July 10, 2019

Salvatore F. Priore, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau A
625 Broadway
11th Floor
Albany, NY 12233-7017

Subject: **Groundwater Sampling Report for Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane**
Hercules Inc (Dyno-Nobel) Site
Port Ewen, NY
NYSDEC Site No.: 356001

Dear Mr. Priore:

This letter transmits the results of groundwater samples that were collected and analyzed in accordance with the Groundwater Sampling Work Plan for Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane (Work Plan) for the Hercules Inc. site (the Site). The Work Plan was prepared in response to the directive from the New York State Department of Environmental Conservation (NYSDEC) in a letter dated September 25, 2018. The Work Plan was submitted to NYSDEC on November 21, 2018 by EHS Support LLC ("EHS Support"), on behalf of Ashland LLC ("Ashland") who acquired Hercules Incorporated) and Dyno Nobel, Inc. ("Dyno Nobel") and was approved by the NYSDEC on November 29, 2018.

Antea Group ("Antea") was contracted to collect groundwater samples pursuant to the Work Plan. In accordance with the Work Plan, on December 11-12, 2018, Antea collected groundwater samples from nine groundwater monitoring wells for the analysis of PFAS and 1,4-dioxane. The samples were collected using low-flow sampling techniques using a peristaltic pump, with sample handling procedures and precautions specific to PFAS and 1,4-dioxane, as provided by NYSDEC (**Attachments 1 and 2**). Prior to sampling, the well depths were gauged, and the peristaltic pump tubing was placed approximately 1-foot from the bottom of the well. The groundwater well locations are illustrated on **Figure 1**.

Quality assurance/quality control (QA/QC) procedures included the collection of a blind duplicate groundwater sample and a matrix spike/matrix spike duplicate sample pair.

The groundwater samples and QA/QC samples were shipped on ice and under Chain-of-Custody to TestAmerica Laboratories, Inc ("TestAmerica") who has the relevant analytical method certifications, and the method detection limits (MDLs) requested by the NYSDEC (**Attachment 3**) were met, including:

- PFAS Target Analytes – Modified (Low Level) United States Environmental Protection Agency (USEPA) Method 537 with a MDL of 2 nanograms per liter (ng/L [parts per trillion]) for perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA)
- 1,4-dioxane – USEPA Method 8270 in selective ion monitoring (SIM) mode with a minimum MDL of 0.28 microgram per Liter (µg/L [parts per billion])

Full Category B data validation was performed by EHS Support following NYSDEC protocols, and findings were reported in data usability summary reports (DUSRs) (see **Attachment 4**). All data were found to be valid and usable. The electronic data deliverables (EDDs) are being uploaded to the NYSDEC Environmental Information Management system (EIMS).

The sample results are summarized in the attached **Table 1**.

Please contact me at (850) 251-0582 or k.vanlandingham@ehs-support.com with any questions or comments.

Sincerely,

Kristin A. VanLandingham, P.E.
Project Manager/Senior Project Engineer

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TABLE

TABLE 1
PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) AND 1,4-DIOXANE CONCENTRATIONS IN GROUNDWATER

HERCULES INC. SITE
PORT EWEN, NY

Chemical	Units	MW-10 12/12/18	MW-11D 12/12/18	MW-15S 12/11/18	DUP-2 (MW-15S) 12/11/18	MW-16S 12/11/18	MW-21R 12/11/18	MW-22R 12/12/18	MW-24S 12/12/18	MW-25S 12/12/18	MW-26S 12/12/18
2-(N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	ng/L	18 U	20 U	19 U	19 U	20 U	19 U	20 U	19 U	20 U	19 U
2-(N-methyl perfluorooctanesulfonamido) acetic acid	ng/L	18 U	20 U	19 U	19 U	20 U	19 U	20 U	19 U	20 U	19 U
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	ng/L	18 U	20 U	19 U	19 U	20 U	460	20 U	19 U	20 U	19 U
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	ng/L	18 U	20 U	19 U	19 U	20 U	97 U	20 U	19 U	20 U	19 U
Perfluorobutane Sulfonate	ng/L	1.8 U	2 U	0.23 J	0.25 J	2 U	0.57 J	2 U	1.9 U	2 U	1.9 U
Perfluorobutanoic acid (PFBA)	ng/L	1.8 U	2 U	3.2	3.3	2 U	5.3	2 U	1.9 U	2 U	2.6 U
Perfluorodecane sulfonic acid (1-Decanesulfonic acid, heneicosafluoro-)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Perfluorodecanoic acid (Decanoic acid, nonadecafluoro-)	ng/L	1.8 U	2 U	1.9 U	1.9 U	0.36 J	1.2 J	2 U	1.1 J	2 U	0.88 J
Perfluorododecanoic acid (Dodecanoic acid, tricosafluoro-)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Perfluoroheptane Sulfonate (PFHpS)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Perfluoroheptanoic acid (PFHpA)	ng/L	1.8 U	2 U	0.63 J	0.65 J	0.39 J	2	0.51 J	1.5 J	2 U	3
Perfluorohexane sulfonic acid (PFHxS)	ng/L	0.27 J	0.31 J	0.3 J	0.38 J	0.3 J	0.92 J	2 U	0.26 J	0.31 J	0.26 J
Perfluorohexanoic acid (PFHxA)	ng/L	1.8 U	2 U	1.1 J	1.1 J	1.3 J	8.7	1.4 J	2.8	2 U	6.7
Perfluorononanoic acid (PFNA)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	0.46 J	2 U	0.51 J	2 U	0.54 J
Perfluorooctane sulfonamide (1-Octanesulfonamide, hetpadecafluoro-)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Perfluorooctane sulfonic acid (PFOS)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	0.78 J	2 U	1.9 U	2 U	1.9 U
Perfluorooctanoic acid (PFOA)	ng/L	1.8 U	2 U	1.2 J	1.3 J	0.96 J	5.9	0.92 J	2.4	2 U	3.8
Perfluoropentanoic acid (PFPeA)	ng/L	1.8 U	2 U	1.7 J	1.6 J	1.7 J	2.5	1.8 J	8.1	2 U	16
Perfluorotetradecanoic acid (Tetradecanoic acid, heptacosafluoro-)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Perfluorotridecanoic acid (Tridecanoic acid, pentacosafluoro-)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U	2 U	1.9 U
Perfluoroundecanoic acid (Undecanoic acid, uncosafluoro-)	ng/L	1.8 U	2 U	1.9 U	1.9 U	2 U	1.9 U	2 U	1.9 U	2 U	1.9 U
1,4-Dioxane	µg/L	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	3.3 J	0.21 U	0.25 U	0.24 U	0.21 U

Notes:
ng/L = nanograms per liter
µg/L = micrograms per liter
U = Indicates analyte was analyzed for but not detected
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

EHS Support

FIGURE

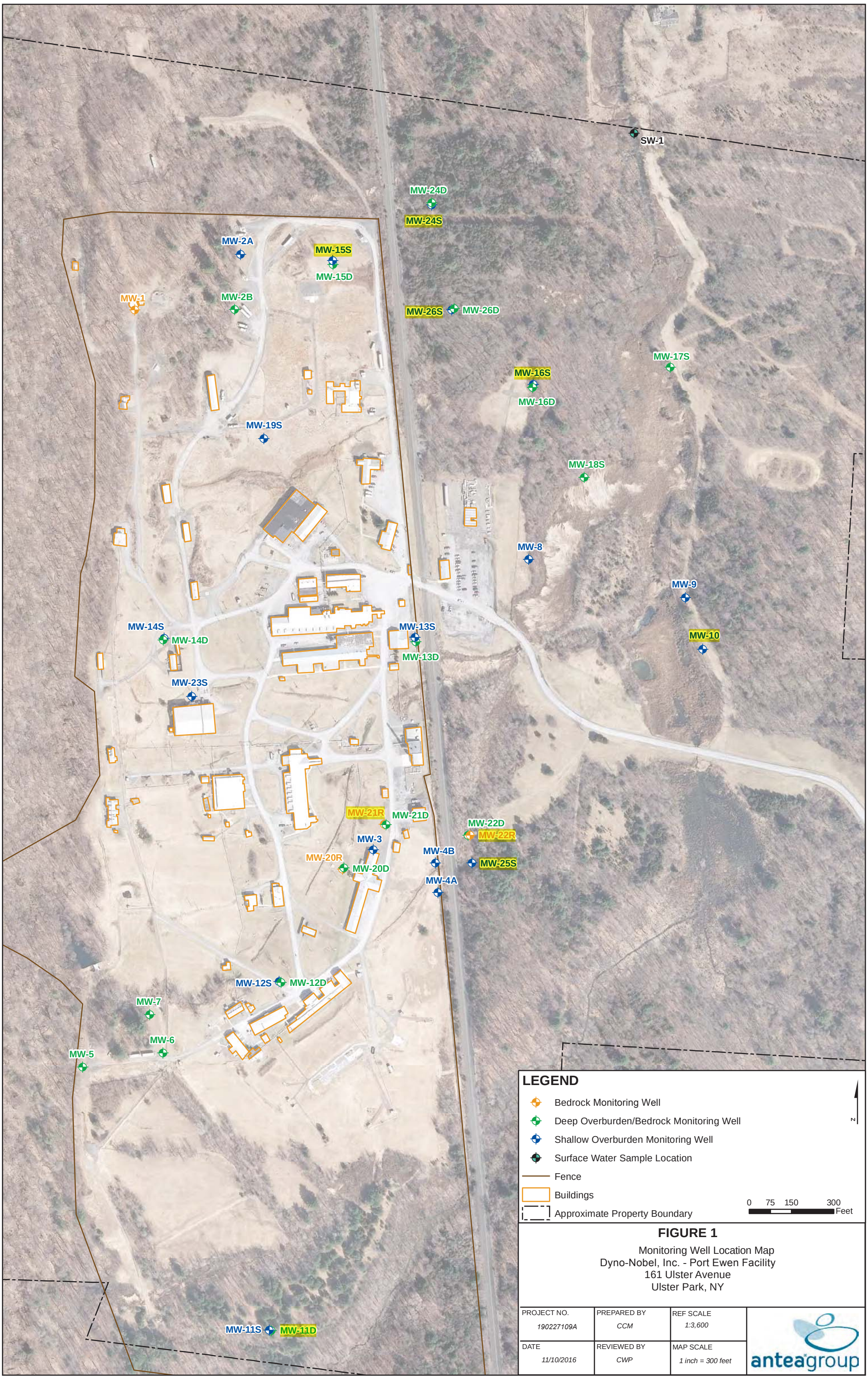

FIGURE 1

Monitoring Well Location Map
Dyno-Nobel, Inc. - Port Ewen Facility
161 Ulster Avenue
Ulster Park, NY

PROJECT NO.	PREPARED BY	REF SCALE
190227109A	CCM	1:3,600
DATE	REVIEWED BY	MAP SCALE
11/10/2016	CWP	1 inch = 300 feet

anteagroup

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ATTACHMENT 1

Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFS) from Monitoring Wells - Sample Protocol

Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from Monitoring Wells Sample Protocol

Samples collected using this protocol are intended to be analyzed for perfluorooctanoic acid (PFOA) and other perfluorinated compounds by Modified (Low Level) Test Method 537.

The procedure used must be consistent with the NYSDEC March 1991 Sampling Guidelines and Protocols http://www.dec.ny.gov/docs/remediation_hudson_pdf/sgpsect5.pdf with the following materials limitations.

At this time acceptable materials for sampling include: stainless steel, high density polyethylene (HDPE), PVC, silicone, acetate and polypropylene. Equipment blanks should be generated at least daily. Additional materials may be acceptable if pre-approved by NYSDEC. Requests to use alternate equipment should include clean equipment blanks. **NOTE: Grunfos pumps and bladder pumps are known to contain PFC materials (e.g. Teflon™ washers for Grunfos pumps and LDPE bladders for bladder pumps).** All sampling equipment components and sample containers should not come in contact with aluminum foil, low density polyethylene (LDPE), glass or polytetrafluoroethylene (PTFE, Teflon™) materials including sample bottle cap liners with a PTFE layer. Standard two step decontamination using detergent and clean water rinse will be performed for equipment that does come in contact with PFC materials. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFC materials must be avoided. Many food and drink packaging materials and “plumbers thread seal tape” contain PFCs.

All clothing worn by sampling personnel must have been laundered multiple times. The sampler must wear nitrile gloves while filling and sealing the sample bottles.

Pre-cleaned sample bottles with closures, coolers, ice, sample labels and a chain of custody form will be provided by the laboratory.

1. Fill two pre-cleaned 500 mL HDPE or polypropylene bottle with the sample.
2. Cap the bottles with an acceptable cap and liner closure system.
3. Label the sample bottles.
4. Fill out the chain of custody.
5. Place in a cooler maintained at 4 ± 2º Celsius.

Collect one equipment blank for every sample batch, not to exceed 20 samples.

Collect one field duplicate for every sample batch, not to exceed 20 samples.

Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, not to exceed 20 samples.

Request appropriate data deliverable (Category A or B) and an electronic data deliverable.

ATTACHMENT 2

Sampling Considerations When Analyzing for PFAS

There are several potential sources of PFAS that could contribute to the cross-contamination of environmental samples during sample collection: Weatherproof clothing, pens, logbooks, cosmetics, personal hygiene products, insect repellents, even some sampling equipment could contain PFAS that could lead to false positive sampling results. Below are some special considerations when sampling for PFAS.

SAMPLING CONSIDERATIONS WHEN ANALYZING FOR PFAS	
Prohibited Materials	**Acceptable Materials**
Field Equipment	
Fluoropolymer tubing, valves and other parts in pumps (Teflon®)	High density polyethylene (HDPE) and silicon materials
Fluoropolymer bailers or pump bladders	Disposable Equipment / Dedicated Equiment (no PTFE parts)
Aluminum foil	Thin HDPE sheeting
Blue (chemical) ice*	Ice contained in plastic (polyethlene) bags (double bagged), secured to avoid meltwater from contacting sample containers, overnight shipping
Post-it notes, sharpies, waterproof fieldbook	Ball point pens, Loose paper on aluminum clipboard, non weatherproof fieldbook, pre-printed labels
Glass containers (due to potential loss of analytle through adsorption)	Polypropylene or HDPE sample bottles fitted with an unlined (no PTFE), polypropylene or HDPE screw cap
Decon 90	Alconox and Liquinox soap for decontamination, if needed
Decontamination water from the site	Water used for the decontamination of sampling equipment will be laboratory certified "PFAS-free" water
Field Clothing and Personal Protective Equipment (PPE)	
New clothing or water resistant, waterproof, or stain-treated clothing, clothing containing Gore-Tex	Well-laundered clothing, defined as clothing that has been washed 6 times or more after purchase, made of synthetic or natural fibers.
Clothing laundered using fabric softener	No fabric softener
Boots containg Gore-Tex	Boots made with polyurethane and polyvinyl chloride
Cosmetics, moisturizers, hand cream or other related products as part of personal cleaning/showering routine on the morning of sampling	Sunscreens - Alba Organics Natural Sunscreen, Yes to Cucumbers, Aubrey Organics, Jason Natural Sun Block, Kiss my face, Baby sunscreens that are "free" or "natural"
	Inspect Repellents: Jason Natural Quit Bugging Me, Repel Lemon Eucalyptus Inspect repellent, Herbal Armor, BabyGanics
Handling or prepackaged food products	Do not have at sampling location, wash hands well after handing wear powderless nitrile gloves

ATTACHMENT 3

Groundwater Sampling for Emerging Contaminants (April 2018)

Groundwater Sampling for Emerging Contaminants

April 2018

Issue: NYSDEC has committed to analyzing representative groundwater samples at remediation sites for emerging contaminants (1,4-dioxane and PFAS) as described in the below guidance.

Implementation

NYSDEC project managers will be contacting site owners to schedule sampling for these chemicals. Only groundwater sampling is required. The number of samples required will be similar to the number of samples where "full TAL/TCL sampling" would typically be required in a remedial investigation. If sampling is not feasible (e.g., the site no longer has any monitoring wells in place), sampling may be waived on a site-specific basis after first considering potential sources of these chemicals and whether there are water supplies nearby.

Upon a new site being brought into any program (i.e., SSF, BCP), PFAS and 1,4-dioxane will be incorporated into the investigation of groundwater as part of the standard "full TAL/TCL" sampling. Until an SCO is established for PFAS, soil samples do not need to be analyzed for PFAS unless groundwater contamination is detected. Separate guidance will be developed to address sites where emerging contaminants are found in the groundwater. The analysis currently performed for SVOCs in soil is adequate for evaluation of 1,4-dioxane, which already has an established SCO.

Analysis and Reporting

Labs should provide a full category B deliverable, and a DUSR should be prepared by a data validator, and the electronic data submission should meet the requirements provided at: https://www.dec.ny.gov/chemical/62440.html ,

The work plan should explicitly describe analysis and reporting requirements.

PFAS sample analysis: Currently, ELAP does not offer certification for PFAS compounds in matrices other than finished drinking water. However, laboratories analyzing environmental samples (ex. soil, sediments, and groundwater) are required, by DER, to hold ELAP certification for PFOA and PFOS in drinking water by EPA Method 537 or ISO 25101.

Modified EPA Method 537 is the preferred method to use for groundwater samples due to the ability to achieve 2 ng/L (ppt) detection limits. If contract labs or work plans submitted by responsible parties indicate that they are not able to achieve similar reporting limits, the project manager should discuss this with a DER chemist. Note: Reporting limits for PFOA and PFOS should not exceed 2 ng/L.

PFAS sample reporting: DER has developed a PFAS target analyte list (below) with the intent of achieving reporting consistency between labs for commonly reportable analytes. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. This list may be updated in the future as new information is learned and as labs develop new capabilities. If lab and/or matrix specific issues are encountered for any particular compounds, the NYSDEC project manager will make case-by-case decisions as to whether particular analytes may be temporarily or permanently discontinued from analysis for each site. Any technical lab issues should be brought to the attention of a NYSDEC chemist.

Some sampling using this full PFAS target analyte list is needed to understand the nature of contamination. It may also be critical to differentiate PFAS compounds associated with a site from other

sources of these chemicals. Like routine refinements to parameter lists based on investigative findings, the full PFAS target analyte list may not be needed for all sampling intended to define the extent of contamination. Project managers may approve a shorter analyte list (e.g., just the UCMR3 list) for some reporting on a case by case basis.

1,4-Dioxane Analysis and Reporting: The method detection limit (MDL) for 1,4-dioxane should be no higher than 0.28 µg/l (ppb). ELAP offers certification for both EPA Methods 8260 and 8270. In order to get the appropriate detection limits, the lab would need to run either of these methods in "selective ion monitoring" (SIM) mode. DER is advising the use of method 8270, since this method provides a more robust extraction procedure, uses a larger sample volume, and is less vulnerable to interference from chlorinated solvents (we acknowledge that 8260 has been shown to have a higher recovery in some studies).

Full PFAS Target Analyte List

Group	Chemical Name	Abbreviation	CAS Number
Perfluoroalkyl sulfonates	**Perfluorobutanesulfonic acid**	**PFBS**	**375-73-5**
	Perfluorohexanesulfonic acid	**PFHxS**	**355-46-4**
	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
	Perfluorooctanessulfonic acid	**PFOS**	**1763-23-1**
	Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluoroalkyl carboxylates	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	**PFHpA**	**375-85-9**
	Perfluorooctanoic acid	**PFOA**	**335-67-1**
	Perfluorononanoic acid	**PFNA**	**375-95-1**
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTriA/PFTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7
Fluorinated Telomer Sulfonates	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctane-sulfonamides	Perfluroroctanesulfonamide	FOSA	754-91-6
Perfluorooctane-sulfonamidoacetic acids	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

Bold entries depict the 6 original UCMR3 chemicals

ATTACHMENT 4

Laboratory Analytical Reports and DUSRs

EHS Validation Report Number: 209

Dyno Nobel Port Ewen Site
Port Ewen, New York

Analyses performed by: TestAmerica, Sacrament, California

Sample delivery group (SDG): 320-46132
Analyses: PFAS
Review Level: DUSR

EHS Support

Report Date: February 5, 2019

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Sample Summary

Water samples were collected at the Dyno Nobel Port Ewen Site in Port Ewen, New York and were analyzed by Environmental Protection Agency (EPA) Method 537 Modified for analysis of per- and polyfluorinated alkyl substances. Samples included in this sample delivery group (SDG), and in this data validation report, are listed in the table below.

SDG	Lab Sample ID	Field Sample ID	Sample Matrix	Sample Collection Date	PFAS Analysis
320-46132	320-46132-1	MW-15S-12112018	Water	12/11/2018	X
320-46132	320-46132-2	PFASDUP_20181211-FB	Water	12/11/2018	X
320-46132	320-46132-3	MW-21R-12112018	Water	12/11/2018	X
320-46132	320-46132-4	MW-22R-12122018	Water	12/12/2018	X
320-46132	320-46132-5	MW-25S-12122018	Water	12/12/2018	X
320-46132	320-46132-6	MW-16S-12112018	Water	12/11/2018	X
320-46132	320-46132-7	MW-24S-12122018	Water	12/12/2018	X
320-46132	320-46132-8	MW-26S-12122018	Water	12/12/2018	X
320-46132	320-46132-9	MW-11D-EB	Water	12/12/2018	X
320-46132	320-46132-10	Equip Blank-12112018	Water	12/11/2018	X
320-46132	320-46132-11	MW-10-12122018	Water	12/12/2018	X

1 Introduction

Data were reviewed in accordance with TestAmerica Laboratories, Inc. Standard Operating Procedure WS-LC-0025 "Per- and Polyfluorinated Substances (PFAS) in Water, Soils, Sediments and Tissue" Rev 3.3 12/03/2018. United States EPA (Environmental Protection Agency) Method 537 "Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/ Tandem Mass Spectrometry (LC/MS/MS)" was referenced as needed, as were the Department of Defense (DoD) Department of Energy (DOE) Consolidated Quality Systems Manual (QSM) for Environmental Laboratories Version 5.2, 2018, National Functional Guidelines for High Resolution Superfund Methods Data Review, April 2016 and EPA Region 2 validation SOPs for high resolution methods. It is expected that the laboratory conducted sufficient quality review of the data prior to reporting. While QC is meant to increase confidence in analytical data, it is important to note that no compound concentration is guaranteed to be accurate, even if all QC criteria were met.

Data validation includes a review of reported results and supporting documentation in the laboratory report. Based on this evaluation, qualifiers may be added, deleted, or modified. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines and EPA Region 2 validation guidance:

1.1 Validation Qualifiers

U The analyte was included in the analysis but was not detected above the reported quantitation limit, or the result is considered non-detect as a consequence of associated blank contamination.

UJ The analyte was included in the analysis but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

JN There is presumptive evidence for the presence of the material at an estimated value.

R The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control (QC) criteria. The analyte may or may not be present in the sample.

2 Sample Custody and Receipt

All samples were received in good condition and properly preserved. The chain of custody was properly completed.

3 Assessment Summary and Data Usability

In this SDG, no quality control excursions encountered led to rejection of data. Results reported in this SDG are considered usable. Please refer to report below for specific QC variances and data qualification.

4 Per- and Polyfluorinated Alkyl Substances (PFAS) analysis

4.1 Preservation and Holding Times

Acceptance criteria were met. Relevant preservation and holding time requirements are presented in the table below.

Method	Matrix	Preservation	Holding Time
SOP WS-LC-0025	Water	0 - 6 °C	14 days to extraction, 40 days to analysis days

4.2 Calibration

Acceptance criteria were met:

- The initial calibration RSD (relative standard deviation) values, and/or the regression coefficient values, were acceptable.
- The CCV %D (continuing calibration verification percent difference) results were within limits.

4.3 Blanks

Sample results associated with blank contamination are presented in the table below. Please note that blanks are not qualified based on detections observed in other blanks. For example, equipment blank results are not qualified due to method blank contamination.

Compound	Blank detection	Blank result (category)	Associated samples	Sample result	Qualification
Perfluorobutanoic acid (PFBA)	0.605 J ng/L (MB) and 0.40 J ng/L (EB)	< RL	320-46132-1 320-46132-2 320-46132-3	> RL and > 5X blank concentration	No qualification needed.
			320-46132-4 320-46132-5 320-46132-6 320-46132-7 320-46132-11	< RL	U at the RL
			320-46132-8	> RL but < 5X blank concentration	U at the reported concentration
			320-46132-9	Non-detect	No qualification needed
Perfluorotetra-decanoic acid (PFTeA)	0.412 J ng/L (MB)	< RL	All associated samples	Non-detect	No qualification needed

MB Method blank
U Non-detect
RL Reporting limit

4.4 Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD)

Acceptance criteria were met. Recoveries and relative percent difference (RPD) values were within limits.

4.5 Matrix Spike/ Matrix Spike Duplicate (MS/MSD) Analysis

Acceptance criteria were met. MS/MSD analysis was performed on sample 320-46132-1.

4.6 Isotope Dilution Analytes

Acceptance criteria were met. Recoveries of isotope dilution analytes were within acceptance limits.

4.7 Compound Identification

Acceptable; no issues to report. For sample 320-46132-3, results for two analytes were reported from a dilution.

4.8 Field duplicates

Acceptance criteria were met. One field duplicate sample was submitted in this sample delivery group. Relationships between parent sample results and field duplicate results are evaluated using criteria shown in the table below.

Quality control nonconformance	Sample Result	Qualification
Sample and its field duplicate ≥ 5x the RL and -RPD > 30% (aqueous) - or - -RPD > 50% (soil/ sediment)	Detect	J
Sample and/or its field duplicate < 5x the RL and -absolute difference > 2x the RL (aqueous) - or- -absolute difference > 3x the RL (soil/ sediment)	Non-detect	UJ
	Detect	J

RPD Relative percent difference

4.9 Additional Notes

NA: No additional notes to report.

Validation performed by: Amy Coats
EHS Support

ANALYTICAL REPORT

Job Number: 680-162184-1

Job Description: Hercules Dyno - Port Ewen, NY

Contract Number: No Number - No Expiration Date

For:
Ashland LLC
Ashland Hercules Research Center
500 Hercules Rd Bldg 8139
Wilmington, DE 19808

Attention: Ed Meeks

Approved for release.
Eddie T Barnett
Project Manager I
1/3/2019 3:10 PM

Eddie T Barnett, Project Manager I
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01/03/2019

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

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CASE NARRATIVE
Client: Ashland LLC
Project: Hercules Dyno - Port Ewen, NY

Report Number: 680-162184-1

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT
The samples were received on 12/14/2018; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 2.8º C, 3.3º C, 3.6º C, 4.5º C and 4.9º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Samples MW-3 (680-162184-1), MW-21R (680-162184-5), MW-21D (680-162184-6), MW-22D (680-162184-7), MW-22R (680-162184-8), MW-25S (680-162184-11), VOCDUP_20181212 (680-162184-15) and TRIP BLANK (680-162184-17) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 12/20/2018, 12/21/2018 and 12/24/2018.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batches 680-552552, 680-552754, and 680-553025.

Bromomethane is reported with an E flag in the batch QC because the top two points were dropped from the ICAL: MW-22R (680-162184-8[MS]), MW-22R (680-162184-8[MSD]), (CCVIS 680-552557/2), (LCS 680-552557/3) and (LCSD 680-552557/4). The sample associated with the QC was non detect for bromomethane. The data has been qualified and reported.

Bromomethane recovered low for LCS 680-552557/3. Tetrachloroethene recovered high. Bromomethane recovered low for LCSD 680-552557/4. Refer to the QC report for details.

Bromomethane exceeded the RPD limit for the MSD of sample MW-22RMSD (680-162184-8) in batch 680-552557. Refer to the QC report for details.

Samples MW-3 (680-162184-1)[100X] and MW-3 (680-162184-1)[250X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS) - SELECTED ION MONITORING (SIM) ISOTOPE DILUTION
Samples MW-15S (680-162184-2), MW-16S (680-162184-4), MW-21R (680-162184-5), MW-22R (680-162184-8), MW-24S (680-162184-9), MW-25S (680-162184-11), MW-26S (680-162184-12), EQUIP BLANK (680-162184-16), MW-10 (680-162184-19), MW-11D (680-162184-20) and PFASDUP_20181211 (680-162184-21) were analyzed for Semivolatile Organic Compounds (GC-MS) - Selected Ion Monitoring (SIM) Isotope Dilution in accordance with EPA SW-846 Method 8270D SIM Isotope Dilution. The samples were prepared on 12/17/2018 and 12/27/2018 and analyzed on 12/18/2018 and 12/28/2018.

Insufficient sample volume was provided for the following samples for the 8270_SIM analysis: MW-22R (680-162184-8), MW-24S (680-162184-9), MW-25S (680-162184-11) and MW-26S (680-162184-12).

The following sample was re-prepared outside of preparation holding time due to the original QC samples recovering outside of control limits: MW-21R (680-162184-5).

The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-451231 and analytical batch 480-451416 recovered outside control limits for the following analytes: 1,4-Dioxane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

1,4-Dioxane was detected in method blank MB 480-451231/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

1,4-Dioxane recovered high for the MS of sample MW-15SMS (680-162184-2) in batch 480-451416. 1,4-Dioxane exceeded the RPD limit for the MSD of sample MW-15SMSD (680-162184-2) in batch 480-451416. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICP) - DISSOLVED
Samples MW-15S (680-162184-2), MW-15D (680-162184-3), MW-16S (680-162184-4), MW-24S (680-162184-9), MW-24D

(680-162184-10), MW-26S (680-162184-12), MW-26D (680-162184-13), METDUP_20181211 (680-162184-14), EQUIP BLANK (680-162184-16) and SW-1 (680-162184-18) were analyzed for Metals (ICP) - Dissolved in accordance with EPA SW-846 Method 6010C. The samples were prepared on 12/14/2018 and analyzed on 12/15/2018, 12/18/2018 and 12/19/2018.

Calcium recovered high for the MS of sample MW-15DMS (680-162184-3) in batch 680-552495. Calcium and Selenium recovered high for the MSD of sample MW-15DMSD (680-162184-3) in batch 680-552495. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICP)

Samples MW-15S (680-162184-2), MW-15D (680-162184-3), MW-16S (680-162184-4), MW-24S (680-162184-9), MW-24D (680-162184-10), MW-26S (680-162184-12), MW-26D (680-162184-13), METDUP_20181211 (680-162184-14), EQUIP BLANK (680-162184-16) and SW-1 (680-162184-18) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 12/14/2018 and analyzed on 12/18/2018 and 12/19/2018.

Calcium recovered high for the MS of sample MW-15DMS (680-162184-3) in batch 680-552495. Calcium recovered high for the MSD of sample MW-15DMSD (680-162184-3) in batch 680-552495. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MERCURY (ICP) - DISSOLVED

Samples MW-15S (680-162184-2), MW-15D (680-162184-3), MW-16S (680-162184-4), MW-24S (680-162184-9), MW-24D (680-162184-10), MW-26S (680-162184-12), MW-26D (680-162184-13), METDUP_20181211 (680-162184-14), EQUIP BLANK (680-162184-16) and SW-1 (680-162184-18) were analyzed for Mercury (ICP) - Dissolved in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 12/20/2018 and 12/31/2018 and analyzed on 01/02/2019, 12/21/2018 and 12/22/2018.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples MW-15S (680-162184-2), MW-15D (680-162184-3), MW-16S (680-162184-4), MW-24S (680-162184-9), MW-24D (680-162184-10), MW-26S (680-162184-12), MW-26D (680-162184-13), METDUP_20181211 (680-162184-14), EQUIP BLANK (680-162184-16) and SW-1 (680-162184-18) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 12/21/2018 and analyzed on 12/22/2018.

Mercury recovered low for the MS of sample MW-15DMS (680-162184-3) in batch 680-552999. Mercury recovered low for the MSD of sample MW-15DMSD (680-162184-3) in batch 680-552999. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-162184-1	MW-3	Water	12/11/18 14:53	12/14/18 09:49
680-162184-2	MW-15S	Water	12/11/18 12:00	12/14/18 09:49
680-162184-3	MW-15D	Water	12/11/18 13:50	12/14/18 09:49
680-162184-4	MW-16S	Water	12/11/18 15:45	12/14/18 09:49
680-162184-5	MW-21R	Water	12/11/18 13:23	12/14/18 09:49
680-162184-6	MW-21D	Water	12/11/18 12:37	12/14/18 09:49
680-162184-7	MW-22D	Water	12/11/18 16:21	12/14/18 09:49
680-162184-8	MW-22R	Water	12/12/18 10:43	12/14/18 09:49
680-162184-9	MW-24S	Water	12/12/18 13:08	12/14/18 09:49
680-162184-10	MW-24D	Water	12/12/18 13:55	12/14/18 09:49
680-162184-11	MW-25S	Water	12/12/18 12:23	12/14/18 09:49
680-162184-12	MW-26S	Water	12/12/18 11:05	12/14/18 09:49
680-162184-13	MW-26D	Water	12/12/18 11:52	12/14/18 09:49
680-162184-14	METDUP_20181211	Water	12/11/18 00:00	12/14/18 09:49
680-162184-15	VOCDUP_20181212	Water	12/12/18 00:00	12/14/18 09:49
680-162184-16	EQUIP BLANK	Water	12/11/18 16:35	12/14/18 09:49
680-162184-17	TRIP BLANK	Water	12/12/18 00:00	12/14/18 09:49
680-162184-18	SW-1	Water	12/12/18 16:40	12/14/18 09:49
680-162184-19	MW-10	Water	12/12/18 14:21	12/14/18 09:49
680-162184-20	MW-11D	Water	12/12/18 15:59	12/14/18 09:49
680-162184-21	PFASDUP_20181211	Water	12/11/18 00:00	12/14/18 09:49

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-3 — Lab Sample ID: 680-162184-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7900		100	37	ug/L	100		8260B	Total/NA
1,1-Dichloroethane	110		100	38	ug/L	100		8260B	Total/NA
1,1-Dichloroethene	20000		100	36	ug/L	100		8260B	Total/NA
1,2-Dichloroethane	100		100	50	ug/L	100		8260B	Total/NA
cis-1,2-Dichloroethene	670		100	41	ug/L	100		8260B	Total/NA
Trichloroethene - DL	25000		250	120	ug/L	250		8260B	Total/NA

Client Sample ID: MW-15S — Lab Sample ID: 680-162184-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.017		0.010	0.0017	mg/L	1		6010C	Total/NA
Calcium	75		0.50	0.025	mg/L	1		6010C	Total/NA
Iron	0.021	J	0.050	0.017	mg/L	1		6010C	Total/NA
Potassium	0.22	J	1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	20		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.073		0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	37		1.0	0.48	mg/L	1		6010C	Total/NA
Selenium	0.030		0.020	0.0099	mg/L	1		6010C	Total/NA
Barium	0.015		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	72		0.50	0.025	mg/L	1		6010C	Dissolved
Potassium	0.22	J	1.0	0.017	mg/L	1		6010C	Dissolved
Magnesium	19		0.50	0.033	mg/L	1		6010C	Dissolved
Manganese	0.0035	J	0.010	0.0010	mg/L	1		6010C	Dissolved
Sodium	36		1.0	0.48	mg/L	1		6010C	Dissolved
Selenium	0.039		0.020	0.0099	mg/L	1		6010C	Dissolved

Client Sample ID: MW-15D — Lab Sample ID: 680-162184-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.061	J	0.20	0.024	mg/L	1		6010C	Total/NA
Barium	0.11		0.010	0.0017	mg/L	1		6010C	Total/NA
Calcium	50		0.50	0.025	mg/L	1		6010C	Total/NA
Iron	0.13		0.050	0.017	mg/L	1		6010C	Total/NA
Potassium	4.4		1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	12		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.016		0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	6.9		1.0	0.48	mg/L	1		6010C	Total/NA
Selenium	0.33		0.020	0.0099	mg/L	1		6010C	Total/NA
Barium	0.098		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	44		0.50	0.025	mg/L	1		6010C	Dissolved
Potassium	4.1		1.0	0.017	mg/L	1		6010C	Dissolved
Magnesium	11		0.50	0.033	mg/L	1		6010C	Dissolved
Manganese	0.0072	J	0.010	0.0010	mg/L	1		6010C	Dissolved
Sodium	6.6		1.0	0.48	mg/L	1		6010C	Dissolved
Selenium	0.35	F1	0.020	0.0099	mg/L	1		6010C	Dissolved

Client Sample ID: MW-16S — Lab Sample ID: 680-162184-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.036	J	0.20	0.024	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-16S (Continued) — Lab Sample ID: 680-162184-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.097		0.010	0.0017	mg/L	1		6010C	Total/NA
Calcium	84		0.50	0.025	mg/L	1		6010C	Total/NA
Iron	0.27		0.050	0.017	mg/L	1		6010C	Total/NA
Potassium	0.93	J	1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	24		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.15		0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	19		1.0	0.48	mg/L	1		6010C	Total/NA
Zinc	0.0079	J	0.020	0.0070	mg/L	1		6010C	Total/NA
Barium	0.095		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	82		0.50	0.025	mg/L	1		6010C	Dissolved
Iron	0.16		0.050	0.017	mg/L	1		6010C	Dissolved
Potassium	0.92	J	1.0	0.017	mg/L	1		6010C	Dissolved
Magnesium	24		0.50	0.033	mg/L	1		6010C	Dissolved
Manganese	0.088		0.010	0.0010	mg/L	1		6010C	Dissolved
Sodium	18		1.0	0.48	mg/L	1		6010C	Dissolved

Client Sample ID: MW-21R — Lab Sample ID: 680-162184-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.9	J	10	7.0	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.41	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.39	J	1.0	0.37	ug/L	1		8260B	Total/NA
Trichloroethene	4.8		1.0	0.48	ug/L	1		8260B	Total/NA
1,4-Dioxane	3.3	B *	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
1,4-Dioxane - RE	3.5	H	0.20	0.10	ug/L	1		8270D SIM ID	Total/NA

Client Sample ID: MW-21D — Lab Sample ID: 680-162184-6

No Detections.

Client Sample ID: MW-22D — Lab Sample ID: 680-162184-7

No Detections.

Client Sample ID: MW-22R — Lab Sample ID: 680-162184-8

No Detections.

Client Sample ID: MW-24S — Lab Sample ID: 680-162184-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.041		0.010	0.0017	mg/L	1		6010C	Total/NA
Calcium	86		0.50	0.025	mg/L	1		6010C	Total/NA
Iron	0.093		0.050	0.017	mg/L	1		6010C	Total/NA
Potassium	0.58	J	1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	25		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.019		0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	16		1.0	0.48	mg/L	1		6010C	Total/NA
Barium	0.036		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	81		0.50	0.025	mg/L	1		6010C	Dissolved
Potassium	0.55	J	1.0	0.017	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-24S (Continued) — Lab Sample ID: 680-162184-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	24		0.50	0.033	mg/L	1		6010C	Dissolved
Manganese	0.0083	J	0.010	0.0010	mg/L	1		6010C	Dissolved
Sodium	15		1.0	0.48	mg/L	1		6010C	Dissolved

Client Sample ID: MW-24D — Lab Sample ID: 680-162184-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.15	J	0.20	0.024	mg/L	1		6010C	Total/NA
Barium	0.088		0.010	0.0017	mg/L	1		6010C	Total/NA
Calcium	68		0.50	0.025	mg/L	1		6010C	Total/NA
Iron	0.82		0.050	0.017	mg/L	1		6010C	Total/NA
Potassium	1.8		1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	13		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.14		0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	6.6		1.0	0.48	mg/L	1		6010C	Total/NA
Barium	0.088		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	68		0.50	0.025	mg/L	1		6010C	Dissolved
Iron	0.12		0.050	0.017	mg/L	1		6010C	Dissolved
Potassium	1.8		1.0	0.017	mg/L	1		6010C	Dissolved
Magnesium	13		0.50	0.033	mg/L	1		6010C	Dissolved
Manganese	0.11		0.010	0.0010	mg/L	1		6010C	Dissolved
Sodium	6.3		1.0	0.48	mg/L	1		6010C	Dissolved

Client Sample ID: MW-25S — Lab Sample ID: 680-162184-11

No Detections.

Client Sample ID: MW-26S — Lab Sample ID: 680-162184-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.044	J	0.20	0.024	mg/L	1		6010C	Total/NA
Barium	0.025		0.010	0.0017	mg/L	1		6010C	Total/NA
Calcium	58		0.50	0.025	mg/L	1		6010C	Total/NA
Iron	0.052		0.050	0.017	mg/L	1		6010C	Total/NA
Potassium	0.50	J	1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	21		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.069		0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	24		1.0	0.48	mg/L	1		6010C	Total/NA
Selenium	0.012	J	0.020	0.0099	mg/L	1		6010C	Total/NA
Barium	0.023		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	60		0.50	0.025	mg/L	1		6010C	Dissolved
Chromium	0.0017	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Potassium	0.54	J	1.0	0.017	mg/L	1		6010C	Dissolved
Magnesium	23		0.50	0.033	mg/L	1		6010C	Dissolved
Sodium	27		1.0	0.48	mg/L	1		6010C	Dissolved

Client Sample ID: MW-26D — Lab Sample ID: 680-162184-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.025		0.020	0.0062	mg/L	1		6010C	Total/NA
Barium	0.048		0.010	0.0017	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-26D (Continued) — Lab Sample ID: 680-162184-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	44		0.50	0.025	mg/L	1		6010C	Total/NA
Iron	0.12		0.050	0.017	mg/L	1		6010C	Total/NA
Potassium	0.65	J	1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	7.2		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.022		0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	9.7		1.0	0.48	mg/L	1		6010C	Total/NA
Arsenic	0.023		0.020	0.0062	mg/L	1		6010C	Dissolved
Barium	0.049		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	48		0.50	0.025	mg/L	1		6010C	Dissolved
Iron	0.018	J	0.050	0.017	mg/L	1		6010C	Dissolved
Potassium	0.72	J	1.0	0.017	mg/L	1		6010C	Dissolved
Magnesium	8.1		0.50	0.033	mg/L	1		6010C	Dissolved
Manganese	0.0022	J	0.010	0.0010	mg/L	1		6010C	Dissolved
Sodium	11		1.0	0.48	mg/L	1		6010C	Dissolved

Client Sample ID: METDUP_20181211 — Lab Sample ID: 680-162184-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.097		0.010	0.0017	mg/L	1		6010C	Total/NA
Calcium	45		0.50	0.025	mg/L	1		6010C	Total/NA
Potassium	4.0		1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	12		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.0075	J	0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	6.9		1.0	0.48	mg/L	1		6010C	Total/NA
Selenium	0.36		0.020	0.0099	mg/L	1		6010C	Total/NA
Aluminum	0.062	J	0.20	0.024	mg/L	1		6010C	Dissolved
Barium	0.12		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	56		0.50	0.025	mg/L	1		6010C	Dissolved
Copper	0.0019	J	0.020	0.0018	mg/L	1		6010C	Dissolved
Iron	0.12		0.050	0.017	mg/L	1		6010C	Dissolved
Potassium	4.9		1.0	0.017	mg/L	1		6010C	Dissolved
Magnesium	14		0.50	0.033	mg/L	1		6010C	Dissolved
Manganese	0.023		0.010	0.0010	mg/L	1		6010C	Dissolved
Sodium	8.0		1.0	0.48	mg/L	1		6010C	Dissolved
Lead	0.0051	J	0.010	0.0039	mg/L	1		6010C	Dissolved
Selenium	0.38		0.020	0.0099	mg/L	1		6010C	Dissolved
Zinc	0.010	J	0.020	0.0070	mg/L	1		6010C	Dissolved

Client Sample ID: VOCDUP_20181212 — Lab Sample ID: 680-162184-15

No Detections.

Client Sample ID: EQUIP BLANK — Lab Sample ID: 680-162184-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	0.12	J	0.50	0.025	mg/L	1		6010C	Total/NA
Potassium	0.017	J	1.0	0.017	mg/L	1		6010C	Total/NA
Calcium	0.12	J	0.50	0.025	mg/L	1		6010C	Dissolved
Potassium	0.017	J	1.0	0.017	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 680-162184-17

No Detections.

Client Sample ID: SW-1 — Lab Sample ID: 680-162184-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.12	J	0.20	0.024	mg/L	1		6010C	Total/NA
Barium	0.033		0.010	0.0017	mg/L	1		6010C	Total/NA
Calcium	43		0.50	0.025	mg/L	1		6010C	Total/NA
Copper	0.022		0.020	0.0018	mg/L	1		6010C	Total/NA
Iron	0.38		0.050	0.017	mg/L	1		6010C	Total/NA
Potassium	0.87	J	1.0	0.017	mg/L	1		6010C	Total/NA
Magnesium	5.0		0.50	0.033	mg/L	1		6010C	Total/NA
Manganese	0.077		0.010	0.0010	mg/L	1		6010C	Total/NA
Sodium	14		1.0	0.48	mg/L	1		6010C	Total/NA
Zinc	0.0096	J	0.020	0.0070	mg/L	1		6010C	Total/NA
Aluminum	0.071	J	0.20	0.024	mg/L	1		6010C	Dissolved
Barium	0.038		0.010	0.0017	mg/L	1		6010C	Dissolved
Calcium	45		0.50	0.025	mg/L	1		6010C	Dissolved
Copper	0.028		0.020	0.0018	mg/L	1		6010C	Dissolved
Iron	0.64		0.050	0.017	mg/L	1		6010C	Dissolved
Potassium	0.88	J	1.0	0.017	mg/L	1		6010C	Dissolved
Magnesium	5.1		0.50	0.033	mg/L	1		6010C	Dissolved
Manganese	0.13		0.010	0.0010	mg/L	1		6010C	Dissolved
Sodium	14		1.0	0.48	mg/L	1		6010C	Dissolved
Lead	0.0040	J	0.010	0.0039	mg/L	1		6010C	Dissolved
Zinc	0.016	J	0.020	0.0070	mg/L	1		6010C	Dissolved

Client Sample ID: MW-10 — Lab Sample ID: 680-162184-19

No Detections.

Client Sample ID: MW-11D — Lab Sample ID: 680-162184-20

No Detections.

Client Sample ID: PFASDUP_20181211 — Lab Sample ID: 680-162184-21

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL SAV
7470A	Mercury (CVAA)	SW846	TAL SAV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL SAV
3010A	Preparation, Total Metals	SW846	TAL SAV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030B	Purge and Trap	SW846	TAL SAV
7470A	Preparation, Mercury	SW846	TAL SAV

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-3

Date Collected: 12/11/18 14:53
Date Received: 12/14/18 09:49

Lab Sample ID: 680-162184-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**7900**		100	37	ug/L			12/21/18 19:10	100
1,1,2,2-Tetrachloroethane	100	U	100	62	ug/L			12/21/18 19:10	100
1,1,2-Trichloro-1,2,2-trifluoroethane	100	U	100	36	ug/L			12/21/18 19:10	100
1,1,2-Trichloroethane	100	U	100	33	ug/L			12/21/18 19:10	100
1,1-Dichloroethane	**110**		100	38	ug/L			12/21/18 19:10	100
1,1-Dichloroethene	**20000**		100	36	ug/L			12/21/18 19:10	100
1,2,4-Trichlorobenzene	500	U	500	250	ug/L			12/21/18 19:10	100
1,2-Dibromo-3-Chloropropane	500	U	500	110	ug/L			12/21/18 19:10	100
1,2-Dichlorobenzene	100	U	100	37	ug/L			12/21/18 19:10	100
1,2-Dichloroethane	**100**		100	50	ug/L			12/21/18 19:10	100
1,2-Dichloropropane	100	U	100	67	ug/L			12/21/18 19:10	100
1,3-Dichlorobenzene	100	U	100	43	ug/L			12/21/18 19:10	100
1,4-Dichlorobenzene	100	U	100	46	ug/L			12/21/18 19:10	100
Methyl Ethyl Ketone	1000	U	1000	340	ug/L			12/21/18 19:10	100
2-Hexanone	1000	U	1000	200	ug/L			12/21/18 19:10	100
methyl isobutyl ketone	1000	U	1000	210	ug/L			12/21/18 19:10	100
Acetone	1000	U	1000	700	ug/L			12/21/18 19:10	100
Benzene	100	U	100	43	ug/L			12/21/18 19:10	100
Bromoform	100	U	100	43	ug/L			12/21/18 19:10	100
Bromomethane	500	U	500	250	ug/L			12/21/18 19:10	100
Carbon disulfide	200	U	200	100	ug/L			12/21/18 19:10	100
Carbon tetrachloride	100	U	100	33	ug/L			12/21/18 19:10	100
Chlorobenzene	100	U	100	26	ug/L			12/21/18 19:10	100
Dibromochloromethane	100	U	100	32	ug/L			12/21/18 19:10	100
Chloroethane	500	U	500	250	ug/L			12/21/18 19:10	100
Chloroform	100	U	100	50	ug/L			12/21/18 19:10	100
Chloromethane	100	U	100	40	ug/L			12/21/18 19:10	100
cis-1,2-Dichloroethene	**670**		100	41	ug/L			12/21/18 19:10	100
cis-1,3-Dichloropropene	100	U	100	40	ug/L			12/21/18 19:10	100
Cyclohexane	100	U	100	39	ug/L			12/21/18 19:10	100
Bromodichloromethane	100	U	100	44	ug/L			12/21/18 19:10	100
Dichlorodifluoromethane	100	U	100	60	ug/L			12/21/18 19:10	100
Ethylbenzene	100	U	100	33	ug/L			12/21/18 19:10	100
1,2-Dibromoethane	100	U	100	44	ug/L			12/21/18 19:10	100
Isopropylbenzene	100	U	100	35	ug/L			12/21/18 19:10	100
Methyl acetate	500	U	500	180	ug/L			12/21/18 19:10	100
Methyl tert-butyl ether	1000	U	1000	30	ug/L			12/21/18 19:10	100
Methylcyclohexane	100	U	100	43	ug/L			12/21/18 19:10	100
Methylene Chloride	500	U	500	250	ug/L			12/21/18 19:10	100
Styrene	100	U	100	27	ug/L			12/21/18 19:10	100
Tetrachloroethene	100	U	100	74	ug/L			12/21/18 19:10	100
Toluene	100	U	100	48	ug/L			12/21/18 19:10	100
trans-1,2-Dichloroethene	100	U	100	37	ug/L			12/21/18 19:10	100
trans-1,3-Dichloropropene	100	U	100	42	ug/L			12/21/18 19:10	100
Trichlorofluoromethane	100	U	100	42	ug/L			12/21/18 19:10	100
Vinyl chloride	100	U	100	50	ug/L			12/21/18 19:10	100
Xylenes, Total	100	U	100	23	ug/L			12/21/18 19:10	100

Client Sample ID: MW-3

Lab Sample ID: 680-162184-1
Date Collected: 12/11/18 14:53
Matrix: Water
Date Received: 12/14/18 09:49

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*73 - 131*		*12/21/18 19:10*	*100*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/21/18 19:10*	*100*
Dibromofluoromethane (Surr)	*102*		*80 - 122*		*12/21/18 19:10*	*100*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*12/21/18 19:10*	*100*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**25000**		250	120	ug/L			12/24/18 21:46	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*73 - 131*		*12/24/18 21:46*	*250*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/24/18 21:46*	*250*
Dibromofluoromethane (Surr)	*97*		*80 - 122*		*12/24/18 21:46*	*250*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*12/24/18 21:46*	*250*

Client Sample ID: MW-15S

Lab Sample ID: 680-162184-2
Date Collected: 12/11/18 12:00
Matrix: Water
Date Received: 12/14/18 09:49

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U * F1 F2	0.20	0.10	ug/L		12/17/18 14:25	12/18/18 17:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*21*		*15 - 110*	*12/17/18 14:25*	*12/18/18 17:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 21:58	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 21:58	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 21:58	1
Barium	**0.017**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 21:58	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 21:58	1
Calcium	**75**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 21:58	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 21:58	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:58	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 21:58	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 21:58	1
Iron	**0.021**	**J**	0.050	0.017	mg/L		12/14/18 17:07	12/18/18 21:58	1
Potassium	**0.22**	**J**	1.0	0.017	mg/L		12/14/18 17:07	12/18/18 21:58	1
Magnesium	**20**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 21:58	1
Manganese	**0.073**		0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:58	1
Sodium	**37**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 21:58	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 21:58	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 21:58	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 21:58	1
Selenium	**0.030**		0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 21:58	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 21:58	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:58	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 21:58	1

Client Sample ID: MW-15S

Lab Sample ID: 680-162184-2

Date Collected: 12/11/18 12:00

Matrix: Water

Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:34	12/18/18 20:57	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:34	12/18/18 20:57	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:34	12/18/18 20:57	1
Barium	**0.015**		0.010	0.0017	mg/L		12/14/18 15:34	12/18/18 20:57	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:34	12/18/18 20:57	1
Calcium	**72**		0.50	0.025	mg/L		12/14/18 15:34	12/18/18 20:57	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:34	12/18/18 20:57	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:57	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:34	12/18/18 20:57	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:34	12/18/18 20:57	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 15:34	12/18/18 20:57	1
Potassium	**0.22**	**J**	1.0	0.017	mg/L		12/14/18 15:34	12/18/18 20:57	1
Magnesium	**19**		0.50	0.033	mg/L		12/14/18 15:34	12/18/18 20:57	1
Manganese	**0.0035**	**J**	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:57	1
Sodium	**36**		1.0	0.48	mg/L		12/14/18 15:34	12/18/18 20:57	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:34	12/18/18 20:57	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:34	12/18/18 20:57	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:34	12/18/18 20:57	1
Selenium	**0.039**		0.020	0.0099	mg/L		12/14/18 15:34	12/18/18 20:57	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:34	12/18/18 20:57	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:57	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:34	12/18/18 20:57	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 10:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/22/18 09:36	1

Client Sample ID: MW-15D

Lab Sample ID: 680-162184-3

Date Collected: 12/11/18 13:50

Matrix: Water

Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 21:27	1
Aluminum	**0.061**	**J**	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 21:27	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 21:27	1
Barium	**0.11**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 21:27	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 21:27	1
Calcium	**50**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 21:27	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 21:27	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:27	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 21:27	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 21:27	1
Iron	**0.13**		0.050	0.017	mg/L		12/14/18 17:07	12/18/18 21:27	1
Potassium	**4.4**		1.0	0.017	mg/L		12/14/18 17:07	12/18/18 21:27	1
Magnesium	**12**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 21:27	1

Client Sample ID: MW-15D
Lab Sample ID: 680-162184-3

Date Collected: 12/11/18 13:50
Date Received: 12/14/18 09:49
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.016**		0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:27	1
Sodium	**6.9**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 21:27	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 21:27	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 21:27	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 21:27	1
Selenium	**0.33**		0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 21:27	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 21:27	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:27	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 21:27	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:34	12/18/18 20:26	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:34	12/18/18 20:26	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:34	12/18/18 20:26	1
Barium	**0.098**		0.010	0.0017	mg/L		12/14/18 15:34	12/18/18 20:26	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:34	12/18/18 20:26	1
Calcium	**44**		0.50	0.025	mg/L		12/14/18 15:34	12/18/18 20:26	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:34	12/18/18 20:26	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:26	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:34	12/18/18 20:26	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:34	12/18/18 20:26	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 15:34	12/18/18 20:26	1
Potassium	**4.1**		1.0	0.017	mg/L		12/14/18 15:34	12/18/18 20:26	1
Magnesium	**11**		0.50	0.033	mg/L		12/14/18 15:34	12/18/18 20:26	1
Manganese	**0.0072**	**J**	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:26	1
Sodium	**6.6**		1.0	0.48	mg/L		12/14/18 15:34	12/18/18 20:26	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:34	12/18/18 20:26	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:34	12/18/18 20:26	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:34	12/18/18 20:26	1
Selenium	**0.35**	**F1**	0.020	0.0099	mg/L		12/14/18 15:34	12/18/18 20:26	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:34	12/18/18 20:26	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:26	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:34	12/18/18 20:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U F1	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 10:28	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/21/18 23:36	1

Client Sample ID: MW-16S
Lab Sample ID: 680-162184-4

Date Collected: 12/11/18 15:45
Date Received: 12/14/18 09:49
Matrix: Water

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U *	0.20	0.10	ug/L		12/17/18 14:25	12/18/18 19:05	1

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-16S

Date Collected: 12/11/18 15:45
Date Received: 12/14/18 09:49

Lab Sample ID: 680-162184-4

Matrix: Water

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	22		15 - 110	12/17/18 14:25	12/18/18 19:05	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 22:02	1
Aluminum	**0.036**	**J**	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 22:02	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 22:02	1
Barium	**0.097**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 22:02	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 22:02	1
Calcium	**84**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 22:02	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 22:02	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:02	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 22:02	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 22:02	1
Iron	**0.27**		0.050	0.017	mg/L		12/14/18 17:07	12/18/18 22:02	1
Potassium	**0.93**	**J**	1.0	0.017	mg/L		12/14/18 17:07	12/18/18 22:02	1
Magnesium	**24**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 22:02	1
Manganese	**0.15**		0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:02	1
Sodium	**19**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 22:02	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 22:02	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 22:02	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 22:02	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 22:02	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 22:02	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:02	1
Zinc	**0.0079**	**J**	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 22:02	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:34	12/18/18 21:01	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:34	12/18/18 21:01	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:34	12/18/18 21:01	1
Barium	**0.095**		0.010	0.0017	mg/L		12/14/18 15:34	12/18/18 21:01	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:34	12/18/18 21:01	1
Calcium	**82**		0.50	0.025	mg/L		12/14/18 15:34	12/18/18 21:01	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:34	12/18/18 21:01	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:01	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:34	12/18/18 21:01	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:34	12/18/18 21:01	1
Iron	**0.16**		0.050	0.017	mg/L		12/14/18 15:34	12/18/18 21:01	1
Potassium	**0.92**	**J**	1.0	0.017	mg/L		12/14/18 15:34	12/18/18 21:01	1
Magnesium	**24**		0.50	0.033	mg/L		12/14/18 15:34	12/18/18 21:01	1
Manganese	**0.088**		0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:01	1
Sodium	**18**		1.0	0.48	mg/L		12/14/18 15:34	12/18/18 21:01	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:34	12/18/18 21:01	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:34	12/18/18 21:01	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:34	12/18/18 21:01	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 15:34	12/18/18 21:01	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:34	12/18/18 21:01	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:01	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:34	12/18/18 21:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 10:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/22/18 09:40	1

Client Sample ID: MW-21R

Lab Sample ID: 680-162184-5

Date Collected: 12/11/18 13:23

Matrix: Water

Date Received: 12/14/18 09:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 18:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 18:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 18:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 18:56	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 18:56	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 18:56	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 18:56	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 18:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 18:56	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 18:56	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 18:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 18:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 18:56	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 18:56	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 18:56	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 18:56	1
Acetone	**8.9**	**J**	10	7.0	ug/L			12/20/18 18:56	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 18:56	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 18:56	1
Bromomethane	5.0	U	5.0	2.5	ug/L			12/20/18 18:56	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 18:56	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 18:56	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 18:56	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 18:56	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 18:56	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 18:56	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 18:56	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.41	ug/L			12/20/18 18:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 18:56	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 18:56	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 18:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 18:56	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 18:56	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 18:56	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 18:56	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 18:56	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 18:56	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 18:56	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 18:56	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 18:56	1
Tetrachloroethene	1.0	U	1.0	0.74	ug/L			12/20/18 18:56	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 18:56	1

Client Sample ID: MW-21R

Lab Sample ID: 680-162184-5

Date Collected: 12/11/18 13:23
Date Received: 12/14/18 09:49

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	**0.39**	**J**	1.0	0.37	ug/L			12/20/18 18:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 18:56	1
Trichloroethene	**4.8**		1.0	0.48	ug/L			12/20/18 18:56	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 18:56	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 18:56	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 131*		*12/20/18 18:56*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/20/18 18:56*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 122*		*12/20/18 18:56*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/20/18 18:56*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.3**	**B ***	0.20	0.10	ug/L		12/17/18 14:25	12/18/18 19:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*21*		*15 - 110*	*12/17/18 14:25*	*12/18/18 19:30*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.5**	**H**	0.20	0.10	ug/L		12/27/18 15:17	12/28/18 19:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*23*		*15 - 110*	*12/27/18 15:17*	*12/28/18 19:47*	*1*

Client Sample ID: MW-21D

Lab Sample ID: 680-162184-6

Date Collected: 12/11/18 12:37
Date Received: 12/14/18 09:49

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 19:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 19:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 19:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 19:19	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 19:19	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 19:19	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 19:19	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 19:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 19:19	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 19:19	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 19:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 19:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 19:19	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 19:19	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 19:19	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 19:19	1
Acetone	10	U	10	7.0	ug/L			12/20/18 19:19	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 19:19	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 19:19	1

Client Sample ID: MW-21D

Lab Sample ID: 680-162184-6

Date Collected: 12/11/18 12:37

Matrix: Water

Date Received: 12/14/18 09:49

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	5.0	U	5.0	2.5	ug/L			12/20/18 19:19	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 19:19	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 19:19	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 19:19	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 19:19	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 19:19	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 19:19	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 19:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/20/18 19:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 19:19	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 19:19	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 19:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 19:19	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 19:19	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 19:19	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 19:19	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 19:19	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 19:19	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 19:19	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 19:19	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 19:19	1
Tetrachloroethene	1.0	U	1.0	0.74	ug/L			12/20/18 19:19	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 19:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/20/18 19:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 19:19	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/20/18 19:19	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 19:19	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 19:19	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*73 - 131*		*12/20/18 19:19*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/20/18 19:19*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 122*		*12/20/18 19:19*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*12/20/18 19:19*	*1*

Client Sample ID: MW-22D

Lab Sample ID: 680-162184-7

Date Collected: 12/11/18 16:21

Matrix: Water

Date Received: 12/14/18 09:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 17:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 17:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 17:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 17:24	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 17:24	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 17:24	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 17:24	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 17:24	1

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-22D

Date Collected: 12/11/18 16:21
Date Received: 12/14/18 09:49

Lab Sample ID: 680-162184-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 17:24	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 17:24	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 17:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 17:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 17:24	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 17:24	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 17:24	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 17:24	1
Acetone	10	U	10	7.0	ug/L			12/20/18 17:24	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 17:24	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 17:24	1
Bromomethane	5.0	U *	5.0	2.5	ug/L			12/20/18 17:24	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 17:24	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 17:24	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 17:24	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 17:24	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 17:24	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 17:24	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 17:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/20/18 17:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 17:24	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 17:24	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 17:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 17:24	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 17:24	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 17:24	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 17:24	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 17:24	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 17:24	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 17:24	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 17:24	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 17:24	1
Tetrachloroethene	1.0	U *	1.0	0.74	ug/L			12/20/18 17:24	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 17:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/20/18 17:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 17:24	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/20/18 17:24	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 17:24	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 17:24	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*73 - 131*		*12/20/18 17:24*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/20/18 17:24*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 122*		*12/20/18 17:24*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/20/18 17:24*	*1*

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-22R

Date Collected: 12/12/18 10:43
Date Received: 12/14/18 09:49

Lab Sample ID: 680-162184-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 17:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 17:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 17:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 17:48	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 17:48	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 17:48	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 17:48	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 17:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 17:48	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 17:48	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 17:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 17:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 17:48	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 17:48	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 17:48	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 17:48	1
Acetone	10	U	10	7.0	ug/L			12/20/18 17:48	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 17:48	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 17:48	1
Bromomethane	5.0	U * F2	5.0	2.5	ug/L			12/20/18 17:48	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 17:48	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 17:48	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 17:48	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 17:48	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 17:48	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 17:48	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 17:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/20/18 17:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 17:48	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 17:48	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 17:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 17:48	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 17:48	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 17:48	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 17:48	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 17:48	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 17:48	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 17:48	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 17:48	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 17:48	1
Tetrachloroethene	1.0	U *	1.0	0.74	ug/L			12/20/18 17:48	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 17:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/20/18 17:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 17:48	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/20/18 17:48	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 17:48	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 17:48	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 17:48	1

Client Sample ID: MW-22R

Lab Sample ID: 680-162184-8

Date Collected: 12/12/18 10:43

Matrix: Water

Date Received: 12/14/18 09:49

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 131*		*12/20/18 17:48*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/18 17:48*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 122*		*12/20/18 17:48*	*1*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*12/20/18 17:48*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U *	0.21	0.11	ug/L		12/17/18 14:25	12/18/18 19:54	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*25*		*15 - 110*	*12/17/18 14:25*	*12/18/18 19:54*	*1*

Client Sample ID: MW-24S

Lab Sample ID: 680-162184-9

Date Collected: 12/12/18 13:08

Matrix: Water

Date Received: 12/14/18 09:49

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.25	U *	0.25	0.13	ug/L		12/17/18 14:25	12/18/18 20:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*26*		*15 - 110*	*12/17/18 14:25*	*12/18/18 20:19*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 22:07	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 22:07	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 22:07	1
Barium	**0.041**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 22:07	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 22:07	1
Calcium	**86**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 22:07	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 22:07	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:07	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 22:07	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 22:07	1
Iron	**0.093**		0.050	0.017	mg/L		12/14/18 17:07	12/18/18 22:07	1
Potassium	**0.58**	**J**	1.0	0.017	mg/L		12/14/18 17:07	12/18/18 22:07	1
Magnesium	**25**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 22:07	1
Manganese	**0.019**		0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:07	1
Sodium	**16**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 22:07	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 22:07	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 22:07	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 22:07	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 22:07	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 22:07	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:07	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 22:07	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:34	12/18/18 21:05	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:34	12/18/18 21:05	1

Client Sample ID: MW-24S

Lab Sample ID: 680-162184-9

Date Collected: 12/12/18 13:08

Matrix: Water

Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:34	12/18/18 21:05	1
Barium	**0.036**		0.010	0.0017	mg/L		12/14/18 15:34	12/18/18 21:05	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:34	12/18/18 21:05	1
Calcium	**81**		0.50	0.025	mg/L		12/14/18 15:34	12/18/18 21:05	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:34	12/18/18 21:05	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:05	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:34	12/18/18 21:05	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:34	12/18/18 21:05	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 15:34	12/18/18 21:05	1
Potassium	**0.55**	**J**	1.0	0.017	mg/L		12/14/18 15:34	12/18/18 21:05	1
Magnesium	**24**		0.50	0.033	mg/L		12/14/18 15:34	12/18/18 21:05	1
Manganese	**0.0083**	**J**	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:05	1
Sodium	**15**		1.0	0.48	mg/L		12/14/18 15:34	12/18/18 21:05	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:34	12/18/18 21:05	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:34	12/18/18 21:05	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:34	12/18/18 21:05	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 15:34	12/18/18 21:05	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:34	12/18/18 21:05	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:05	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:34	12/18/18 21:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 10:59	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/22/18 09:52	1

Client Sample ID: MW-24D

Lab Sample ID: 680-162184-10

Date Collected: 12/12/18 13:55

Matrix: Water

Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 22:11	1
Aluminum	**0.15**	**J**	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 22:11	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 22:11	1
Barium	**0.088**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 22:11	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 22:11	1
Calcium	**68**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 22:11	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 22:11	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:11	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 22:11	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 22:11	1
Iron	**0.82**		0.050	0.017	mg/L		12/14/18 17:07	12/18/18 22:11	1
Potassium	**1.8**		1.0	0.017	mg/L		12/14/18 17:07	12/18/18 22:11	1
Magnesium	**13**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 22:11	1
Manganese	**0.14**		0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:11	1
Sodium	**6.6**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 22:11	1

Client Sample ID: MW-24D

Lab Sample ID: 680-162184-10

Date Collected: 12/12/18 13:55

Matrix: Water

Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 22:11	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 22:11	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 22:11	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 22:11	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 22:11	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:11	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 22:11	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:34	12/18/18 21:10	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:34	12/18/18 21:10	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:34	12/18/18 21:10	1
Barium	**0.088**		0.010	0.0017	mg/L		12/14/18 15:34	12/18/18 21:10	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:34	12/18/18 21:10	1
Calcium	**68**		0.50	0.025	mg/L		12/14/18 15:34	12/18/18 21:10	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:34	12/18/18 21:10	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:10	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:34	12/18/18 21:10	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:34	12/18/18 21:10	1
Iron	**0.12**		0.050	0.017	mg/L		12/14/18 15:34	12/18/18 21:10	1
Potassium	**1.8**		1.0	0.017	mg/L		12/14/18 15:34	12/18/18 21:10	1
Magnesium	**13**		0.50	0.033	mg/L		12/14/18 15:34	12/18/18 21:10	1
Manganese	**0.11**		0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:10	1
Sodium	**6.3**		1.0	0.48	mg/L		12/14/18 15:34	12/18/18 21:10	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:34	12/18/18 21:10	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:34	12/18/18 21:10	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:34	12/18/18 21:10	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 15:34	12/18/18 21:10	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:34	12/18/18 21:10	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 21:10	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:34	12/18/18 21:10	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 11:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/22/18 09:56	1

Client Sample ID: MW-25S

Lab Sample ID: 680-162184-11

Date Collected: 12/12/18 12:23

Matrix: Water

Date Received: 12/14/18 09:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 18:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 18:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 18:11	1

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-25S

Date Collected: 12/12/18 12:23
Date Received: 12/14/18 09:49

Lab Sample ID: 680-162184-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 18:11	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 18:11	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 18:11	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 18:11	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 18:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 18:11	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 18:11	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 18:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 18:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 18:11	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 18:11	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 18:11	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 18:11	1
Acetone	10	U	10	7.0	ug/L			12/20/18 18:11	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 18:11	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 18:11	1
Bromomethane	5.0	U *	5.0	2.5	ug/L			12/20/18 18:11	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 18:11	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 18:11	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 18:11	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 18:11	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 18:11	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 18:11	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 18:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/20/18 18:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 18:11	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 18:11	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 18:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 18:11	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 18:11	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 18:11	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 18:11	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 18:11	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 18:11	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 18:11	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 18:11	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 18:11	1
Tetrachloroethene	1.0	U *	1.0	0.74	ug/L			12/20/18 18:11	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 18:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/20/18 18:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 18:11	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/20/18 18:11	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 18:11	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 18:11	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*73 - 131*		*12/20/18 18:11*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/20/18 18:11*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 122*		*12/20/18 18:11*	*1*

Client Sample ID: MW-25S

Lab Sample ID: 680-162184-11
Date Collected: 12/12/18 12:23
Matrix: Water
Date Received: 12/14/18 09:49

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/20/18 18:11*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.24	U *	0.24	0.12	ug/L		12/17/18 14:25	12/18/18 20:44	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*25*		*15 - 110*	*12/17/18 14:25*	*12/18/18 20:44*	*1*

Client Sample ID: MW-26S

Lab Sample ID: 680-162184-12
Date Collected: 12/12/18 11:05
Matrix: Water
Date Received: 12/14/18 09:49

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.21	U *	0.21	0.11	ug/L		12/17/18 14:25	12/18/18 21:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*25*		*15 - 110*	*12/17/18 14:25*	*12/18/18 21:09*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 22:16	1
Aluminum	**0.044**	**J**	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 22:16	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 22:16	1
Barium	**0.025**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 22:16	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 22:16	1
Calcium	**58**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 22:16	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 22:16	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:16	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 22:16	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 22:16	1
Iron	**0.052**		0.050	0.017	mg/L		12/14/18 17:07	12/18/18 22:16	1
Potassium	**0.50**	**J**	1.0	0.017	mg/L		12/14/18 17:07	12/18/18 22:16	1
Magnesium	**21**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 22:16	1
Manganese	**0.069**		0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:16	1
Sodium	**24**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 22:16	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 22:16	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 22:16	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 22:16	1
Selenium	**0.012**	**J**	0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 22:16	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 22:16	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:16	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 22:16	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:39	12/15/18 19:54	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:39	12/15/18 19:54	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:39	12/15/18 19:54	1
Barium	**0.023**		0.010	0.0017	mg/L		12/14/18 15:39	12/15/18 19:54	1

Client Sample ID: MW-26S

Lab Sample ID: 680-162184-12

Date Collected: 12/12/18 11:05
Date Received: 12/14/18 09:49

Matrix: Water

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:39	12/15/18 19:54	1
Calcium	**60**		0.50	0.025	mg/L		12/14/18 15:39	12/15/18 19:54	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:39	12/15/18 19:54	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:54	1
Chromium	**0.0017**	**J**	0.010	0.0016	mg/L		12/14/18 15:39	12/15/18 19:54	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:39	12/15/18 19:54	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 15:39	12/15/18 19:54	1
Potassium	**0.54**	**J**	1.0	0.017	mg/L		12/14/18 15:39	12/15/18 19:54	1
Magnesium	**23**		0.50	0.033	mg/L		12/14/18 15:39	12/15/18 19:54	1
Manganese	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:54	1
Sodium	**27**		1.0	0.48	mg/L		12/14/18 15:39	12/15/18 19:54	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:39	12/15/18 19:54	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:39	12/15/18 19:54	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:39	12/15/18 19:54	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 15:39	12/15/18 19:54	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:39	12/15/18 19:54	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:54	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:39	12/15/18 19:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 10:52	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/22/18 09:44	1

Client Sample ID: MW-26D

Lab Sample ID: 680-162184-13

Date Collected: 12/12/18 11:52
Date Received: 12/14/18 09:49

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 22:20	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 22:20	1
Arsenic	**0.025**		0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 22:20	1
Barium	**0.048**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 22:20	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 22:20	1
Calcium	**44**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 22:20	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 22:20	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:20	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 22:20	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 22:20	1
Iron	**0.12**		0.050	0.017	mg/L		12/14/18 17:07	12/18/18 22:20	1
Potassium	**0.65**	**J**	1.0	0.017	mg/L		12/14/18 17:07	12/18/18 22:20	1
Magnesium	**7.2**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 22:20	1
Manganese	**0.022**		0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:20	1
Sodium	**9.7**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 22:20	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 22:20	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 22:20	1

Client Sample ID: MW-26D

Lab Sample ID: 680-162184-13

Date Collected: 12/12/18 11:52

Matrix: Water

Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 22:20	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 22:20	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 22:20	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:20	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 22:20	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:39	12/15/18 19:59	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:39	12/15/18 19:59	1
Arsenic	**0.023**		0.020	0.0062	mg/L		12/14/18 15:39	12/15/18 19:59	1
Barium	**0.049**		0.010	0.0017	mg/L		12/14/18 15:39	12/15/18 19:59	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:39	12/15/18 19:59	1
Calcium	**48**		0.50	0.025	mg/L		12/14/18 15:39	12/15/18 19:59	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:39	12/15/18 19:59	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:59	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:39	12/15/18 19:59	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:39	12/15/18 19:59	1
Iron	**0.018**	**J**	0.050	0.017	mg/L		12/14/18 15:39	12/15/18 19:59	1
Potassium	**0.72**	**J**	1.0	0.017	mg/L		12/14/18 15:39	12/15/18 19:59	1
Magnesium	**8.1**		0.50	0.033	mg/L		12/14/18 15:39	12/15/18 19:59	1
Manganese	**0.0022**	**J**	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:59	1
Sodium	**11**		1.0	0.48	mg/L		12/14/18 15:39	12/15/18 19:59	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:39	12/15/18 19:59	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:39	12/15/18 19:59	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:39	12/15/18 19:59	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 15:39	12/15/18 19:59	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:39	12/15/18 19:59	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:59	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:39	12/15/18 19:59	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 11:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/22/18 09:48	1

Client Sample ID: METDUP_20181211

Lab Sample ID: 680-162184-14

Date Collected: 12/11/18 00:00

Matrix: Water

Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 22:24	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 22:24	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 22:24	1
Barium	**0.097**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 22:24	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 22:24	1

Client Sample ID: METDUP_20181211

Date Collected: 12/11/18 00:00
Date Received: 12/14/18 09:49

Lab Sample ID: 680-162184-14

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**45**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 22:24	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 22:24	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:24	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 22:24	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 22:24	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 17:07	12/18/18 22:24	1
Potassium	**4.0**		1.0	0.017	mg/L		12/14/18 17:07	12/18/18 22:24	1
Magnesium	**12**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 22:24	1
Manganese	**0.0075**	**J**	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:24	1
Sodium	**6.9**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 22:24	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 22:24	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 22:24	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 22:24	1
Selenium	**0.36**		0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 22:24	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 22:24	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:24	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 22:24	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:39	12/15/18 19:21	1
Aluminum	**0.062**	**J**	0.20	0.024	mg/L		12/14/18 15:39	12/15/18 19:21	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:39	12/15/18 19:21	1
Barium	**0.12**		0.010	0.0017	mg/L		12/14/18 15:39	12/15/18 19:21	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:39	12/15/18 19:21	1
Calcium	**56**		0.50	0.025	mg/L		12/14/18 15:39	12/15/18 19:21	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:39	12/15/18 19:21	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:21	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:39	12/15/18 19:21	1
Copper	**0.0019**	**J**	0.020	0.0018	mg/L		12/14/18 15:39	12/15/18 19:21	1
Iron	**0.12**		0.050	0.017	mg/L		12/14/18 15:39	12/15/18 19:21	1
Potassium	**4.9**		1.0	0.017	mg/L		12/14/18 15:39	12/15/18 19:21	1
Magnesium	**14**		0.50	0.033	mg/L		12/14/18 15:39	12/15/18 19:21	1
Manganese	**0.023**		0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:21	1
Sodium	**8.0**		1.0	0.48	mg/L		12/14/18 15:39	12/15/18 19:21	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:39	12/15/18 19:21	1
Lead	**0.0051**	**J**	0.010	0.0039	mg/L		12/14/18 15:39	12/15/18 19:21	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:39	12/15/18 19:21	1
Selenium	**0.38**		0.020	0.0099	mg/L		12/14/18 15:39	12/15/18 19:21	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:39	12/15/18 19:21	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:21	1
Zinc	**0.010**	**J**	0.020	0.0070	mg/L		12/14/18 15:39	12/15/18 19:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 10:44	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:18	12/22/18 10:04	1

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: VOCDUP_20181212

Date Collected: 12/12/18 00:00
Date Received: 12/14/18 09:49

Lab Sample ID: 680-162184-15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 18:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 18:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 18:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 18:35	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 18:35	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 18:35	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 18:35	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 18:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 18:35	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 18:35	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 18:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 18:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 18:35	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 18:35	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 18:35	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 18:35	1
Acetone	10	U	10	7.0	ug/L			12/20/18 18:35	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 18:35	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 18:35	1
Bromomethane	5.0	U *	5.0	2.5	ug/L			12/20/18 18:35	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 18:35	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 18:35	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 18:35	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 18:35	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 18:35	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 18:35	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 18:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/20/18 18:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 18:35	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 18:35	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 18:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 18:35	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 18:35	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 18:35	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 18:35	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 18:35	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 18:35	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 18:35	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 18:35	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 18:35	1
Tetrachloroethene	1.0	U *	1.0	0.74	ug/L			12/20/18 18:35	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 18:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/20/18 18:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 18:35	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/20/18 18:35	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 18:35	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 18:35	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 18:35	1

Client Sample ID: VOCDUP_20181212

Lab Sample ID: 680-162184-15

Date Collected: 12/12/18 00:00

Matrix: Water

Date Received: 12/14/18 09:49

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 131*		*12/20/18 18:35*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/20/18 18:35*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 122*		*12/20/18 18:35*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*12/20/18 18:35*	*1*

Client Sample ID: EQUIP BLANK

Lab Sample ID: 680-162184-16

Date Collected: 12/11/18 16:35

Matrix: Water

Date Received: 12/14/18 09:49

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U *	0.20	0.10	ug/L		12/17/18 14:25	12/18/18 21:33	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*24*		*15 - 110*	*12/17/18 14:25*	*12/18/18 21:33*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/19/18 00:06	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:07	12/19/18 00:06	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/19/18 00:06	1
Barium	0.010	U	0.010	0.0017	mg/L		12/14/18 17:07	12/19/18 00:06	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/19/18 00:06	1
Calcium	**0.12**	**J**	0.50	0.025	mg/L		12/14/18 17:07	12/19/18 00:06	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/19/18 00:06	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/19/18 00:06	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/19/18 00:06	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/19/18 00:06	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 17:07	12/19/18 00:06	1
Potassium	**0.017**	**J**	1.0	0.017	mg/L		12/14/18 17:07	12/19/18 00:06	1
Magnesium	0.50	U	0.50	0.033	mg/L		12/14/18 17:07	12/19/18 00:06	1
Manganese	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/19/18 00:06	1
Sodium	1.0	U	1.0	0.48	mg/L		12/14/18 17:07	12/19/18 00:06	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/19/18 00:06	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/19/18 00:06	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/19/18 00:06	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:07	12/19/18 00:06	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/19/18 00:06	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/19/18 00:06	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/19/18 00:06	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:30	12/19/18 00:32	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:30	12/19/18 00:32	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:30	12/19/18 00:32	1
Barium	0.010	U	0.010	0.0017	mg/L		12/14/18 17:30	12/19/18 00:32	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:30	12/19/18 00:32	1
Calcium	**0.12**	**J**	0.50	0.025	mg/L		12/14/18 17:30	12/19/18 00:32	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:30	12/19/18 00:32	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:30	12/19/18 00:32	1

Client Sample ID: EQUIP BLANK

Lab Sample ID: 680-162184-16

Date Collected: 12/11/18 16:35

Matrix: Water

Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:30	12/19/18 00:32	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:30	12/19/18 00:32	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 17:30	12/19/18 00:32	1
Potassium	**0.017**	**J**	1.0	0.017	mg/L		12/14/18 17:30	12/19/18 00:32	1
Magnesium	0.50	U	0.50	0.033	mg/L		12/14/18 17:30	12/19/18 00:32	1
Manganese	0.010	U	0.010	0.0010	mg/L		12/14/18 17:30	12/19/18 00:32	1
Sodium	1.0	U	1.0	0.48	mg/L		12/14/18 17:30	12/19/18 00:32	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:30	12/19/18 00:32	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:30	12/19/18 00:32	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:30	12/19/18 00:32	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:30	12/19/18 00:32	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:30	12/19/18 00:32	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:30	12/19/18 00:32	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:30	12/19/18 00:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 11:15	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/22/18 10:00	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 680-162184-17

Date Collected: 12/12/18 00:00

Matrix: Water

Date Received: 12/14/18 09:49

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 12:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 12:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 12:17	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 12:17	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 12:17	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 12:17	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 12:17	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 12:17	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 12:17	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 12:17	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 12:17	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 12:17	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 12:17	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 12:17	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 12:17	1
Acetone	10	U	10	7.0	ug/L			12/20/18 12:17	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 12:17	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 12:17	1
Bromomethane	5.0	U *	5.0	2.5	ug/L			12/20/18 12:17	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 12:17	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 680-162184-17

Date Collected: 12/12/18 00:00
Matrix: Water
Date Received: 12/14/18 09:49

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 12:17	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 12:17	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 12:17	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 12:17	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 12:17	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 12:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/20/18 12:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 12:17	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 12:17	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 12:17	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 12:17	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 12:17	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 12:17	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 12:17	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 12:17	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 12:17	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 12:17	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 12:17	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 12:17	1
Tetrachloroethene	1.0	U *	1.0	0.74	ug/L			12/20/18 12:17	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 12:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/20/18 12:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 12:17	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/20/18 12:17	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 12:17	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 12:17	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*73 - 131*		*12/20/18 12:17*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/20/18 12:17*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 122*		*12/20/18 12:17*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/20/18 12:17*	*1*

Client Sample ID: SW-1

Lab Sample ID: 680-162184-18

Date Collected: 12/12/18 16:40
Matrix: Water
Date Received: 12/14/18 09:49

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 22:29	1
Aluminum	**0.12**	**J**	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 22:29	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 22:29	1
Barium	**0.033**		0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 22:29	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 22:29	1
Calcium	**43**		0.50	0.025	mg/L		12/14/18 17:07	12/18/18 22:29	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 22:29	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:29	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 22:29	1
Copper	**0.022**		0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 22:29	1

Client Sample Results

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: SW-1

Date Collected: 12/12/18 16:40
Date Received: 12/14/18 09:49

Lab Sample ID: 680-162184-18

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.38**		0.050	0.017	mg/L		12/14/18 17:07	12/18/18 22:29	1
Potassium	**0.87**	**J**	1.0	0.017	mg/L		12/14/18 17:07	12/18/18 22:29	1
Magnesium	**5.0**		0.50	0.033	mg/L		12/14/18 17:07	12/18/18 22:29	1
Manganese	**0.077**		0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:29	1
Sodium	**14**		1.0	0.48	mg/L		12/14/18 17:07	12/18/18 22:29	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 22:29	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 22:29	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 22:29	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 22:29	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 22:29	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:29	1
Zinc	**0.0096**	**J**	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 22:29	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:34	12/18/18 20:21	1
Aluminum	**0.071**	**J**	0.20	0.024	mg/L		12/14/18 15:34	12/18/18 20:21	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:34	12/18/18 20:21	1
Barium	**0.038**		0.010	0.0017	mg/L		12/14/18 15:34	12/18/18 20:21	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:34	12/18/18 20:21	1
Calcium	**45**		0.50	0.025	mg/L		12/14/18 15:34	12/18/18 20:21	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:34	12/18/18 20:21	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:21	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:34	12/18/18 20:21	1
Copper	**0.028**		0.020	0.0018	mg/L		12/14/18 15:34	12/18/18 20:21	1
Iron	**0.64**		0.050	0.017	mg/L		12/14/18 15:34	12/18/18 20:21	1
Potassium	**0.88**	**J**	1.0	0.017	mg/L		12/14/18 15:34	12/18/18 20:21	1
Magnesium	**5.1**		0.50	0.033	mg/L		12/14/18 15:34	12/18/18 20:21	1
Manganese	**0.13**		0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:21	1
Sodium	**14**		1.0	0.48	mg/L		12/14/18 15:34	12/18/18 20:21	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:34	12/18/18 20:21	1
Lead	**0.0040**	**J**	0.010	0.0039	mg/L		12/14/18 15:34	12/18/18 20:21	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:34	12/18/18 20:21	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 15:34	12/18/18 20:21	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:34	12/18/18 20:21	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:21	1
Zinc	**0.016**	**J**	0.020	0.0070	mg/L		12/14/18 15:34	12/18/18 20:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 10:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/31/18 15:16	01/02/19 11:15	1

Client Sample ID: MW-10

Lab Sample ID: 680-162184-19

Date Collected: 12/12/18 14:21
Matrix: Water
Date Received: 12/14/18 09:49

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U *	0.20	0.10	ug/L		12/17/18 14:25	12/18/18 21:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*27*		*15 - 110*	*12/17/18 14:25*	*12/18/18 21:58*	*1*

Client Sample ID: MW-11D

Lab Sample ID: 680-162184-20

Date Collected: 12/12/18 15:59
Matrix: Water
Date Received: 12/14/18 09:49

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U *	0.20	0.10	ug/L		12/17/18 14:25	12/18/18 22:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*23*		*15 - 110*	*12/17/18 14:25*	*12/18/18 22:23*	*1*

Client Sample ID: PFASDUP_20181211

Lab Sample ID: 680-162184-21

Date Collected: 12/11/18 00:00
Matrix: Water
Date Received: 12/14/18 09:49

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U *	0.20	0.10	ug/L		12/17/18 14:25	12/18/18 22:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*27*		*15 - 110*	*12/17/18 14:25*	*12/18/18 22:48*	*1*

Surrogate Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	TOL	DBFM	BFB
Lab Sample ID	Client Sample ID	(73-131)	(80-120)	(80-122)	(80-120)
680-162184-1	MW-3	104	97	102	101
680-162184-1 - DL	MW-3	92	98	97	89
680-162184-5	MW-21R	99	100	102	99
680-162184-6	MW-21D	97	99	103	99
680-162184-7	MW-22D	94	95	99	93
680-162184-8	MW-22R	96	94	101	84
680-162184-8 MS	MW-22R	97	99	103	92
680-162184-8 MSD	MW-22R	93	97	99	92
680-162184-11	MW-25S	93	96	97	93
680-162184-15	VOCDUP_20181212	96	95	99	92
680-162184-17	TRIP BLANK	97	94	100	93
LCS 680-552552/3	Lab Control Sample	98	97	100	97
LCS 680-552557/3	Lab Control Sample	99	106	101	95
LCS 680-552754/3	Lab Control Sample	98	101	103	99
LCS 680-553025/4	Lab Control Sample	91	98	98	91
LCSD 680-552552/4	Lab Control Sample Dup	94	98	100	97
LCSD 680-552557/4	Lab Control Sample Dup	96	95	99	93
LCSD 680-552754/4	Lab Control Sample Dup	95	98	100	97
LCSD 680-553025/5	Lab Control Sample Dup	99	101	104	94
MB 680-552552/8	Method Blank	95	98	100	98
MB 680-552557/8	Method Blank	93	95	97	91
MB 680-552754/8	Method Blank	96	99	101	98
MB 680-553025/8	Method Blank	92	99	96	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Isotope Dilution Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	**Client Sample ID**	**DXE (15-110)**							
680-162184-2	MW-15S	21							
680-162184-2 MS	MW-15S	25							
680-162184-2 MSD	MW-15S	24							
680-162184-4	MW-16S	22							
680-162184-5	MW-21R	21							
680-162184-5 - RE	MW-21R	23							
680-162184-8	MW-22R	25							
680-162184-9	MW-24S	26							
680-162184-11	MW-25S	25							
680-162184-12	MW-26S	25							
680-162184-16	EQUIP BLANK	24							
680-162184-19	MW-10	27							
680-162184-20	MW-11D	23							
680-162184-21	PFASDUP_20181211	27							
LCS 480-451231/2-A	Lab Control Sample	26							
LCS 480-452766/2-A	Lab Control Sample	30							
MB 480-451231/1-A	Method Blank	25							
MB 480-452766/1-A	Method Blank	32							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-552552/8
Matrix: Water
Analysis Batch: 552552

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 11:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 11:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 11:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 11:45	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 11:45	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 11:45	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 11:45	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 11:45	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 11:45	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 11:45	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 11:45	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 11:45	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 11:45	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 11:45	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 11:45	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 11:45	1
Acetone	10	U	10	7.0	ug/L			12/20/18 11:45	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 11:45	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 11:45	1
Bromomethane	5.0	U	5.0	2.5	ug/L			12/20/18 11:45	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 11:45	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 11:45	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 11:45	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 11:45	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 11:45	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 11:45	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 11:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/20/18 11:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 11:45	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 11:45	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 11:45	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 11:45	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 11:45	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 11:45	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 11:45	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 11:45	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 11:45	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 11:45	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 11:45	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 11:45	1
Tetrachloroethene	1.0	U	1.0	0.74	ug/L			12/20/18 11:45	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 11:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/20/18 11:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 11:45	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/20/18 11:45	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 11:45	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 11:45	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 11:45	1

QC Sample Results

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		73 - 131		12/20/18 11:45	1
Toluene-d8 (Surr)	98		80 - 120		12/20/18 11:45	1
Dibromofluoromethane (Surr)	100		80 - 122		12/20/18 11:45	1
4-Bromofluorobenzene (Surr)	98		80 - 120		12/20/18 11:45	1

Lab Sample ID: LCS 680-552552/3
Matrix: Water
Analysis Batch: 552552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	80 - 120
1,1,2,2-Tetrachloroethane	50.0	51.7		ug/L		103	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.9		ug/L		102	79 - 124
1,1,2-Trichloroethane	50.0	51.4		ug/L		103	80 - 120
1,1-Dichloroethane	50.0	48.5		ug/L		97	80 - 120
1,1-Dichloroethene	50.0	48.6		ug/L		97	76 - 120
1,2,4-Trichlorobenzene	50.0	46.6		ug/L		93	68 - 128
1,2-Dibromo-3-Chloropropane	50.0	43.3		ug/L		87	71 - 134
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	80 - 120
1,2-Dichloroethane	50.0	48.0		ug/L		96	80 - 120
1,2-Dichloropropane	50.0	50.5		ug/L		101	80 - 120
1,3-Dichlorobenzene	50.0	50.1		ug/L		100	80 - 120
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	80 - 120
Methyl Ethyl Ketone	250	247		ug/L		99	80 - 131
2-Hexanone	250	245		ug/L		98	74 - 127
methyl isobutyl ketone	250	265		ug/L		106	76 - 124
Acetone	250	251		ug/L		100	70 - 135
Benzene	50.0	50.2		ug/L		100	80 - 120
Bromoform	50.0	54.7		ug/L		109	74 - 126
Bromomethane	50.0	34.4		ug/L		69	62 - 130
Carbon disulfide	50.0	47.7		ug/L		95	80 - 120
Carbon tetrachloride	50.0	51.5		ug/L		103	76 - 123
Chlorobenzene	50.0	49.7		ug/L		99	80 - 120
Dibromochloromethane	50.0	52.5		ug/L		105	80 - 121
Chloroethane	50.0	43.4		ug/L		87	66 - 135
Chloroform	50.0	49.0		ug/L		98	80 - 120
Chloromethane	50.0	41.4		ug/L		83	69 - 131
cis-1,2-Dichloroethene	50.0	49.7		ug/L		99	80 - 120
cis-1,3-Dichloropropene	50.0	51.3		ug/L		103	80 - 120
Cyclohexane	50.0	51.4		ug/L		103	80 - 120
Bromodichloromethane	50.0	51.4		ug/L		103	80 - 120
Dichlorodifluoromethane	50.0	42.3		ug/L		85	47 - 155
Ethylbenzene	50.0	50.2		ug/L		100	80 - 120
1,2-Dibromoethane	50.0	52.3		ug/L		105	80 - 120
Isopropylbenzene	50.0	51.3		ug/L		103	80 - 120
Methyl acetate	100	101		ug/L		101	45 - 158
Methyl tert-butyl ether	50.0	50.3		ug/L		101	80 - 120
Methylcyclohexane	50.0	52.4		ug/L		105	85 - 122
Methylene Chloride	50.0	44.2		ug/L		88	80 - 120
Styrene	50.0	52.9		ug/L		106	80 - 120
Tetrachloroethene	50.0	50.3		ug/L		101	80 - 121
Toluene	50.0	50.3		ug/L		101	80 - 113
trans-1,2-Dichloroethene	50.0	50.7		ug/L		101	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-552552/3
Matrix: Water
Analysis Batch: 552552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	49.7		ug/L		99	80 - 120
Trichloroethene	50.0	50.8		ug/L		102	80 - 120
Trichlorofluoromethane	50.0	46.3		ug/L		93	60 - 141
Vinyl chloride	50.0	44.7		ug/L		89	71 - 128
Xylenes, Total	100	103		ug/L		103	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*73 - 131*
Toluene-d8 (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 122*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: LCSD 680-552552/4
Matrix: Water
Analysis Batch: 552552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	50.6		ug/L		101	80 - 120	0	20
1,1,2,2-Tetrachloroethane	50.0	51.7		ug/L		103	80 - 120	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.6		ug/L		101	79 - 124	1	20
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	80 - 120	3	20
1,1-Dichloroethane	50.0	48.7		ug/L		97	80 - 120	1	20
1,1-Dichloroethene	50.0	49.2		ug/L		98	76 - 120	1	20
1,2,4-Trichlorobenzene	50.0	49.2		ug/L		98	68 - 128	5	20
1,2-Dibromo-3-Chloropropane	50.0	45.2		ug/L		90	71 - 134	4	20
1,2-Dichlorobenzene	50.0	52.3		ug/L		105	80 - 120	2	20
1,2-Dichloroethane	50.0	46.8		ug/L		94	80 - 120	2	50
1,2-Dichloropropane	50.0	49.3		ug/L		99	80 - 120	2	20
1,3-Dichlorobenzene	50.0	51.2		ug/L		102	80 - 120	2	20
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	80 - 120	0	20
Methyl Ethyl Ketone	250	233		ug/L		93	80 - 131	6	20
2-Hexanone	250	235		ug/L		94	74 - 127	4	20
methyl isobutyl ketone	250	254		ug/L		102	76 - 124	4	20
Acetone	250	236		ug/L		94	70 - 135	6	30
Benzene	50.0	49.9		ug/L		100	80 - 120	1	20
Bromoform	50.0	54.2		ug/L		108	74 - 126	1	20
Bromomethane	50.0	35.1		ug/L		70	62 - 130	2	20
Carbon disulfide	50.0	47.8		ug/L		96	80 - 120	0	20
Carbon tetrachloride	50.0	50.8		ug/L		102	76 - 123	1	20
Chlorobenzene	50.0	50.7		ug/L		101	80 - 120	2	20
Dibromochloromethane	50.0	50.8		ug/L		102	80 - 121	3	20
Chloroethane	50.0	42.5		ug/L		85	66 - 135	2	20
Chloroform	50.0	48.8		ug/L		98	80 - 120	0	20
Chloromethane	50.0	41.2		ug/L		82	69 - 131	0	30
cis-1,2-Dichloroethene	50.0	49.9		ug/L		100	80 - 120	0	20
cis-1,3-Dichloropropene	50.0	50.3		ug/L		101	80 - 120	2	20
Cyclohexane	50.0	50.8		ug/L		102	80 - 120	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-552552/4
Matrix: Water
Analysis Batch: 552552

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromodichloromethane	50.0	49.5		ug/L		99	80 - 120	4	20
Dichlorodifluoromethane	50.0	41.9		ug/L		84	47 - 155	1	40
Ethylbenzene	50.0	51.5		ug/L		103	80 - 120	2	20
1,2-Dibromoethane	50.0	50.3		ug/L		101	80 - 120	4	20
Isopropylbenzene	50.0	52.7		ug/L		105	80 - 120	3	20
Methyl acetate	100	95.2		ug/L		95	45 - 158	6	20
Methyl tert-butyl ether	50.0	46.7		ug/L		93	80 - 120	7	20
Methylcyclohexane	50.0	52.9		ug/L		106	85 - 122	1	20
Methylene Chloride	50.0	43.3		ug/L		87	80 - 120	2	20
Styrene	50.0	53.2		ug/L		106	80 - 120	1	20
Tetrachloroethene	50.0	50.4		ug/L		101	80 - 121	0	20
Toluene	50.0	49.9		ug/L		100	80 - 113	1	20
trans-1,2-Dichloroethene	50.0	51.6		ug/L		103	80 - 120	2	20
trans-1,3-Dichloropropene	50.0	48.1		ug/L		96	80 - 120	3	30
Trichloroethene	50.0	50.5		ug/L		101	80 - 120	1	20
Trichlorofluoromethane	50.0	46.3		ug/L		93	60 - 141	0	20
Vinyl chloride	50.0	44.2		ug/L		88	71 - 128	1	20
Xylenes, Total	100	104		ug/L		104	80 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*73 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 122*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 680-552557/8
Matrix: Water
Analysis Batch: 552557

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/20/18 11:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/20/18 11:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/20/18 11:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/20/18 11:54	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/20/18 11:54	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/20/18 11:54	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/20/18 11:54	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/20/18 11:54	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/20/18 11:54	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/20/18 11:54	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/20/18 11:54	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/20/18 11:54	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/20/18 11:54	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/20/18 11:54	1
2-Hexanone	10	U	10	2.0	ug/L			12/20/18 11:54	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/20/18 11:54	1
Acetone	10	U	10	7.0	ug/L			12/20/18 11:54	1
Benzene	1.0	U	1.0	0.43	ug/L			12/20/18 11:54	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-552557/8
Matrix: Water
Analysis Batch: 552557

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	1.0	U	1.0	0.43	ug/L			12/20/18 11:54	1
Bromomethane	5.0	U	5.0	2.5	ug/L			12/20/18 11:54	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/20/18 11:54	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/20/18 11:54	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/20/18 11:54	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/20/18 11:54	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/20/18 11:54	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/20/18 11:54	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/20/18 11:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/20/18 11:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/20/18 11:54	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/20/18 11:54	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/20/18 11:54	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/20/18 11:54	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/20/18 11:54	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/20/18 11:54	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/20/18 11:54	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/20/18 11:54	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/20/18 11:54	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/20/18 11:54	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/20/18 11:54	1
Styrene	1.0	U	1.0	0.27	ug/L			12/20/18 11:54	1
Tetrachloroethene	1.0	U	1.0	0.74	ug/L			12/20/18 11:54	1
Toluene	1.0	U	1.0	0.48	ug/L			12/20/18 11:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/20/18 11:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/20/18 11:54	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/20/18 11:54	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/20/18 11:54	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/20/18 11:54	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/20/18 11:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*73 - 131*		*12/20/18 11:54*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/20/18 11:54*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 122*		*12/20/18 11:54*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*12/20/18 11:54*	*1*

Lab Sample ID: LCS 680-552557/3
Matrix: Water
Analysis Batch: 552557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	52.5		ug/L		105	80 - 120
1,1,2,2-Tetrachloroethane	50.0	50.5		ug/L		101	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.9		ug/L		112	79 - 124
1,1,2-Trichloroethane	50.0	53.9		ug/L		108	80 - 120
1,1-Dichloroethane	50.0	49.8		ug/L		100	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-552557/3
Matrix: Water
Analysis Batch: 552557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	50.0	54.2		ug/L		108	76 - 120
1,2,4-Trichlorobenzene	50.0	50.7		ug/L		101	68 - 128
1,2-Dibromo-3-Chloropropane	50.0	57.4		ug/L		115	71 - 134
1,2-Dichlorobenzene	50.0	54.2		ug/L		108	80 - 120
1,2-Dichloroethane	50.0	52.5		ug/L		105	80 - 120
1,2-Dichloropropane	50.0	52.4		ug/L		105	80 - 120
1,3-Dichlorobenzene	50.0	54.5		ug/L		109	80 - 120
1,4-Dichlorobenzene	50.0	52.1		ug/L		104	80 - 120
Methyl Ethyl Ketone	250	288		ug/L		115	80 - 131
2-Hexanone	250	270		ug/L		108	74 - 127
methyl isobutyl ketone	250	264		ug/L		105	76 - 124
Acetone	250	287		ug/L		115	70 - 135
Benzene	50.0	51.0		ug/L		102	80 - 120
Bromoform	50.0	55.9		ug/L		112	74 - 126
Bromomethane	50.0	28.7	E *	ug/L		57	62 - 130
Carbon disulfide	50.0	53.3		ug/L		107	80 - 120
Carbon tetrachloride	50.0	54.7		ug/L		109	76 - 123
Chlorobenzene	50.0	52.2		ug/L		104	80 - 120
Dibromochloromethane	50.0	57.7		ug/L		115	80 - 121
Chloroethane	50.0	55.9		ug/L		112	66 - 135
Chloroform	50.0	50.6		ug/L		101	80 - 120
Chloromethane	50.0	50.8		ug/L		102	69 - 131
cis-1,2-Dichloroethene	50.0	47.3		ug/L		95	80 - 120
cis-1,3-Dichloropropene	50.0	53.5		ug/L		107	80 - 120
Cyclohexane	50.0	53.1		ug/L		106	80 - 120
Bromodichloromethane	50.0	54.0		ug/L		108	80 - 120
Dichlorodifluoromethane	50.0	53.0		ug/L		106	47 - 155
Ethylbenzene	50.0	52.6		ug/L		105	80 - 120
1,2-Dibromoethane	50.0	57.0		ug/L		114	80 - 120
Isopropylbenzene	50.0	53.3		ug/L		107	80 - 120
Methyl acetate	100	109		ug/L		109	45 - 158
Methyl tert-butyl ether	50.0	51.2		ug/L		102	80 - 120
Methylcyclohexane	50.0	53.9		ug/L		108	85 - 122
Methylene Chloride	50.0	48.4		ug/L		97	80 - 120
Styrene	50.0	53.5		ug/L		107	80 - 120
Tetrachloroethene	50.0	61.5	*	ug/L		123	80 - 121
Toluene	50.0	55.3		ug/L		111	80 - 113
trans-1,2-Dichloroethene	50.0	51.9		ug/L		104	80 - 120
trans-1,3-Dichloropropene	50.0	54.4		ug/L		109	80 - 120
Trichloroethene	50.0	49.4		ug/L		99	80 - 120
Trichlorofluoromethane	50.0	58.8		ug/L		118	60 - 141
Vinyl chloride	50.0	54.3		ug/L		109	71 - 128
Xylenes, Total	100	102		ug/L		102	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 131*
Toluene-d8 (Surr)	*106*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 122*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-552557/3
Matrix: Water
Analysis Batch: 552557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*

Lab Sample ID: LCSD 680-552557/4
Matrix: Water
Analysis Batch: 552557

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	53.3		ug/L		107	80 - 120	1	20
1,1,2,2-Tetrachloroethane			50.0	49.9		ug/L		100	80 - 120	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	56.0		ug/L		112	79 - 124	0	20
1,1,2-Trichloroethane			50.0	49.5		ug/L		99	80 - 120	9	20
1,1-Dichloroethane			50.0	48.8		ug/L		98	80 - 120	2	20
1,1-Dichloroethene			50.0	52.0		ug/L		104	76 - 120	4	20
1,2,4-Trichlorobenzene			50.0	49.5		ug/L		99	68 - 128	2	20
1,2-Dibromo-3-Chloropropane			50.0	53.0		ug/L		106	71 - 134	8	20
1,2-Dichlorobenzene			50.0	52.5		ug/L		105	80 - 120	3	20
1,2-Dichloroethane			50.0	49.5		ug/L		99	80 - 120	6	50
1,2-Dichloropropane			50.0	48.5		ug/L		97	80 - 120	8	20
1,3-Dichlorobenzene			50.0	52.7		ug/L		105	80 - 120	3	20
1,4-Dichlorobenzene			50.0	51.4		ug/L		103	80 - 120	1	20
Methyl Ethyl Ketone			250	265		ug/L		106	80 - 131	8	20
2-Hexanone			250	242		ug/L		97	74 - 127	11	20
methyl isobutyl ketone			250	234		ug/L		94	76 - 124	12	20
Acetone			250	245		ug/L		98	70 - 135	16	30
Benzene			50.0	48.9		ug/L		98	80 - 120	4	20
Bromoform			50.0	53.5		ug/L		107	74 - 126	4	20
Bromomethane			50.0	29.2	E *	ug/L		58	62 - 130	2	20
Carbon disulfide			50.0	51.4		ug/L		103	80 - 120	4	20
Carbon tetrachloride			50.0	55.8		ug/L		112	76 - 123	2	20
Chlorobenzene			50.0	51.8		ug/L		104	80 - 120	1	20
Dibromochloromethane			50.0	51.3		ug/L		103	80 - 121	12	20
Chloroethane			50.0	54.1		ug/L		108	66 - 135	3	20
Chloroform			50.0	49.8		ug/L		100	80 - 120	2	20
Chloromethane			50.0	48.1		ug/L		96	69 - 131	6	30
cis-1,2-Dichloroethene			50.0	46.4		ug/L		93	80 - 120	2	20
cis-1,3-Dichloropropene			50.0	48.2		ug/L		96	80 - 120	10	20
Cyclohexane			50.0	52.4		ug/L		105	80 - 120	1	20
Bromodichloromethane			50.0	49.9		ug/L		100	80 - 120	8	20
Dichlorodifluoromethane			50.0	49.5		ug/L		99	47 - 155	7	40
Ethylbenzene			50.0	51.7		ug/L		103	80 - 120	2	20
1,2-Dibromoethane			50.0	51.1		ug/L		102	80 - 120	11	20
Isopropylbenzene			50.0	52.5		ug/L		105	80 - 120	2	20
Methyl acetate			100	97.8		ug/L		98	45 - 158	11	20
Methyl tert-butyl ether			50.0	49.5		ug/L		99	80 - 120	3	20
Methylcyclohexane			50.0	49.9		ug/L		100	85 - 122	8	20
Methylene Chloride			50.0	45.3		ug/L		91	80 - 120	7	20
Styrene			50.0	52.1		ug/L		104	80 - 120	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-552557/4
Matrix: Water
Analysis Batch: 552557

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene			50.0	56.0		ug/L		112	80 - 121	9	20
Toluene			50.0	49.3		ug/L		99	80 - 113	11	20
trans-1,2-Dichloroethene			50.0	52.0		ug/L		104	80 - 120	0	20
trans-1,3-Dichloropropene			50.0	48.7		ug/L		97	80 - 120	11	30
Trichloroethene			50.0	47.9		ug/L		96	80 - 120	3	20
Trichlorofluoromethane			50.0	57.4		ug/L		115	60 - 141	2	20
Vinyl chloride			50.0	50.8		ug/L		102	71 - 128	7	20
Xylenes, Total			100	102		ug/L		102	80 - 120	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 131*
Toluene-d8 (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 122*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*

Lab Sample ID: 680-162184-8 MS
Matrix: Water
Analysis Batch: 552557

Client Sample ID: MW-22R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane	1.0	U	50.0	55.7		ug/L		111	74 - 128		
1,1,2,2-Tetrachloroethane	1.0	U	50.0	48.6		ug/L		97	72 - 128		
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	50.0	61.0		ug/L		122	65 - 131		
1,1,2-Trichloroethane	1.0	U	50.0	47.6		ug/L		95	79 - 125		
1,1-Dichloroethane	1.0	U	50.0	50.7		ug/L		101	80 - 120		
1,1-Dichloroethene	1.0	U	50.0	54.0		ug/L		108	74 - 125		
1,2,4-Trichlorobenzene	5.0	U	50.0	42.4		ug/L		85	77 - 131		
1,2-Dibromo-3-Chloropropane	5.0	U	50.0	50.0		ug/L		100	59 - 141		
1,2-Dichlorobenzene	1.0	U	50.0	46.4		ug/L		93	80 - 120		
1,2-Dichloroethane	1.0	U	50.0	50.6		ug/L		101	75 - 130		
1,2-Dichloropropane	1.0	U	50.0	47.1		ug/L		94	80 - 123		
1,3-Dichlorobenzene	1.0	U	50.0	46.3		ug/L		93	80 - 120		
1,4-Dichlorobenzene	1.0	U	50.0	44.8		ug/L		90	80 - 120		
Methyl Ethyl Ketone	10	U	250	278		ug/L		111	75 - 133		
2-Hexanone	10	U	250	241		ug/L		97	70 - 141		
methyl isobutyl ketone	10	U	250	236		ug/L		95	75 - 135		
Acetone	10	U	250	256		ug/L		102	60 - 154		
Benzene	1.0	U	50.0	50.8		ug/L		102	73 - 131		
Bromoform	1.0	U	50.0	51.6		ug/L		103	69 - 135		
Bromomethane	5.0	U * F2	50.0	20.6	E	ug/L		41	20 - 180		
Carbon disulfide	2.0	U	50.0	54.1		ug/L		108	73 - 127		
Carbon tetrachloride	1.0	U	50.0	60.4		ug/L		121	75 - 130		
Chlorobenzene	1.0	U	50.0	50.1		ug/L		100	80 - 120		
Dibromochloromethane	1.0	U	50.0	49.8		ug/L		100	71 - 136		
Chloroethane	5.0	U	50.0	61.2		ug/L		122	50 - 151		
Chloroform	1.0	U	50.0	50.6		ug/L		101	79 - 122		
Chloromethane	1.0	U	50.0	53.3		ug/L		107	63 - 126		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-162184-8 MS
Matrix: Water
Analysis Batch: 552557

Client Sample ID: MW-22R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	1.0	U	50.0	46.2		ug/L		92	80 - 122
cis-1,3-Dichloropropene	1.0	U	50.0	46.0		ug/L		92	80 - 133
Cyclohexane	1.0	U	50.0	57.3		ug/L		115	69 - 130
Bromodichloromethane	1.0	U	50.0	50.7		ug/L		101	77 - 129
Dichlorodifluoromethane	1.0	U	50.0	65.4		ug/L		131	51 - 140
Ethylbenzene	1.0	U	50.0	51.5		ug/L		103	80 - 120
1,2-Dibromoethane	1.0	U	50.0	50.5		ug/L		101	77 - 131
Isopropylbenzene	1.0	U	50.0	51.7		ug/L		103	80 - 120
Methyl acetate	5.0	U	100	88.1		ug/L		88	66 - 134
Methyl tert-butyl ether	10	U	50.0	48.1		ug/L		96	74 - 135
Methylcyclohexane	1.0	U	50.0	54.8		ug/L		110	75 - 127
Methylene Chloride	5.0	U	50.0	45.1		ug/L		90	76 - 129
Styrene	1.0	U	50.0	53.6		ug/L		107	80 - 122
Tetrachloroethene	1.0	U *	50.0	57.0		ug/L		114	77 - 123
Toluene	1.0	U	50.0	50.3		ug/L		101	80 - 122
trans-1,2-Dichloroethene	1.0	U	50.0	51.9		ug/L		104	78 - 123
trans-1,3-Dichloropropene	1.0	U	50.0	47.3		ug/L		95	74 - 140
Trichloroethene	1.0	U	50.0	48.4		ug/L		97	80 - 123
Trichlorofluoromethane	1.0	U	50.0	64.9		ug/L		130	58 - 145
Vinyl chloride	1.0	U	50.0	59.0		ug/L		118	68 - 132
Xylenes, Total	1.0	U	100	99.7		ug/L		100	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*73 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 122*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*

Lab Sample ID: 680-162184-8 MSD
Matrix: Water
Analysis Batch: 552557

Client Sample ID: MW-22R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	50.0	55.2		ug/L		110	74 - 128	1	20
1,1,2,2-Tetrachloroethane	1.0	U	50.0	48.9		ug/L		98	72 - 128	1	20
1,1,2-Trichloro-1,2,2-trifluoroetha ne	1.0	U	50.0	61.7		ug/L		123	65 - 131	1	20
1,1,2-Trichloroethane	1.0	U	50.0	46.9		ug/L		94	79 - 125	2	20
1,1-Dichloroethane	1.0	U	50.0	49.4		ug/L		99	80 - 120	3	20
1,1-Dichloroethene	1.0	U	50.0	54.7		ug/L		109	74 - 125	1	20
1,2,4-Trichlorobenzene	5.0	U	50.0	47.4		ug/L		95	77 - 131	11	20
1,2-Dibromo-3-Chloropropane	5.0	U	50.0	56.1		ug/L		112	59 - 141	11	20
1,2-Dichlorobenzene	1.0	U	50.0	50.1		ug/L		100	80 - 120	8	20
1,2-Dichloroethane	1.0	U	50.0	49.2		ug/L		98	75 - 130	3	50
1,2-Dichloropropane	1.0	U	50.0	46.8		ug/L		94	80 - 123	1	20
1,3-Dichlorobenzene	1.0	U	50.0	49.1		ug/L		98	80 - 120	6	20
1,4-Dichlorobenzene	1.0	U	50.0	49.1		ug/L		98	80 - 120	9	20
Methyl Ethyl Ketone	10	U	250	277		ug/L		111	75 - 133	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-162184-8 MSD
Matrix: Water
Analysis Batch: 552557

Client Sample ID: MW-22R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Hexanone	10	U	250	238		ug/L		95	70 - 141	1	20
methyl isobutyl ketone	10	U	250	232		ug/L		93	75 - 135	2	20
Acetone	10	U	250	261		ug/L		104	60 - 154	2	30
Benzene	1.0	U	50.0	50.2		ug/L		100	73 - 131	1	20
Bromoform	1.0	U	50.0	54.1		ug/L		108	69 - 135	5	20
Bromomethane	5.0	U * F2	50.0	26.3	E F2	ug/L		53	20 - 180	24	20
Carbon disulfide	2.0	U	50.0	54.5		ug/L		109	73 - 127	1	20
Carbon tetrachloride	1.0	U	50.0	60.1		ug/L		120	75 - 130	0	20
Chlorobenzene	1.0	U	50.0	51.2		ug/L		102	80 - 120	2	20
Dibromochloromethane	1.0	U	50.0	48.7		ug/L		97	71 - 136	2	20
Chloroethane	5.0	U	50.0	59.7		ug/L		119	50 - 151	2	20
Chloroform	1.0	U	50.0	49.9		ug/L		100	79 - 122	2	20
Chloromethane	1.0	U	50.0	51.3		ug/L		103	63 - 126	4	30
cis-1,2-Dichloroethene	1.0	U	50.0	45.5		ug/L		91	80 - 122	2	20
cis-1,3-Dichloropropene	1.0	U	50.0	44.5		ug/L		89	80 - 133	3	20
Cyclohexane	1.0	U	50.0	55.9		ug/L		112	69 - 130	2	20
Bromodichloromethane	1.0	U	50.0	49.3		ug/L		99	77 - 129	3	20
Dichlorodifluoromethane	1.0	U	50.0	64.5		ug/L		129	51 - 140	1	40
Ethylbenzene	1.0	U	50.0	52.4		ug/L		105	80 - 120	2	20
1,2-Dibromoethane	1.0	U	50.0	49.9		ug/L		100	77 - 131	1	20
Isopropylbenzene	1.0	U	50.0	53.3		ug/L		107	80 - 120	3	20
Methyl acetate	5.0	U	100	87.3		ug/L		87	66 - 134	1	20
Methyl tert-butyl ether	10	U	50.0	48.4		ug/L		97	74 - 135	1	20
Methylcyclohexane	1.0	U	50.0	52.6		ug/L		105	75 - 127	4	20
Methylene Chloride	5.0	U	50.0	44.7		ug/L		89	76 - 129	1	20
Styrene	1.0	U	50.0	54.8		ug/L		110	80 - 122	2	20
Tetrachloroethene	1.0	U *	50.0	56.4		ug/L		113	77 - 123	1	20
Toluene	1.0	U	50.0	49.1		ug/L		98	80 - 122	3	20
trans-1,2-Dichloroethene	1.0	U	50.0	52.4		ug/L		105	78 - 123	1	20
trans-1,3-Dichloropropene	1.0	U	50.0	46.3		ug/L		93	74 - 140	2	30
Trichloroethene	1.0	U	50.0	49.5		ug/L		99	80 - 123	2	20
Trichlorofluoromethane	1.0	U	50.0	65.4		ug/L		131	58 - 145	1	20
Vinyl chloride	1.0	U	50.0	59.0		ug/L		118	68 - 132	0	20
Xylenes, Total	1.0	U	100	102		ug/L		102	80 - 120	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*73 - 131*
Toluene-d8 (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 122*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*

Lab Sample ID: MB 680-552754/8
Matrix: Water
Analysis Batch: 552754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/21/18 11:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/21/18 11:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-552754/8
Matrix: Water
Analysis Batch: 552754

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/21/18 11:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/21/18 11:35	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/21/18 11:35	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/21/18 11:35	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/21/18 11:35	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/21/18 11:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/21/18 11:35	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/21/18 11:35	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/21/18 11:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/21/18 11:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/21/18 11:35	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/21/18 11:35	1
2-Hexanone	10	U	10	2.0	ug/L			12/21/18 11:35	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/21/18 11:35	1
Acetone	10	U	10	7.0	ug/L			12/21/18 11:35	1
Benzene	1.0	U	1.0	0.43	ug/L			12/21/18 11:35	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/21/18 11:35	1
Bromomethane	5.0	U	5.0	2.5	ug/L			12/21/18 11:35	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/21/18 11:35	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/21/18 11:35	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/21/18 11:35	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/21/18 11:35	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/21/18 11:35	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/21/18 11:35	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/21/18 11:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/21/18 11:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/21/18 11:35	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/21/18 11:35	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/21/18 11:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/21/18 11:35	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/21/18 11:35	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/21/18 11:35	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/21/18 11:35	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/21/18 11:35	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/21/18 11:35	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/21/18 11:35	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/21/18 11:35	1
Styrene	1.0	U	1.0	0.27	ug/L			12/21/18 11:35	1
Tetrachloroethene	1.0	U	1.0	0.74	ug/L			12/21/18 11:35	1
Toluene	1.0	U	1.0	0.48	ug/L			12/21/18 11:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/21/18 11:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/21/18 11:35	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/21/18 11:35	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/21/18 11:35	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/21/18 11:35	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/21/18 11:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-552754/8
Matrix: Water
Analysis Batch: 552754

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 131*		*12/21/18 11:35*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/21/18 11:35*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 122*		*12/21/18 11:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*12/21/18 11:35*	*1*

Lab Sample ID: LCS 680-552754/3
Matrix: Water
Analysis Batch: 552754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	51.7		ug/L		103	80 - 120
1,1,2,2-Tetrachloroethane	50.0	51.8		ug/L		104	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.0		ug/L		102	79 - 124
1,1,2-Trichloroethane	50.0	52.4		ug/L		105	80 - 120
1,1-Dichloroethane	50.0	51.2		ug/L		102	80 - 120
1,1-Dichloroethene	50.0	50.3		ug/L		101	76 - 120
1,2,4-Trichlorobenzene	50.0	49.6		ug/L		99	68 - 128
1,2-Dibromo-3-Chloropropane	50.0	44.2		ug/L		88	71 - 134
1,2-Dichlorobenzene	50.0	52.8		ug/L		106	80 - 120
1,2-Dichloroethane	50.0	49.3		ug/L		99	80 - 120
1,2-Dichloropropane	50.0	51.9		ug/L		104	80 - 120
1,3-Dichlorobenzene	50.0	51.7		ug/L		103	80 - 120
1,4-Dichlorobenzene	50.0	50.5		ug/L		101	80 - 120
Methyl Ethyl Ketone	250	233		ug/L		93	80 - 131
2-Hexanone	250	249		ug/L		100	74 - 127
methyl isobutyl ketone	250	267		ug/L		107	76 - 124
Acetone	250	246		ug/L		99	70 - 135
Benzene	50.0	51.6		ug/L		103	80 - 120
Bromoform	50.0	53.8		ug/L		108	74 - 126
Bromomethane	50.0	40.9		ug/L		82	62 - 130
Carbon disulfide	50.0	49.8		ug/L		100	80 - 120
Carbon tetrachloride	50.0	51.9		ug/L		104	76 - 123
Chlorobenzene	50.0	51.2		ug/L		102	80 - 120
Dibromochloromethane	50.0	52.0		ug/L		104	80 - 121
Chloroethane	50.0	45.4		ug/L		91	66 - 135
Chloroform	50.0	50.8		ug/L		102	80 - 120
Chloromethane	50.0	45.3		ug/L		91	69 - 131
cis-1,2-Dichloroethene	50.0	52.2		ug/L		104	80 - 120
cis-1,3-Dichloropropene	50.0	52.4		ug/L		105	80 - 120
Cyclohexane	50.0	52.0		ug/L		104	80 - 120
Bromodichloromethane	50.0	51.9		ug/L		104	80 - 120
Dichlorodifluoromethane	50.0	45.2		ug/L		90	47 - 155
Ethylbenzene	50.0	51.7		ug/L		103	80 - 120
1,2-Dibromoethane	50.0	52.8		ug/L		106	80 - 120
Isopropylbenzene	50.0	53.0		ug/L		106	80 - 120
Methyl acetate	100	98.3		ug/L		98	45 - 158
Methyl tert-butyl ether	50.0	46.5		ug/L		93	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-552754/3
Matrix: Water
Analysis Batch: 552754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylcyclohexane	50.0	53.6		ug/L		107	85 - 122
Methylene Chloride	50.0	45.9		ug/L		92	80 - 120
Styrene	50.0	54.0		ug/L		108	80 - 120
Tetrachloroethene	50.0	52.0		ug/L		104	80 - 121
Toluene	50.0	51.6		ug/L		103	80 - 113
trans-1,2-Dichloroethene	50.0	53.3		ug/L		107	80 - 120
trans-1,3-Dichloropropene	50.0	50.7		ug/L		101	80 - 120
Trichloroethene	50.0	51.4		ug/L		103	80 - 120
Trichlorofluoromethane	50.0	48.9		ug/L		98	60 - 141
Vinyl chloride	50.0	47.5		ug/L		95	71 - 128
Xylenes, Total	100	104		ug/L		104	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*73 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*103*		*80 - 122*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Lab Sample ID: LCSD 680-552754/4
Matrix: Water
Analysis Batch: 552754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	51.6		ug/L		103	80 - 120	0	20
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	80 - 120	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.3		ug/L		105	79 - 124	3	20
1,1,2-Trichloroethane	50.0	50.4		ug/L		101	80 - 120	4	20
1,1-Dichloroethane	50.0	49.8		ug/L		100	80 - 120	3	20
1,1-Dichloroethene	50.0	50.2		ug/L		100	76 - 120	0	20
1,2,4-Trichlorobenzene	50.0	50.2		ug/L		100	68 - 128	1	20
1,2-Dibromo-3-Chloropropane	50.0	45.2		ug/L		90	71 - 134	2	20
1,2-Dichlorobenzene	50.0	51.4		ug/L		103	80 - 120	3	20
1,2-Dichloroethane	50.0	47.8		ug/L		96	80 - 120	3	50
1,2-Dichloropropane	50.0	50.3		ug/L		101	80 - 120	3	20
1,3-Dichlorobenzene	50.0	50.8		ug/L		102	80 - 120	2	20
1,4-Dichlorobenzene	50.0	49.6		ug/L		99	80 - 120	2	20
Methyl Ethyl Ketone	250	228		ug/L		91	80 - 131	2	20
2-Hexanone	250	246		ug/L		99	74 - 127	1	20
methyl isobutyl ketone	250	260		ug/L		104	76 - 124	2	20
Acetone	250	245		ug/L		98	70 - 135	0	30
Benzene	50.0	50.8		ug/L		102	80 - 120	2	20
Bromoform	50.0	52.8		ug/L		106	74 - 126	2	20
Bromomethane	50.0	40.0		ug/L		80	62 - 130	2	20
Carbon disulfide	50.0	49.9		ug/L		100	80 - 120	0	20
Carbon tetrachloride	50.0	52.2		ug/L		104	76 - 123	1	20
Chlorobenzene	50.0	50.2		ug/L		100	80 - 120	2	20
Dibromochloromethane	50.0	50.6		ug/L		101	80 - 121	3	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-552754/4
Matrix: Water
Analysis Batch: 552754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroethane	50.0	44.0		ug/L		88	66 - 135	3	20
Chloroform	50.0	50.1		ug/L		100	80 - 120	1	20
Chloromethane	50.0	43.7		ug/L		87	69 - 131	4	30
cis-1,2-Dichloroethene	50.0	51.6		ug/L		103	80 - 120	1	20
cis-1,3-Dichloropropene	50.0	51.4		ug/L		103	80 - 120	2	20
Cyclohexane	50.0	52.5		ug/L		105	80 - 120	1	20
Bromodichloromethane	50.0	50.0		ug/L		100	80 - 120	4	20
Dichlorodifluoromethane	50.0	44.5		ug/L		89	47 - 155	1	40
Ethylbenzene	50.0	51.2		ug/L		102	80 - 120	1	20
1,2-Dibromoethane	50.0	51.4		ug/L		103	80 - 120	3	20
Isopropylbenzene	50.0	52.4		ug/L		105	80 - 120	1	20
Methyl acetate	100	94.9		ug/L		95	45 - 158	3	20
Methyl tert-butyl ether	50.0	46.7		ug/L		93	80 - 120	0	20
Methylcyclohexane	50.0	54.8		ug/L		110	85 - 122	2	20
Methylene Chloride	50.0	44.1		ug/L		88	80 - 120	4	20
Styrene	50.0	53.0		ug/L		106	80 - 120	2	20
Tetrachloroethene	50.0	50.7		ug/L		101	80 - 121	3	20
Toluene	50.0	50.3		ug/L		101	80 - 113	2	20
trans-1,2-Dichloroethene	50.0	53.3		ug/L		107	80 - 120	0	20
trans-1,3-Dichloropropene	50.0	48.9		ug/L		98	80 - 120	3	30
Trichloroethene	50.0	51.4		ug/L		103	80 - 120	0	20
Trichlorofluoromethane	50.0	48.1		ug/L		96	60 - 141	1	20
Vinyl chloride	50.0	46.6		ug/L		93	71 - 128	2	20
Xylenes, Total	100	104		ug/L		104	80 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*73 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 122*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 680-553025/8
Matrix: Water
Analysis Batch: 553025

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.37	ug/L			12/24/18 13:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62	ug/L			12/24/18 13:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36	ug/L			12/24/18 13:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.33	ug/L			12/24/18 13:34	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			12/24/18 13:34	1
1,1-Dichloroethene	1.0	U	1.0	0.36	ug/L			12/24/18 13:34	1
1,2,4-Trichlorobenzene	5.0	U	5.0	2.5	ug/L			12/24/18 13:34	1
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1	ug/L			12/24/18 13:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.37	ug/L			12/24/18 13:34	1
1,2-Dichloroethane	1.0	U	1.0	0.50	ug/L			12/24/18 13:34	1
1,2-Dichloropropane	1.0	U	1.0	0.67	ug/L			12/24/18 13:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/24/18 13:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-553025/8
Matrix: Water
Analysis Batch: 553025

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.0	U	1.0	0.46	ug/L			12/24/18 13:34	1
Methyl Ethyl Ketone	10	U	10	3.4	ug/L			12/24/18 13:34	1
2-Hexanone	10	U	10	2.0	ug/L			12/24/18 13:34	1
methyl isobutyl ketone	10	U	10	2.1	ug/L			12/24/18 13:34	1
Acetone	10	U	10	7.0	ug/L			12/24/18 13:34	1
Benzene	1.0	U	1.0	0.43	ug/L			12/24/18 13:34	1
Bromoform	1.0	U	1.0	0.43	ug/L			12/24/18 13:34	1
Bromomethane	5.0	U	5.0	2.5	ug/L			12/24/18 13:34	1
Carbon disulfide	2.0	U	2.0	1.0	ug/L			12/24/18 13:34	1
Carbon tetrachloride	1.0	U	1.0	0.33	ug/L			12/24/18 13:34	1
Chlorobenzene	1.0	U	1.0	0.26	ug/L			12/24/18 13:34	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			12/24/18 13:34	1
Chloroethane	5.0	U	5.0	2.5	ug/L			12/24/18 13:34	1
Chloroform	1.0	U	1.0	0.50	ug/L			12/24/18 13:34	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/24/18 13:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.41	ug/L			12/24/18 13:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.40	ug/L			12/24/18 13:34	1
Cyclohexane	1.0	U	1.0	0.39	ug/L			12/24/18 13:34	1
Bromodichloromethane	1.0	U	1.0	0.44	ug/L			12/24/18 13:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.60	ug/L			12/24/18 13:34	1
Ethylbenzene	1.0	U	1.0	0.33	ug/L			12/24/18 13:34	1
1,2-Dibromoethane	1.0	U	1.0	0.44	ug/L			12/24/18 13:34	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			12/24/18 13:34	1
Methyl acetate	5.0	U	5.0	1.8	ug/L			12/24/18 13:34	1
Methyl tert-butyl ether	10	U	10	0.30	ug/L			12/24/18 13:34	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			12/24/18 13:34	1
Methylene Chloride	5.0	U	5.0	2.5	ug/L			12/24/18 13:34	1
Styrene	1.0	U	1.0	0.27	ug/L			12/24/18 13:34	1
Tetrachloroethene	1.0	U	1.0	0.74	ug/L			12/24/18 13:34	1
Toluene	1.0	U	1.0	0.48	ug/L			12/24/18 13:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.37	ug/L			12/24/18 13:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.42	ug/L			12/24/18 13:34	1
Trichloroethene	1.0	U	1.0	0.48	ug/L			12/24/18 13:34	1
Trichlorofluoromethane	1.0	U	1.0	0.42	ug/L			12/24/18 13:34	1
Vinyl chloride	1.0	U	1.0	0.50	ug/L			12/24/18 13:34	1
Xylenes, Total	1.0	U	1.0	0.23	ug/L			12/24/18 13:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*73 - 131*		*12/24/18 13:34*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/24/18 13:34*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 122*		*12/24/18 13:34*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/24/18 13:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-553025/4
Matrix: Water
Analysis Batch: 553025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	47.5		ug/L		95	80 - 120
1,1,2,2-Tetrachloroethane	50.0	47.7		ug/L		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.6		ug/L		101	79 - 124
1,1,2-Trichloroethane	50.0	48.4		ug/L		97	80 - 120
1,1-Dichloroethane	50.0	46.0		ug/L		92	80 - 120
1,1-Dichloroethene	50.0	50.5		ug/L		101	76 - 120
1,2,4-Trichlorobenzene	50.0	48.2		ug/L		96	68 - 128
1,2-Dibromo-3-Chloropropane	50.0	45.7		ug/L		91	71 - 134
1,2-Dichlorobenzene	50.0	49.2		ug/L		98	80 - 120
1,2-Dichloroethane	50.0	46.2		ug/L		92	80 - 120
1,2-Dichloropropane	50.0	47.2		ug/L		94	80 - 120
1,3-Dichlorobenzene	50.0	48.1		ug/L		96	80 - 120
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	80 - 120
Methyl Ethyl Ketone	250	240		ug/L		96	80 - 131
2-Hexanone	250	219		ug/L		88	74 - 127
methyl isobutyl ketone	250	219		ug/L		87	76 - 124
Acetone	250	222		ug/L		89	70 - 135
Benzene	50.0	47.9		ug/L		96	80 - 120
Bromoform	50.0	42.3		ug/L		85	74 - 126
Bromomethane	50.0	36.3		ug/L		73	62 - 130
Carbon disulfide	50.0	46.3		ug/L		93	80 - 120
Carbon tetrachloride	50.0	42.8		ug/L		86	76 - 123
Chlorobenzene	50.0	48.9		ug/L		98	80 - 120
Dibromochloromethane	50.0	45.7		ug/L		91	80 - 121
Chloroethane	50.0	46.1		ug/L		92	66 - 135
Chloroform	50.0	48.1		ug/L		96	80 - 120
Chloromethane	50.0	36.6		ug/L		73	69 - 131
cis-1,2-Dichloroethene	50.0	47.1		ug/L		94	80 - 120
cis-1,3-Dichloropropene	50.0	48.8		ug/L		98	80 - 120
Cyclohexane	50.0	45.1		ug/L		90	80 - 120
Bromodichloromethane	50.0	46.2		ug/L		92	80 - 120
Dichlorodifluoromethane	50.0	36.4		ug/L		73	47 - 155
Ethylbenzene	50.0	48.1		ug/L		96	80 - 120
1,2-Dibromoethane	50.0	48.1		ug/L		96	80 - 120
Isopropylbenzene	50.0	49.2		ug/L		98	80 - 120
Methyl acetate	100	80.4		ug/L		80	45 - 158
Methyl tert-butyl ether	50.0	46.2		ug/L		92	80 - 120
Methylcyclohexane	50.0	45.8		ug/L		92	85 - 122
Methylene Chloride	50.0	47.7		ug/L		95	80 - 120
Styrene	50.0	46.4		ug/L		93	80 - 120
Tetrachloroethene	50.0	50.8		ug/L		102	80 - 121
Toluene	50.0	48.7		ug/L		97	80 - 113
trans-1,2-Dichloroethene	50.0	51.4		ug/L		103	80 - 120
trans-1,3-Dichloropropene	50.0	44.6		ug/L		89	80 - 120
Trichloroethene	50.0	49.3		ug/L		99	80 - 120
Trichlorofluoromethane	50.0	42.2		ug/L		84	60 - 141
Vinyl chloride	50.0	43.3		ug/L		87	71 - 128

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-553025/4
Matrix: Water
Analysis Batch: 553025

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Xylenes, Total			100	97.8		ug/L		98	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*73 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 122*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*

Lab Sample ID: LCSD 680-553025/5
Matrix: Water
Analysis Batch: 553025

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			50.0	49.2		ug/L		98	80 - 120	3	20
1,1,2,2-Tetrachloroethane			50.0	51.0		ug/L		102	80 - 120	7	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	52.2		ug/L		104	79 - 124	3	20
1,1,2-Trichloroethane			50.0	52.1		ug/L		104	80 - 120	7	20
1,1-Dichloroethane			50.0	48.2		ug/L		96	80 - 120	5	20
1,1-Dichloroethene			50.0	52.0		ug/L		104	76 - 120	3	20
1,2,4-Trichlorobenzene			50.0	51.3		ug/L		103	68 - 128	6	20
1,2-Dibromo-3-Chloropropane			50.0	49.5		ug/L		99	71 - 134	8	20
1,2-Dichlorobenzene			50.0	51.1		ug/L		102	80 - 120	4	20
1,2-Dichloroethane			50.0	49.6		ug/L		99	80 - 120	7	50
1,2-Dichloropropane			50.0	49.9		ug/L		100	80 - 120	6	20
1,3-Dichlorobenzene			50.0	51.0		ug/L		102	80 - 120	6	20
1,4-Dichlorobenzene			50.0	51.6		ug/L		103	80 - 120	4	20
Methyl Ethyl Ketone			250	262		ug/L		105	80 - 131	9	20
2-Hexanone			250	238		ug/L		95	74 - 127	8	20
methyl isobutyl ketone			250	236		ug/L		94	76 - 124	8	20
Acetone			250	237		ug/L		95	70 - 135	7	30
Benzene			50.0	50.2		ug/L		100	80 - 120	5	20
Bromoform			50.0	45.4		ug/L		91	74 - 126	7	20
Bromomethane			50.0	39.0		ug/L		78	62 - 130	7	20
Carbon disulfide			50.0	48.0		ug/L		96	80 - 120	4	20
Carbon tetrachloride			50.0	45.1		ug/L		90	76 - 123	5	20
Chlorobenzene			50.0	51.2		ug/L		102	80 - 120	5	20
Dibromochloromethane			50.0	49.2		ug/L		98	80 - 121	7	20
Chloroethane			50.0	47.7		ug/L		95	66 - 135	3	20
Chloroform			50.0	50.2		ug/L		100	80 - 120	4	20
Chloromethane			50.0	38.0		ug/L		76	69 - 131	4	30
cis-1,2-Dichloroethene			50.0	48.9		ug/L		98	80 - 120	4	20
cis-1,3-Dichloropropene			50.0	51.3		ug/L		103	80 - 120	5	20
Cyclohexane			50.0	46.3		ug/L		93	80 - 120	3	20
Bromodichloromethane			50.0	48.8		ug/L		98	80 - 120	6	20
Dichlorodifluoromethane			50.0	37.9		ug/L		76	47 - 155	4	40
Ethylbenzene			50.0	49.8		ug/L		100	80 - 120	3	20
1,2-Dibromoethane			50.0	52.2		ug/L		104	80 - 120	8	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-553025/5
Matrix: Water
Analysis Batch: 553025

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene	50.0	51.6		ug/L		103	80 - 120	5	20
Methyl acetate	100	87.7		ug/L		88	45 - 158	9	20
Methyl tert-butyl ether	50.0	49.6		ug/L		99	80 - 120	7	20
Methylcyclohexane	50.0	48.1		ug/L		96	85 - 122	5	20
Methylene Chloride	50.0	50.7		ug/L		101	80 - 120	6	20
Styrene	50.0	48.5		ug/L		97	80 - 120	4	20
Tetrachloroethene	50.0	53.1		ug/L		106	80 - 121	5	20
Toluene	50.0	51.6		ug/L		103	80 - 113	6	20
trans-1,2-Dichloroethene	50.0	53.1		ug/L		106	80 - 120	3	20
trans-1,3-Dichloropropene	50.0	48.0		ug/L		96	80 - 120	7	30
Trichloroethene	50.0	52.3		ug/L		105	80 - 120	6	20
Trichlorofluoromethane	50.0	50.3		ug/L		101	60 - 141	18	20
Vinyl chloride	50.0	44.5		ug/L		89	71 - 128	3	20
Xylenes, Total	100	102		ug/L		102	80 - 120	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 122*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-451231/1-A
Matrix: Water
Analysis Batch: 451416

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 451231

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.218		0.20	0.10	ug/L		12/17/18 14:25	12/18/18 15:00	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*25*		*15 - 110*	*12/17/18 14:25*	*12/18/18 15:00*	*1*

Lab Sample ID: LCS 480-451231/2-A
Matrix: Water
Analysis Batch: 451416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 451231

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.00	1.47	E *	ug/L		147	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*26*		*15 - 110*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: 680-162184-2 MS — **Client Sample ID: MW-15S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451416 — **Prep Batch: 451231**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	0.20	U * F1 F2	1.00	1.74	E F1	ug/L		174	40 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*25*		*15 - 110*

Lab Sample ID: 680-162184-2 MSD — **Client Sample ID: MW-15S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 451416 — **Prep Batch: 451231**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dioxane	0.20	U * F1 F2	1.00	1.35	E F2	ug/L		135	40 - 140	25	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*24*		*15 - 110*

Lab Sample ID: MB 480-452766/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 452932 — **Prep Batch: 452766**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.20	U	0.20	0.10	ug/L		12/27/18 15:17	12/28/18 16:54	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*32*		*15 - 110*	*12/27/18 15:17*	*12/28/18 16:54*	*1*

Lab Sample ID: LCS 480-452766/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 452932 — **Prep Batch: 452766**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dioxane	1.00	1.27		ug/L		127	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*30*		*15 - 110*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-551774/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552495 — **Prep Batch: 551774**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 21:19	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 21:19	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 21:19	1
Barium	0.010	U	0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 21:19	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 21:19	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 680-551774/1-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551774

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.50	U	0.50	0.025	mg/L		12/14/18 17:07	12/18/18 21:19	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 21:19	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:19	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 21:19	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 21:19	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 17:07	12/18/18 21:19	1
Potassium	1.0	U	1.0	0.017	mg/L		12/14/18 17:07	12/18/18 21:19	1
Magnesium	0.50	U	0.50	0.033	mg/L		12/14/18 17:07	12/18/18 21:19	1
Manganese	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:19	1
Sodium	1.0	U	1.0	0.48	mg/L		12/14/18 17:07	12/18/18 21:19	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 21:19	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 21:19	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 21:19	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 21:19	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 21:19	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 21:19	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 21:19	1

Lab Sample ID: LCS 680-551774/2-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551774

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0486		mg/L		97	80 - 120
Aluminum	5.00	4.63		mg/L		93	80 - 120
Arsenic	0.100	0.0914		mg/L		91	80 - 120
Barium	0.100	0.0947		mg/L		95	80 - 120
Beryllium	0.0500	0.0490		mg/L		98	80 - 120
Calcium	5.00	4.75		mg/L		95	80 - 120
Cadmium	0.0500	0.0495		mg/L		99	80 - 120
Cobalt	0.0500	0.0491		mg/L		98	80 - 120
Chromium	0.100	0.0978		mg/L		98	80 - 120
Copper	0.100	0.0934		mg/L		93	80 - 120
Iron	5.00	4.83		mg/L		97	80 - 120
Potassium	8.00	7.38		mg/L		92	80 - 120
Magnesium	5.00	4.76		mg/L		95	80 - 120
Manganese	0.500	0.480		mg/L		96	80 - 120
Sodium	5.00	4.88		mg/L		98	80 - 120
Nickel	0.100	0.0953		mg/L		95	80 - 120
Lead	0.500	0.479		mg/L		96	80 - 120
Antimony	0.0500	0.0450		mg/L		90	80 - 120
Selenium	0.100	0.0886		mg/L		89	80 - 120
Thallium	0.0400	0.0373		mg/L		93	80 - 120
Vanadium	0.100	0.0951		mg/L		95	80 - 120
Zinc	0.100	0.0988		mg/L		99	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 680-162184-3 MS — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552495 — **Prep Batch: 551774**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.010	U	0.0500	0.0499		mg/L		100	75 - 125
Aluminum	0.061	J	5.00	4.84		mg/L		96	75 - 125
Arsenic	0.020	U	0.100	0.0980		mg/L		98	75 - 125
Barium	0.11		0.100	0.215		mg/L		104	75 - 125
Beryllium	0.0040	U	0.0500	0.0504		mg/L		101	75 - 125
Calcium	50		5.00	61.2	4	mg/L		231	75 - 125
Cadmium	0.0050	U	0.0500	0.0500		mg/L		100	75 - 125
Cobalt	0.010	U	0.0500	0.0498		mg/L		100	75 - 125
Chromium	0.010	U	0.100	0.0997		mg/L		100	75 - 125
Copper	0.020	U	0.100	0.0962		mg/L		96	75 - 125
Iron	0.13		5.00	5.10		mg/L		100	75 - 125
Potassium	4.4		8.00	12.3		mg/L		99	75 - 125
Magnesium	12		5.00	17.5		mg/L		108	75 - 125
Manganese	0.016		0.500	0.516		mg/L		100	75 - 125
Sodium	6.9		5.00	12.2		mg/L		106	75 - 125
Nickel	0.040	U	0.100	0.0979		mg/L		98	75 - 125
Lead	0.010	U	0.500	0.483		mg/L		97	75 - 125
Antimony	0.020	U	0.0500	0.0460		mg/L		92	75 - 125
Selenium	0.33		0.100	0.450		mg/L		124	75 - 125
Thallium	0.025	U	0.0400	0.0366		mg/L		92	75 - 125
Vanadium	0.010	U	0.100	0.0983		mg/L		98	75 - 125
Zinc	0.020	U	0.100	0.110		mg/L		110	75 - 125

Lab Sample ID: 680-162184-3 MSD — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552495 — **Prep Batch: 551774**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.010	U	0.0500	0.0500		mg/L		100	75 - 125	0	20
Aluminum	0.061	J	5.00	4.87		mg/L		96	75 - 125	0	20
Arsenic	0.020	U	0.100	0.102		mg/L		102	75 - 125	4	20
Barium	0.11		0.100	0.215		mg/L		103	75 - 125	0	20
Beryllium	0.0040	U	0.0500	0.0502		mg/L		100	75 - 125	0	20
Calcium	50		5.00	62.2	4	mg/L		251	75 - 125	2	20
Cadmium	0.0050	U	0.0500	0.0501		mg/L		100	75 - 125	0	20
Cobalt	0.010	U	0.0500	0.0497		mg/L		99	75 - 125	0	20
Chromium	0.010	U	0.100	0.0997		mg/L		100	75 - 125	0	20
Copper	0.020	U	0.100	0.0962		mg/L		96	75 - 125	0	20
Iron	0.13		5.00	5.14		mg/L		100	75 - 125	1	20
Potassium	4.4		8.00	12.2		mg/L		98	75 - 125	1	20
Magnesium	12		5.00	17.5		mg/L		107	75 - 125	0	20
Manganese	0.016		0.500	0.517		mg/L		100	75 - 125	0	20
Sodium	6.9		5.00	12.0		mg/L		103	75 - 125	1	20
Nickel	0.040	U	0.100	0.0970		mg/L		97	75 - 125	1	20
Lead	0.010	U	0.500	0.491		mg/L		98	75 - 125	2	20
Antimony	0.020	U	0.0500	0.0444		mg/L		89	75 - 125	4	20
Selenium	0.33		0.100	0.450		mg/L		124	75 - 125	0	20
Thallium	0.025	U	0.0400	0.0343		mg/L		86	75 - 125	7	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 680-162184-3 MSD — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552495 — **Prep Batch: 551774**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	0.010	U	0.100	0.0975		mg/L		98	75 - 125	1	20
Zinc	0.020	U	0.100	0.0991		mg/L		99	75 - 125	10	20

Lab Sample ID: MB 680-551775/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552495 — **Prep Batch: 551775**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:07	12/18/18 22:55	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:07	12/18/18 22:55	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:07	12/18/18 22:55	1
Barium	0.010	U	0.010	0.0017	mg/L		12/14/18 17:07	12/18/18 22:55	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:07	12/18/18 22:55	1
Calcium	0.50	U	0.50	0.025	mg/L		12/14/18 17:07	12/18/18 22:55	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:07	12/18/18 22:55	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:55	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:07	12/18/18 22:55	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:07	12/18/18 22:55	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 17:07	12/18/18 22:55	1
Potassium	1.0	U	1.0	0.017	mg/L		12/14/18 17:07	12/18/18 22:55	1
Magnesium	0.50	U	0.50	0.033	mg/L		12/14/18 17:07	12/18/18 22:55	1
Manganese	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:55	1
Sodium	1.0	U	1.0	0.48	mg/L		12/14/18 17:07	12/18/18 22:55	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:07	12/18/18 22:55	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:07	12/18/18 22:55	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:07	12/18/18 22:55	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:07	12/18/18 22:55	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:07	12/18/18 22:55	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:07	12/18/18 22:55	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:07	12/18/18 22:55	1

Lab Sample ID: LCS 680-551775/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552495 — **Prep Batch: 551775**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0514		mg/L		103	80 - 120
Aluminum	5.00	4.81		mg/L		96	80 - 120
Arsenic	0.100	0.0976		mg/L		98	80 - 120
Barium	0.100	0.0982		mg/L		98	80 - 120
Beryllium	0.0500	0.0511		mg/L		102	80 - 120
Calcium	5.00	4.94		mg/L		99	80 - 120
Cadmium	0.0500	0.0512		mg/L		102	80 - 120
Cobalt	0.0500	0.0500		mg/L		100	80 - 120
Chromium	0.100	0.101		mg/L		101	80 - 120
Copper	0.100	0.0969		mg/L		97	80 - 120
Iron	5.00	5.02		mg/L		100	80 - 120
Potassium	8.00	7.63		mg/L		95	80 - 120
Magnesium	5.00	4.96		mg/L		99	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 680-551775/2-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551775

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.500	0.498		mg/L		100	80 - 120
Sodium	5.00	4.88		mg/L		98	80 - 120
Nickel	0.100	0.0992		mg/L		99	80 - 120
Lead	0.500	0.495		mg/L		99	80 - 120
Antimony	0.0500	0.0429		mg/L		86	80 - 120
Selenium	0.100	0.0931		mg/L		93	80 - 120
Thallium	0.0400	0.0377		mg/L		94	80 - 120
Vanadium	0.100	0.0986		mg/L		99	80 - 120
Zinc	0.100	0.102		mg/L		102	80 - 120

Lab Sample ID: MB 680-551751/1-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 551751

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:34	12/18/18 20:13	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:34	12/18/18 20:13	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:34	12/18/18 20:13	1
Barium	0.010	U	0.010	0.0017	mg/L		12/14/18 15:34	12/18/18 20:13	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:34	12/18/18 20:13	1
Calcium	0.50	U	0.50	0.025	mg/L		12/14/18 15:34	12/18/18 20:13	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:34	12/18/18 20:13	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:13	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:34	12/18/18 20:13	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:34	12/18/18 20:13	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 15:34	12/18/18 20:13	1
Potassium	1.0	U	1.0	0.017	mg/L		12/14/18 15:34	12/18/18 20:13	1
Magnesium	0.50	U	0.50	0.033	mg/L		12/14/18 15:34	12/18/18 20:13	1
Manganese	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:13	1
Sodium	1.0	U	1.0	0.48	mg/L		12/14/18 15:34	12/18/18 20:13	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:34	12/18/18 20:13	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:34	12/18/18 20:13	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:34	12/18/18 20:13	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 15:34	12/18/18 20:13	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:34	12/18/18 20:13	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:34	12/18/18 20:13	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:34	12/18/18 20:13	1

Lab Sample ID: LCS 680-551751/2-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 551751

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0508		mg/L		102	80 - 120
Aluminum	5.00	4.88		mg/L		98	80 - 120
Arsenic	0.100	0.0973		mg/L		97	80 - 120
Barium	0.100	0.100		mg/L		100	80 - 120
Beryllium	0.0500	0.0514		mg/L		103	80 - 120
Calcium	5.00	4.99		mg/L		100	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 680-551751/2-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 551751

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.0500	0.0519		mg/L		104	80 - 120
Cobalt	0.0500	0.0512		mg/L		102	80 - 120
Chromium	0.100	0.102		mg/L		102	80 - 120
Copper	0.100	0.0981		mg/L		98	80 - 120
Iron	5.00	5.04		mg/L		101	80 - 120
Potassium	8.00	7.82		mg/L		98	80 - 120
Magnesium	5.00	5.01		mg/L		100	80 - 120
Manganese	0.500	0.504		mg/L		101	80 - 120
Sodium	5.00	4.93		mg/L		99	80 - 120
Nickel	0.100	0.0999		mg/L		100	80 - 120
Lead	0.500	0.503		mg/L		101	80 - 120
Antimony	0.0500	0.0444		mg/L		89	80 - 120
Selenium	0.100	0.0957		mg/L		96	80 - 120
Thallium	0.0400	0.0340		mg/L		85	80 - 120
Vanadium	0.100	0.0999		mg/L		100	80 - 120
Zinc	0.100	0.106		mg/L		106	80 - 120

Lab Sample ID: MB 680-551755/1-A
Matrix: Water
Analysis Batch: 552039

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 551755

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 15:39	12/15/18 19:12	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 15:39	12/15/18 19:12	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 15:39	12/15/18 19:12	1
Barium	0.010	U	0.010	0.0017	mg/L		12/14/18 15:39	12/15/18 19:12	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 15:39	12/15/18 19:12	1
Calcium	0.50	U	0.50	0.025	mg/L		12/14/18 15:39	12/15/18 19:12	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 15:39	12/15/18 19:12	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:12	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 15:39	12/15/18 19:12	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 15:39	12/15/18 19:12	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 15:39	12/15/18 19:12	1
Potassium	1.0	U	1.0	0.017	mg/L		12/14/18 15:39	12/15/18 19:12	1
Magnesium	0.50	U	0.50	0.033	mg/L		12/14/18 15:39	12/15/18 19:12	1
Manganese	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:12	1
Sodium	1.0	U	1.0	0.48	mg/L		12/14/18 15:39	12/15/18 19:12	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 15:39	12/15/18 19:12	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 15:39	12/15/18 19:12	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 15:39	12/15/18 19:12	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 15:39	12/15/18 19:12	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 15:39	12/15/18 19:12	1
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 15:39	12/15/18 19:12	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 15:39	12/15/18 19:12	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 680-551755/2-A
Matrix: Water
Analysis Batch: 552039

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 551755

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0490		mg/L		98	80 - 120
Aluminum	5.00	4.86		mg/L		97	80 - 120
Arsenic	0.100	0.105		mg/L		105	80 - 120
Barium	0.100	0.0951		mg/L		95	80 - 120
Beryllium	0.0500	0.0518		mg/L		104	80 - 120
Calcium	5.00	4.93		mg/L		99	80 - 120
Cadmium	0.0500	0.0512		mg/L		102	80 - 120
Cobalt	0.0500	0.0496		mg/L		99	80 - 120
Chromium	0.100	0.0999		mg/L		100	80 - 120
Copper	0.100	0.101		mg/L		101	80 - 120
Iron	5.00	4.99		mg/L		100	80 - 120
Potassium	8.00	7.88		mg/L		98	80 - 120
Magnesium	5.00	5.08		mg/L		102	80 - 120
Manganese	0.500	0.498		mg/L		100	80 - 120
Sodium	5.00	5.19		mg/L		104	80 - 120
Nickel	0.100	0.104		mg/L		104	80 - 120
Lead	0.500	0.520		mg/L		104	80 - 120
Antimony	0.0500	0.0547		mg/L		109	80 - 120
Selenium	0.100	0.0975		mg/L		97	80 - 120
Thallium	0.0400	0.0425		mg/L		106	80 - 120
Vanadium	0.100	0.0978		mg/L		98	80 - 120
Zinc	0.100	0.104		mg/L		104	80 - 120

Lab Sample ID: MB 680-551782/1-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 551782

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.010	U	0.010	0.00060	mg/L		12/14/18 17:30	12/19/18 00:23	1
Aluminum	0.20	U	0.20	0.024	mg/L		12/14/18 17:30	12/19/18 00:23	1
Arsenic	0.020	U	0.020	0.0062	mg/L		12/14/18 17:30	12/19/18 00:23	1
Barium	0.010	U	0.010	0.0017	mg/L		12/14/18 17:30	12/19/18 00:23	1
Beryllium	0.0040	U	0.0040	0.00010	mg/L		12/14/18 17:30	12/19/18 00:23	1
Calcium	0.50	U	0.50	0.025	mg/L		12/14/18 17:30	12/19/18 00:23	1
Cadmium	0.0050	U	0.0050	0.0010	mg/L		12/14/18 17:30	12/19/18 00:23	1
Cobalt	0.010	U	0.010	0.0010	mg/L		12/14/18 17:30	12/19/18 00:23	1
Chromium	0.010	U	0.010	0.0016	mg/L		12/14/18 17:30	12/19/18 00:23	1
Copper	0.020	U	0.020	0.0018	mg/L		12/14/18 17:30	12/19/18 00:23	1
Iron	0.050	U	0.050	0.017	mg/L		12/14/18 17:30	12/19/18 00:23	1
Potassium	1.0	U	1.0	0.017	mg/L		12/14/18 17:30	12/19/18 00:23	1
Magnesium	0.50	U	0.50	0.033	mg/L		12/14/18 17:30	12/19/18 00:23	1
Manganese	0.010	U	0.010	0.0010	mg/L		12/14/18 17:30	12/19/18 00:23	1
Sodium	1.0	U	1.0	0.48	mg/L		12/14/18 17:30	12/19/18 00:23	1
Nickel	0.040	U	0.040	0.0021	mg/L		12/14/18 17:30	12/19/18 00:23	1
Lead	0.010	U	0.010	0.0039	mg/L		12/14/18 17:30	12/19/18 00:23	1
Antimony	0.020	U	0.020	0.0053	mg/L		12/14/18 17:30	12/19/18 00:23	1
Selenium	0.020	U	0.020	0.0099	mg/L		12/14/18 17:30	12/19/18 00:23	1
Thallium	0.025	U	0.025	0.0060	mg/L		12/14/18 17:30	12/19/18 00:23	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 680-551782/1-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 551782

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	0.010	U	0.010	0.0010	mg/L		12/14/18 17:30	12/19/18 00:23	1
Zinc	0.020	U	0.020	0.0070	mg/L		12/14/18 17:30	12/19/18 00:23	1

Lab Sample ID: LCS 680-551782/2-A
Matrix: Water
Analysis Batch: 552495

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 551782

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.0500	0.0510		mg/L		102	80 - 120
Aluminum	5.00	4.86		mg/L		97	80 - 120
Arsenic	0.100	0.0991		mg/L		99	80 - 120
Barium	0.100	0.0980		mg/L		98	80 - 120
Beryllium	0.0500	0.0519		mg/L		104	80 - 120
Calcium	5.00	4.97		mg/L		99	80 - 120
Cadmium	0.0500	0.0522		mg/L		104	80 - 120
Cobalt	0.0500	0.0513		mg/L		103	80 - 120
Chromium	0.100	0.102		mg/L		102	80 - 120
Copper	0.100	0.0979		mg/L		98	80 - 120
Iron	5.00	5.07		mg/L		101	80 - 120
Potassium	8.00	7.70		mg/L		96	80 - 120
Magnesium	5.00	5.05		mg/L		101	80 - 120
Manganese	0.500	0.501		mg/L		100	80 - 120
Sodium	5.00	5.00		mg/L		100	80 - 120
Nickel	0.100	0.100		mg/L		100	80 - 120
Lead	0.500	0.504		mg/L		101	80 - 120
Antimony	0.0500	0.0438		mg/L		88	80 - 120
Selenium	0.100	0.0947		mg/L		95	80 - 120
Thallium	0.0400	0.0429		mg/L		107	80 - 120
Vanadium	0.100	0.0994		mg/L		99	80 - 120
Zinc	0.100	0.0980		mg/L		98	80 - 120

Lab Sample ID: 680-162184-3 MS
Matrix: Water
Analysis Batch: 552495

Client Sample ID: MW-15D
Prep Type: Dissolved
Prep Batch: 551751

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.010	U	0.0500	0.0499		mg/L		100	75 - 125
Aluminum	0.20	U	5.00	4.80		mg/L		96	75 - 125
Arsenic	0.020	U	0.100	0.0938		mg/L		94	75 - 125
Barium	0.098		0.100	0.202		mg/L		104	75 - 125
Beryllium	0.0040	U	0.0500	0.0503		mg/L		101	75 - 125
Calcium	44		5.00	52.7	4	mg/L		183	75 - 125
Cadmium	0.0050	U	0.0500	0.0505		mg/L		101	75 - 125
Cobalt	0.010	U	0.0500	0.0497		mg/L		99	75 - 125
Chromium	0.010	U	0.100	0.0993		mg/L		99	75 - 125
Copper	0.020	U	0.100	0.0957		mg/L		96	75 - 125
Iron	0.050	U	5.00	4.93		mg/L		99	75 - 125
Potassium	4.1		8.00	12.3		mg/L		102	75 - 125
Magnesium	11		5.00	17.1		mg/L		114	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 680-162184-3 MS — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 552495 — **Prep Batch: 551751**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	0.0072	J	0.500	0.499		mg/L		98	75 - 125
Sodium	6.6		5.00	12.2		mg/L		112	75 - 125
Nickel	0.040	U	0.100	0.0970		mg/L		97	75 - 125
Lead	0.010	U	0.500	0.494		mg/L		99	75 - 125
Antimony	0.020	U	0.0500	0.0474		mg/L		95	75 - 125
Selenium	0.35	F1	0.100	0.474		mg/L		120	75 - 125
Thallium	0.025	U	0.0400	0.0384		mg/L		96	75 - 125
Vanadium	0.010	U	0.100	0.0981		mg/L		98	75 - 125
Zinc	0.020	U	0.100	0.0990		mg/L		99	75 - 125

Lab Sample ID: 680-162184-3 MSD — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 552495 — **Prep Batch: 551751**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.010	U	0.0500	0.0511		mg/L		102	75 - 125	2	20
Aluminum	0.20	U	5.00	4.85		mg/L		97	75 - 125	1	20
Arsenic	0.020	U	0.100	0.0970		mg/L		97	75 - 125	3	20
Barium	0.098		0.100	0.201		mg/L		103	75 - 125	0	20
Beryllium	0.0040	U	0.0500	0.0507		mg/L		101	75 - 125	1	20
Calcium	44		5.00	54.0	4	mg/L		210	75 - 125	2	20
Cadmium	0.0050	U	0.0500	0.0507		mg/L		101	75 - 125	0	20
Cobalt	0.010	U	0.0500	0.0503		mg/L		101	75 - 125	1	20
Chromium	0.010	U	0.100	0.100		mg/L		100	75 - 125	1	20
Copper	0.020	U	0.100	0.0966		mg/L		97	75 - 125	1	20
Iron	0.050	U	5.00	4.99		mg/L		100	75 - 125	1	20
Potassium	4.1		8.00	12.4		mg/L		104	75 - 125	1	20
Magnesium	11		5.00	17.3		mg/L		117	75 - 125	1	20
Manganese	0.0072	J	0.500	0.503		mg/L		99	75 - 125	1	20
Sodium	6.6		5.00	12.3		mg/L		114	75 - 125	1	20
Nickel	0.040	U	0.100	0.0973		mg/L		97	75 - 125	0	20
Lead	0.010	U	0.500	0.496		mg/L		99	75 - 125	0	20
Antimony	0.020	U	0.0500	0.0477		mg/L		95	75 - 125	1	20
Selenium	0.35	F1	0.100	0.488	F1	mg/L		134	75 - 125	3	20
Thallium	0.025	U	0.0400	0.0349		mg/L		87	75 - 125	10	20
Vanadium	0.010	U	0.100	0.0991		mg/L		99	75 - 125	1	20
Zinc	0.020	U	0.100	0.102		mg/L		102	75 - 125	3	20

Lab Sample ID: 680-162184-14 MS — **Client Sample ID: METDUP_20181211**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 552039 — **Prep Batch: 551755**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.010	U	0.0500	0.0510		mg/L		102	75 - 125
Aluminum	0.062	J	5.00	5.10		mg/L		101	75 - 125
Arsenic	0.020	U	0.100	0.107		mg/L		107	75 - 125
Barium	0.12		0.100	0.212		mg/L		95	75 - 125
Beryllium	0.0040	U	0.0500	0.0538		mg/L		108	75 - 125
Calcium	56		5.00	60.2	4	mg/L		84	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 680-162184-14 MS — **Client Sample ID: METDUP_20181211**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 552039 — **Prep Batch: 551755**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.0050	U	0.0500	0.0529		mg/L		106	75 - 125
Cobalt	0.010	U	0.0500	0.0499		mg/L		100	75 - 125
Chromium	0.010	U	0.100	0.103		mg/L		103	75 - 125
Copper	0.0019	J	0.100	0.105		mg/L		104	75 - 125
Iron	0.12		5.00	5.25		mg/L		103	75 - 125
Potassium	4.9		8.00	13.2		mg/L		104	75 - 125
Magnesium	14		5.00	18.7		mg/L		102	75 - 125
Manganese	0.023		0.500	0.536		mg/L		103	75 - 125
Sodium	8.0		5.00	13.1		mg/L		103	75 - 125
Nickel	0.040	U	0.100	0.104		mg/L		104	75 - 125
Lead	0.0051	J	0.500	0.529		mg/L		105	75 - 125
Antimony	0.020	U	0.0500	0.0496		mg/L		99	75 - 125
Selenium	0.38		0.100	0.486		mg/L		104	75 - 125
Thallium	0.025	U	0.0400	0.0365		mg/L		91	75 - 125
Vanadium	0.010	U	0.100	0.101		mg/L		101	75 - 125
Zinc	0.010	J	0.100	0.115		mg/L		105	75 - 125

Lab Sample ID: 680-162184-14 MSD — **Client Sample ID: METDUP_20181211**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 552039 — **Prep Batch: 551755**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.010	U	0.0500	0.0511		mg/L		102	75 - 125	0	20
Aluminum	0.062	J	5.00	5.10		mg/L		101	75 - 125	0	20
Arsenic	0.020	U	0.100	0.108		mg/L		108	75 - 125	0	20
Barium	0.12		0.100	0.213		mg/L		96	75 - 125	0	20
Beryllium	0.0040	U	0.0500	0.0538		mg/L		108	75 - 125	0	20
Calcium	56		5.00	60.8	4	mg/L		95	75 - 125	1	20
Cadmium	0.0050	U	0.0500	0.0528		mg/L		106	75 - 125	0	20
Cobalt	0.010	U	0.0500	0.0509		mg/L		102	75 - 125	2	20
Chromium	0.010	U	0.100	0.103		mg/L		103	75 - 125	0	20
Copper	0.0019	J	0.100	0.105		mg/L		103	75 - 125	0	20
Iron	0.12		5.00	5.28		mg/L		103	75 - 125	0	20
Potassium	4.9		8.00	13.3		mg/L		105	75 - 125	0	20
Magnesium	14		5.00	18.8		mg/L		104	75 - 125	1	20
Manganese	0.023		0.500	0.536		mg/L		103	75 - 125	0	20
Sodium	8.0		5.00	13.2		mg/L		105	75 - 125	1	20
Nickel	0.040	U	0.100	0.105		mg/L		105	75 - 125	1	20
Lead	0.0051	J	0.500	0.523		mg/L		104	75 - 125	1	20
Antimony	0.020	U	0.0500	0.0501		mg/L		100	75 - 125	1	20
Selenium	0.38		0.100	0.488		mg/L		106	75 - 125	0	20
Thallium	0.025	U	0.0400	0.0410		mg/L		103	75 - 125	12	20
Vanadium	0.010	U	0.100	0.101		mg/L		101	75 - 125	0	20
Zinc	0.010	J	0.100	0.117		mg/L		106	75 - 125	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 680-162184-16 MS
Matrix: Water
Analysis Batch: 552495

Client Sample ID: EQUIP BLANK
Prep Type: Dissolved
Prep Batch: 551782

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.010	U	0.0500	0.0495		mg/L		99	75 - 125
Aluminum	0.20	U	5.00	4.76		mg/L		95	75 - 125
Arsenic	0.020	U	0.100	0.0935		mg/L		93	75 - 125
Barium	0.010	U	0.100	0.0956		mg/L		96	75 - 125
Beryllium	0.0040	U	0.0500	0.0507		mg/L		101	75 - 125
Calcium	0.12	J	5.00	4.98		mg/L		97	75 - 125
Cadmium	0.0050	U	0.0500	0.0506		mg/L		101	75 - 125
Cobalt	0.010	U	0.0500	0.0493		mg/L		99	75 - 125
Chromium	0.010	U	0.100	0.0998		mg/L		100	75 - 125
Copper	0.020	U	0.100	0.0957		mg/L		96	75 - 125
Iron	0.050	U	5.00	4.96		mg/L		99	75 - 125
Potassium	0.017	J	8.00	7.56		mg/L		95	75 - 125
Magnesium	0.50	U	5.00	4.94		mg/L		99	75 - 125
Manganese	0.010	U	0.500	0.490		mg/L		98	75 - 125
Sodium	1.0	U	5.00	5.15		mg/L		103	75 - 125
Nickel	0.040	U	0.100	0.0982		mg/L		98	75 - 125
Lead	0.010	U	0.500	0.486		mg/L		97	75 - 125
Antimony	0.020	U	0.0500	0.0462		mg/L		92	75 - 125
Selenium	0.020	U	0.100	0.0984		mg/L		98	75 - 125
Thallium	0.025	U	0.0400	0.0406		mg/L		102	75 - 125
Vanadium	0.010	U	0.100	0.0967		mg/L		97	75 - 125
Zinc	0.020	U	0.100	0.101		mg/L		101	75 - 125

Lab Sample ID: 680-162184-16 MSD
Matrix: Water
Analysis Batch: 552495

Client Sample ID: EQUIP BLANK
Prep Type: Dissolved
Prep Batch: 551782

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	0.010	U	0.0500	0.0511		mg/L		102	75 - 125	3	20
Aluminum	0.20	U	5.00	4.80		mg/L		96	75 - 125	1	20
Arsenic	0.020	U	0.100	0.0948		mg/L		95	75 - 125	1	20
Barium	0.010	U	0.100	0.0974		mg/L		97	75 - 125	2	20
Beryllium	0.0040	U	0.0500	0.0514		mg/L		103	75 - 125	1	20
Calcium	0.12	J	5.00	5.04		mg/L		98	75 - 125	1	20
Cadmium	0.0050	U	0.0500	0.0515		mg/L		103	75 - 125	2	20
Cobalt	0.010	U	0.0500	0.0505		mg/L		101	75 - 125	2	20
Chromium	0.010	U	0.100	0.101		mg/L		101	75 - 125	1	20
Copper	0.020	U	0.100	0.0976		mg/L		98	75 - 125	2	20
Iron	0.050	U	5.00	5.03		mg/L		101	75 - 125	1	20
Potassium	0.017	J	8.00	7.65		mg/L		96	75 - 125	1	20
Magnesium	0.50	U	5.00	5.00		mg/L		100	75 - 125	1	20
Manganese	0.010	U	0.500	0.495		mg/L		99	75 - 125	1	20
Sodium	1.0	U	5.00	5.32		mg/L		106	75 - 125	3	20
Nickel	0.040	U	0.100	0.0999		mg/L		100	75 - 125	2	20
Lead	0.010	U	0.500	0.496		mg/L		99	75 - 125	2	20
Antimony	0.020	U	0.0500	0.0412		mg/L		82	75 - 125	11	20
Selenium	0.020	U	0.100	0.0922		mg/L		92	75 - 125	6	20
Thallium	0.025	U	0.0400	0.0376		mg/L		94	75 - 125	8	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 680-162184-16 MSD — **Client Sample ID: EQUIP BLANK**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 552495 — **Prep Batch: 551782**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	0.010	U	0.100	0.0984		mg/L		98	75 - 125	2	20
Zinc	0.020	U	0.100	0.0991		mg/L		99	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-552619/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552922 — **Prep Batch: 552619**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/20/18 12:16	12/21/18 22:32	1

Lab Sample ID: LCS 680-552619/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552922 — **Prep Batch: 552619**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00239		mg/L		96	80 - 120

Lab Sample ID: MB 680-552831/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552999 — **Prep Batch: 552831**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/21/18 13:16	12/22/18 10:08	1

Lab Sample ID: LCS 680-552831/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552999 — **Prep Batch: 552831**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00250	0.00254		mg/L		102	80 - 120

Lab Sample ID: 680-162184-3 MS — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552999 — **Prep Batch: 552831**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00020	U F1	0.00100	0.000728	F1	mg/L		73	80 - 120

Lab Sample ID: 680-162184-3 MSD — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 552999 — **Prep Batch: 552831**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00020	U F1	0.00100	0.000723	F1	mg/L		72	80 - 120	1	20

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 680-553794/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 554062 — **Prep Batch: 553794**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020	U	0.00020	0.000080	mg/L		12/31/18 10:53	01/02/19 11:07	1

Lab Sample ID: LCS 680-553794/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 554062 — **Prep Batch: 553794**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00250	0.00220		mg/L		88	80 - 120		

Lab Sample ID: 680-162184-3 MS — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 552922 — **Prep Batch: 552619**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.00020	U	0.00100	0.000894		mg/L		89	80 - 120		

Lab Sample ID: 680-162184-3 MSD — **Client Sample ID: MW-15D**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 552922 — **Prep Batch: 552619**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00020	U	0.00100	0.000877		mg/L		88	80 - 120	2	20

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
E	Result exceeded calibration range.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
E	Result exceeded calibration range.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
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.
F1	MS and/or MSD Recovery is outside acceptance limits.
W	PS: Post-digestion spike was outside control limits
V	Serial Dilution exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

GC/MS VOA

Analysis Batch: 552552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-5	MW-21R	Total/NA	Water	8260B	
680-162184-6	MW-21D	Total/NA	Water	8260B	
MB 680-552552/8	Method Blank	Total/NA	Water	8260B	
LCS 680-552552/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-552552/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 552557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-7	MW-22D	Total/NA	Water	8260B	
680-162184-8	MW-22R	Total/NA	Water	8260B	
680-162184-11	MW-25S	Total/NA	Water	8260B	
680-162184-15	VOCDUP_20181212	Total/NA	Water	8260B	
680-162184-17	TRIP BLANK	Total/NA	Water	8260B	
MB 680-552557/8	Method Blank	Total/NA	Water	8260B	
LCS 680-552557/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-552557/4	Lab Control Sample Dup	Total/NA	Water	8260B	
680-162184-8 MS	MW-22R	Total/NA	Water	8260B	
680-162184-8 MSD	MW-22R	Total/NA	Water	8260B	

Analysis Batch: 552754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-1	MW-3	Total/NA	Water	8260B	
MB 680-552754/8	Method Blank	Total/NA	Water	8260B	
LCS 680-552754/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-552754/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 553025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-1 - DL	MW-3	Total/NA	Water	8260B	
MB 680-553025/8	Method Blank	Total/NA	Water	8260B	
LCS 680-553025/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-553025/5	Lab Control Sample Dup	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 451231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Total/NA	Water	3510C	
680-162184-4	MW-16S	Total/NA	Water	3510C	
680-162184-5	MW-21R	Total/NA	Water	3510C	
680-162184-8	MW-22R	Total/NA	Water	3510C	
680-162184-9	MW-24S	Total/NA	Water	3510C	
680-162184-11	MW-25S	Total/NA	Water	3510C	
680-162184-12	MW-26S	Total/NA	Water	3510C	
680-162184-16	EQUIP BLANK	Total/NA	Water	3510C	
680-162184-19	MW-10	Total/NA	Water	3510C	
680-162184-20	MW-11D	Total/NA	Water	3510C	
680-162184-21	PFASDUP_20181211	Total/NA	Water	3510C	
MB 480-451231/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-451231/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 451231 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2 MS	MW-15S	Total/NA	Water	3510C	
680-162184-2 MSD	MW-15S	Total/NA	Water	3510C	

Analysis Batch: 451416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Total/NA	Water	8270D SIM ID	451231
680-162184-4	MW-16S	Total/NA	Water	8270D SIM ID	451231
680-162184-5	MW-21R	Total/NA	Water	8270D SIM ID	451231
680-162184-8	MW-22R	Total/NA	Water	8270D SIM ID	451231
680-162184-9	MW-24S	Total/NA	Water	8270D SIM ID	451231
680-162184-11	MW-25S	Total/NA	Water	8270D SIM ID	451231
680-162184-12	MW-26S	Total/NA	Water	8270D SIM ID	451231
680-162184-16	EQUIP BLANK	Total/NA	Water	8270D SIM ID	451231
680-162184-19	MW-10	Total/NA	Water	8270D SIM ID	451231
680-162184-20	MW-11D	Total/NA	Water	8270D SIM ID	451231
680-162184-21	PFASDUP_20181211	Total/NA	Water	8270D SIM ID	451231
MB 480-451231/1-A	Method Blank	Total/NA	Water	8270D SIM ID	451231
LCS 480-451231/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	451231
680-162184-2 MS	MW-15S	Total/NA	Water	8270D SIM ID	451231
680-162184-2 MSD	MW-15S	Total/NA	Water	8270D SIM ID	451231

Prep Batch: 452766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-5 - RE	MW-21R	Total/NA	Water	3510C	
MB 480-452766/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-452766/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 452932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-5 - RE	MW-21R	Total/NA	Water	8270D SIM ID	452766
MB 480-452766/1-A	Method Blank	Total/NA	Water	8270D SIM ID	452766
LCS 480-452766/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	452766

Metals

Prep Batch: 551751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Dissolved	Water	3005A	
680-162184-3	MW-15D	Dissolved	Water	3005A	
680-162184-4	MW-16S	Dissolved	Water	3005A	
680-162184-9	MW-24S	Dissolved	Water	3005A	
680-162184-10	MW-24D	Dissolved	Water	3005A	
680-162184-18	SW-1	Dissolved	Water	3005A	
MB 680-551751/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-551751/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-162184-3 MS	MW-15D	Dissolved	Water	3005A	
680-162184-3 MSD	MW-15D	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 551755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-12	MW-26S	Dissolved	Water	3005A	
680-162184-13	MW-26D	Dissolved	Water	3005A	
680-162184-14	METDUP_20181211	Dissolved	Water	3005A	
MB 680-551755/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-551755/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-162184-14 MS	METDUP_20181211	Dissolved	Water	3005A	
680-162184-14 MSD	METDUP_20181211	Dissolved	Water	3005A	

Prep Batch: 551774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Total/NA	Water	3010A	
680-162184-3	MW-15D	Total/NA	Water	3010A	
680-162184-4	MW-16S	Total/NA	Water	3010A	
680-162184-9	MW-24S	Total/NA	Water	3010A	
680-162184-10	MW-24D	Total/NA	Water	3010A	
680-162184-12	MW-26S	Total/NA	Water	3010A	
680-162184-13	MW-26D	Total/NA	Water	3010A	
680-162184-14	METDUP_20181211	Total/NA	Water	3010A	
680-162184-18	SW-1	Total/NA	Water	3010A	
MB 680-551774/1-A	Method Blank	Total/NA	Water	3010A	
LCS 680-551774/2-A	Lab Control Sample	Total/NA	Water	3010A	
680-162184-3 MS	MW-15D	Total/NA	Water	3010A	
680-162184-3 MSD	MW-15D	Total/NA	Water	3010A	

Prep Batch: 551775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-16	EQUIP BLANK	Total/NA	Water	3010A	
MB 680-551775/1-A	Method Blank	Total/NA	Water	3010A	
LCS 680-551775/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 551782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-16	EQUIP BLANK	Dissolved	Water	3005A	
MB 680-551782/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 680-551782/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
680-162184-16 MS	EQUIP BLANK	Dissolved	Water	3005A	
680-162184-16 MSD	EQUIP BLANK	Dissolved	Water	3005A	

Analysis Batch: 552039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-12	MW-26S	Dissolved	Water	6010C	551755
680-162184-13	MW-26D	Dissolved	Water	6010C	551755
680-162184-14	METDUP_20181211	Dissolved	Water	6010C	551755
MB 680-551755/1-A	Method Blank	Total Recoverable	Water	6010C	551755
LCS 680-551755/2-A	Lab Control Sample	Total Recoverable	Water	6010C	551755
680-162184-14 MS	METDUP_20181211	Dissolved	Water	6010C	551755
680-162184-14 MSD	METDUP_20181211	Dissolved	Water	6010C	551755

Analysis Batch: 552495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Dissolved	Water	6010C	551751

Metals (Continued)

Analysis Batch: 552495 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Total/NA	Water	6010C	551774
680-162184-3	MW-15D	Dissolved	Water	6010C	551751
680-162184-3	MW-15D	Total/NA	Water	6010C	551774
680-162184-4	MW-16S	Dissolved	Water	6010C	551751
680-162184-4	MW-16S	Total/NA	Water	6010C	551774
680-162184-9	MW-24S	Dissolved	Water	6010C	551751
680-162184-9	MW-24S	Total/NA	Water	6010C	551774
680-162184-10	MW-24D	Dissolved	Water	6010C	551751
680-162184-10	MW-24D	Total/NA	Water	6010C	551774
680-162184-12	MW-26S	Total/NA	Water	6010C	551774
680-162184-13	MW-26D	Total/NA	Water	6010C	551774
680-162184-14	METDUP_20181211	Total/NA	Water	6010C	551774
680-162184-16	EQUIP BLANK	Dissolved	Water	6010C	551782
680-162184-16	EQUIP BLANK	Total/NA	Water	6010C	551775
680-162184-18	SW-1	Dissolved	Water	6010C	551751
680-162184-18	SW-1	Total/NA	Water	6010C	551774
MB 680-551751/1-A	Method Blank	Total Recoverable	Water	6010C	551751
MB 680-551774/1-A	Method Blank	Total/NA	Water	6010C	551774
MB 680-551775/1-A	Method Blank	Total/NA	Water	6010C	551775
MB 680-551782/1-A	Method Blank	Total Recoverable	Water	6010C	551782
LCS 680-551751/2-A	Lab Control Sample	Total Recoverable	Water	6010C	551751
LCS 680-551774/2-A	Lab Control Sample	Total/NA	Water	6010C	551774
LCS 680-551775/2-A	Lab Control Sample	Total/NA	Water	6010C	551775
LCS 680-551782/2-A	Lab Control Sample	Total Recoverable	Water	6010C	551782
680-162184-3 MS	MW-15D	Dissolved	Water	6010C	551751
680-162184-3 MS	MW-15D	Total/NA	Water	6010C	551774
680-162184-3 MSD	MW-15D	Dissolved	Water	6010C	551751
680-162184-3 MSD	MW-15D	Total/NA	Water	6010C	551774
680-162184-16 MS	EQUIP BLANK	Dissolved	Water	6010C	551782
680-162184-16 MSD	EQUIP BLANK	Dissolved	Water	6010C	551782

Prep Batch: 552619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Dissolved	Water	7470A	
680-162184-3	MW-15D	Dissolved	Water	7470A	
680-162184-4	MW-16S	Dissolved	Water	7470A	
680-162184-9	MW-24S	Dissolved	Water	7470A	
680-162184-10	MW-24D	Dissolved	Water	7470A	
680-162184-12	MW-26S	Dissolved	Water	7470A	
680-162184-13	MW-26D	Dissolved	Water	7470A	
680-162184-14	METDUP_20181211	Dissolved	Water	7470A	
680-162184-16	EQUIP BLANK	Dissolved	Water	7470A	
MB 680-552619/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-552619/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-162184-3 MS	MW-15D	Dissolved	Water	7470A	
680-162184-3 MSD	MW-15D	Dissolved	Water	7470A	

Prep Batch: 552831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Total/NA	Water	7470A	
680-162184-3	MW-15D	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 552831 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-4	MW-16S	Total/NA	Water	7470A	
680-162184-9	MW-24S	Total/NA	Water	7470A	
680-162184-10	MW-24D	Total/NA	Water	7470A	
680-162184-12	MW-26S	Total/NA	Water	7470A	
680-162184-13	MW-26D	Total/NA	Water	7470A	
680-162184-14	METDUP_20181211	Total/NA	Water	7470A	
680-162184-16	EQUIP BLANK	Total/NA	Water	7470A	
680-162184-18	SW-1	Total/NA	Water	7470A	
MB 680-552831/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-552831/2-A	Lab Control Sample	Total/NA	Water	7470A	
680-162184-3 MS	MW-15D	Total/NA	Water	7470A	
680-162184-3 MSD	MW-15D	Total/NA	Water	7470A	

Analysis Batch: 552922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-3	MW-15D	Dissolved	Water	7470A	552619
MB 680-552619/1-A	Method Blank	Total/NA	Water	7470A	552619
LCS 680-552619/2-A	Lab Control Sample	Total/NA	Water	7470A	552619
680-162184-3 MS	MW-15D	Dissolved	Water	7470A	552619
680-162184-3 MSD	MW-15D	Dissolved	Water	7470A	552619

Analysis Batch: 552999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-2	MW-15S	Dissolved	Water	7470A	552619
680-162184-2	MW-15S	Total/NA	Water	7470A	552831
680-162184-3	MW-15D	Total/NA	Water	7470A	552831
680-162184-4	MW-16S	Dissolved	Water	7470A	552619
680-162184-4	MW-16S	Total/NA	Water	7470A	552831
680-162184-9	MW-24S	Dissolved	Water	7470A	552619
680-162184-9	MW-24S	Total/NA	Water	7470A	552831
680-162184-10	MW-24D	Dissolved	Water	7470A	552619
680-162184-10	MW-24D	Total/NA	Water	7470A	552831
680-162184-12	MW-26S	Dissolved	Water	7470A	552619
680-162184-12	MW-26S	Total/NA	Water	7470A	552831
680-162184-13	MW-26D	Dissolved	Water	7470A	552619
680-162184-13	MW-26D	Total/NA	Water	7470A	552831
680-162184-14	METDUP_20181211	Dissolved	Water	7470A	552619
680-162184-14	METDUP_20181211	Total/NA	Water	7470A	552831
680-162184-16	EQUIP BLANK	Dissolved	Water	7470A	552619
680-162184-16	EQUIP BLANK	Total/NA	Water	7470A	552831
680-162184-18	SW-1	Total/NA	Water	7470A	552831
MB 680-552831/1-A	Method Blank	Total/NA	Water	7470A	552831
LCS 680-552831/2-A	Lab Control Sample	Total/NA	Water	7470A	552831
680-162184-3 MS	MW-15D	Total/NA	Water	7470A	552831
680-162184-3 MSD	MW-15D	Total/NA	Water	7470A	552831

Prep Batch: 553794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-18	SW-1	Dissolved	Water	7470A	
MB 680-553794/1-A	Method Blank	Total/NA	Water	7470A	
LCS 680-553794/2-A	Lab Control Sample	Total/NA	Water	7470A	

QC Association Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Analysis Batch: 554062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-162184-18	SW-1	Dissolved	Water	7470A	553794
MB 680-553794/1-A	Method Blank	Total/NA	Water	7470A	553794
LCS 680-553794/2-A	Lab Control Sample	Total/NA	Water	7470A	553794

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-3 — Lab Sample ID: 680-162184-1

Date Collected: 12/11/18 14:53
Date Received: 12/14/18 09:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		100	552754	12/21/18 19:10	Y1S	TAL SAV
Total/NA	Analysis	8260B	DL	250	553025	12/24/18 21:46	Y1S	TAL SAV

Client Sample ID: MW-15S — Lab Sample ID: 680-162184-2

Date Collected: 12/11/18 12:00
Date Received: 12/14/18 09:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 17:51	DMR	TAL BUF
Dissolved	Prep	3005A			551751	12/14/18 15:34	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552495	12/18/18 20:57	BCB	TAL SAV
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/18/18 21:58	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552999	12/22/18 09:36	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 10:48	PEP	TAL SAV

Client Sample ID: MW-15D — Lab Sample ID: 680-162184-3

Date Collected: 12/11/18 13:50
Date Received: 12/14/18 09:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			551751	12/14/18 15:34	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552495	12/18/18 20:26	BCB	TAL SAV
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/18/18 21:27	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552922	12/21/18 23:36	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 10:28	PEP	TAL SAV

Client Sample ID: MW-16S — Lab Sample ID: 680-162184-4

Date Collected: 12/11/18 15:45
Date Received: 12/14/18 09:49
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 19:05	DMR	TAL BUF
Dissolved	Prep	3005A			551751	12/14/18 15:34	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552495	12/18/18 21:01	BCB	TAL SAV
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV

Client Sample ID: MW-16S — Lab Sample ID: 680-162184-4

Date Collected: 12/11/18 15:45 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1	552495	12/18/18 22:02	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552999	12/22/18 09:40	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 10:40	PEP	TAL SAV

Client Sample ID: MW-21R — Lab Sample ID: 680-162184-5

Date Collected: 12/11/18 13:23 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552552	12/20/18 18:56	JLK	TAL SAV
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 19:30	DMR	TAL BUF
Total/NA	Prep	3510C	RE		452766	12/27/18 15:17	AAP	TAL BUF
Total/NA	Analysis	8270D SIM ID	RE	1	452932	12/28/18 19:47	DMR	TAL BUF

Client Sample ID: MW-21D — Lab Sample ID: 680-162184-6

Date Collected: 12/11/18 12:37 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552552	12/20/18 19:19	JLK	TAL SAV

Client Sample ID: MW-22D — Lab Sample ID: 680-162184-7

Date Collected: 12/11/18 16:21 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552557	12/20/18 17:24	Y1S	TAL SAV

Client Sample ID: MW-22R — Lab Sample ID: 680-162184-8

Date Collected: 12/12/18 10:43 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552557	12/20/18 17:48	Y1S	TAL SAV
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 19:54	DMR	TAL BUF

Client Sample ID: MW-24S — Lab Sample ID: 680-162184-9

Date Collected: 12/12/18 13:08 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 20:19	DMR	TAL BUF
Dissolved	Prep	3005A			551751	12/14/18 15:34	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552495	12/18/18 21:05	BCB	TAL SAV
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/18/18 22:07	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552999	12/22/18 09:52	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 10:59	PEP	TAL SAV

Client Sample ID: MW-24D — Lab Sample ID: 680-162184-10

Date Collected: 12/12/18 13:55 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			551751	12/14/18 15:34	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552495	12/18/18 21:10	BCB	TAL SAV
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/18/18 22:11	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552999	12/22/18 09:56	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 11:11	PEP	TAL SAV

Client Sample ID: MW-25S — Lab Sample ID: 680-162184-11

Date Collected: 12/12/18 12:23 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552557	12/20/18 18:11	Y1S	TAL SAV
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 20:44	DMR	TAL BUF

Client Sample ID: MW-26S — Lab Sample ID: 680-162184-12

Date Collected: 12/12/18 11:05 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 21:09	DMR	TAL BUF
Dissolved	Prep	3005A			551755	12/14/18 15:39	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552039	12/15/18 19:54	BCB	TAL SAV

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: MW-26S — Lab Sample ID: 680-162184-12

Date Collected: 12/12/18 11:05
Matrix: Water
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/18/18 22:16	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552999	12/22/18 09:44	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 10:52	PEP	TAL SAV

Client Sample ID: MW-26D — Lab Sample ID: 680-162184-13

Date Collected: 12/12/18 11:52
Matrix: Water
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			551755	12/14/18 15:39	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552039	12/15/18 19:59	BCB	TAL SAV
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/18/18 22:20	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552999	12/22/18 09:48	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 11:19	PEP	TAL SAV

Client Sample ID: METDUP_20181211 — Lab Sample ID: 680-162184-14

Date Collected: 12/11/18 00:00
Matrix: Water
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			551755	12/14/18 15:39	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552039	12/15/18 19:21	BCB	TAL SAV
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/18/18 22:24	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:18	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552999	12/22/18 10:04	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 10:44	PEP	TAL SAV

Client Sample ID: VOCDUP_20181212 — Lab Sample ID: 680-162184-15

Date Collected: 12/12/18 00:00
Matrix: Water
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552557	12/20/18 18:35	Y1S	TAL SAV

Lab Chronicle

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Client Sample ID: EQUIP BLANK — Lab Sample ID: 680-162184-16

Date Collected: 12/11/18 16:35 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 21:33	DMR	TAL BUF
Dissolved	Prep	3005A			551782	12/14/18 17:30	BCB	TAL SAV
Dissolved	Analysis	6010C		1	552495	12/19/18 00:32	BCB	TAL SAV
Total/NA	Prep	3010A			551775	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/19/18 00:06	BCB	TAL SAV
Dissolved	Prep	7470A			552619	12/20/18 12:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	552999	12/22/18 10:00	PEP	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 11:15	PEP	TAL SAV

Client Sample ID: TRIP BLANK — Lab Sample ID: 680-162184-17

Date Collected: 12/12/18 00:00 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	552557	12/20/18 12:17	Y1S	TAL SAV

Client Sample ID: SW-1 — Lab Sample ID: 680-162184-18

Date Collected: 12/12/18 16:40 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			551751	12/14/18 15:34	BJB	TAL SAV
Dissolved	Analysis	6010C		1	552495	12/18/18 20:21	BCB	TAL SAV
Total/NA	Prep	3010A			551774	12/14/18 17:07	BCB	TAL SAV
Total/NA	Analysis	6010C		1	552495	12/18/18 22:29	BCB	TAL SAV
Dissolved	Prep	7470A			553794	12/31/18 15:16	PEP	TAL SAV
Dissolved	Analysis	7470A		1	554062	01/02/19 11:15	BCB	TAL SAV
Total/NA	Prep	7470A			552831	12/21/18 13:16	PEP	TAL SAV
Total/NA	Analysis	7470A		1	552999	12/22/18 10:55	PEP	TAL SAV

Client Sample ID: MW-10 — Lab Sample ID: 680-162184-19

Date Collected: 12/12/18 14:21 — **Matrix: Water**
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 21:58	DMR	TAL BUF

Client Sample ID: MW-11D
Lab Sample ID: 680-162184-20

Date Collected: 12/12/18 15:59
Matrix: Water
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 22:23	DMR	TAL BUF

Client Sample ID: PFASDUP_20181211
Lab Sample ID: 680-162184-21

Date Collected: 12/11/18 00:00
Matrix: Water
Date Received: 12/14/18 09:49

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			451231	12/17/18 14:25	ATG	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	451416	12/18/18 22:48	DMR	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Laboratory: TestAmerica Savannah

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10842	03-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	1,1,1-Trichloroethane
8260B		Water	1,1,2,2-Tetrachloroethane
8260B		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
8260B		Water	1,1,2-Trichloroethane
8260B		Water	1,1-Dichloroethane
8260B		Water	1,1-Dichloroethene
8260B		Water	1,2,4-Trichlorobenzene
8260B		Water	1,2-Dibromo-3-Chloropropane
8260B		Water	1,2-Dibromoethane
8260B		Water	1,2-Dichlorobenzene
8260B		Water	1,2-Dichloroethane
8260B		Water	1,2-Dichloropropane
8260B		Water	1,3-Dichlorobenzene
8260B		Water	1,4-Dichlorobenzene
8260B		Water	2-Hexanone
8260B		Water	Acetone
8260B		Water	Benzene
8260B		Water	Bromodichloromethane
8260B		Water	Bromoform
8260B		Water	Bromomethane
8260B		Water	Carbon disulfide
8260B		Water	Carbon tetrachloride
8260B		Water	Chlorobenzene
8260B		Water	Chloroethane
8260B		Water	Chloroform
8260B		Water	Chloromethane
8260B		Water	cis-1,2-Dichloroethene
8260B		Water	cis-1,3-Dichloropropene
8260B		Water	Cyclohexane
8260B		Water	Dibromochloromethane
8260B		Water	Dichlorodifluoromethane
8260B		Water	Ethylbenzene
8260B		Water	Isopropylbenzene
8260B		Water	Methyl acetate
8260B		Water	Methyl Ethyl Ketone
8260B		Water	methyl isobutyl ketone
8260B		Water	Methyl tert-butyl ether
8260B		Water	Methylcyclohexane
8260B		Water	Methylene Chloride
8260B		Water	Styrene
8260B		Water	Tetrachloroethene
8260B		Water	Toluene
8260B		Water	trans-1,2-Dichloroethene
8260B		Water	trans-1,3-Dichloropropene
8260B		Water	Trichloroethene
8260B		Water	Trichlorofluoromethane

Accreditation/Certification Summary

Client: Ashland LLC
Project/Site: Hercules Dyno - Port Ewen, NY

TestAmerica Job ID: 680-162184-1

Laboratory: TestAmerica Savannah (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10842	03-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Vinyl chloride
8260B		Water	Xylenes, Total

Laboratory: TestAmerica Buffalo

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-19
California	State Program	9	2931	04-01-19
Connecticut	State Program	1	PH-0568	09-30-20
Florida	NELAP	4	E87672	06-30-19
Georgia	State Program	4	10026 (NY)	03-31-19
Georgia	State Program	4	956	03-31-19
Illinois	NELAP	5	200003	09-30-19
Iowa	State Program	7	374	03-01-19 *
Kansas	NELAP	7	E-10187	01-31-19 *
Kentucky (DW)	State Program	4	90029	12-31-18 *
Kentucky (UST)	State Program	4	30	03-31-19
Kentucky (WW)	State Program	4	90029	12-31-19
Louisiana	NELAP	6	02031	06-30-19
Maryland	State Program	3	294	03-31-19
Massachusetts	State Program	1	M-NY044	06-30-19
Michigan	State Program	5	9937	03-31-19
Minnesota	NELAP	5	036-999-337	12-31-19
New Hampshire	NELAP	1	2337	11-17-19
New York	NELAP	2	10026	03-31-19
North Dakota	State Program	8	R-176	03-31-19
Oklahoma	State Program	6	9421	08-31-19
Oregon	NELAP	10	NY200003	06-09-19
Pennsylvania	NELAP	3	68-00281	07-31-19
Rhode Island	State Program	1	LAO00328	12-30-18 *
Tennessee	State Program	4	TN02970	03-31-19
Texas	NELAP	6	T104704412-15-6	07-31-19
USDA	Federal		P330-11-00386	02-06-21
Virginia	NELAP	3	460185	09-14-19
Washington	State Program	10	C784	02-10-19 *
Wisconsin	State Program	5	998310390	08-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-VRX (20m ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MW-3	680-162184-1	102	104	97	101
MW-3 DL	680-162184-1 DL	97	92	98	89
MW-21R	680-162184-5	102	99	100	99
MW-21D	680-162184-6	103	97	99	99
MW-22D	680-162184-7	99	94	95	93
MW-22R	680-162184-8	101	96	94	84
MW-25S	680-162184-11	97	93	96	93
VOCDUP_20181212	680-162184-15	99	96	95	92
TRIP BLANK	680-162184-17	100	97	94	93
	MB 680-552552/8	100	95	98	98
	MB 680-552557/8	97	93	95	91
	MB 680-552754/8	101	96	99	98
	MB 680-553025/8	96	92	99	93
	LCS 680-552552/3	100	98	97	97
	LCS 680-552557/3	101	99	106	95
	LCS 680-552754/3	103	98	101	99
	LCS 680-553025/4	98	91	98	91
	LCSD 680-552552/4	100	94	98	97
	LCSD 680-552557/4	99	96	95	93
	LCSD 680-552754/4	100	95	98	97
	LCSD 680-553025/5	104	99	101	94
MW-22R MS	680-162184-8 MS	103	97	99	92
MW-22R MSD	680-162184-8 MSD	99	93	97	92

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-122
DCA = 1,2-Dichloroethane-d4 (Surr)	73-131
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: AAL2056.D

Lab ID: LCS 680-552552/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	50.4	101	80-120	
1,1,2,2-Tetrachloroethane	50.0	51.7	103	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.9	102	79-124	
1,1,2-Trichloroethane	50.0	51.4	103	80-120	
1,1-Dichloroethane	50.0	48.5	97	80-120	
1,1-Dichloroethene	50.0	48.6	97	76-120	
1,2,4-Trichlorobenzene	50.0	46.6	93	68-128	
1,2-Dibromo-3-Chloropropane	50.0	43.3	87	71-134	
1,2-Dichlorobenzene	50.0	51.0	102	80-120	
1,2-Dichloroethane	50.0	48.0	96	80-120	
1,2-Dichloropropane	50.0	50.5	101	80-120	
1,3-Dichlorobenzene	50.0	50.1	100	80-120	
1,4-Dichlorobenzene	50.0	49.3	99	80-120	
Methyl Ethyl Ketone	250	247	99	80-131	
2-Hexanone	250	245	98	74-127	
methyl isobutyl ketone	250	265	106	76-124	
Acetone	250	251	100	70-135	
Benzene	50.0	50.2	100	80-120	
Bromoform	50.0	54.7	109	74-126	
Bromomethane	50.0	34.4	69	62-130	
Carbon disulfide	50.0	47.7	95	80-120	
Carbon tetrachloride	50.0	51.5	103	76-123	
Chlorobenzene	50.0	49.7	99	80-120	
Dibromochloromethane	50.0	52.5	105	80-121	
Chloroethane	50.0	43.4	87	66-135	
Chloroform	50.0	49.0	98	80-120	
Chloromethane	50.0	41.4	83	69-131	
cis-1,2-Dichloroethene	50.0	49.7	99	80-120	
cis-1,3-Dichloropropene	50.0	51.3	103	80-120	
Cyclohexane	50.0	51.4	103	80-120	
Bromodichloromethane	50.0	51.4	103	80-120	
Dichlorodifluoromethane	50.0	42.3	85	47-155	
Ethylbenzene	50.0	50.2	100	80-120	
1,2-Dibromoethane	50.0	52.3	105	80-120	
Isopropylbenzene	50.0	51.3	103	80-120	
Methyl acetate	100	101	101	45-158	
Methyl tert-butyl ether	50.0	50.3	101	80-120	
Methylcyclohexane	50.0	52.4	105	85-122	
Methylene Chloride	50.0	44.2	88	80-120	
Styrene	50.0	52.9	106	80-120	
Tetrachloroethene	50.0	50.3	101	80-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: AAL2056.D

Lab ID: LCS 680-552552/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	50.0	50.3	101	80-113	
trans-1,2-Dichloroethene	50.0	50.7	101	80-120	
trans-1,3-Dichloropropene	50.0	49.7	99	80-120	
Trichloroethene	50.0	50.8	102	80-120	
Trichlorofluoromethane	50.0	46.3	93	60-141	
Vinyl chloride	50.0	44.7	89	71-128	
Xylenes, Total	100	103	103	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O2Lo2056.D

Lab ID: LCS 680-552557/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	52.5	105	80-120	
1,1,2,2-Tetrachloroethane	50.0	50.5	101	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.9	112	79-124	
1,1,2-Trichloroethane	50.0	53.9	108	80-120	
1,1-Dichloroethane	50.0	49.8	100	80-120	
1,1-Dichloroethene	50.0	54.2	108	76-120	
1,2,4-Trichlorobenzene	50.0	50.7	101	68-128	
1,2-Dibromo-3-Chloropropane	50.0	57.4	115	71-134	
1,2-Dichlorobenzene	50.0	54.2	108	80-120	
1,2-Dichloroethane	50.0	52.5	105	80-120	
1,2-Dichloropropane	50.0	52.4	105	80-120	
1,3-Dichlorobenzene	50.0	54.5	109	80-120	
1,4-Dichlorobenzene	50.0	52.1	104	80-120	
Methyl Ethyl Ketone	250	288	115	80-131	
2-Hexanone	250	270	108	74-127	
methyl isobutyl ketone	250	264	105	76-124	
Acetone	250	287	115	70-135	
Benzene	50.0	51.0	102	80-120	
Bromoform	50.0	55.9	112	74-126	
Bromomethane	50.0	28.7	57	62-130	E *
Carbon disulfide	50.0	53.3	107	80-120	
Carbon tetrachloride	50.0	54.7	109	76-123	
Chlorobenzene	50.0	52.2	104	80-120	
Dibromochloromethane	50.0	57.7	115	80-121	
Chloroethane	50.0	55.9	112	66-135	
Chloroform	50.0	50.6	101	80-120	
Chloromethane	50.0	50.8	102	69-131	
cis-1,2-Dichloroethene	50.0	47.3	95	80-120	
cis-1,3-Dichloropropene	50.0	53.5	107	80-120	
Cyclohexane	50.0	53.1	106	80-120	
Bromodichloromethane	50.0	54.0	108	80-120	
Dichlorodifluoromethane	50.0	53.0	106	47-155	
Ethylbenzene	50.0	52.6	105	80-120	
1,2-Dibromoethane	50.0	57.0	114	80-120	
Isopropylbenzene	50.0	53.3	107	80-120	
Methyl acetate	100	109	109	45-158	
Methyl tert-butyl ether	50.0	51.2	102	80-120	
Methylcyclohexane	50.0	53.9	108	85-122	
Methylene Chloride	50.0	48.4	97	80-120	
Styrene	50.0	53.5	107	80-120	
Tetrachloroethene	50.0	61.5	123	80-121	*

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O2Lo2056.D

Lab ID: LCS 680-552557/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	50.0	55.3	111	80-113	
trans-1,2-Dichloroethene	50.0	51.9	104	80-120	
trans-1,3-Dichloropropene	50.0	54.4	109	80-120	
Trichloroethene	50.0	49.4	99	80-120	
Trichlorofluoromethane	50.0	58.8	118	60-141	
Vinyl chloride	50.0	54.3	109	71-128	
Xylenes, Total	100	102	102	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: AAL2156.D

Lab ID: LCS 680-552754/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	51.7	103	80-120	
1,1,2,2-Tetrachloroethane	50.0	51.8	104	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.0	102	79-124	
1,1,2-Trichloroethane	50.0	52.4	105	80-120	
1,1-Dichloroethane	50.0	51.2	102	80-120	
1,1-Dichloroethene	50.0	50.3	101	76-120	
1,2,4-Trichlorobenzene	50.0	49.6	99	68-128	
1,2-Dibromo-3-Chloropropane	50.0	44.2	88	71-134	
1,2-Dichlorobenzene	50.0	52.8	106	80-120	
1,2-Dichloroethane	50.0	49.3	99	80-120	
1,2-Dichloropropane	50.0	51.9	104	80-120	
1,3-Dichlorobenzene	50.0	51.7	103	80-120	
1,4-Dichlorobenzene	50.0	50.5	101	80-120	
Methyl Ethyl Ketone	250	233	93	80-131	
2-Hexanone	250	249	100	74-127	
methyl isobutyl ketone	250	267	107	76-124	
Acetone	250	246	99	70-135	
Benzene	50.0	51.6	103	80-120	
Bromoform	50.0	53.8	108	74-126	
Bromomethane	50.0	40.9	82	62-130	
Carbon disulfide	50.0	49.8	100	80-120	
Carbon tetrachloride	50.0	51.9	104	76-123	
Chlorobenzene	50.0	51.2	102	80-120	
Dibromochloromethane	50.0	52.0	104	80-121	
Chloroethane	50.0	45.4	91	66-135	
Chloroform	50.0	50.8	102	80-120	
Chloromethane	50.0	45.3	91	69-131	
cis-1,2-Dichloroethene	50.0	52.2	104	80-120	
cis-1,3-Dichloropropene	50.0	52.4	105	80-120	
Cyclohexane	50.0	52.0	104	80-120	
Bromodichloromethane	50.0	51.9	104	80-120	
Dichlorodifluoromethane	50.0	45.2	90	47-155	
Ethylbenzene	50.0	51.7	103	80-120	
1,2-Dibromoethane	50.0	52.8	106	80-120	
Isopropylbenzene	50.0	53.0	106	80-120	
Methyl acetate	100	98.3	98	45-158	
Methyl tert-butyl ether	50.0	46.5	93	80-120	
Methylcyclohexane	50.0	53.6	107	85-122	
Methylene Chloride	50.0	45.9	92	80-120	
Styrene	50.0	54.0	108	80-120	
Tetrachloroethene	50.0	52.0	104	80-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: AAL2156.D

Lab ID: LCS 680-552754/3 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	50.0	51.6	103	80-113	
trans-1,2-Dichloroethene	50.0	53.3	107	80-120	
trans-1,3-Dichloropropene	50.0	50.7	101	80-120	
Trichloroethene	50.0	51.4	103	80-120	
Trichlorofluoromethane	50.0	48.9	98	60-141	
Vinyl chloride	50.0	47.5	95	71-128	
Xylenes, Total	100	104	104	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 1PL2457.D

Lab ID: LCS 680-553025/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	47.5	95	80-120	
1,1,2,2-Tetrachloroethane	50.0	47.7	95	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.6	101	79-124	
1,1,2-Trichloroethane	50.0	48.4	97	80-120	
1,1-Dichloroethane	50.0	46.0	92	80-120	
1,1-Dichloroethene	50.0	50.5	101	76-120	
1,2,4-Trichlorobenzene	50.0	48.2	96	68-128	
1,2-Dibromo-3-Chloropropane	50.0	45.7	91	71-134	
1,2-Dichlorobenzene	50.0	49.2	98	80-120	
1,2-Dichloroethane	50.0	46.2	92	80-120	
1,2-Dichloropropane	50.0	47.2	94	80-120	
1,3-Dichlorobenzene	50.0	48.1	96	80-120	
1,4-Dichlorobenzene	50.0	49.4	99	80-120	
Methyl Ethyl Ketone	250	240	96	80-131	
2-Hexanone	250	219	88	74-127	
methyl isobutyl ketone	250	219	87	76-124	
Acetone	250	222	89	70-135	
Benzene	50.0	47.9	96	80-120	
Bromoform	50.0	42.3	85	74-126	
Bromomethane	50.0	36.3	73	62-130	
Carbon disulfide	50.0	46.3	93	80-120	
Carbon tetrachloride	50.0	42.8	86	76-123	
Chlorobenzene	50.0	48.9	98	80-120	
Dibromochloromethane	50.0	45.7	91	80-121	
Chloroethane	50.0	46.1	92	66-135	
Chloroform	50.0	48.1	96	80-120	
Chloromethane	50.0	36.6	73	69-131	
cis-1,2-Dichloroethene	50.0	47.1	94	80-120	
cis-1,3-Dichloropropene	50.0	48.8	98	80-120	
Cyclohexane	50.0	45.1	90	80-120	
Bromodichloromethane	50.0	46.2	92	80-120	
Dichlorodifluoromethane	50.0	36.4	73	47-155	
Ethylbenzene	50.0	48.1	96	80-120	
1,2-Dibromoethane	50.0	48.1	96	80-120	
Isopropylbenzene	50.0	49.2	98	80-120	
Methyl acetate	100	80.4	80	45-158	
Methyl tert-butyl ether	50.0	46.2	92	80-120	
Methylcyclohexane	50.0	45.8	92	85-122	
Methylene Chloride	50.0	47.7	95	80-120	
Styrene	50.0	46.4	93	80-120	
Tetrachloroethene	50.0	50.8	102	80-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 1PL2457.D

Lab ID: LCS 680-553025/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	50.0	48.7	97	80-113	
trans-1,2-Dichloroethene	50.0	51.4	103	80-120	
trans-1,3-Dichloropropene	50.0	44.6	89	80-120	
Trichloroethene	50.0	49.3	99	80-120	
Trichlorofluoromethane	50.0	42.2	84	60-141	
Vinyl chloride	50.0	43.3	87	71-128	
Xylenes, Total	100	97.8	98	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: AAL2057.D

Lab ID: LCSD 680-552552/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	50.6	101	0	20	80-120	
1,1,2,2-Tetrachloroethane	50.0	51.7	103	0	20	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.6	101	1	20	79-124	
1,1,2-Trichloroethane	50.0	49.7	99	3	20	80-120	
1,1-Dichloroethane	50.0	48.7	97	1	20	80-120	
1,1-Dichloroethene	50.0	49.2	98	1	20	76-120	
1,2,4-Trichlorobenzene	50.0	49.2	98	5	20	68-128	
1,2-Dibromo-3-Chloropropane	50.0	45.2	90	4	20	71-134	
1,2-Dichlorobenzene	50.0	52.3	105	2	20	80-120	
1,2-Dichloroethane	50.0	46.8	94	2	50	80-120	
1,2-Dichloropropane	50.0	49.3	99	2	20	80-120	
1,3-Dichlorobenzene	50.0	51.2	102	2	20	80-120	
1,4-Dichlorobenzene	50.0	49.4	99	0	20	80-120	
Methyl Ethyl Ketone	250	233	93	6	20	80-131	
2-Hexanone	250	235	94	4	20	74-127	
methyl isobutyl ketone	250	254	102	4	20	76-124	
Acetone	250	236	94	6	30	70-135	
Benzene	50.0	49.9	100	1	20	80-120	
Bromoform	50.0	54.2	108	1	20	74-126	
Bromomethane	50.0	35.1	70	2	20	62-130	
Carbon disulfide	50.0	47.8	96	0	20	80-120	
Carbon tetrachloride	50.0	50.8	102	1	20	76-123	
Chlorobenzene	50.0	50.7	101	2	20	80-120	
Dibromochloromethane	50.0	50.8	102	3	20	80-121	
Chloroethane	50.0	42.5	85	2	20	66-135	
Chloroform	50.0	48.8	98	0	20	80-120	
Chloromethane	50.0	41.2	82	0	30	69-131	
cis-1,2-Dichloroethene	50.0	49.9	100	0	20	80-120	
cis-1,3-Dichloropropene	50.0	50.3	101	2	20	80-120	
Cyclohexane	50.0	50.8	102	1	20	80-120	
Bromodichloromethane	50.0	49.5	99	4	20	80-120	
Dichlorodifluoromethane	50.0	41.9	84	1	40	47-155	
Ethylbenzene	50.0	51.5	103	2	20	80-120	
1,2-Dibromoethane	50.0	50.3	101	4	20	80-120	
Isopropylbenzene	50.0	52.7	105	3	20	80-120	
Methyl acetate	100	95.2	95	6	20	45-158	
Methyl tert-butyl ether	50.0	46.7	93	7	20	80-120	
Methylcyclohexane	50.0	52.9	106	1	20	85-122	
Methylene Chloride	50.0	43.3	87	2	20	80-120	
Styrene	50.0	53.2	106	1	20	80-120	
Tetrachloroethene	50.0	50.4	101	0	20	80-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: AAL2057.D

Lab ID: LCSD 680-552552/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	50.0	49.9	100	1	20	80-113	
trans-1,2-Dichloroethene	50.0	51.6	103	2	20	80-120	
trans-1,3-Dichloropropene	50.0	48.1	96	3	30	80-120	
Trichloroethene	50.0	50.5	101	1	20	80-120	
Trichlorofluoromethane	50.0	46.3	93	0	20	60-141	
Vinyl chloride	50.0	44.2	88	1	20	71-128	
Xylenes, Total	100	104	104	1	20	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O2Lo2057.D

Lab ID: LCSD 680-552557/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	53.3	107	1	20	80-120	
1,1,2,2-Tetrachloroethane	50.0	49.9	100	1	20	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	56.0	112	0	20	79-124	
1,1,2-Trichloroethane	50.0	49.5	99	9	20	80-120	
1,1-Dichloroethane	50.0	48.8	98	2	20	80-120	
1,1-Dichloroethene	50.0	52.0	104	4	20	76-120	
1,2,4-Trichlorobenzene	50.0	49.5	99	2	20	68-128	
1,2-Dibromo-3-Chloropropane	50.0	53.0	106	8	20	71-134	
1,2-Dichlorobenzene	50.0	52.5	105	3	20	80-120	
1,2-Dichloroethane	50.0	49.5	99	6	50	80-120	
1,2-Dichloropropane	50.0	48.5	97	8	20	80-120	
1,3-Dichlorobenzene	50.0	52.7	105	3	20	80-120	
1,4-Dichlorobenzene	50.0	51.4	103	1	20	80-120	
Methyl Ethyl Ketone	250	265	106	8	20	80-131	
2-Hexanone	250	242	97	11	20	74-127	
methyl isobutyl ketone	250	234	94	12	20	76-124	
Acetone	250	245	98	16	30	70-135	
Benzene	50.0	48.9	98	4	20	80-120	
Bromoform	50.0	53.5	107	4	20	74-126	
Bromomethane	50.0	29.2	58	2	20	62-130	E *
Carbon disulfide	50.0	51.4	103	4	20	80-120	
Carbon tetrachloride	50.0	55.8	112	2	20	76-123	
Chlorobenzene	50.0	51.8	104	1	20	80-120	
Dibromochloromethane	50.0	51.3	103	12	20	80-121	
Chloroethane	50.0	54.1	108	3	20	66-135	
Chloroform	50.0	49.8	100	2	20	80-120	
Chloromethane	50.0	48.1	96	6	30	69-131	
cis-1,2-Dichloroethene	50.0	46.4	93	2	20	80-120	
cis-1,3-Dichloropropene	50.0	48.2	96	10	20	80-120	
Cyclohexane	50.0	52.4	105	1	20	80-120	
Bromodichloromethane	50.0	49.9	100	8	20	80-120	
Dichlorodifluoromethane	50.0	49.5	99	7	40	47-155	
Ethylbenzene	50.0	51.7	103	2	20	80-120	
1,2-Dibromoethane	50.0	51.1	102	11	20	80-120	
Isopropylbenzene	50.0	52.5	105	2	20	80-120	
Methyl acetate	100	97.8	98	11	20	45-158	
Methyl tert-butyl ether	50.0	49.5	99	3	20	80-120	
Methylcyclohexane	50.0	49.9	100	8	20	85-122	
Methylene Chloride	50.0	45.3	91	7	20	80-120	
Styrene	50.0	52.1	104	3	20	80-120	
Tetrachloroethene	50.0	56.0	112	9	20	80-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O2Lo2057.D

Lab ID: LCSD 680-552557/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	50.0	49.3	99	11	20	80-113	
trans-1,2-Dichloroethene	50.0	52.0	104	0	20	80-120	
trans-1,3-Dichloropropene	50.0	48.7	97	11	30	80-120	
Trichloroethene	50.0	47.9	96	3	20	80-120	
Trichlorofluoromethane	50.0	57.4	115	2	20	60-141	
Vinyl chloride	50.0	50.8	102	7	20	71-128	
Xylenes, Total	100	102	102	0	20	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: AAL2157.D

Lab ID: LCSD 680-552754/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	51.6	103	0	20	80-120	
1,1,2,2-Tetrachloroethane	50.0	52.0	104	0	20	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.3	105	3	20	79-124	
1,1,2-Trichloroethane	50.0	50.4	101	4	20	80-120	
1,1-Dichloroethane	50.0	49.8	100	3	20	80-120	
1,1-Dichloroethene	50.0	50.2	100	0	20	76-120	
1,2,4-Trichlorobenzene	50.0	50.2	100	1	20	68-128	
1,2-Dibromo-3-Chloropropane	50.0	45.2	90	2	20	71-134	
1,2-Dichlorobenzene	50.0	51.4	103	3	20	80-120	
1,2-Dichloroethane	50.0	47.8	96	3	50	80-120	
1,2-Dichloropropane	50.0	50.3	101	3	20	80-120	
1,3-Dichlorobenzene	50.0	50.8	102	2	20	80-120	
1,4-Dichlorobenzene	50.0	49.6	99	2	20	80-120	
Methyl Ethyl Ketone	250	228	91	2	20	80-131	
2-Hexanone	250	246	99	1	20	74-127	
methyl isobutyl ketone	250	260	104	2	20	76-124	
Acetone	250	245	98	0	30	70-135	
Benzene	50.0	50.8	102	2	20	80-120	
Bromoform	50.0	52.8	106	2	20	74-126	
Bromomethane	50.0	40.0	80	2	20	62-130	
Carbon disulfide	50.0	49.9	100	0	20	80-120	
Carbon tetrachloride	50.0	52.2	104	1	20	76-123	
Chlorobenzene	50.0	50.2	100	2	20	80-120	
Dibromochloromethane	50.0	50.6	101	3	20	80-121	
Chloroethane	50.0	44.0	88	3	20	66-135	
Chloroform	50.0	50.1	100	1	20	80-120	
Chloromethane	50.0	43.7	87	4	30	69-131	
cis-1,2-Dichloroethene	50.0	51.6	103	1	20	80-120	
cis-1,3-Dichloropropene	50.0	51.4	103	2	20	80-120	
Cyclohexane	50.0	52.5	105	1	20	80-120	
Bromodichloromethane	50.0	50.0	100	4	20	80-120	
Dichlorodifluoromethane	50.0	44.5	89	1	40	47-155	
Ethylbenzene	50.0	51.2	102	1	20	80-120	
1,2-Dibromoethane	50.0	51.4	103	3	20	80-120	
Isopropylbenzene	50.0	52.4	105	1	20	80-120	
Methyl acetate	100	94.9	95	3	20	45-158	
Methyl tert-butyl ether	50.0	46.7	93	0	20	80-120	
Methylcyclohexane	50.0	54.8	110	2	20	85-122	
Methylene Chloride	50.0	44.1	88	4	20	80-120	
Styrene	50.0	53.0	106	2	20	80-120	
Tetrachloroethene	50.0	50.7	101	3	20	80-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: AAL2157.D

Lab ID: LCSD 680-552754/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	50.0	50.3	101	2	20	80-113	
trans-1,2-Dichloroethene	50.0	53.3	107	0	20	80-120	
trans-1,3-Dichloropropene	50.0	48.9	98	3	30	80-120	
Trichloroethene	50.0	51.4	103	0	20	80-120	
Trichlorofluoromethane	50.0	48.1	96	1	20	60-141	
Vinyl chloride	50.0	46.6	93	2	20	71-128	
Xylenes, Total	100	104	104	1	20	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 1PL2458.D

Lab ID: LCSD 680-553025/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	49.2	98	3	20	80-120	
1,1,2,2-Tetrachloroethane	50.0	51.0	102	7	20	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.2	104	3	20	79-124	
1,1,2-Trichloroethane	50.0	52.1	104	7	20	80-120	
1,1-Dichloroethane	50.0	48.2	96	5	20	80-120	
1,1-Dichloroethene	50.0	52.0	104	3	20	76-120	
1,2,4-Trichlorobenzene	50.0	51.3	103	6	20	68-128	
1,2-Dibromo-3-Chloropropane	50.0	49.5	99	8	20	71-134	
1,2-Dichlorobenzene	50.0	51.1	102	4	20	80-120	
1,2-Dichloroethane	50.0	49.6	99	7	50	80-120	
1,2-Dichloropropane	50.0	49.9	100	6	20	80-120	
1,3-Dichlorobenzene	50.0	51.0	102	6	20	80-120	
1,4-Dichlorobenzene	50.0	51.6	103	4	20	80-120	
Methyl Ethyl Ketone	250	262	105	9	20	80-131	
2-Hexanone	250	238	95	8	20	74-127	
methyl isobutyl ketone	250	236	94	8	20	76-124	
Acetone	250	237	95	7	30	70-135	
Benzene	50.0	50.2	100	5	20	80-120	
Bromoform	50.0	45.4	91	7	20	74-126	
Bromomethane	50.0	39.0	78	7	20	62-130	
Carbon disulfide	50.0	48.0	96	4	20	80-120	
Carbon tetrachloride	50.0	45.1	90	5	20	76-123	
Chlorobenzene	50.0	51.2	102	5	20	80-120	
Dibromochloromethane	50.0	49.2	98	7	20	80-121	
Chloroethane	50.0	47.7	95	3	20	66-135	
Chloroform	50.0	50.2	100	4	20	80-120	
Chloromethane	50.0	38.0	76	4	30	69-131	
cis-1,2-Dichloroethene	50.0	48.9	98	4	20	80-120	
cis-1,3-Dichloropropene	50.0	51.3	103	5	20	80-120	
Cyclohexane	50.0	46.3	93	3	20	80-120	
Bromodichloromethane	50.0	48.8	98	6	20	80-120	
Dichlorodifluoromethane	50.0	37.9	76	4	40	47-155	
Ethylbenzene	50.0	49.8	100	3	20	80-120	
1,2-Dibromoethane	50.0	52.2	104	8	20	80-120	
Isopropylbenzene	50.0	51.6	103	5	20	80-120	
Methyl acetate	100	87.7	88	9	20	45-158	
Methyl tert-butyl ether	50.0	49.6	99	7	20	80-120	
Methylcyclohexane	50.0	48.1	96	5	20	85-122	
Methylene Chloride	50.0	50.7	101	6	20	80-120	
Styrene	50.0	48.5	97	4	20	80-120	
Tetrachloroethene	50.0	53.1	106	5	20	80-121	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 1PL2458.D

Lab ID: LCSD 680-553025/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	50.0	51.6	103	6	20	80-113	
trans-1,2-Dichloroethene	50.0	53.1	106	3	20	80-120	
trans-1,3-Dichloropropene	50.0	48.0	96	7	30	80-120	
Trichloroethene	50.0	52.3	105	6	20	80-120	
Trichlorofluoromethane	50.0	50.3	101	18	20	60-141	
Vinyl chloride	50.0	44.5	89	3	20	71-128	
Xylenes, Total	100	102	102	4	20	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O2Lo2080.D

Lab ID: 680-162184-8 MS Client ID: MW-22R MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	1.0 U	55.7	111	74-128	
1,1,2,2-Tetrachloroethane	50.0	1.0 U	48.6	97	72-128	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	1.0 U	61.0	122	65-131	
1,1,2-Trichloroethane	50.0	1.0 U	47.6	95	79-125	
1,1-Dichloroethane	50.0	1.0 U	50.7	101	80-120	
1,1-Dichloroethene	50.0	1.0 U	54.0	108	74-125	
1,2,4-Trichlorobenzene	50.0	5.0 U	42.4	85	77-131	
1,2-Dibromo-3-Chloropropane	50.0	5.0 U	50.0	100	59-141	
1,2-Dichlorobenzene	50.0	1.0 U	46.4	93	80-120	
1,2-Dichloroethane	50.0	1.0 U	50.6	101	75-130	
1,2-Dichloropropane	50.0	1.0 U	47.1	94	80-123	
1,3-Dichlorobenzene	50.0	1.0 U	46.3	93	80-120	
1,4-Dichlorobenzene	50.0	1.0 U	44.8	90	80-120	
Methyl Ethyl Ketone	250	10 U	278	111	75-133	
2-Hexanone	250	10 U	241	97	70-141	
methyl isobutyl ketone	250	10 U	236	95	75-135	
Acetone	250	10 U	256	102	60-154	
Benzene	50.0	1.0 U	50.8	102	73-131	
Bromoform	50.0	1.0 U	51.6	103	69-135	
Bromomethane	50.0	5.0 U	20.6	41	20-180	E
Carbon disulfide	50.0	2.0 U	54.1	108	73-127	
Carbon tetrachloride	50.0	1.0 U	60.4	121	75-130	
Chlorobenzene	50.0	1.0 U	50.1	100	80-120	
Dibromochloromethane	50.0	1.0 U	49.8	100	71-136	
Chloroethane	50.0	5.0 U	61.2	122	50-151	
Chloroform	50.0	1.0 U	50.6	101	79-122	
Chloromethane	50.0	1.0 U	53.3	107	63-126	
cis-1,2-Dichloroethene	50.0	1.0 U	46.2	92	80-122	
cis-1,3-Dichloropropene	50.0	1.0 U	46.0	92	80-133	
Cyclohexane	50.0	1.0 U	57.3	115	69-130	
Bromodichloromethane	50.0	1.0 U	50.7	101	77-129	
Dichlorodifluoromethane	50.0	1.0 U	65.4	131	51-140	
Ethylbenzene	50.0	1.0 U	51.5	103	80-120	
1,2-Dibromoethane	50.0	1.0 U	50.5	101	77-131	
Isopropylbenzene	50.0	1.0 U	51.7	103	80-120	
Methyl acetate	100	5.0 U	88.1	88	66-134	
Methyl tert-butyl ether	50.0	10 U	48.1	96	74-135	
Methylcyclohexane	50.0	1.0 U	54.8	110	75-127	
Methylene Chloride	50.0	5.0 U	45.1	90	76-129	
Styrene	50.0	1.0 U	53.6	107	80-122	
Tetrachloroethene	50.0	1.0 U	57.0	114	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O2Lo2080.D

Lab ID: 680-162184-8 MS Client ID: MW-22R MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	50.0	1.0 U	50.3	101	80-122	
trans-1,2-Dichloroethene	50.0	1.0 U	51.9	104	78-123	
trans-1,3-Dichloropropene	50.0	1.0 U	47.3	95	74-140	
Trichloroethene	50.0	1.0 U	48.4	97	80-123	
Trichlorofluoromethane	50.0	1.0 U	64.9	130	58-145	
Vinyl chloride	50.0	1.0 U	59.0	118	68-132	
Xylenes, Total	100	1.0 U	99.7	100	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O2Lo2081.D

Lab ID: 680-162184-8 MSD Client ID: MW-22R MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	55.2	110	1	20	74-128	
1,1,2,2-Tetrachloroethane	50.0	48.9	98	1	20	72-128	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	61.7	123	1	20	65-131	
1,1,2-Trichloroethane	50.0	46.9	94	2	20	79-125	
1,1-Dichloroethane	50.0	49.4	99	3	20	80-120	
1,1-Dichloroethene	50.0	54.7	109	1	20	74-125	
1,2,4-Trichlorobenzene	50.0	47.4	95	11	20	77-131	
1,2-Dibromo-3-Chloropropane	50.0	56.1	112	11	20	59-141	
1,2-Dichlorobenzene	50.0	50.1	100	8	20	80-120	
1,2-Dichloroethane	50.0	49.2	98	3	50	75-130	
1,2-Dichloropropane	50.0	46.8	94	1	20	80-123	
1,3-Dichlorobenzene	50.0	49.1	98	6	20	80-120	
1,4-Dichlorobenzene	50.0	49.1	98	9	20	80-120	
Methyl Ethyl Ketone	250	277	111	0	20	75-133	
2-Hexanone	250	238	95	1	20	70-141	
methyl isobutyl ketone	250	232	93	2	20	75-135	
Acetone	250	261	104	2	30	60-154	
Benzene	50.0	50.2	100	1	20	73-131	
Bromoform	50.0	54.1	108	5	20	69-135	
Bromomethane	50.0	26.3	53	24	20	20-180	E F2
Carbon disulfide	50.0	54.5	109	1	20	73-127	
Carbon tetrachloride	50.0	60.1	120	0	20	75-130	
Chlorobenzene	50.0	51.2	102	2	20	80-120	
Dibromochloromethane	50.0	48.7	97	2	20	71-136	
Chloroethane	50.0	59.7	119	2	20	50-151	
Chloroform	50.0	49.9	100	2	20	79-122	
Chloromethane	50.0	51.3	103	4	30	63-126	
cis-1,2-Dichloroethene	50.0	45.5	91	2	20	80-122	
cis-1,3-Dichloropropene	50.0	44.5	89	3	20	80-133	
Cyclohexane	50.0	55.9	112	2	20	69-130	
Bromodichloromethane	50.0	49.3	99	3	20	77-129	
Dichlorodifluoromethane	50.0	64.5	129	1	40	51-140	
Ethylbenzene	50.0	52.4	105	2	20	80-120	
1,2-Dibromoethane	50.0	49.9	100	1	20	77-131	
Isopropylbenzene	50.0	53.3	107	3	20	80-120	
Methyl acetate	100	87.3	87	1	20	66-134	
Methyl tert-butyl ether	50.0	48.4	97	1	20	74-135	
Methylcyclohexane	50.0	52.6	105	4	20	75-127	
Methylene Chloride	50.0	44.7	89	1	20	76-129	
Styrene	50.0	54.8	110	2	20	80-122	
Tetrachloroethene	50.0	56.4	113	1	20	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: O2Lo2081.D

Lab ID: 680-162184-8 MSD Client ID: MW-22R MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	50.0	49.1	98	3	20	80-122	
trans-1,2-Dichloroethene	50.0	52.4	105	1	20	78-123	
trans-1,3-Dichloropropene	50.0	46.3	93	2	30	74-140	
Trichloroethene	50.0	49.5	99	2	20	80-123	
Trichlorofluoromethane	50.0	65.4	131	1	20	58-145	
Vinyl chloride	50.0	59.0	118	0	20	68-132	
Xylenes, Total	100	102	102	2	20	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: AAL2061.D Lab Sample ID: MB 680-552552/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CMSAA Date Analyzed: 12/20/2018 11:45

GC Column: DB-VRX (20m) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-552552/3	AAL2056.D	12/20/2018 09:51
	LCSD 680-552552/4	AAL2057.D	12/20/2018 10:14
MW-21R	680-162184-5	AAL2080.D	12/20/2018 18:56
MW-21D	680-162184-6	AAL2081.D	12/20/2018 19:19

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: O2Lo2061.D Lab Sample ID: MB 680-552557/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CMSO2 Date Analyzed: 12/20/2018 11:54

GC Column: Rtx-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-552557/3	O2Lo2056.D	12/20/2018 09:56
	LCSD 680-552557/4	O2Lo2057.D	12/20/2018 10:20
TRIP BLANK	680-162184-17	O2Lo2062.D	12/20/2018 12:17
MW-22D	680-162184-7	O2Lo2075.D	12/20/2018 17:24
MW-22R	680-162184-8	O2Lo2076.D	12/20/2018 17:48
MW-25S	680-162184-11	O2Lo2077.D	12/20/2018 18:11
VOCDUP_20181212	680-162184-15	O2Lo2078.D	12/20/2018 18:35
MW-22R MS	680-162184-8 MS	O2Lo2080.D	12/20/2018 19:22
MW-22R MSD	680-162184-8 MSD	O2Lo2081.D	12/20/2018 19:45

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: AAL2161.D Lab Sample ID: MB 680-552754/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CMSAA Date Analyzed: 12/21/2018 11:35

GC Column: DB-VRX (20m) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-552754/3	AAL2156.D	12/21/2018 09:41
	LCSD 680-552754/4	AAL2157.D	12/21/2018 10:04
MW-3	680-162184-1	AAL2181.D	12/21/2018 19:10

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: 1PL2461.D Lab Sample ID: MB 680-553025/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CMSP2 Date Analyzed: 12/24/2018 13:34

GC Column: Rxi-624 MS ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 680-553025/4	1PL2457.D	12/24/2018 11:56
	LCSD 680-553025/5	1PL2458.D	12/24/2018 12:20
MW-3 DL	680-162184-1 DL	1PL2481.D	12/24/2018 21:46

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: AAL1801t.D BFB Injection Date: 12/18/2018

Instrument ID: CMSAA BFB Injection Time: 08:27

Analysis Batch No.: 552203

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.6	
75	30.0 - 66.0% of mass 95	41.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	103.7	
175	4.0 - 9.0 % of mass 174	7.3	(7.1) 1
176	93.0 - 101.0% of mass 174	101.7	(98.1) 1
177	5.0 - 9.0% of mass 176	6.8	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 680-552203/5	AAL1804.D	12/18/2018	10:06
	IC 680-552203/6	AAL1805.D	12/18/2018	10:29
	IC 680-552203/7	AAL1806.D	12/18/2018	10:51
	IC 680-552203/8	AAL1807.D	12/18/2018	11:14
	IC 680-552203/9	AAL1808.D	12/18/2018	11:37
	ICIS 680-552203/10	AAL1809.D	12/18/2018	12:00
	IC 680-552203/11	AAL1810.D	12/18/2018	12:22
	IC 680-552203/12	AAL1811.D	12/18/2018	12:45
	ICV 680-552203/14	AAL1813.D	12/18/2018	13:30

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: AAL2001t.D BFB Injection Date: 12/20/2018

Instrument ID: CMSAA BFB Injection Time: 08:42

Analysis Batch No.: 552552

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	12.8	
75	30.0 - 66.0% of mass 95	41.1	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.3	(0.3) 1
174	50.0 - 120.0% of mass 95	105.8	
175	4.0 - 9.0 % of mass 174	7.8	(7.4) 1
176	93.0 - 101.0% of mass 174	100.8	(95.3) 1
177	5.0 - 9.0% of mass 176	6.4	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-552552/2	AAL2055.D	12/20/2018	09:29
	LCS 680-552552/3	AAL2056.D	12/20/2018	09:51
	LCSD 680-552552/4	AAL2057.D	12/20/2018	10:14
	MB 680-552552/8	AAL2061.D	12/20/2018	11:45
MW-21R	680-162184-5	AAL2080.D	12/20/2018	18:56
MW-21D	680-162184-6	AAL2081.D	12/20/2018	19:19

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: AAL2101t.D BFB Injection Date: 12/21/2018

Instrument ID: CMSAA BFB Injection Time: 08:35

Analysis Batch No.: 552754

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	13.3	
75	30.0 - 66.0% of mass 95	41.3	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.7	
173	Less than 2.0% of mass 174	0.3	(0.3) 1
174	50.0 - 120.0% of mass 95	98.8	
175	4.0 - 9.0 % of mass 174	6.7	(6.8) 1
176	93.0 - 101.0% of mass 174	96.2	(97.3) 1
177	5.0 - 9.0% of mass 176	6.6	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-552754/2	AAL2155.D	12/21/2018	09:19
	LCS 680-552754/3	AAL2156.D	12/21/2018	09:41
	LCSD 680-552754/4	AAL2157.D	12/21/2018	10:04
	MB 680-552754/8	AAL2161.D	12/21/2018	11:35
MW-3	680-162184-1	AAL2181.D	12/21/2018	19:10

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: OK01201T.D BFB Injection Date: 11/12/2018

Instrument ID: CMSO2 BFB Injection Time: 10:02

Analysis Batch No.: 547166

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	22.5
75	30.0 - 66.0% of mass 95	47.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	76.6
175	4.0 - 9.0 % of mass 174	6.1 (7.9) 1
176	93.0 - 101.0% of mass 174	77.2 (100.7) 1
177	5.0 - 9.0% of mass 176	5.0 (6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 680-547166/5	OK01211.D	11/12/2018	12:50
	IC 680-547166/6	OK01212.D	11/12/2018	13:14
	IC 680-547166/7	OK01213.D	11/12/2018	13:37
	IC 680-547166/8	OK01214.D	11/12/2018	14:01
	IC 680-547166/9	OK01215.D	11/12/2018	14:24
	ICIS 680-547166/10	OK01216.D	11/12/2018	14:47
	IC 680-547166/11	OK01217.D	11/12/2018	15:11
	IC 680-547166/12	OK01218.D	11/12/2018	15:35
	ICV 680-547166/14	OK01220.D	11/12/2018	16:21

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: 1O2L2001T.D BFB Injection Date: 12/20/2018

Instrument ID: CMSO2 BFB Injection Time: 08:49

Analysis Batch No.: 552557

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	24.3	
75	30.0 - 66.0% of mass 95	49.8	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.6	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	70.5	
175	4.0 - 9.0 % of mass 174	5.9	(8.3) 1
176	93.0 - 101.0% of mass 174	70.7	(100.3) 1
177	5.0 - 9.0% of mass 176	4.6	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-552557/2	O2Lo2055.D	12/20/2018	09:32
	LCS 680-552557/3	O2Lo2056.D	12/20/2018	09:56
	LCSD 680-552557/4	O2Lo2057.D	12/20/2018	10:20
	MB 680-552557/8	O2Lo2061.D	12/20/2018	11:54
TRIP BLANK	680-162184-17	O2Lo2062.D	12/20/2018	12:17
MW-22D	680-162184-7	O2Lo2075.D	12/20/2018	17:24
MW-22R	680-162184-8	O2Lo2076.D	12/20/2018	17:48
MW-25S	680-162184-11	O2Lo2077.D	12/20/2018	18:11
VOCDUP_20181212	680-162184-15	O2Lo2078.D	12/20/2018	18:35
MW-22R MS	680-162184-8 MS	O2Lo2080.D	12/20/2018	19:22
MW-22R MSD	680-162184-8 MSD	O2Lo2081.D	12/20/2018	19:45

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: PL0607T.D BFB Injection Date: 12/06/2018

Instrument ID: CMSP2 BFB Injection Time: 13:41

Analysis Batch No.: 550348

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	21.8	
75	30.0 - 66.0% of mass 95	52.6	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.8	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	95.4	
175	4.0 - 9.0 % of mass 174	7.6	(7.9) 1
176	93.0 - 101.0% of mass 174	92.4	(96.8) 1
177	5.0 - 9.0% of mass 176	6.9	(7.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 680-550348/7	2PL0607.D	12/06/2018	16:21
	IC 680-550348/8	2PL0608.D	12/06/2018	16:46
	IC 680-550348/9	2PL0609.D	12/06/2018	17:11
	IC 680-550348/10	2PL0610.D	12/06/2018	17:35
	IC 680-550348/11	2PL0611.D	12/06/2018	18:00
	ICIS 680-550348/12	2PL0612.D	12/06/2018	18:24
	IC 680-550348/13	2PL0613.D	12/06/2018	18:49
	IC 680-550348/14	2PL0614.D	12/06/2018	19:13
	ICV 680-550348/16	2PL0616.D	12/06/2018	20:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab File ID: 1PL2401T.D BFB Injection Date: 12/24/2018

Instrument ID: CMSP2 BFB Injection Time: 10:32

Analysis Batch No.: 553025

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	18.2	
75	30.0 - 66.0% of mass 95	46.9	
95	Base peak, 100% relative abundance	100.0	
96	5.0 - 9.0% of mass 95	6.4	
173	Less than 2.0% of mass 174	0.0	(0.0) 1
174	50.0 - 120.0% of mass 95	94.8	
175	4.0 - 9.0 % of mass 174	7.6	(8.0) 1
176	93.0 - 101.0% of mass 174	93.1	(98.2) 1
177	5.0 - 9.0% of mass 176	6.3	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 680-553025/3	1PL2456.D	12/24/2018	11:31
	LCS 680-553025/4	1PL2457.D	12/24/2018	11:56
	LCSD 680-553025/5	1PL2458.D	12/24/2018	12:20
	MB 680-553025/8	1PL2461.D	12/24/2018	13:34
MW-3 DL	680-162184-1 DL	1PL2481.D	12/24/2018	21:46

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Sample No.: ICIS 680-552203/10 Date Analyzed: 12/18/2018 12:00

Instrument ID: CMSAA GC Column: DB-VRX (20m) ID: 0.18(mm)

Lab File ID (Standard): AAL1809.D Heated Purge: (Y/N) N

Calibration ID: 62345

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		522326	3.91	200183	6.20	262737	8.10
UPPER LIMIT		1044652	4.41	400366	6.70	525474	8.60
LOWER LIMIT		261163	3.41	100092	5.70	131369	7.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-552203/14		500819	3.91	194636	6.20	257894	8.10

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Sample No.: CCVIS 680-552552/2 Date Analyzed: 12/20/2018 09:29

Instrument ID: CMSAA GC Column: DB-VRX (20m) ID: 0.18(mm)

Lab File ID (Standard): AAL2055.D Heated Purge: (Y/N) N

Calibration ID: 62345

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		530578	3.91	199941	6.20	251992	8.10
UPPER LIMIT		1061156	4.41	399882	6.70	503984	8.60
LOWER LIMIT		265289	3.41	99971	5.70	125996	7.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-552552/3		498835	3.91	192313	6.20	248241	8.10
LCSD 680-552552/4		525140	3.91	196774	6.20	254279	8.10
MB 680-552552/8		549897	3.91	219204	6.21	270527	8.10
680-162184-5	MW-21R	485390	3.91	198839	6.21	239558	8.10
680-162184-6	MW-21D	488576	3.91	199935	6.21	239028	8.10

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Sample No.: CCVIS 680-552754/2 Date Analyzed: 12/21/2018 09:19

Instrument ID: CMSAA GC Column: DB-VRX (20m) ID: 0.18(mm)

Lab File ID (Standard): AAL2155.D Heated Purge: (Y/N) N

Calibration ID: 62345

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		511455	3.91	192498	6.20	239862	8.10
UPPER LIMIT		1022910	4.41	384996	6.70	479724	8.60
LOWER LIMIT		255728	3.41	96249	5.70	119931	7.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-552754/3		471835	3.91	182009	6.20	236165	8.10
LCSD 680-552754/4		493988	3.91	188546	6.20	244363	8.10
MB 680-552754/8		496269	3.91	201311	6.21	244834	8.10
680-162184-1	MW-3	457505	3.91	186915	6.21	218896	8.10

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Sample No.: ICIS 680-547166/10 Date Analyzed: 11/12/2018 14:47

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm)

Lab File ID (Standard): OK01216.D Heated Purge: (Y/N) N

Calibration ID: 61589

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		525819	3.74	214147	6.04	190422	7.95
UPPER LIMIT		1051638	4.24	428294	6.54	380844	8.45
LOWER LIMIT		262910	3.24	107074	5.54	95211	7.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-547166/14		522738	3.74	204553	6.04	187721	7.95

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Sample No.: CCVIS 680-552557/2 Date Analyzed: 12/20/2018 09:32

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm)

Lab File ID (Standard): O2Lo2055.D Heated Purge: (Y/N) N

Calibration ID: 61589

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		578670	3.74	228232	6.04	214440	7.95
UPPER LIMIT		1157340	4.24	456464	6.54	428880	8.45
LOWER LIMIT		289335	3.24	114116	5.54	107220	7.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-552557/3		558462	3.74	239954	6.04	230687	7.95
LCSD 680-552557/4		591341	3.75	229020	6.05	221030	7.95
MB 680-552557/8		623414	3.74	243523	6.04	232018	7.95
680-162184-17	TRIP BLANK	683374	3.75	267756	6.05	249245	7.95
680-162184-7	MW-22D	572035	3.74	222596	6.04	207647	7.95
680-162184-8	MW-22R	553770	3.74	215426	6.04	222754	7.95
680-162184-11	MW-25S	552150	3.74	216102	6.04	200628	7.95
680-162184-15	VOCDUP_20181212	569656	3.75	225499	6.04	208996	7.95
680-162184-8 MS	MW-22R MS	548931	3.75	218686	6.05	221275	7.95
680-162184-8 MSD	MW-22R MSD	566890	3.74	220325	6.04	213134	7.95

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Sample No.: ICIS 680-550348/12 Date Analyzed: 12/06/2018 18:24

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm)

Lab File ID (Standard): 2PL0612.D Heated Purge: (Y/N) N

Calibration ID: 62101

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		770060	4.20	320589	6.51	335642	8.42
UPPER LIMIT		1540120	4.70	641178	7.01	671284	8.92
LOWER LIMIT		385030	3.70	160295	6.01	167821	7.92
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 680-550348/16		762777	4.20	318013	6.51	331310	8.42

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Sample No.: CCVIS 680-553025/3 Date Analyzed: 12/24/2018 11:31

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm)

Lab File ID (Standard): 1PL2456.D Heated Purge: (Y/N) N

Calibration ID: 62106

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		747101	4.20	312697	6.51	339283	8.42
UPPER LIMIT		1494202	4.70	625394	7.01	678566	8.92
LOWER LIMIT		373551	3.70	156349	6.01	169642	7.92
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 680-553025/4		777656	4.21	321888	6.51	346764	8.42
LCSD 680-553025/5		728800	4.20	306251	6.51	333626	8.42
MB 680-553025/8		806792	4.21	320344	6.51	328498	8.42
680-162184-1 DL	MW-3 DL	671599	4.21	270579	6.51	290877	8.42

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-3 | Lab Sample ID: 680-162184-1

Matrix: Water | Lab File ID: AAL2181.D

Analysis Method: 8260B | Date Collected: 12/11/2018 14:53

Sample wt/vol: 5(g) | Date Analyzed: 12/21/2018 19:10

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552754 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	7900		100	37
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	100	U	100	36
79-00-5	1,1,2-Trichloroethane	100	U	100	33
75-34-3	1,1-Dichloroethane	110		100	38
75-35-4	1,1-Dichloroethene	20000		100	36
120-82-1	1,2,4-Trichlorobenzene	500	U	500	250
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	500	110
95-50-1	1,2-Dichlorobenzene	100	U	100	37
107-06-2	1,2-Dichloroethane	100		100	50
78-87-5	1,2-Dichloropropane	100	U	100	67
541-73-1	1,3-Dichlorobenzene	100	U	100	43
106-46-7	1,4-Dichlorobenzene	100	U	100	46
78-93-3	Methyl Ethyl Ketone	1000	U	1000	340
591-78-6	2-Hexanone	1000	U	1000	200
108-10-1	methyl isobutyl ketone	1000	U	1000	210
67-64-1	Acetone	1000	U	1000	700
71-43-2	Benzene	100	U	100	43
75-25-2	Bromoform	100	U	100	43
74-83-9	Bromomethane	500	U	500	250
75-15-0	Carbon disulfide	200	U	200	100
56-23-5	Carbon tetrachloride	100	U	100	33
108-90-7	Chlorobenzene	100	U	100	26
124-48-1	Dibromochloromethane	100	U	100	32
75-00-3	Chloroethane	500	U	500	250
67-66-3	Chloroform	100	U	100	50
74-87-3	Chloromethane	100	U	100	40
156-59-2	cis-1,2-Dichloroethene	670		100	41
10061-01-5	cis-1,3-Dichloropropene	100	U	100	40
110-82-7	Cyclohexane	100	U	100	39
75-27-4	Bromodichloromethane	100	U	100	44
75-71-8	Dichlorodifluoromethane	100	U	100	60
100-41-4	Ethylbenzene	100	U	100	33
106-93-4	1,2-Dibromoethane	100	U	100	44
98-82-8	Isopropylbenzene	100	U	100	35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-3 | Lab Sample ID: 680-162184-1

Matrix: Water | Lab File ID: AAL2181.D

Analysis Method: 8260B | Date Collected: 12/11/2018 14:53

Sample wt/vol: 5(g) | Date Analyzed: 12/21/2018 19:10

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552754 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	500	U	500	180
1634-04-4	Methyl tert-butyl ether	1000	U	1000	30
108-87-2	Methylcyclohexane	100	U	100	43
75-09-2	Methylene Chloride	500	U	500	250
100-42-5	Styrene	100	U	100	27
127-18-4	Tetrachloroethene	100	U	100	74
108-88-3	Toluene	100	U	100	48
156-60-5	trans-1,2-Dichloroethene	100	U	100	37
10061-02-6	trans-1,3-Dichloropropene	100	U	100	42
75-69-4	Trichlorofluoromethane	100	U	100	42
75-01-4	Vinyl chloride	100	U	100	50
1330-20-7	Xylenes, Total	100	U	100	23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		73-131
2037-26-5	Toluene-d8 (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-122
460-00-4	4-Bromofluorobenzene (Surr)	101		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D
Lims ID: 680-162184-B-1
Client ID: MW-3
Sample Type: Client
Inject. Date: 21-Dec-2018 19:10:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 100.0000
Sample Info: 680-0052778-028
Operator ID: ea Instrument ID: CMSAA

Method: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\8260AQ.m
Limit Group: 8260B
Last Update: 24-Dec-2018 09:44:49 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0330

First Level Reviewer: soparaky Date: 24-Dec-2018 09:44:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	457505	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	83	186915	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	93	218896	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	114608	50.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	97	112261	51.8	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	442724	48.6	
$ 7 4-Bromofluorobenzene (Surr	95	7.158	7.153	0.005	98	169060	50.3	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	94	444241	196.9	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	98	4099	1.06	
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	95	18757	6.69	
52 Chloroform	83	3.331	3.331	0.000	93	897	0.2309	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	258193	79.1	
62 1,2-Dichloroethane	62	3.767	3.761	0.000	95	2703	1.04	
65 Trichloroethene	132	4.164	4.164	0.000	94	685575	253.9	E

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

Reagents:

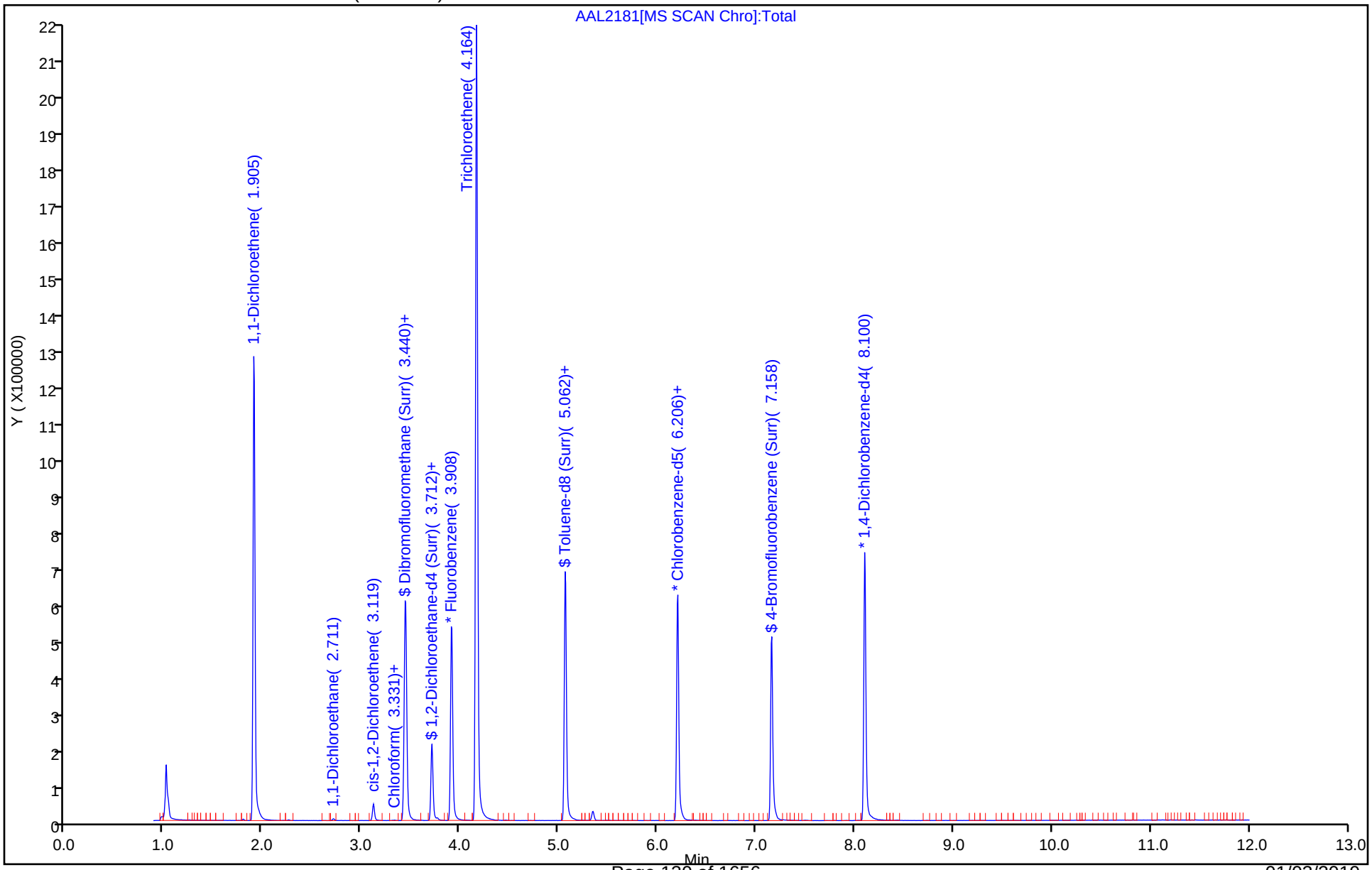
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 24-Dec-2018 09:44:49 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D				
Injection Date:	21-Dec-2018 19:10:30	Instrument ID:	CMSAA	Operator ID:	ea
Lims ID:	680-162184-B-1	Lab Sample ID:	680-162184-1	Worklist Smp#:	28
Client ID:	MW-3				
Purge Vol:	5.000 mL	Dil. Factor:	100.0000	ALS Bottle#:	27
Method:	8260AQ	Limit Group:	8260B		

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)

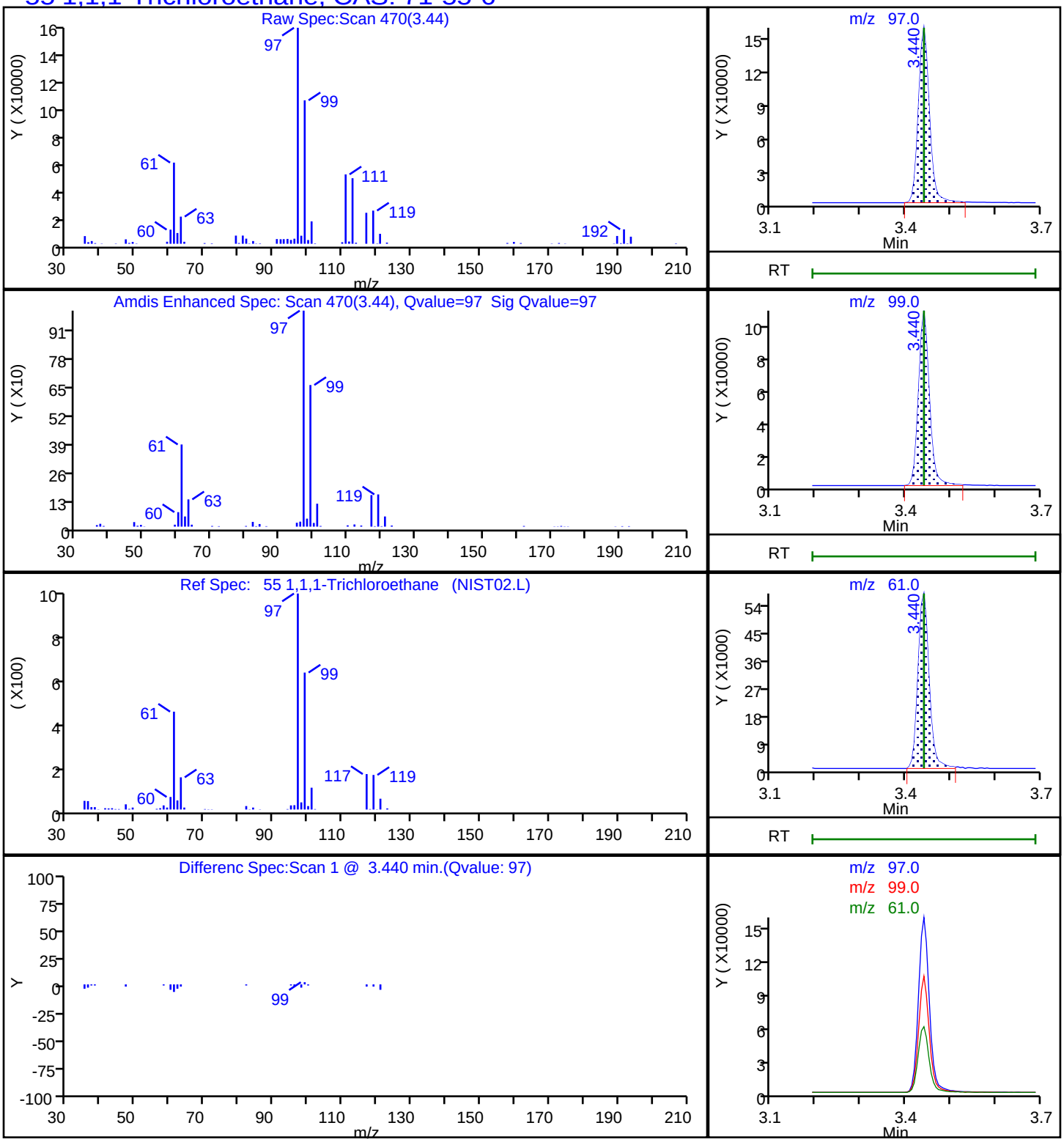


Report Date: 24-Dec-2018 09:44:50 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D				
Injection Date:	21-Dec-2018 19:10:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-B-1	Lab Sample ID:	680-162184-1		
Client ID:	MW-3				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

55 1,1,1-Trichloroethane, CAS: 71-55-6

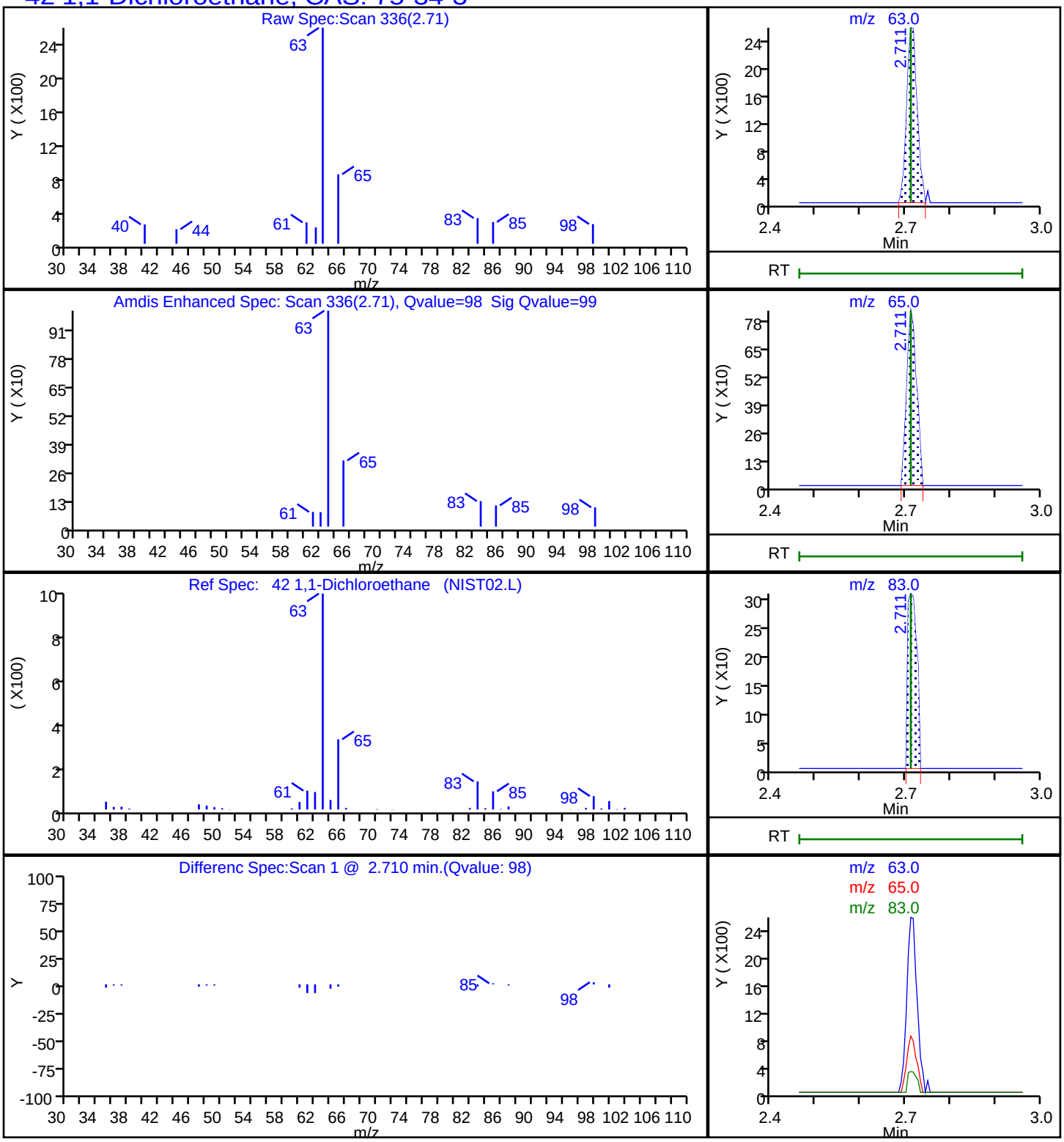


Report Date: 24-Dec-2018 09:44:50 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D				
Injection Date:	21-Dec-2018 19:10:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-B-1	Lab Sample ID:	680-162184-1		
Client ID:	MW-3				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

42 1,1-Dichloroethane, CAS: 75-34-3

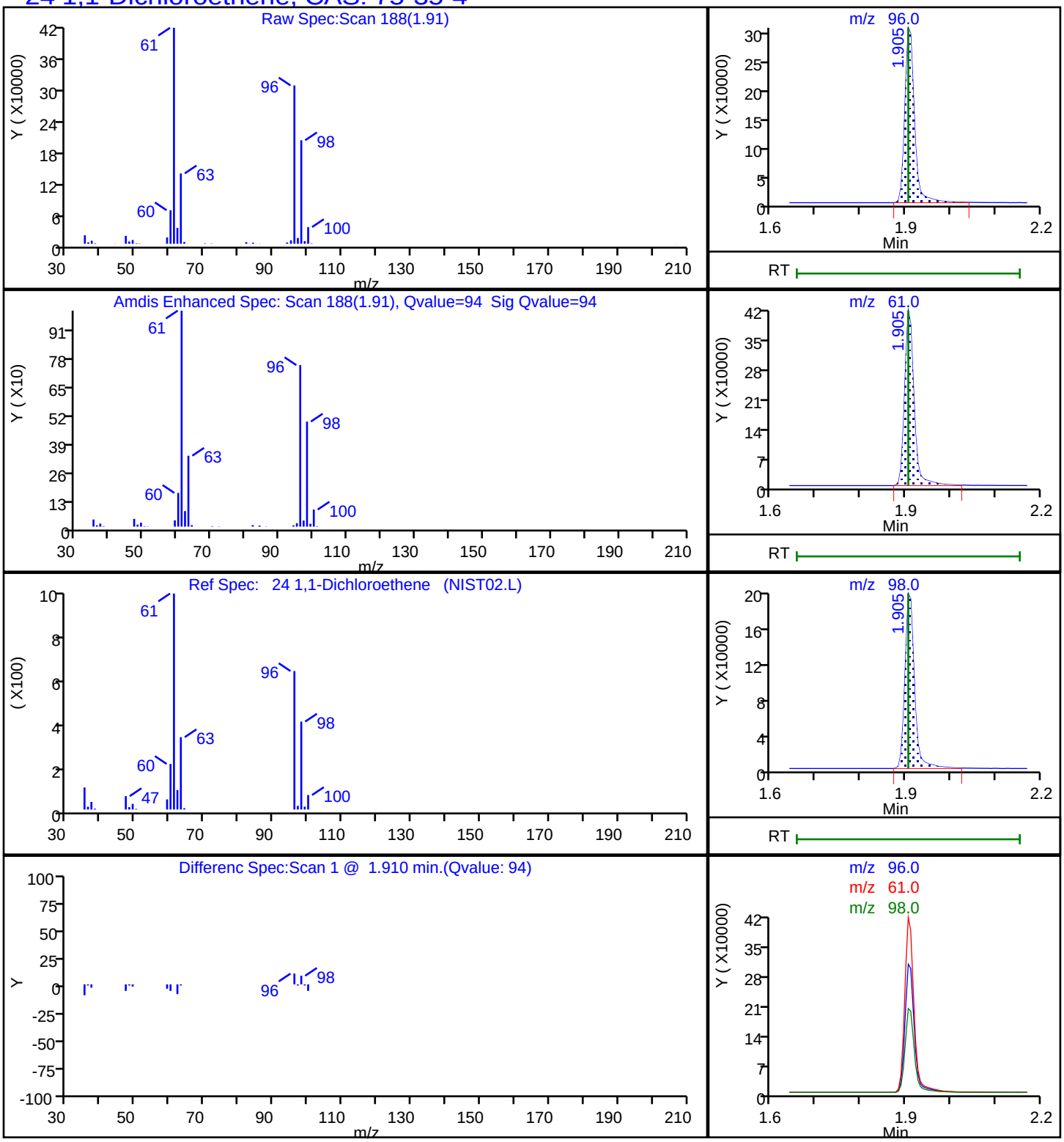


Report Date: 24-Dec-2018 09:44:50 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D				
Injection Date:	21-Dec-2018 19:10:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-B-1	Lab Sample ID:	680-162184-1		
Client ID:	MW-3				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

24 1,1-Dichloroethene, CAS: 75-35-4

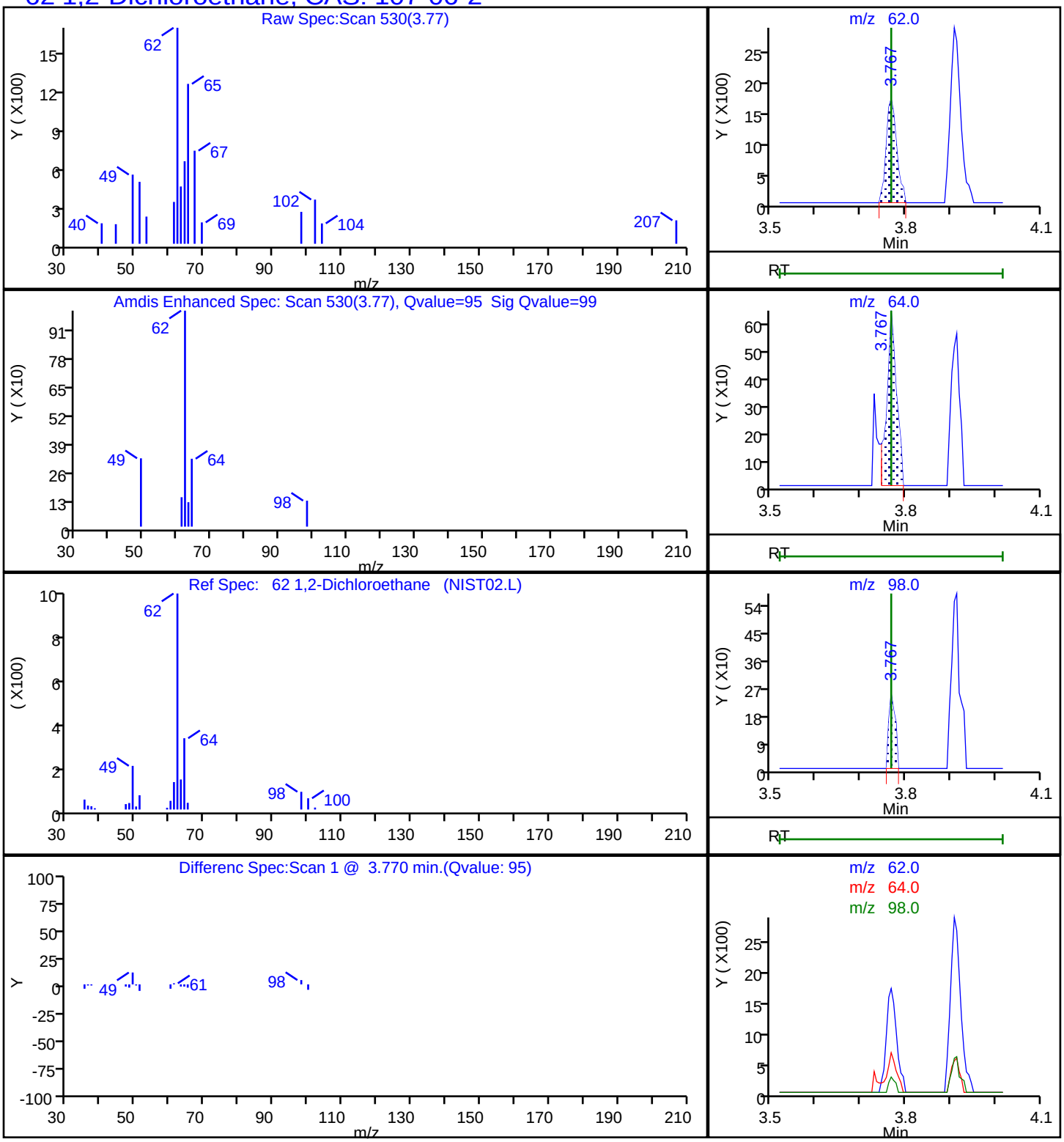


Report Date: 24-Dec-2018 09:44:50 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D				
Injection Date:	21-Dec-2018 19:10:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-B-1	Lab Sample ID:	680-162184-1		
Client ID:	MW-3				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

62 1,2-Dichloroethane, CAS: 107-06-2

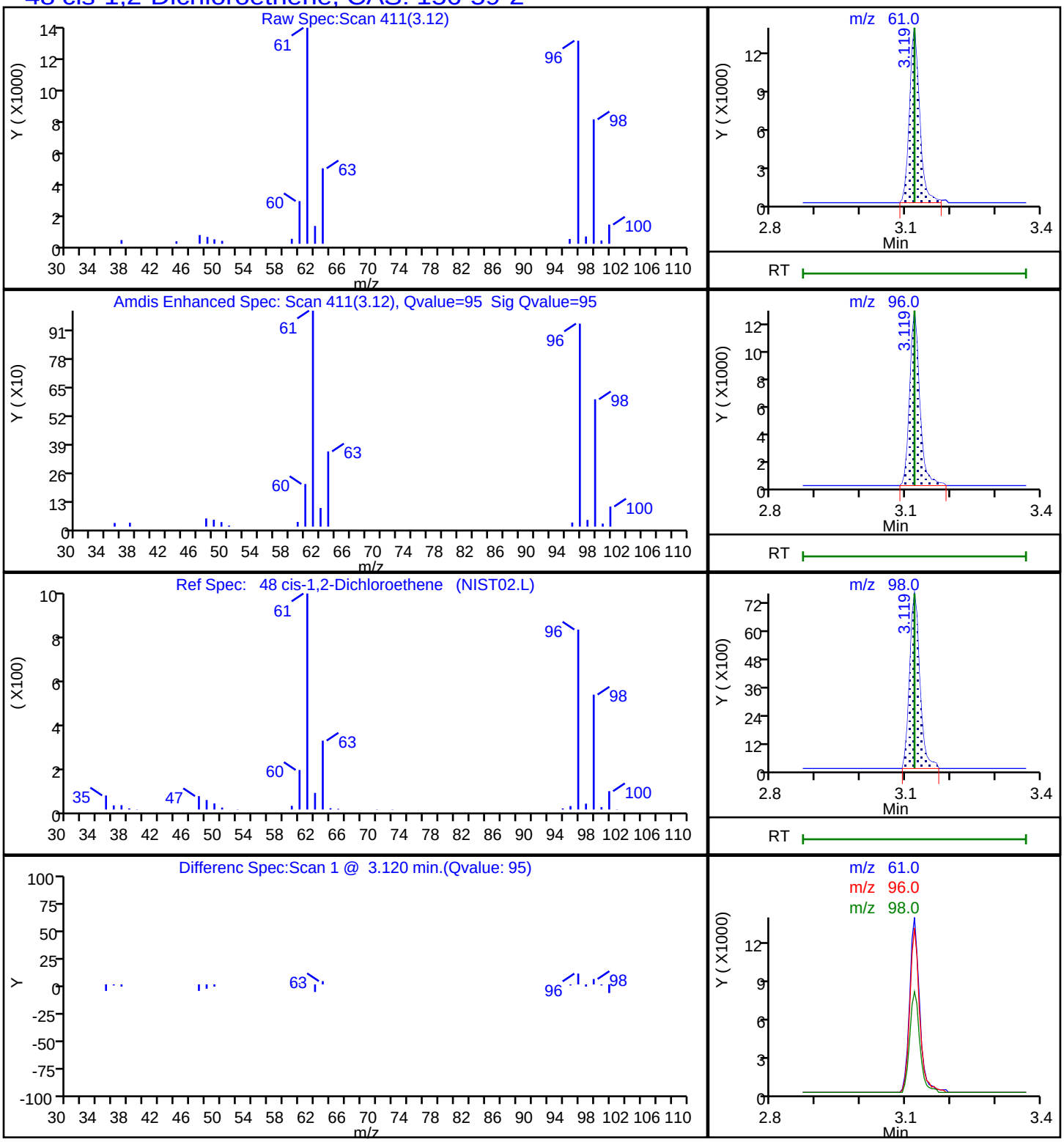


Report Date: 24-Dec-2018 09:44:50 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D				
Injection Date:	21-Dec-2018 19:10:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-B-1	Lab Sample ID:	680-162184-1		
Client ID:	MW-3				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2



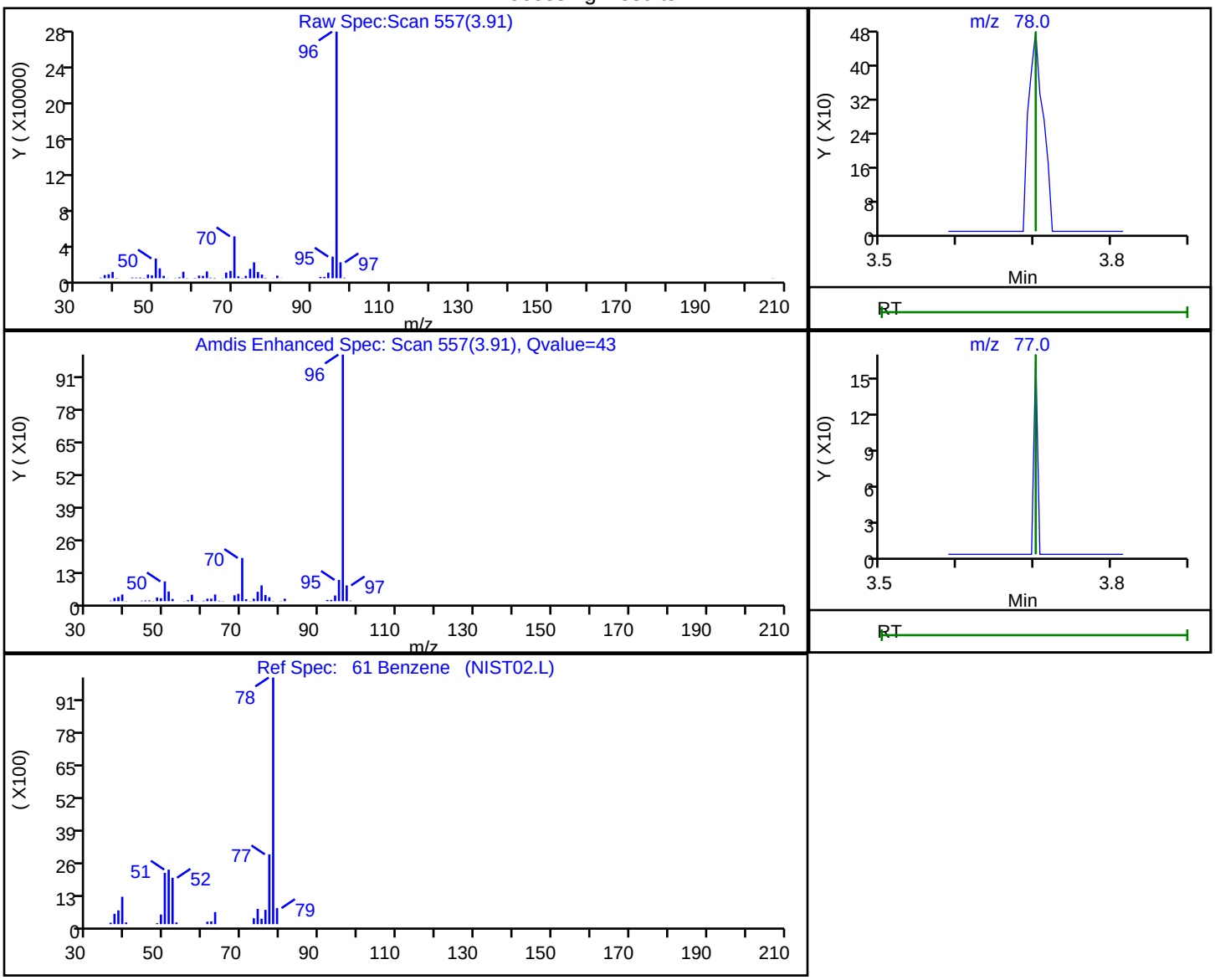
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D				
Injection Date:	21-Dec-2018 19:10:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-B-1	Lab Sample ID:	680-162184-1		
Client ID:	MW-3				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

61 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.91	78.00	496	0.051776
3.91	77.00	6747	

Reviewer: soparaky, 24-Dec-2018 09:44:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

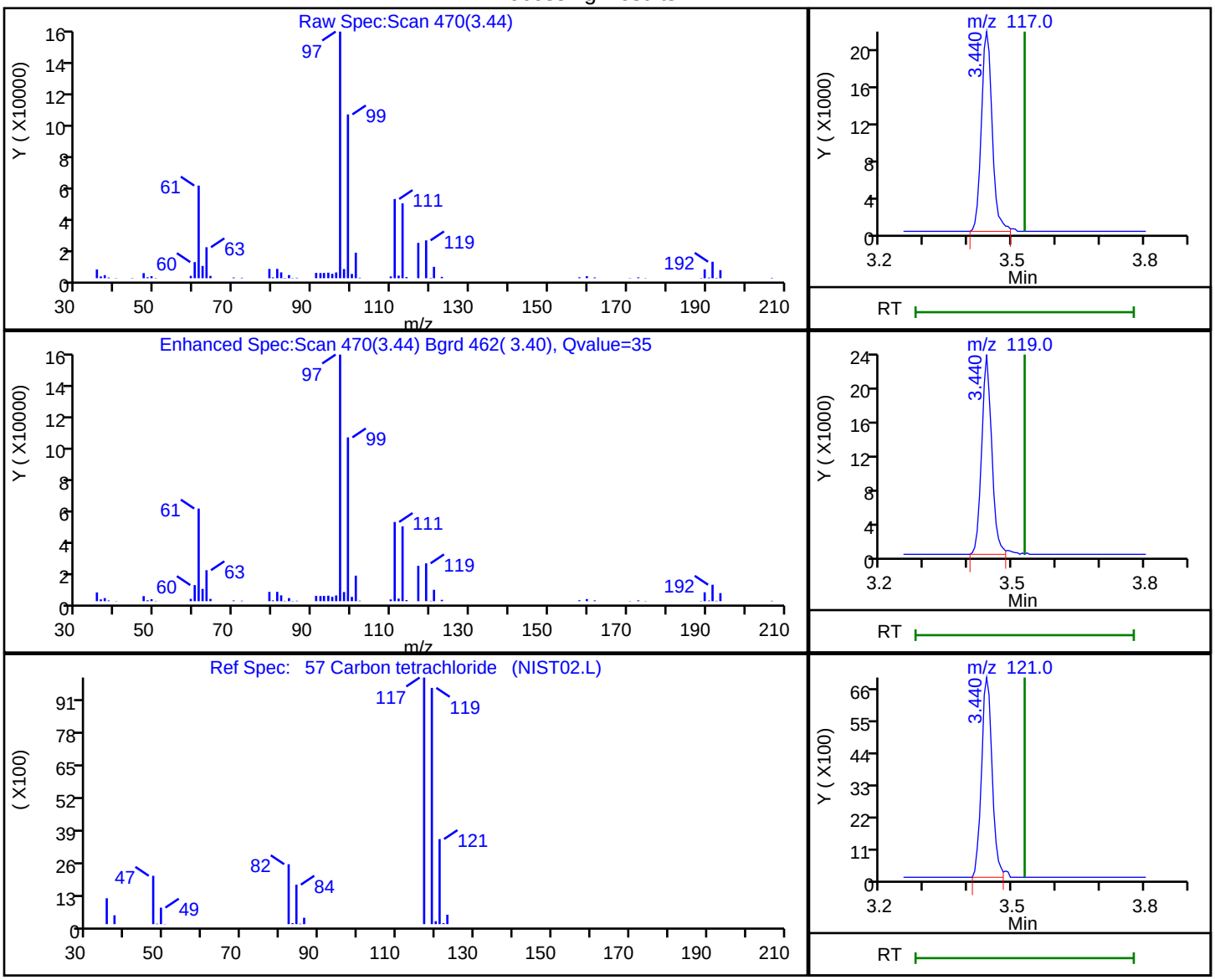
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2181.D				
Injection Date:	21-Dec-2018 19:10:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-B-1	Lab Sample ID:	680-162184-1		
Client ID:	MW-3				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	100.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

57 Carbon tetrachloride, CAS: 56-23-5

Processing Results



RT	Mass	Response	Amount
3.44	117.00	37453	13.808291
3.44	119.00	37218	
3.44	121.00	11789	

Reviewer: soparaky, 24-Dec-2018 09:44:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-3 DL | Lab Sample ID: 680-162184-1 DL

Matrix: Water | Lab File ID: 1PL2481.D

Analysis Method: 8260B | Date Collected: 12/11/2018 14:53

Sample wt/vol: 5(mL) | Date Analyzed: 12/24/2018 21:46

Soil Aliquot Vol: | Dilution Factor: 250

Soil Extract Vol.: | GC Column: Rxi-624 MS ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 553025 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	25000		250	120

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		73-131
2037-26-5	Toluene-d8 (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-122
460-00-4	4-Bromofluorobenzene (Surr)	89		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2481.D
Lims ID: 680-162184-C-1
Client ID: MW-3
Sample Type: Client
Inject. Date: 24-Dec-2018 21:46:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 250.0000
Sample Info: 680-0052833-028
Operator ID: ea Instrument ID: CMSP2

Method: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 25-Dec-2018 11:32:15 Calib Date: 07-Dec-2018 12:54:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181207-52418.b\1PL0709.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: soparaky Date: 25-Dec-2018 11:32:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.209	4.199	0.010	99	671599	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	87	270579	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	93	290877	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	96	163785	48.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	96	198922	46.0	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	98	658027	49.1	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	96	238397	44.6	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	100	238922	75.4	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	15	2444	0.3843	a
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	87	12492	2.15	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	95	167239	29.5	
62 Trichloroethene	132	4.463	4.462	0.001	95	384658	99.3	

QC Flag Legend

Review Flags
a - User Assigned ID

Reagents:

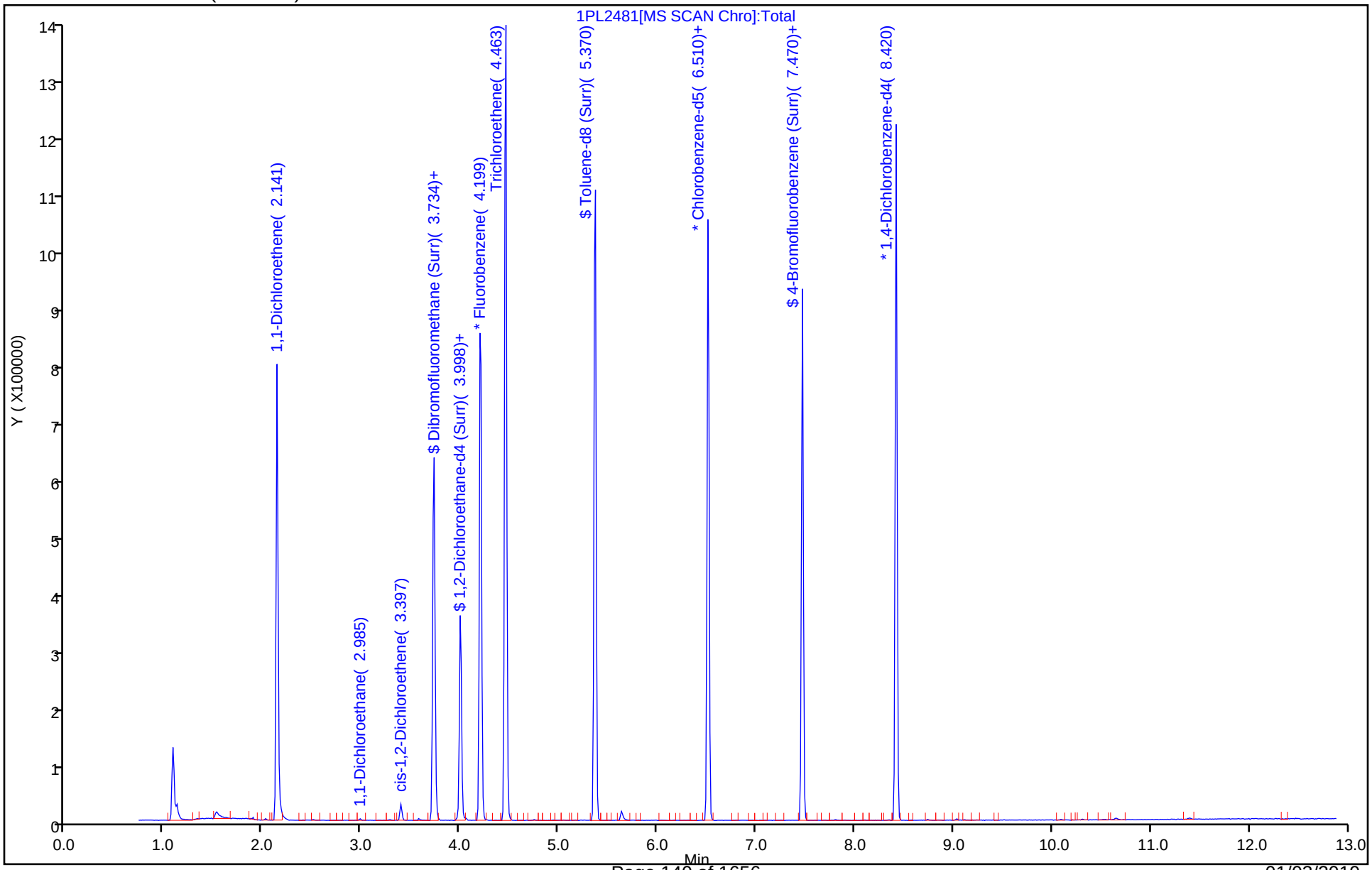
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 25-Dec-2018 11:32:16 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2481.D				
Injection Date:	24-Dec-2018 21:46:30	Instrument ID:	CMSP2	Operator ID:	ea
Lims ID:	680-162184-C-1	Lab Sample ID:	680-162184-1	Worklist Smp#:	28
Client ID:	MW-3				
Purge Vol:	5.000 mL	Dil. Factor:	250.0000	ALS Bottle#:	27
Method:	2014_MSP2	Limit Group:	8260B		

Column: Rxi-624 Sil MS (0.18 mm)

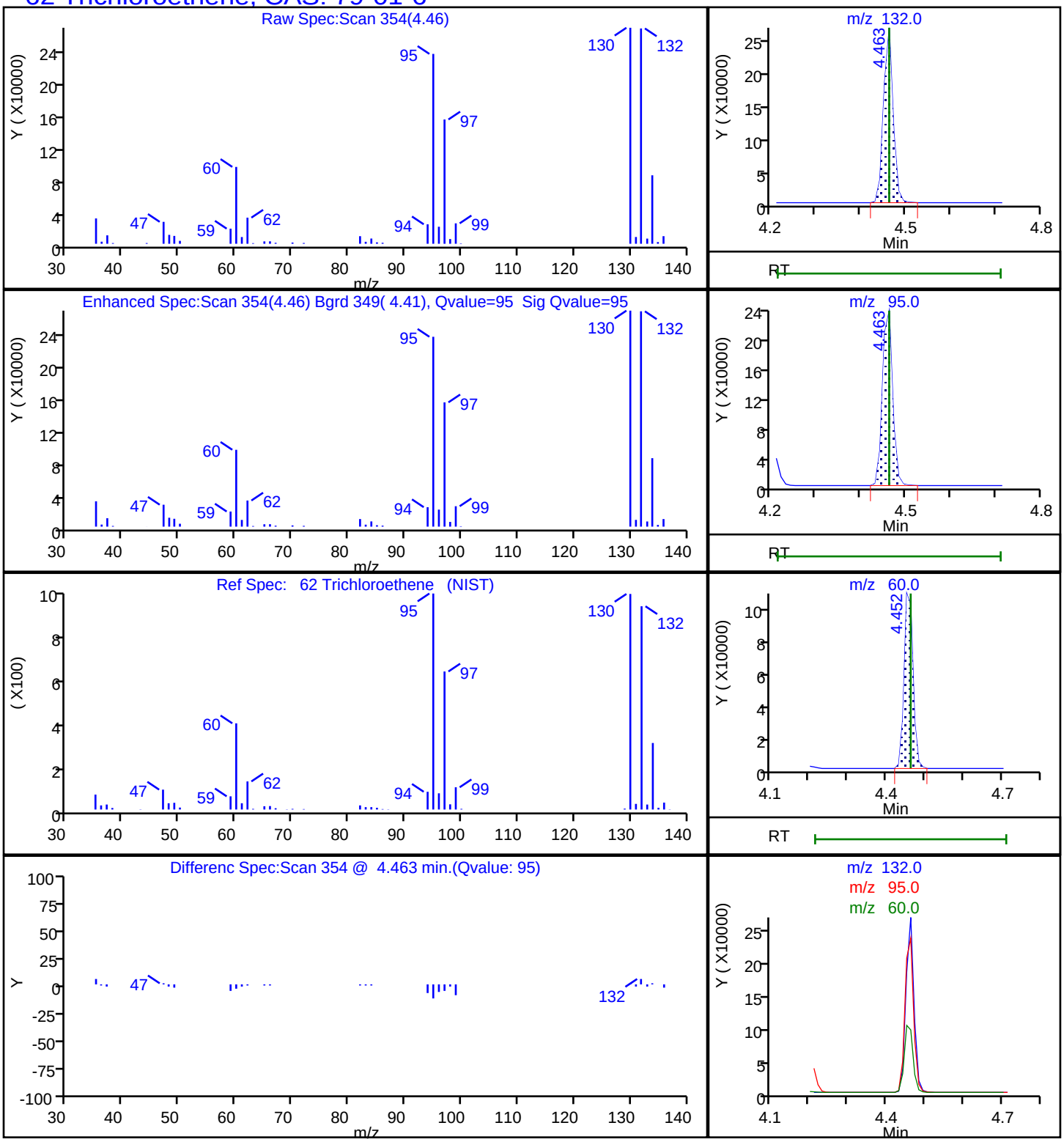


Report Date: 25-Dec-2018 11:32:17 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2481.D				
Injection Date:	24-Dec-2018 21:46:30	Instrument ID:	CMSP2		
Lims ID:	680-162184-C-1	Lab Sample ID:	680-162184-1		
Client ID:	MW-3				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	250.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

62 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-21R | Lab Sample ID: 680-162184-5

Matrix: Water | Lab File ID: AAL2080.D

Analysis Method: 8260B | Date Collected: 12/11/2018 13:23

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 18:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	8.9	J	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	2.8		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-21R | Lab Sample ID: 680-162184-5

Matrix: Water | Lab File ID: AAL2080.D

Analysis Method: 8260B | Date Collected: 12/11/2018 13:23

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 18:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	0.39	J	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	4.8		1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		73-131
2037-26-5	Toluene-d8 (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-122
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D
Lims ID: 680-162184-C-5
Client ID: MW-21R
Sample Type: Client
Inject. Date: 20-Dec-2018 18:56:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052743-027
Operator ID: ea Instrument ID: CMSAA

Method: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\8260AQ.m
Limit Group: 8260B
Last Update: 21-Dec-2018 09:09:59 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: soparaky Date: 21-Dec-2018 09:09:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.914	3.908	0.006	100	485390	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	82	198839	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	239558	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	121393	50.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.718	0.000	97	113866	49.5	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	481246	49.8	
$ 7 4-Bromofluorobenzene (Surr	95	7.158	7.153	0.005	98	181605	49.4	
25 Acetone	58	1.970	1.970	0.000	89	1928	8.88	
36 trans-1,2-Dichloroethene	96	2.400	2.401	0.000	89	1043	0.3912	
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	96	8299	2.79	
65 Trichloroethene	132	4.164	4.164	0.000	93	13638	4.76	

Reagents:

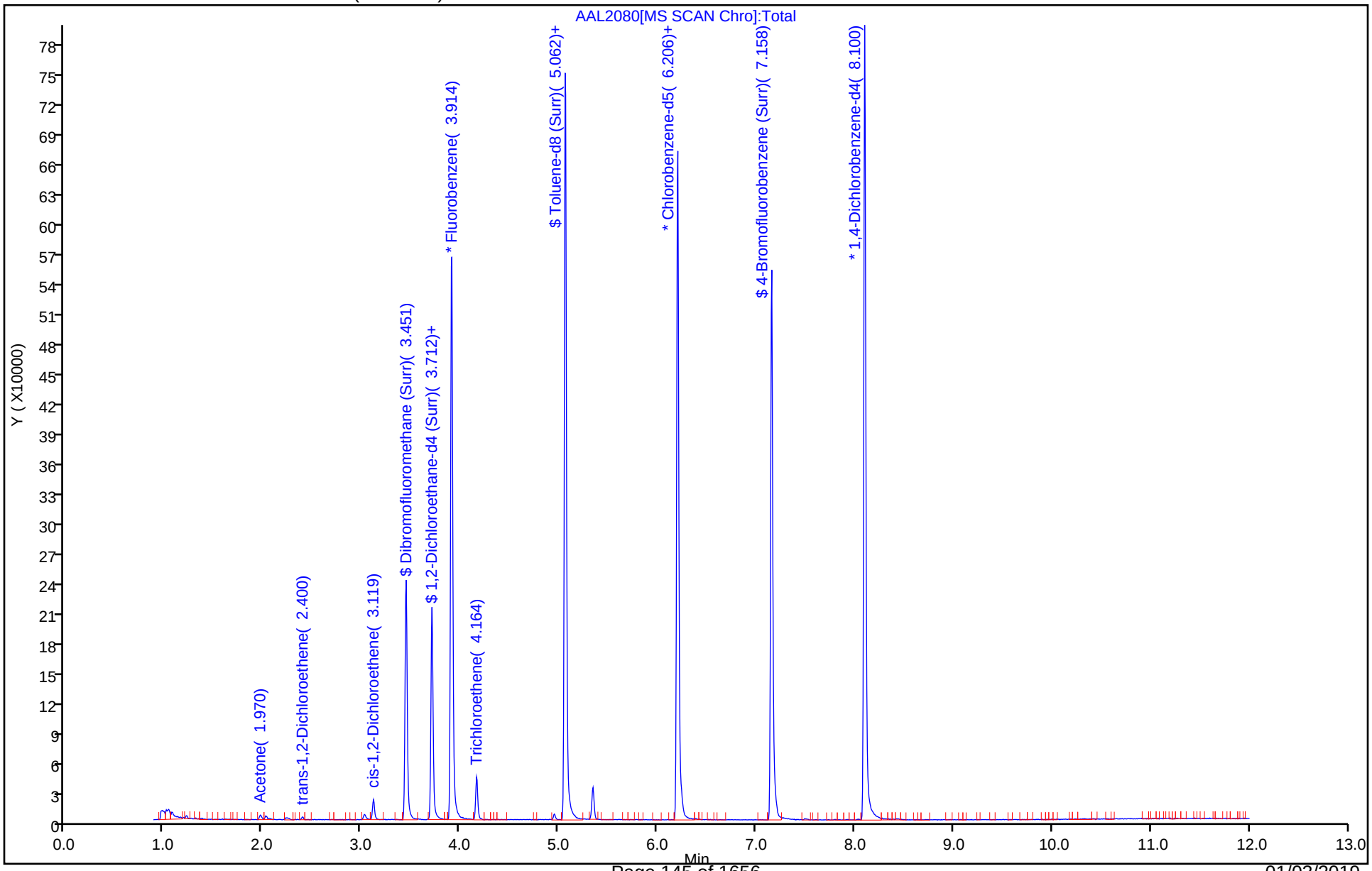
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-Dec-2018 09:10:00 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D				
Injection Date:	20-Dec-2018 18:56:30	Instrument ID:	CMSAA	Operator ID:	ea
Lims ID:	680-162184-C-5	Lab Sample ID:	680-162184-5	Worklist Smp#:	27
Client ID:	MW-21R				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260AQ	Limit Group:	8260B		

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)

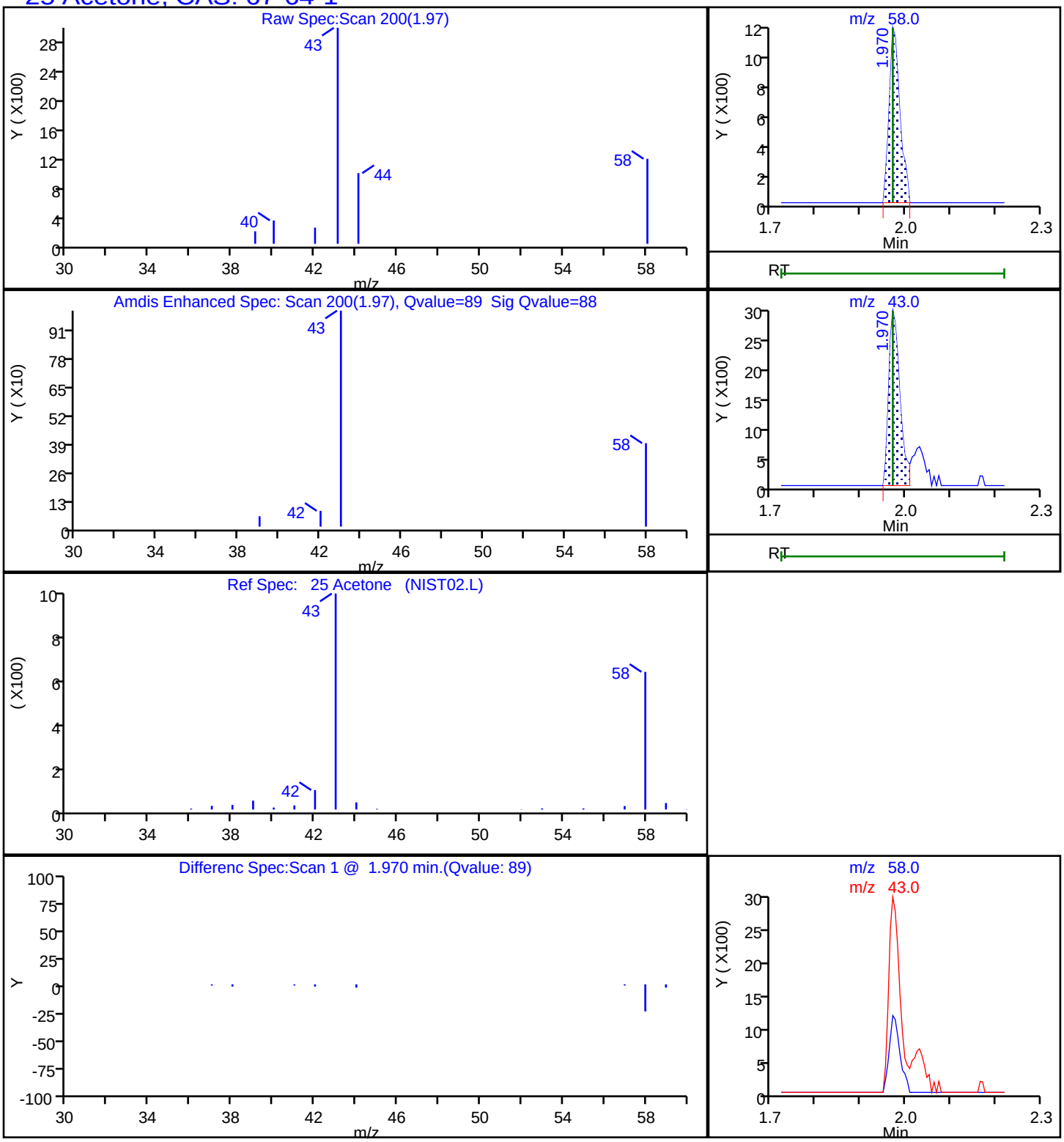


Report Date: 21-Dec-2018 09:10:00 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D				
Injection Date:	20-Dec-2018 18:56:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-C-5	Lab Sample ID:	680-162184-5		
Client ID:	MW-21R				
Operator ID:	ea	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

25 Acetone, CAS: 67-64-1

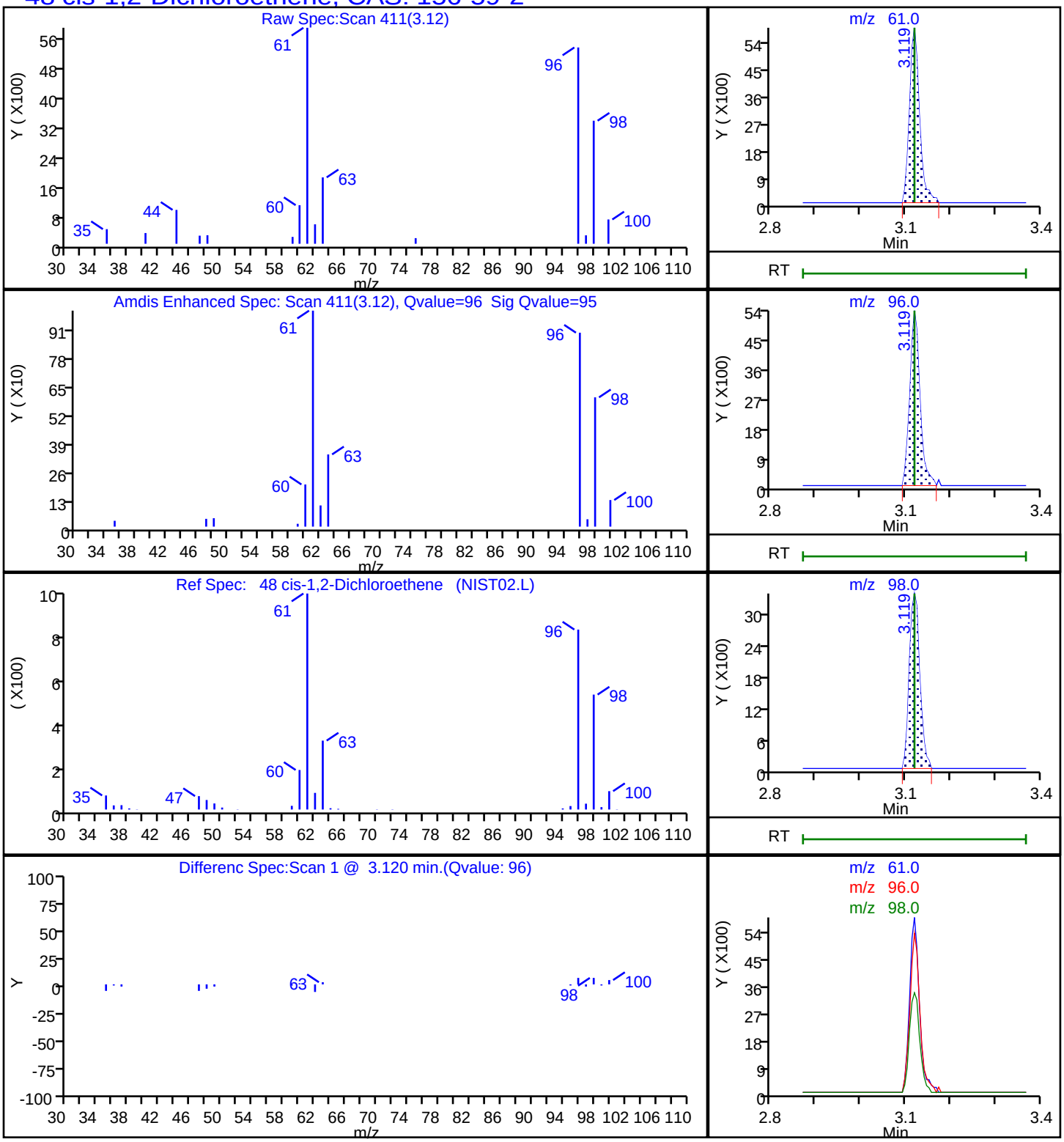


Report Date: 21-Dec-2018 09:10:00 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D				
Injection Date:	20-Dec-2018 18:56:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-C-5	Lab Sample ID:	680-162184-5		
Client ID:	MW-21R				
Operator ID:	ea	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

48 cis-1,2-Dichloroethene, CAS: 156-59-2

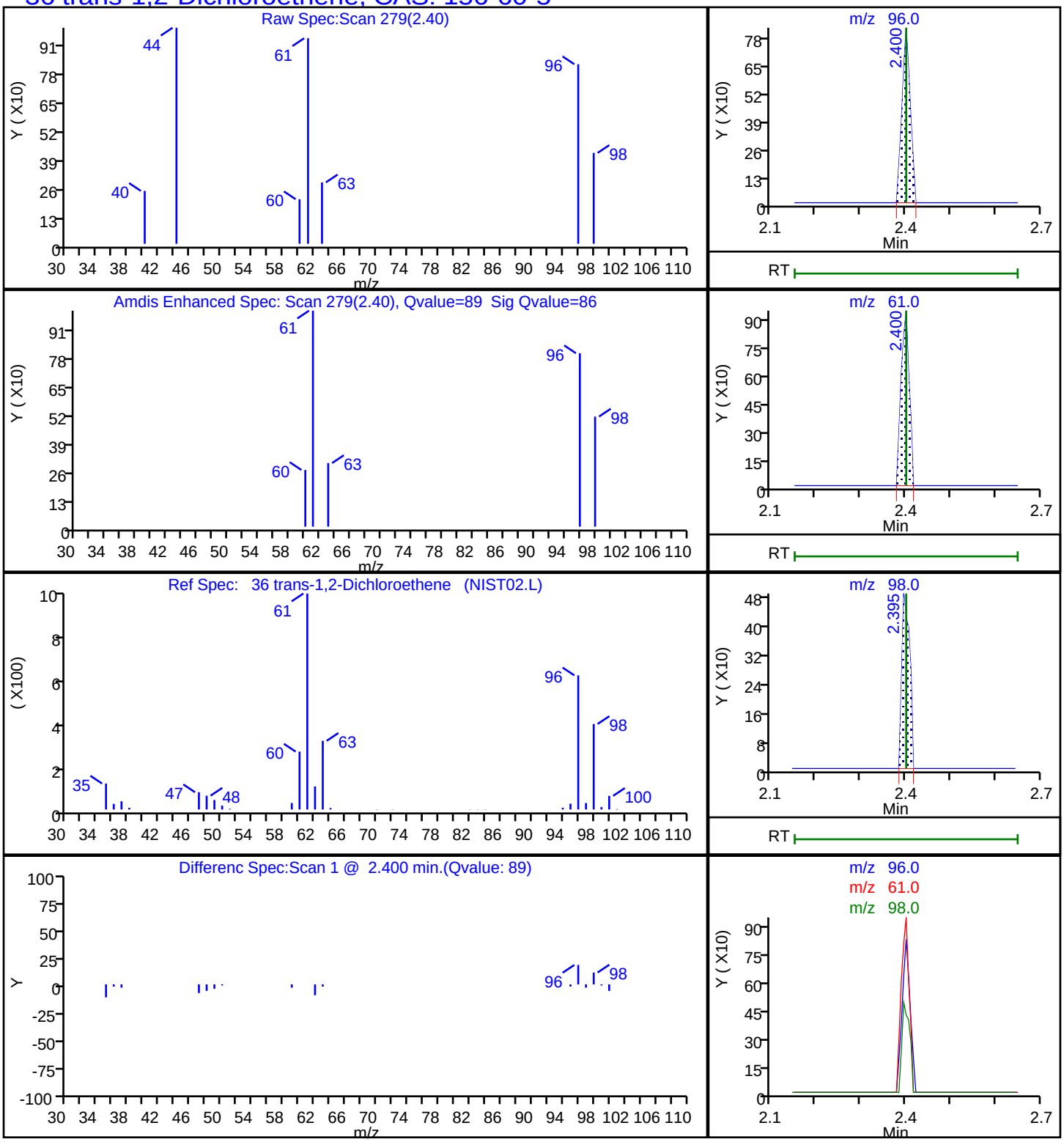


Report Date: 21-Dec-2018 09:10:00 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D				
Injection Date:	20-Dec-2018 18:56:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-C-5	Lab Sample ID:	680-162184-5		
Client ID:	MW-21R				
Operator ID:	ea	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

36 trans-1,2-Dichloroethene, CAS: 156-60-5

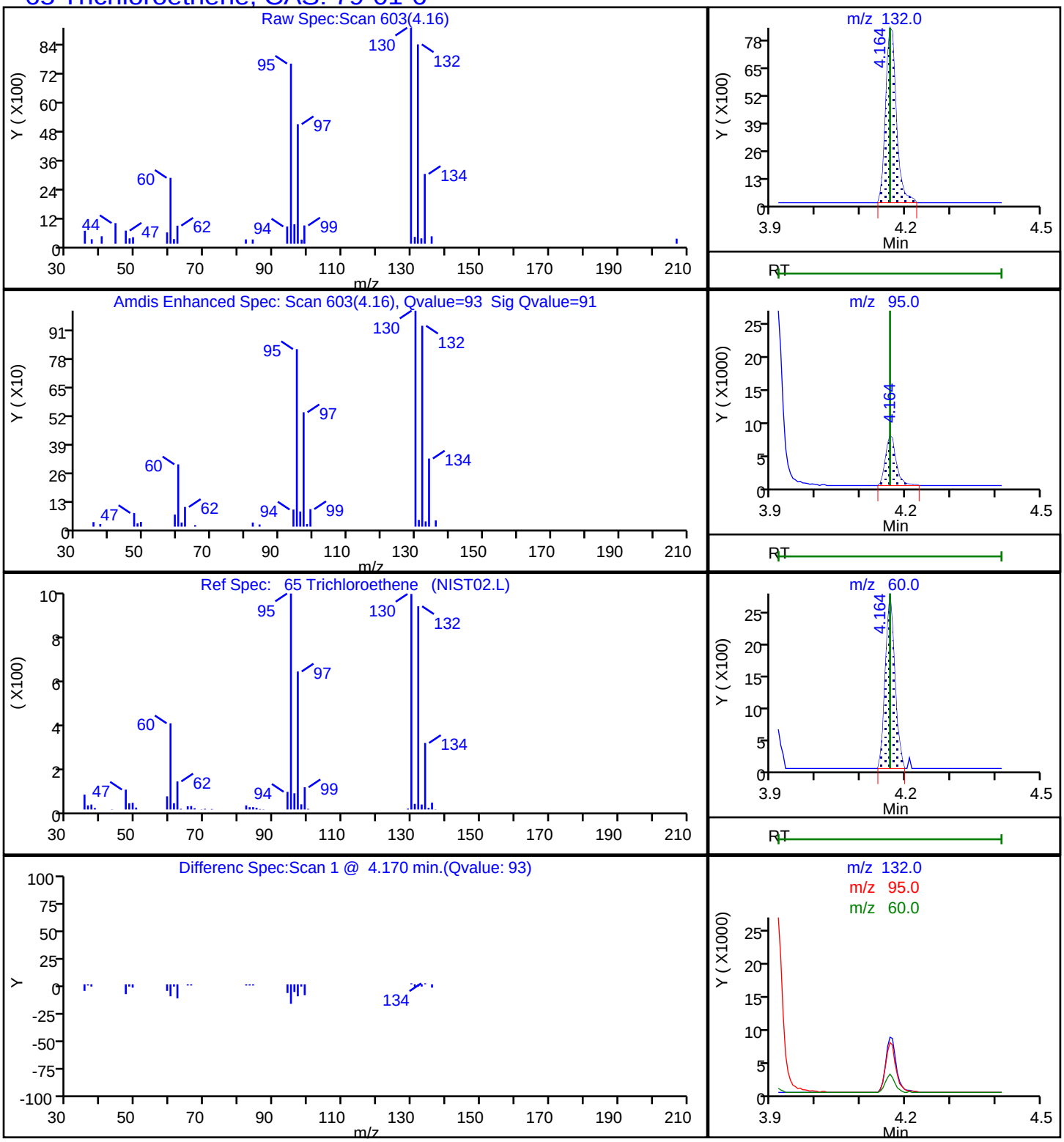


Report Date: 21-Dec-2018 09:10:00 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D				
Injection Date:	20-Dec-2018 18:56:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-C-5	Lab Sample ID:	680-162184-5		
Client ID:	MW-21R				
Operator ID:	ea	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

65 Trichloroethene, CAS: 79-01-6



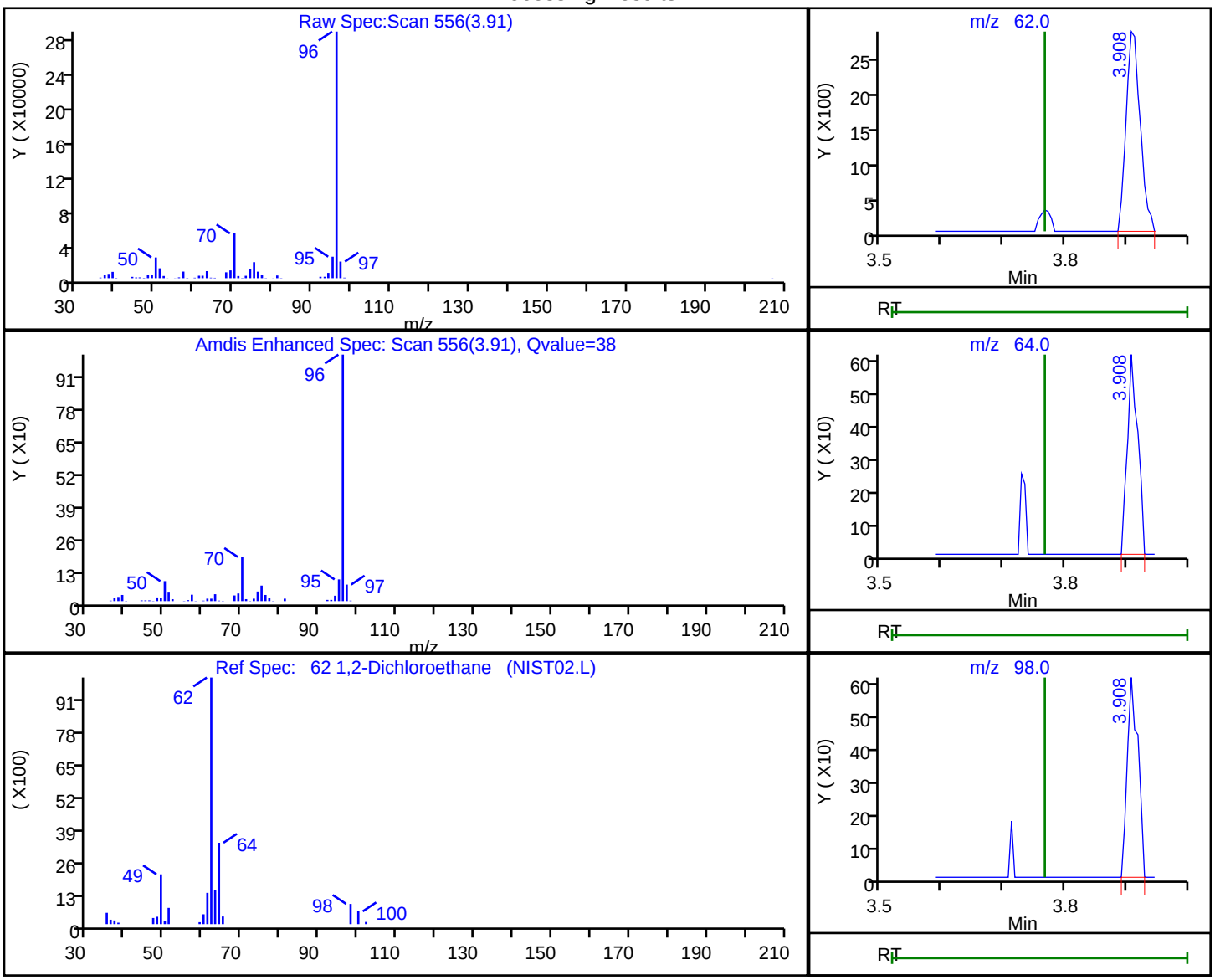
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D				
Injection Date:	20-Dec-2018 18:56:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-C-5	Lab Sample ID:	680-162184-5		
Client ID:	MW-21R				
Operator ID:	ea	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

62 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.91	62.00	4617	1.676422
3.91	64.00	727	
3.91	98.00	755	

Reviewer: soparaky, 21-Dec-2018 09:09:45

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

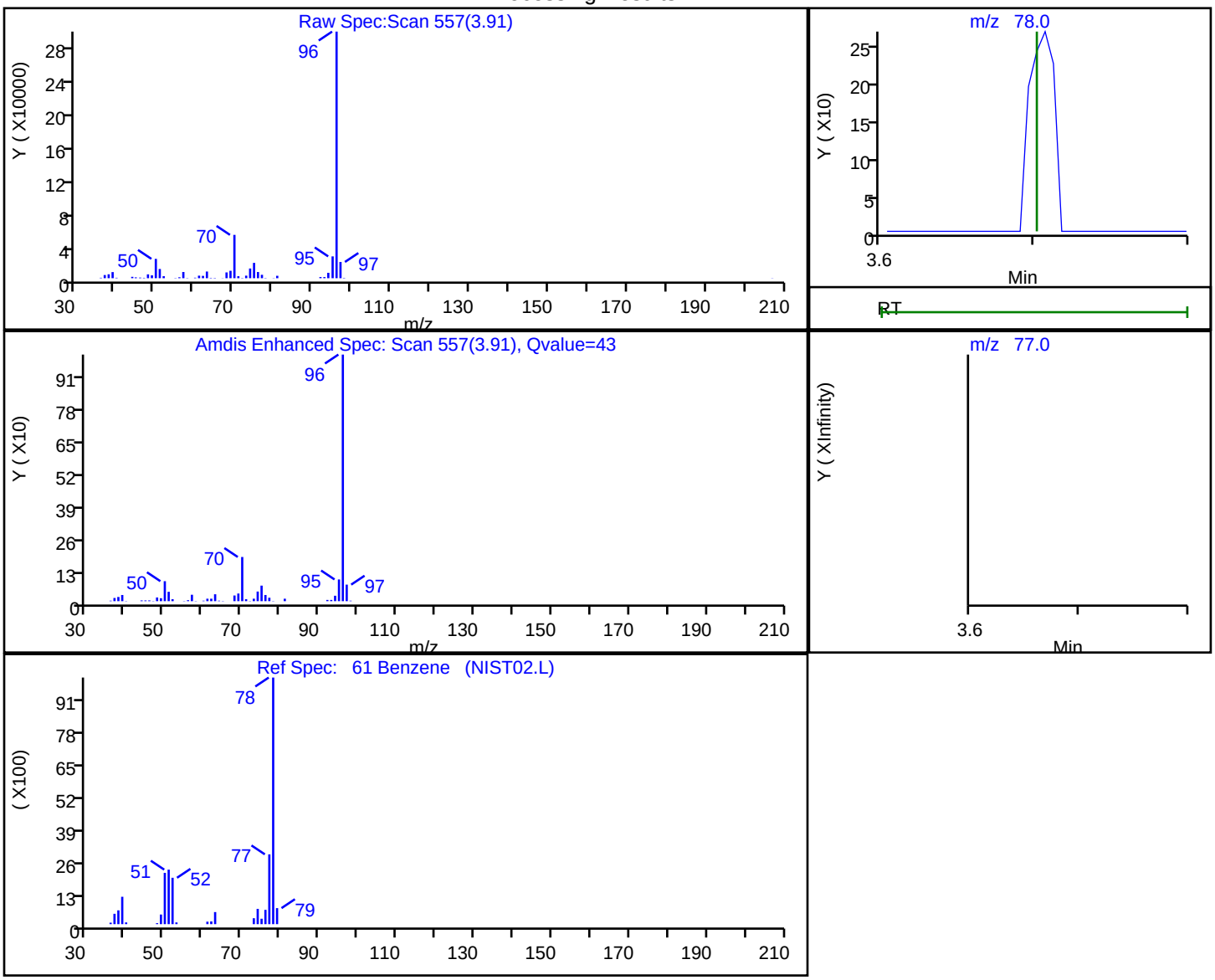
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D				
Injection Date:	20-Dec-2018 18:56:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-C-5	Lab Sample ID:	680-162184-5		
Client ID:	MW-21R				
Operator ID:	ea	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

61 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.91	78.00	402	0.039553
3.91	77.00	6798	

Reviewer: soparaky, 21-Dec-2018 09:09:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

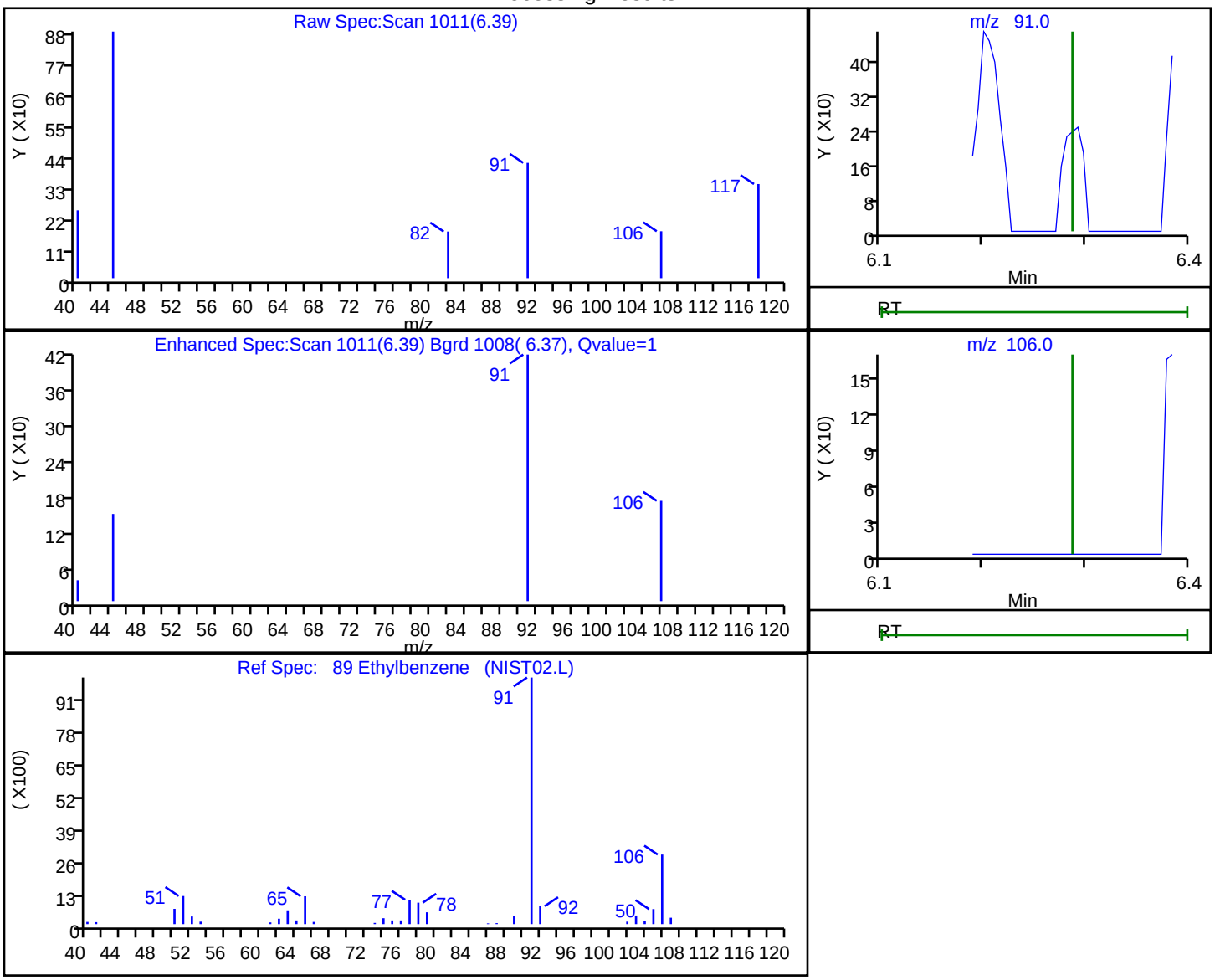
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2080.D				
Injection Date:	20-Dec-2018 18:56:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-C-5	Lab Sample ID:	680-162184-5		
Client ID:	MW-21R				
Operator ID:	ea	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

89 Ethylbenzene, CAS: 100-41-4

Processing Results



RT	Mass	Response	Amount
6.39	91.00	462	0.035909
6.39	106.00	247	

Reviewer: soparaky, 21-Dec-2018 09:09:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-21D | Lab Sample ID: 680-162184-6

Matrix: Water | Lab File ID: AAL2081.D

Analysis Method: 8260B | Date Collected: 12/11/2018 12:37

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 19:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-21D | Lab Sample ID: 680-162184-6

Matrix: Water | Lab File ID: AAL2081.D

Analysis Method: 8260B | Date Collected: 12/11/2018 12:37

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 19:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		73-131
2037-26-5	Toluene-d8 (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-122
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2081.D				
Lims ID:	680-162184-A-6				
Client ID:	MW-21D				
Sample Type:	Client				
Inject. Date:	20-Dec-2018 19:19:30	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	680-0052743-028				
Operator ID:	ea	Instrument ID:	CMSAA		
Method:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\8260AQ.m				
Limit Group:	8260B				
Last Update:	21-Dec-2018 09:10:28	Calib Date:	18-Dec-2018 12:45:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D				
Column 1 :	DB-VRX 20m x 0.18um x 1.0um (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0321				

First Level Reviewer: soparaky Date: 21-Dec-2018 09:10:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.914	3.908	0.006	100	488576	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	83	199935	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	239028	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	123762	51.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.713	3.718	0.001	96	112649	48.7	
$ 6 Toluene-d8 (Surr)	98	5.063	5.062	0.001	100	481530	49.5	
$ 7 4-Bromofluorobenzene (Surr	95	7.158	7.153	0.005	97	181946	49.6	

Reagents:

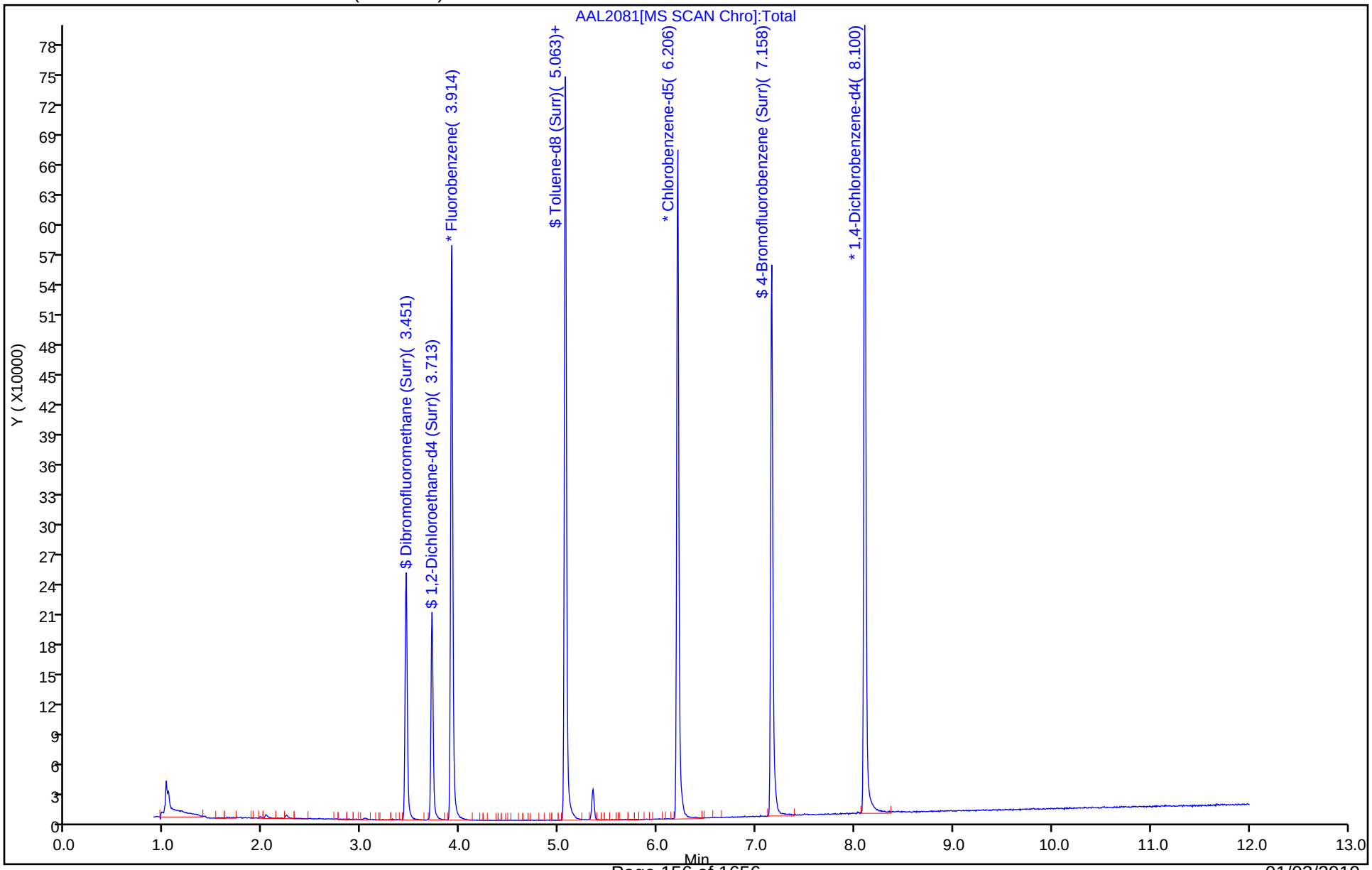
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-Dec-2018 09:10:28 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2081.D				
Injection Date:	20-Dec-2018 19:19:30	Instrument ID:	CMSAA	Operator ID:	ea
Lims ID:	680-162184-A-6	Lab Sample ID:	680-162184-6	Worklist Smp#:	28
Client ID:	MW-21D				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260AQ	Limit Group:	8260B		

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



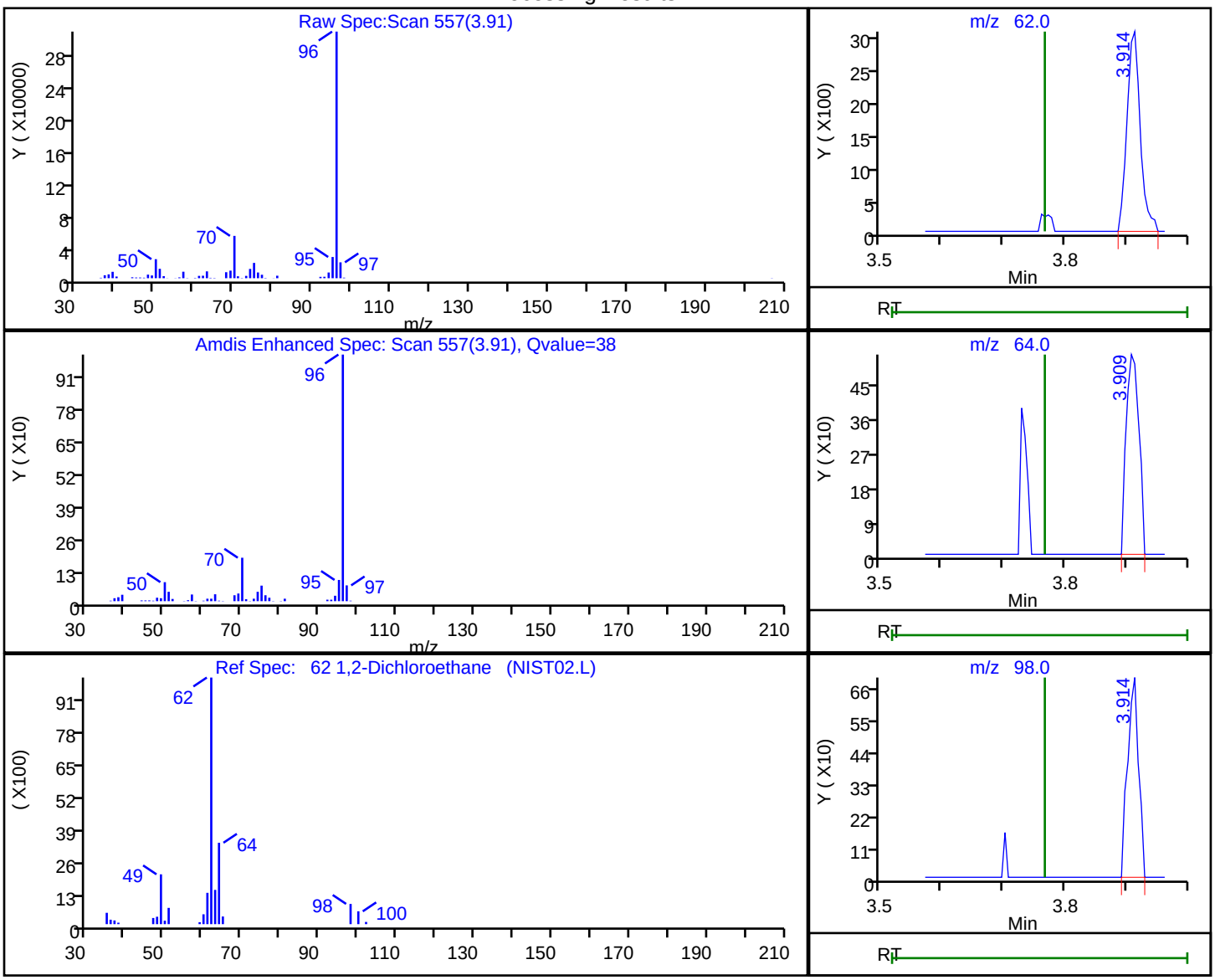
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2081.D				
Injection Date:	20-Dec-2018 19:19:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-A-6	Lab Sample ID:	680-162184-6		
Client ID:	MW-21D				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

62 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.91	62.00	4636	1.672344
3.91	64.00	768	
3.91	98.00	869	

Reviewer: soparaky, 21-Dec-2018 09:10:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

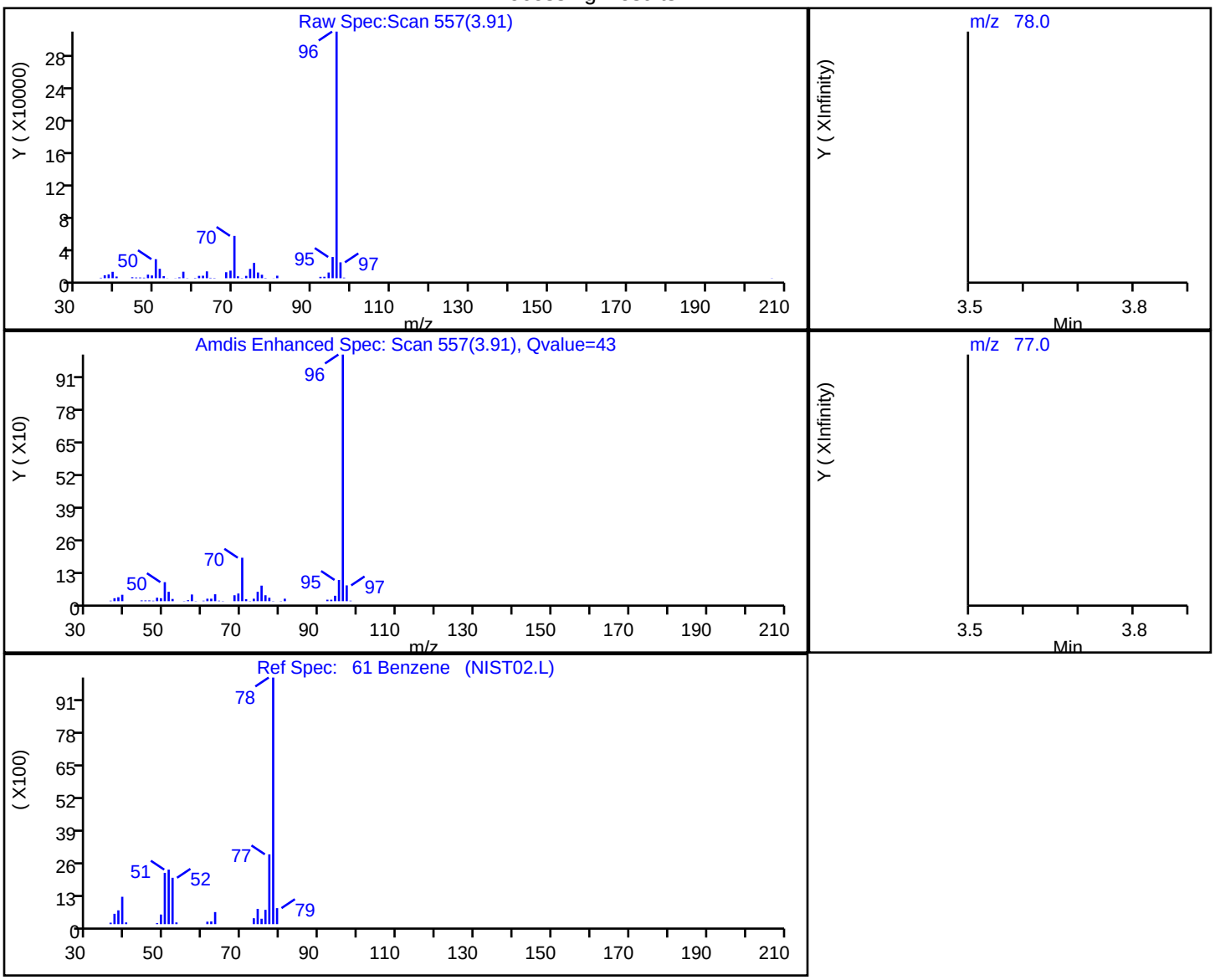
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2081.D				
Injection Date:	20-Dec-2018 19:19:30	Instrument ID:	CMSAA		
Lims ID:	680-162184-A-6	Lab Sample ID:	680-162184-6		
Client ID:	MW-21D				
Operator ID:	ea	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

61 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.91	78.00	556	0.054348
3.91	77.00	6860	

Reviewer: soparaky, 21-Dec-2018 09:10:13

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-22D | Lab Sample ID: 680-162184-7

Matrix: Water | Lab File ID: O2Lo2075.D

Analysis Method: 8260B | Date Collected: 12/11/2018 16:21

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 17:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U *	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-22D | Lab Sample ID: 680-162184-7

Matrix: Water | Lab File ID: O2Lo2075.D

Analysis Method: 8260B | Date Collected: 12/11/2018 16:21

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 17:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		73-131
2037-26-5	Toluene-d8 (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-122
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2075.D				
Lims ID:	680-162184-C-7				
Client ID:	MW-22D				
Sample Type:	Client				
Inject. Date:	20-Dec-2018 17:24:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	680-0052745-022				
Operator ID:	EA	Instrument ID:	CMSO2		
Method:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m				
Limit Group:	8260B				
Last Update:	21-Dec-2018 09:55:09	Calib Date:	12-Nov-2018 15:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D				
Column 1 :	Rtx-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0321				

First Level Reviewer: soparaky Date: 21-Dec-2018 09:55:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.278	3.269	0.009	97	153862	49.3	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.511	-0.001	98	206247	47.0	
* 55 Fluorobenzene	96	3.742	3.743	-0.001	98	572035	50.0	
$ 69 Toluene-d8 (Surr)	98	4.913	4.914	-0.001	99	521612	47.3	
* 81 Chlorobenzene-d5	82	6.042	6.043	-0.001	89	222596	50.0	
$ 92 4-Bromofluorobenzene (Surr	95	7.002	7.003	-0.001	91	205859	46.5	
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.952	-0.001	96	207647	50.0	

Reagents:

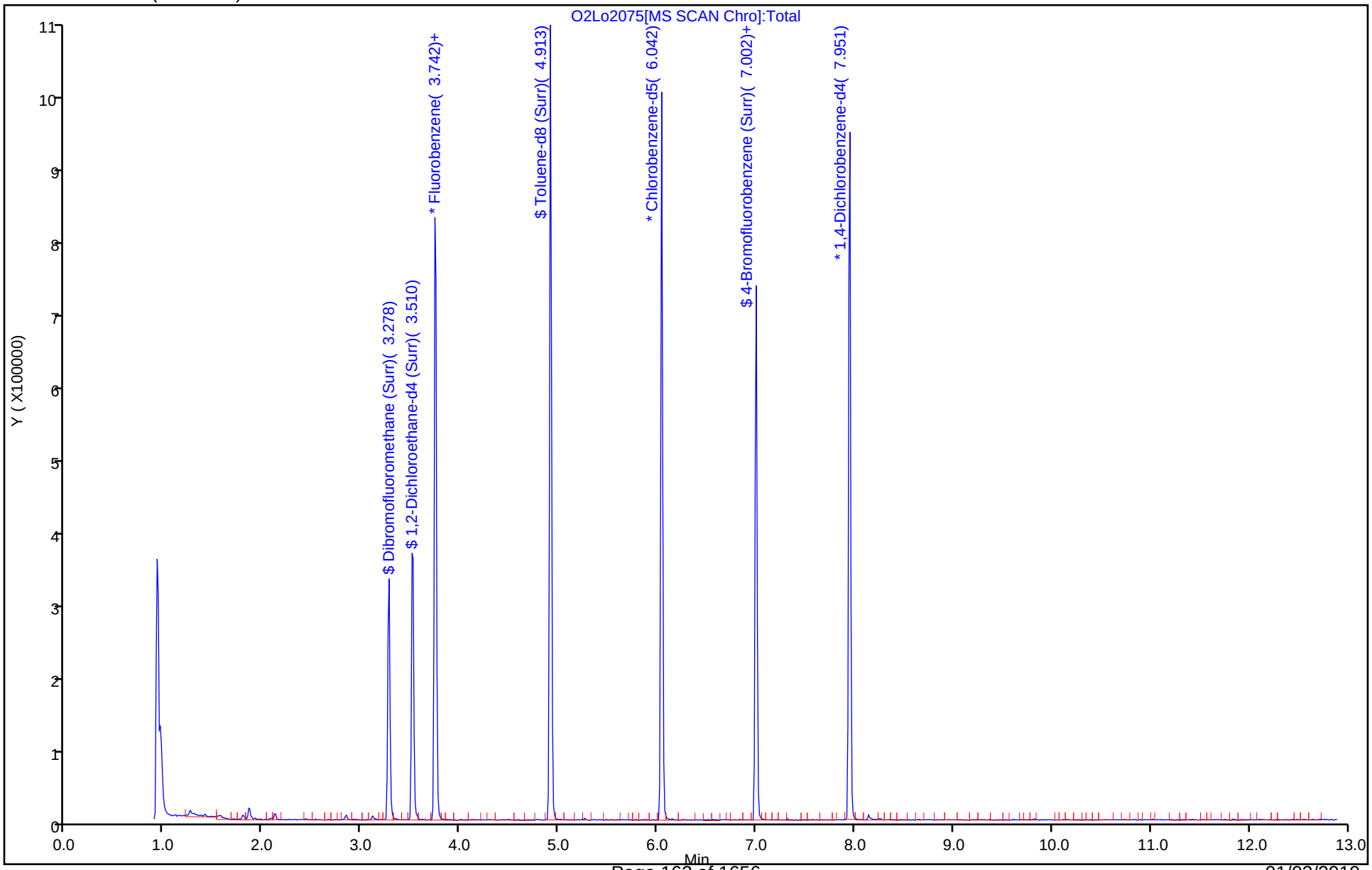
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-Dec-2018 09:55:10 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2075.D				
Injection Date:	20-Dec-2018 17:24:30	Instrument ID:	CMSO2	Operator ID:	EA
Lims ID:	680-162184-C-7	Lab Sample ID:	680-162184-7	Worklist Smp#:	22
Client ID:	MW-22D				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	2014_MSO2	Limit Group:	8260B		

Column: Rtx-624 (0.18 mm)



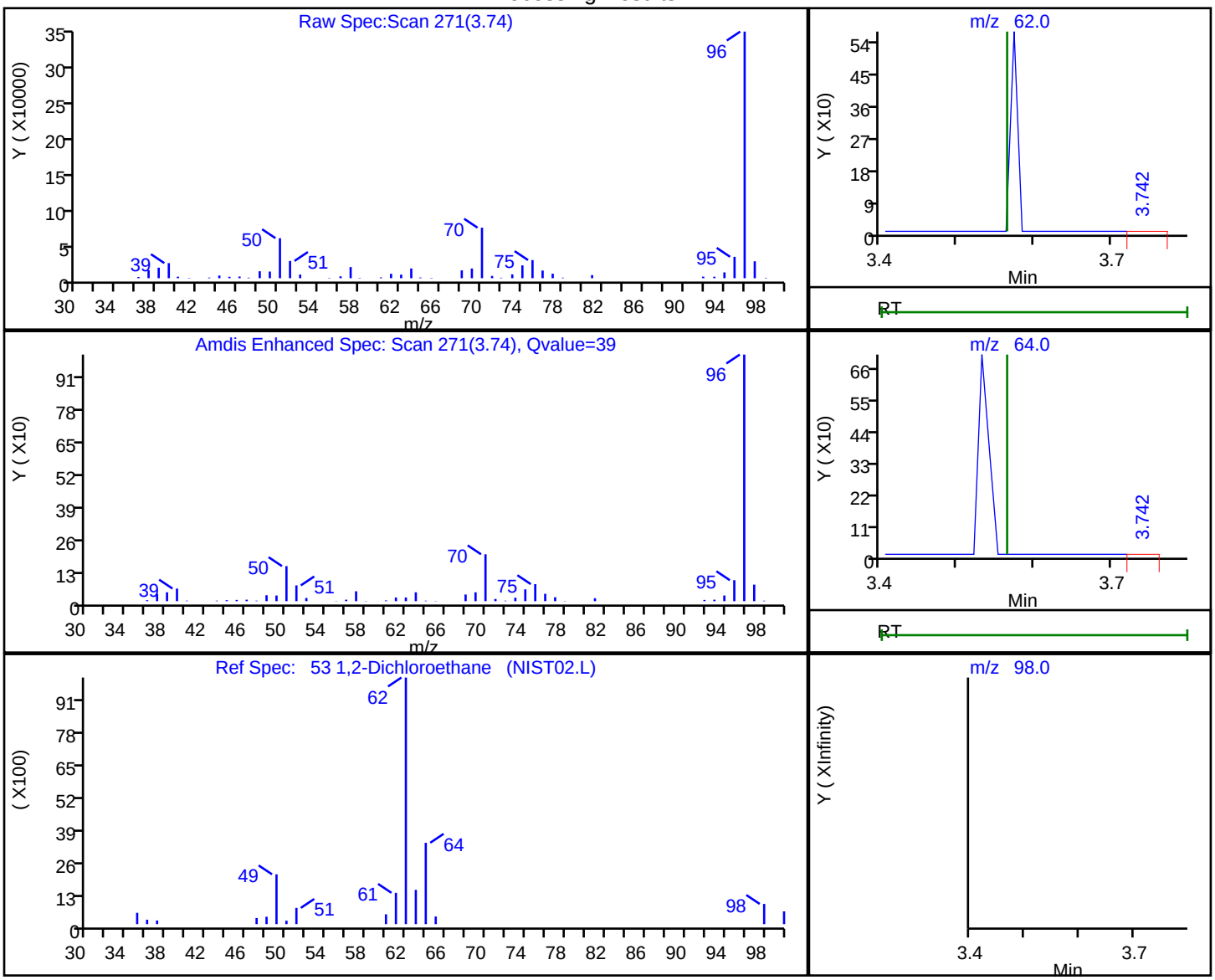
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2075.D				
Injection Date:	20-Dec-2018 17:24:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-C-7	Lab Sample ID:	680-162184-7		
Client ID:	MW-22D				
Operator ID:	EA	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

53 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.74	62.00	7935	1.513946
3.74	64.00	1305	
3.75	98.00	764	

Reviewer: soparaky, 21-Dec-2018 09:55:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

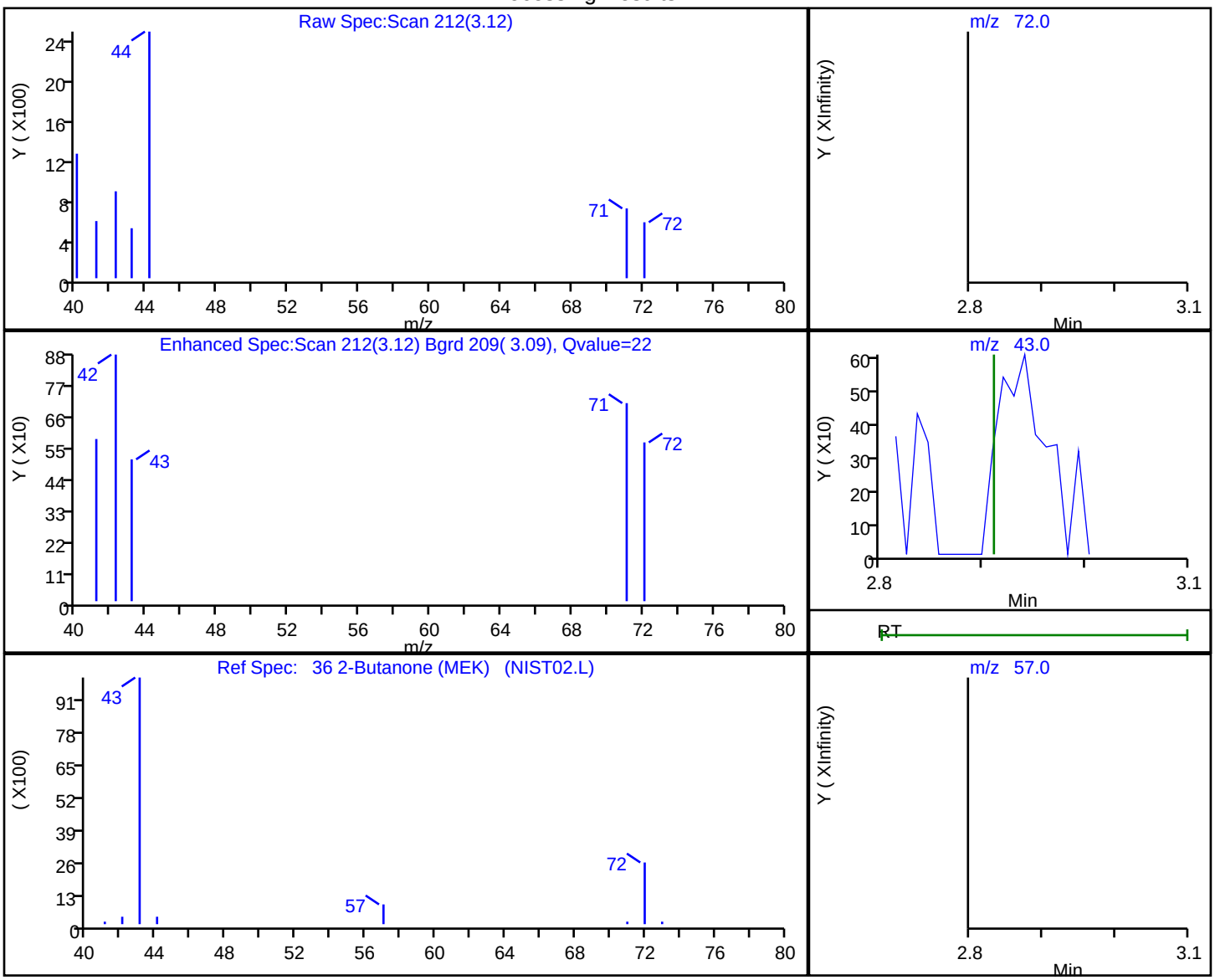
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2075.D				
Injection Date:	20-Dec-2018 17:24:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-C-7	Lab Sample ID:	680-162184-7		
Client ID:	MW-22D				
Operator ID:	EA	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.12	72.00	596	1.030810
3.11	43.00	1757	
2.91	57.00	0	

Reviewer: soparaky, 21-Dec-2018 09:54:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

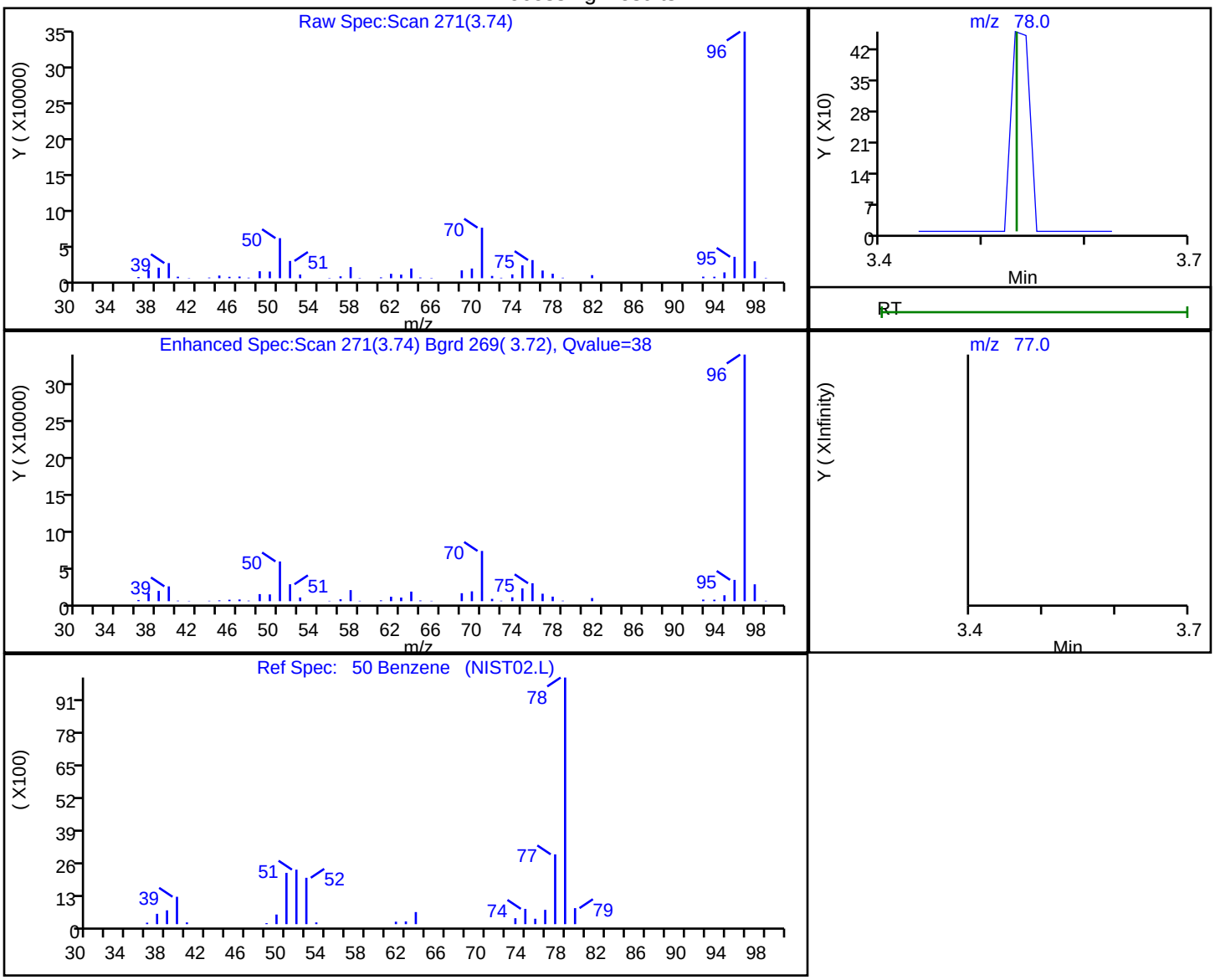
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2075.D				
Injection Date:	20-Dec-2018 17:24:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-C-7	Lab Sample ID:	680-162184-7		
Client ID:	MW-22D				
Operator ID:	EA	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.74	78.00	675	0.054906
3.74	77.00	9413	

Reviewer: soparaky, 21-Dec-2018 09:55:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-22R | Lab Sample ID: 680-162184-8

Matrix: Water | Lab File ID: O2Lo2076.D

Analysis Method: 8260B | Date Collected: 12/12/2018 10:43

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 17:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U * F2	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-22R | Lab Sample ID: 680-162184-8

Matrix: Water | Lab File ID: O2Lo2076.D

Analysis Method: 8260B | Date Collected: 12/12/2018 10:43

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 17:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		73-131
2037-26-5	Toluene-d8 (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-122
460-00-4	4-Bromofluorobenzene (Surr)	84		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2076.D
Lims ID: 680-162184-C-8
Client ID: MW-22R
Sample Type: Client
Inject. Date: 20-Dec-2018 17:48:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052745-023
Operator ID: EA Instrument ID: CMSO2

Method: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 21-Dec-2018 09:56:14 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: soparaky Date: 21-Dec-2018 09:56:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
16 Isopropyl alcohol	45	1.856	1.854	0.002	98	31275	NC	
21 Acetonitrile	41	2.120	1.991	0.129	36	1879	NC	
23 2-Methyl-2-propanol	59	2.120	2.119	0.001	61	2339	3.79	
38 Tetrahydrofuran	42	3.111	3.100	0.011	89	2360	0.9863	
$ 44 Dibromofluoromethane (Surr	113	3.269	3.269	0.000	97	152783	50.5	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.512	3.511	0.001	98	204715	48.2	
* 55 Fluorobenzene	96	3.744	3.743	0.001	98	553770	50.0	
$ 69 Toluene-d8 (Surr)	98	4.915	4.914	0.001	98	501897	47.0	
80 1-Chlorohexane	55	6.044	6.032	0.011	28	4488	NC	
* 81 Chlorobenzene-d5	82	6.044	6.043	0.001	88	215426	50.0	
86 n-Butyl acrylate	55	7.004	6.993	0.011	7	593	NC	
$ 92 4-Bromofluorobenzene (Surr	95	7.004	7.003	0.001	95	199844	42.1	
* 109 1,4-Dichlorobenzene-d4	152	7.953	7.952	0.001	95	222754	50.0	
$ 127 BFB								

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

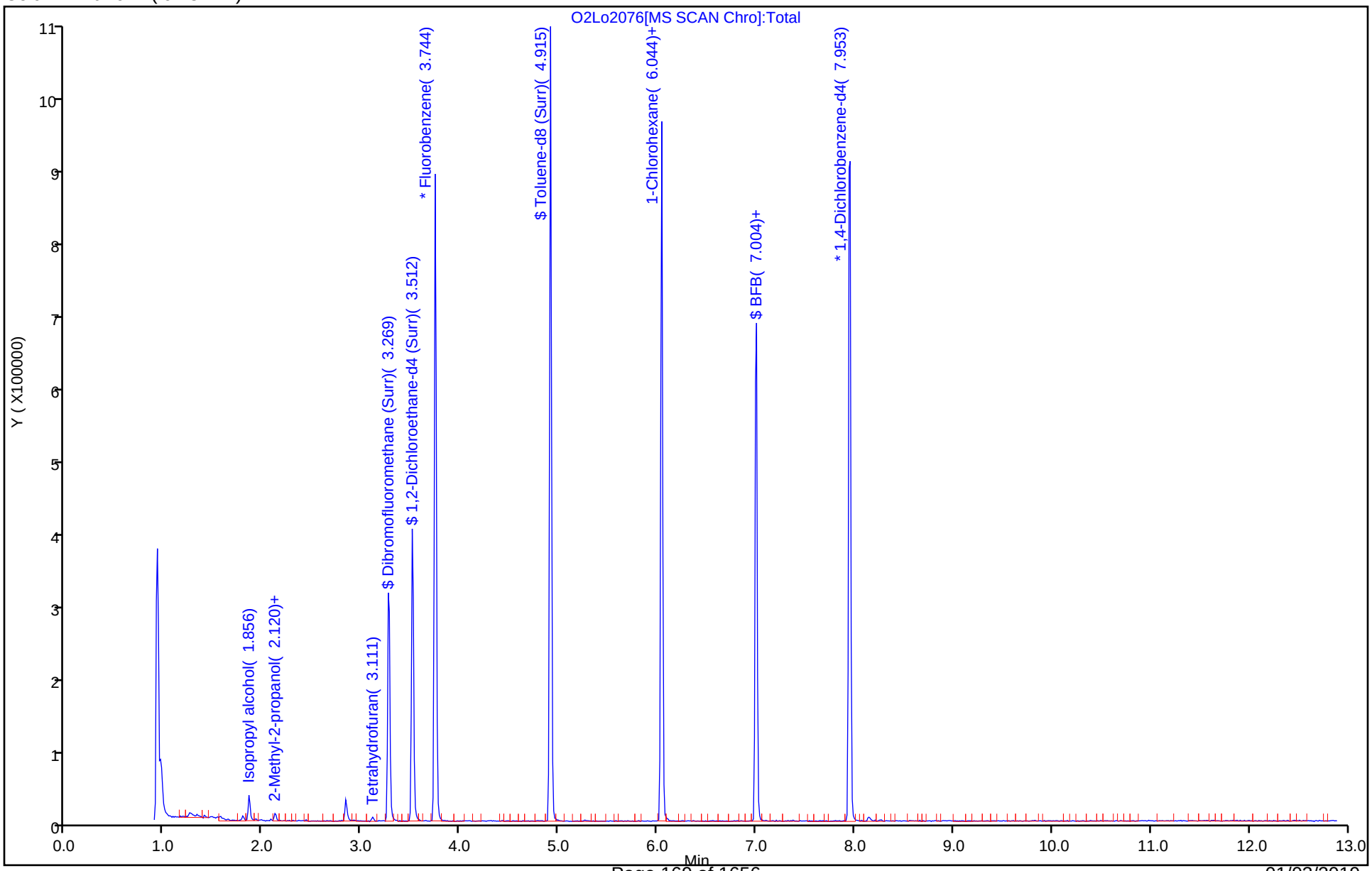
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-Dec-2018 09:56:15 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2076.D				
Injection Date:	20-Dec-2018 17:48:30	Instrument ID:	CMSO2	Operator ID:	EA
Lims ID:	680-162184-C-8	Lab Sample ID:	680-162184-8	Worklist Smp#:	23
Client ID:	MW-22R				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	2014_MSO2	Limit Group:	8260B		

Column: Rtx-624 (0.18 mm)



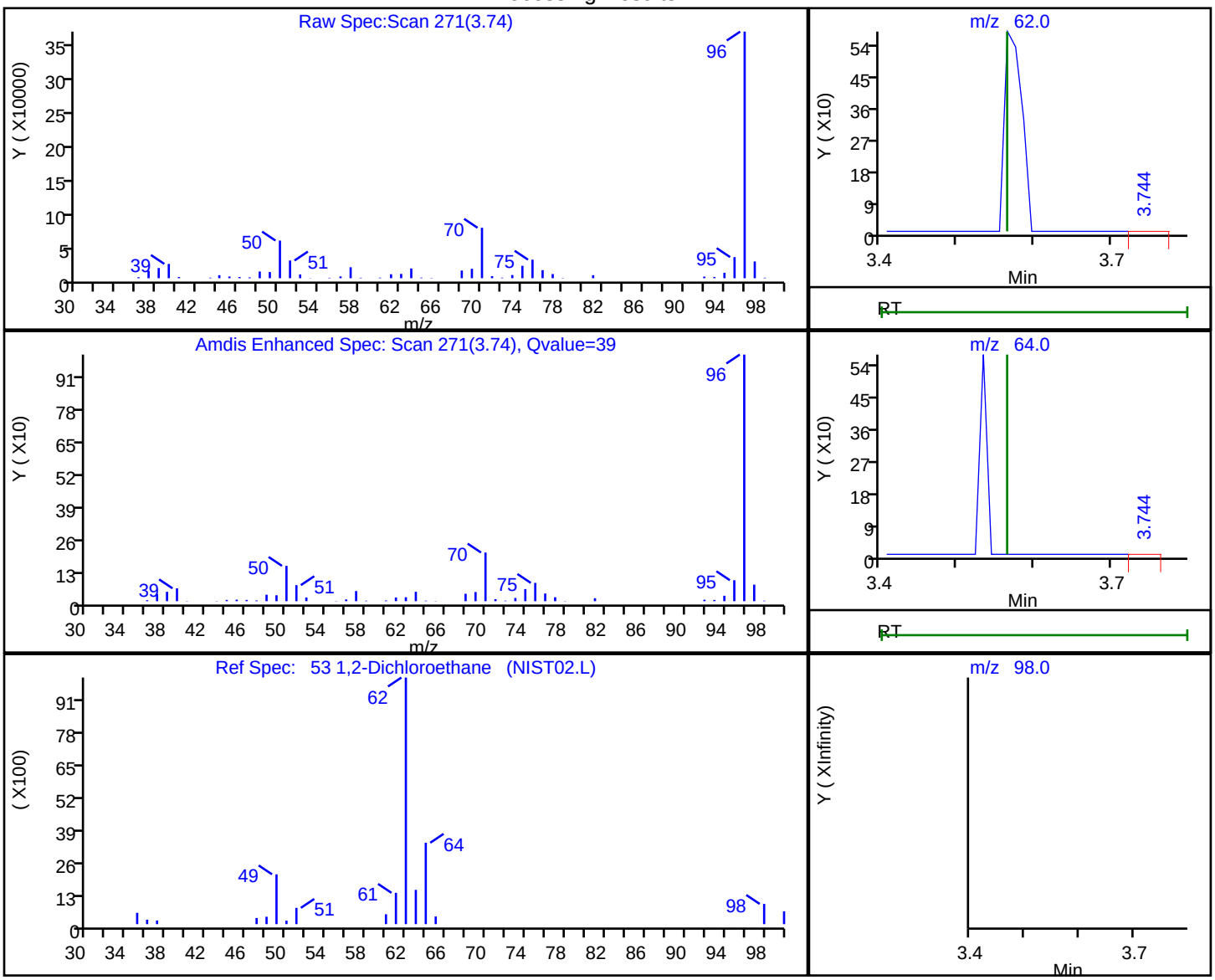
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2076.D				
Injection Date:	20-Dec-2018 17:48:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-C-8	Lab Sample ID:	680-162184-8		
Client ID:	MW-22R				
Operator ID:	EA	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

53 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.74	62.00	8704	1.715440
3.74	64.00	1346	
3.74	98.00	1174	

Reviewer: soparaky, 21-Dec-2018 09:55:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

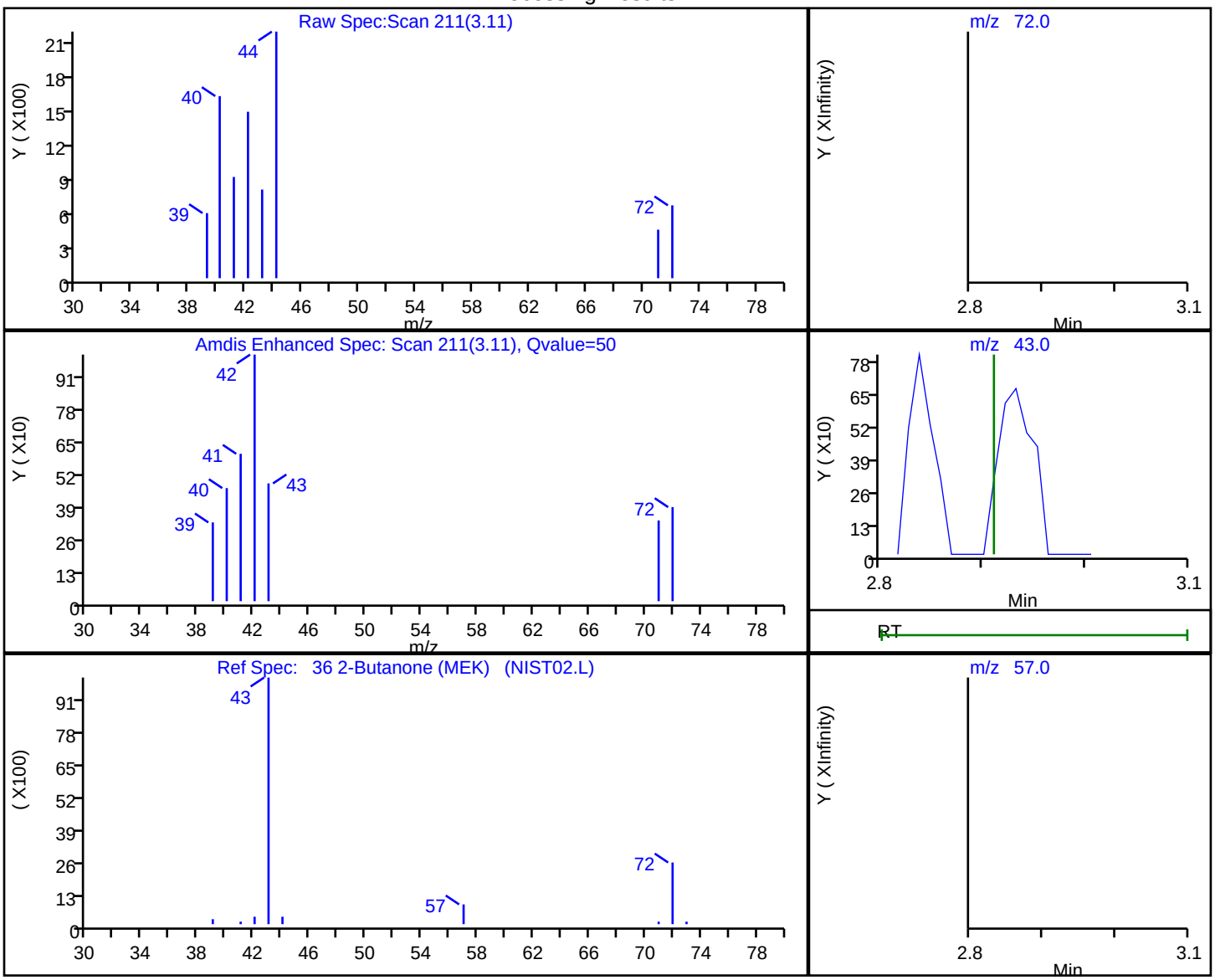
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2076.D				
Injection Date:	20-Dec-2018 17:48:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-C-8	Lab Sample ID:	680-162184-8		
Client ID:	MW-22R				
Operator ID:	EA	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.11	72.00	603	1.077316
3.11	43.00	953	
2.91	57.00	0	

Reviewer: soparaky, 21-Dec-2018 09:55:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

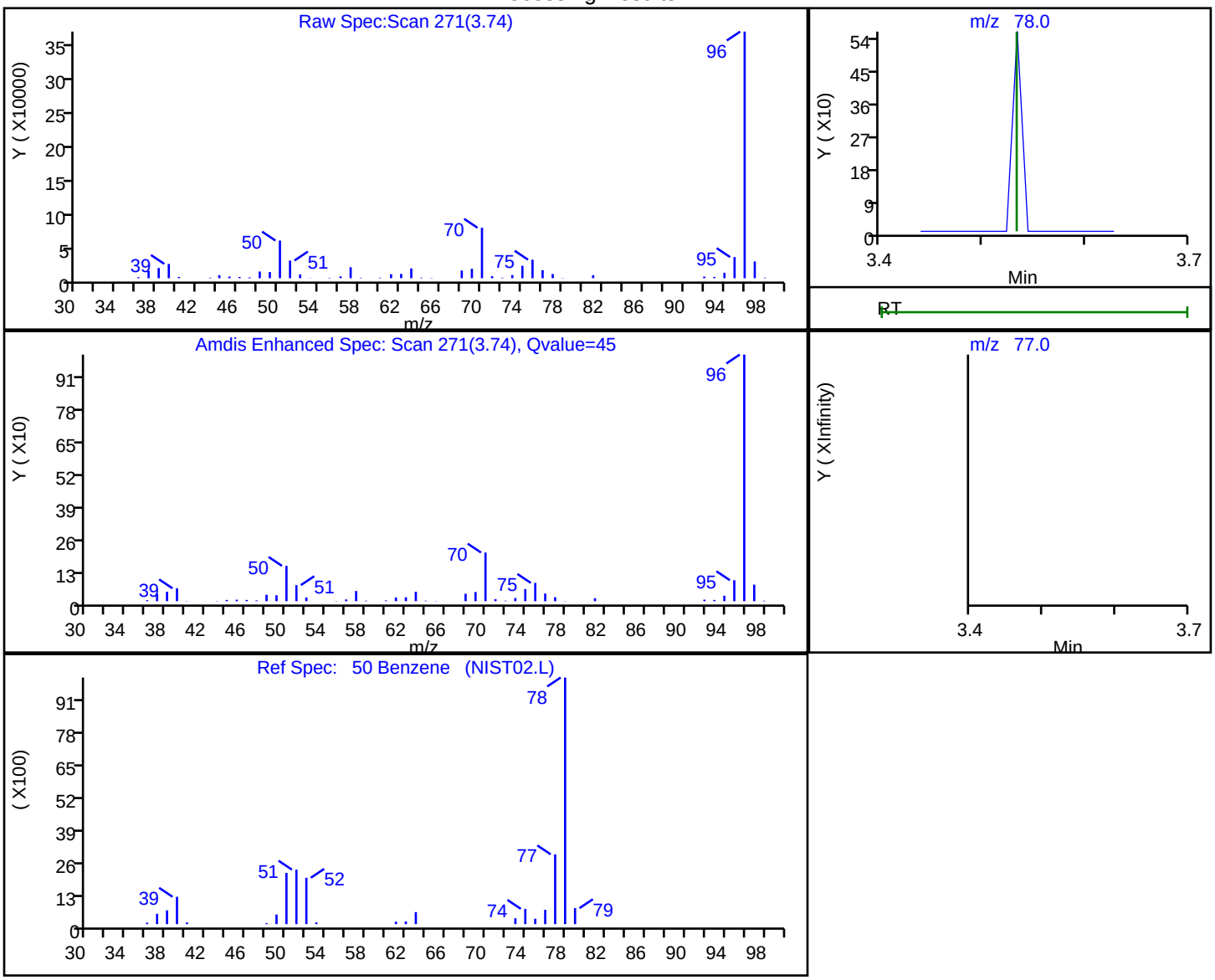
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2076.D				
Injection Date:	20-Dec-2018 17:48:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-C-8	Lab Sample ID:	680-162184-8		
Client ID:	MW-22R				
Operator ID:	EA	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.74	78.00	462	0.038820
3.74	77.00	8575	

Reviewer: soparaky, 21-Dec-2018 09:55:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-25S | Lab Sample ID: 680-162184-11

Matrix: Water | Lab File ID: O2Lo2077.D

Analysis Method: 8260B | Date Collected: 12/12/2018 12:23

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 18:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U *	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-25S | Lab Sample ID: 680-162184-11

Matrix: Water | Lab File ID: O2Lo2077.D

Analysis Method: 8260B | Date Collected: 12/12/2018 12:23

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 18:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		73-131
2037-26-5	Toluene-d8 (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-122
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2077.D
Lims ID: 680-162184-A-11
Client ID: MW-25S
Sample Type: Client
Inject. Date: 20-Dec-2018 18:11:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052745-024
Operator ID: EA Instrument ID: CMSO2

Method: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 21-Dec-2018 09:56:41 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: soparaky Date: 21-Dec-2018 09:56:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.270	3.269	0.001	97	146822	48.7	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.512	3.511	0.001	98	196639	46.4	
* 55 Fluorobenzene	96	3.744	3.743	0.001	98	552150	50.0	
$ 69 Toluene-d8 (Surr)	98	4.915	4.914	0.001	98	510718	47.9	
* 81 Chlorobenzene-d5	82	6.044	6.043	0.001	88	216102	50.0	
$ 92 4-Bromofluorobenzene (Surr	95	6.993	7.003	-0.010	92	199582	46.6	
* 109 1,4-Dichlorobenzene-d4	152	7.953	7.952	0.001	97	200628	50.0	

Reagents:

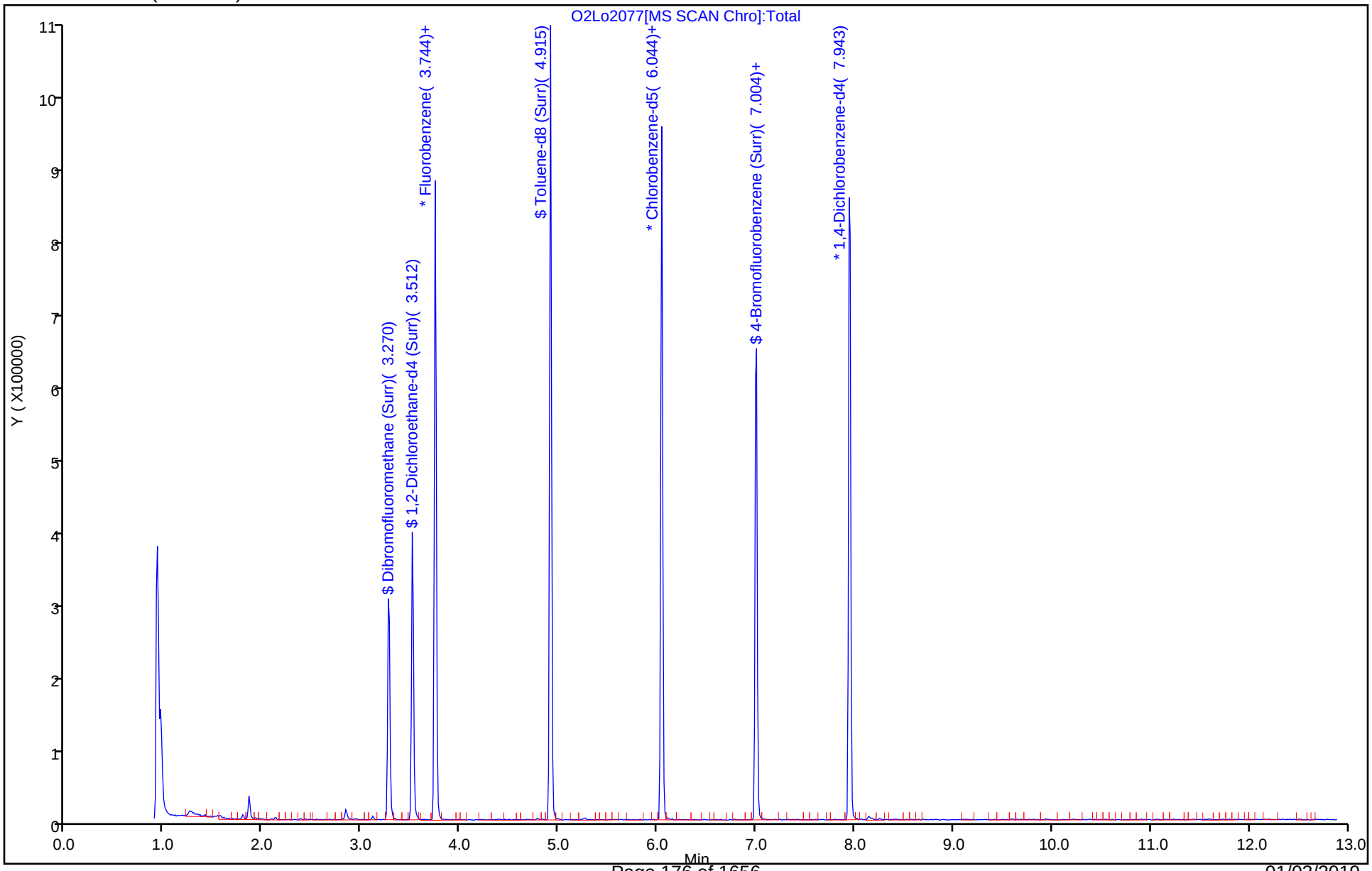
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-Dec-2018 09:56:41 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2077.D				
Injection Date:	20-Dec-2018 18:11:30	Instrument ID:	CMSO2	Operator ID:	EA
Lims ID:	680-162184-A-11	Lab Sample ID:	680-162184-11	Worklist Smp#:	24
Client ID:	MW-25S				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	2014_MSO2	Limit Group:	8260B		

Column: Rtx-624 (0.18 mm)



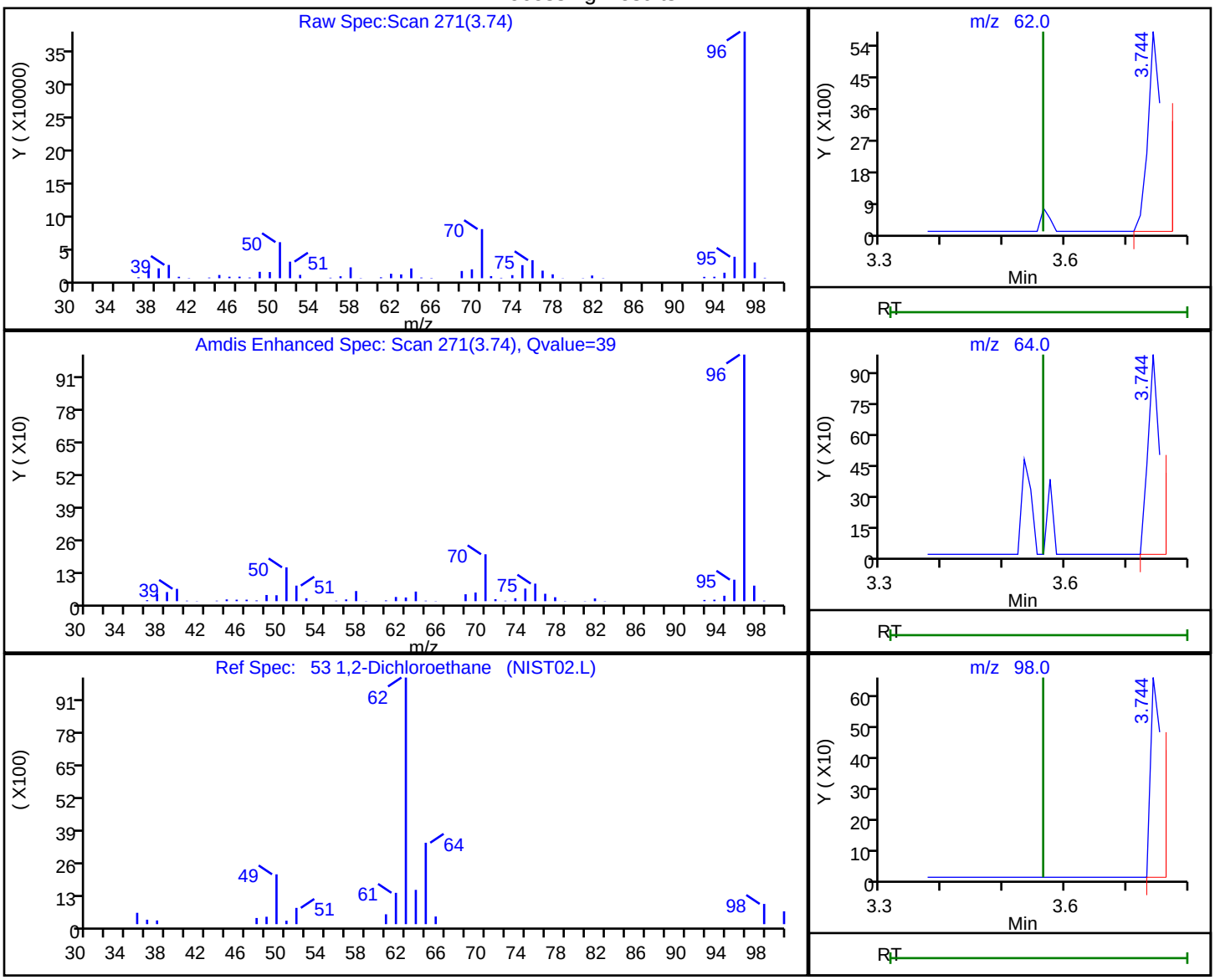
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2077.D				
Injection Date:	20-Dec-2018 18:11:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-11	Lab Sample ID:	680-162184-11		
Client ID:	MW-25S				
Operator ID:	EA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

53 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.74	62.00	8034	1.588038
3.74	64.00	1208	
3.74	98.00	719	

Reviewer: soparaky, 21-Dec-2018 09:56:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

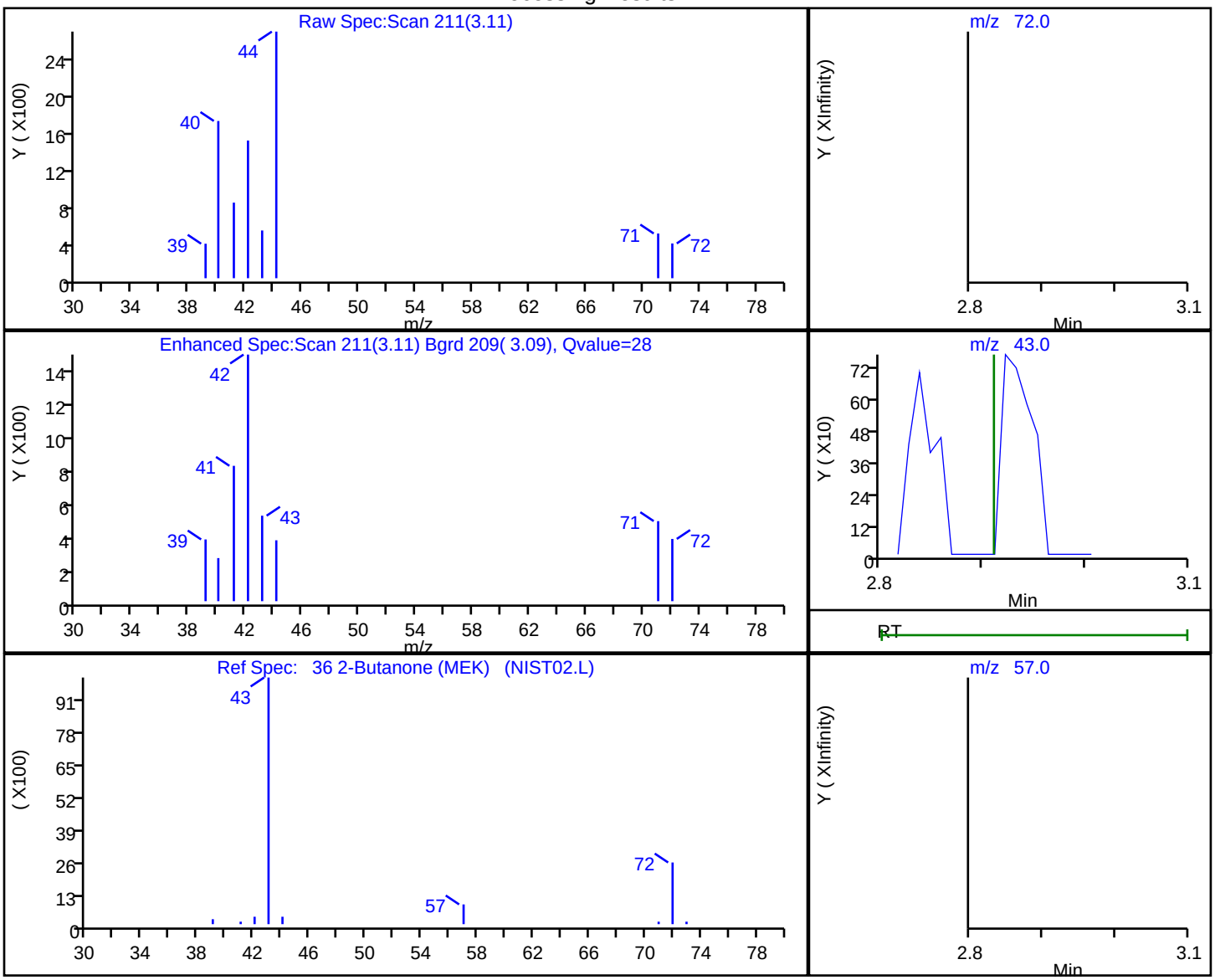
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2077.D				
Injection Date:	20-Dec-2018 18:11:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-11	Lab Sample ID:	680-162184-11		
Client ID:	MW-25S				
Operator ID:	EA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.11	72.00	435	0.779448
3.11	43.00	518	
2.91	57.00	0	

Reviewer: soparaky, 21-Dec-2018 09:56:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

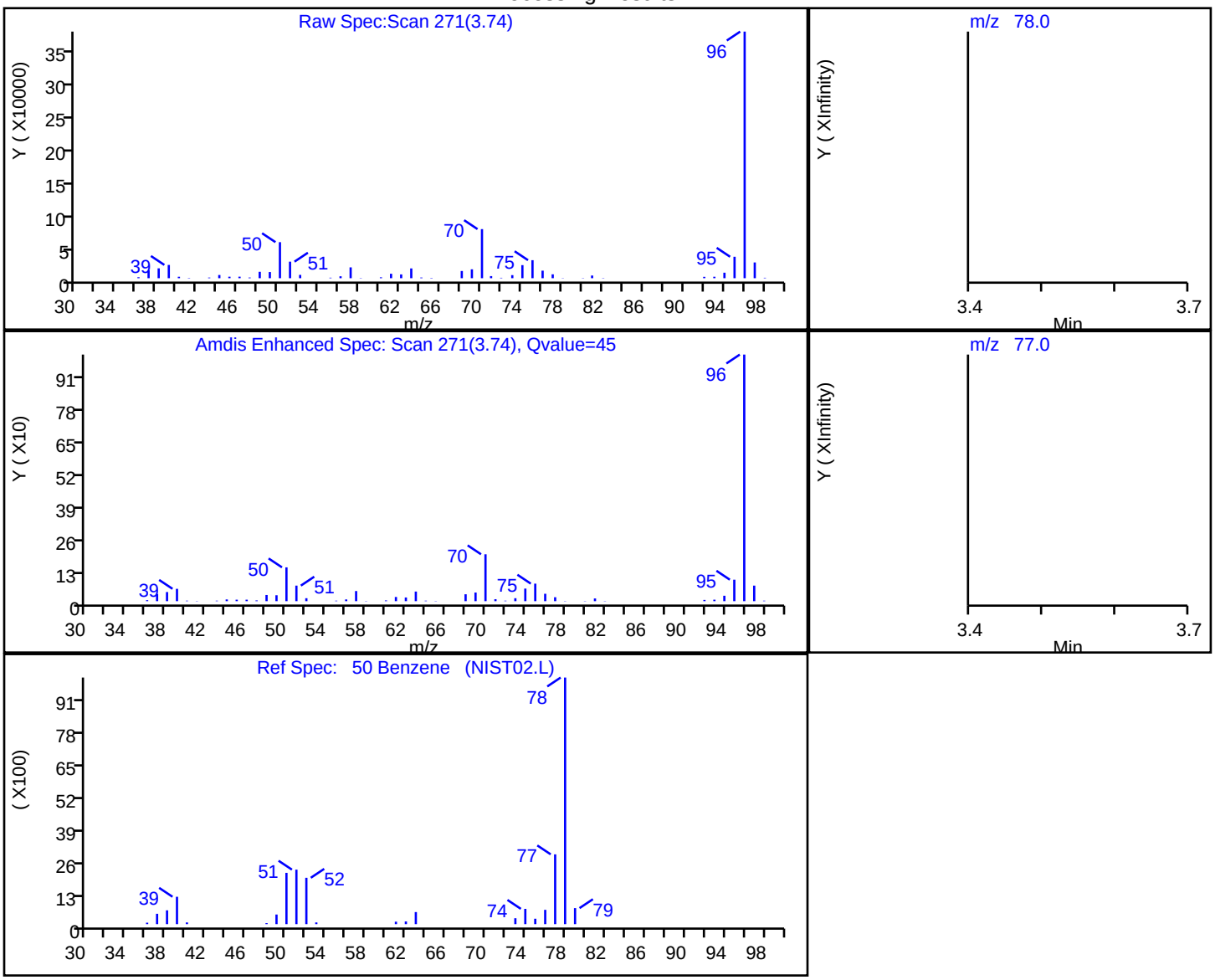
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2077.D				
Injection Date:	20-Dec-2018 18:11:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-11	Lab Sample ID:	680-162184-11		
Client ID:	MW-25S				
Operator ID:	EA	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.74	78.00	399	0.033625
3.74	77.00	8820	

Reviewer: soparaky, 21-Dec-2018 09:56:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: VOCDUP_20181212 | Lab Sample ID: 680-162184-15

Matrix: Water | Lab File ID: O2Lo2078.D

Analysis Method: 8260B | Date Collected: 12/12/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 18:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U *	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: VOCDUP_20181212 | Lab Sample ID: 680-162184-15

Matrix: Water | Lab File ID: O2Lo2078.D

Analysis Method: 8260B | Date Collected: 12/12/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 18:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		73-131
2037-26-5	Toluene-d8 (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-122
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2078.D				
Lims ID:	680-162184-A-15				
Client ID:	VOCDUP_20181212				
Sample Type:	Client				
Inject. Date:	20-Dec-2018 18:35:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	680-0052745-025				
Operator ID:	EA	Instrument ID:	CMSO2		
Method:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m				
Limit Group:	8260B				
Last Update:	21-Dec-2018 09:57:18	Calib Date:	12-Nov-2018 15:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D				
Column 1 :	Rtx-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0321				

First Level Reviewer: soparaky Date: 21-Dec-2018 09:57:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.270	3.269	0.001	97	154708	49.7	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.513	3.511	0.002	97	208676	47.8	
* 55 Fluorobenzene	96	3.745	3.743	0.002	98	569656	50.0	
$ 69 Toluene-d8 (Surr)	98	4.915	4.914	0.001	99	522755	47.6	
* 81 Chlorobenzene-d5	82	6.044	6.043	0.001	88	225499	50.0	
$ 92 4-Bromofluorobenzene (Surr	95	6.994	7.003	-0.009	91	205997	46.2	
* 109 1,4-Dichlorobenzene-d4	152	7.953	7.952	0.001	97	208996	50.0	

Reagents:

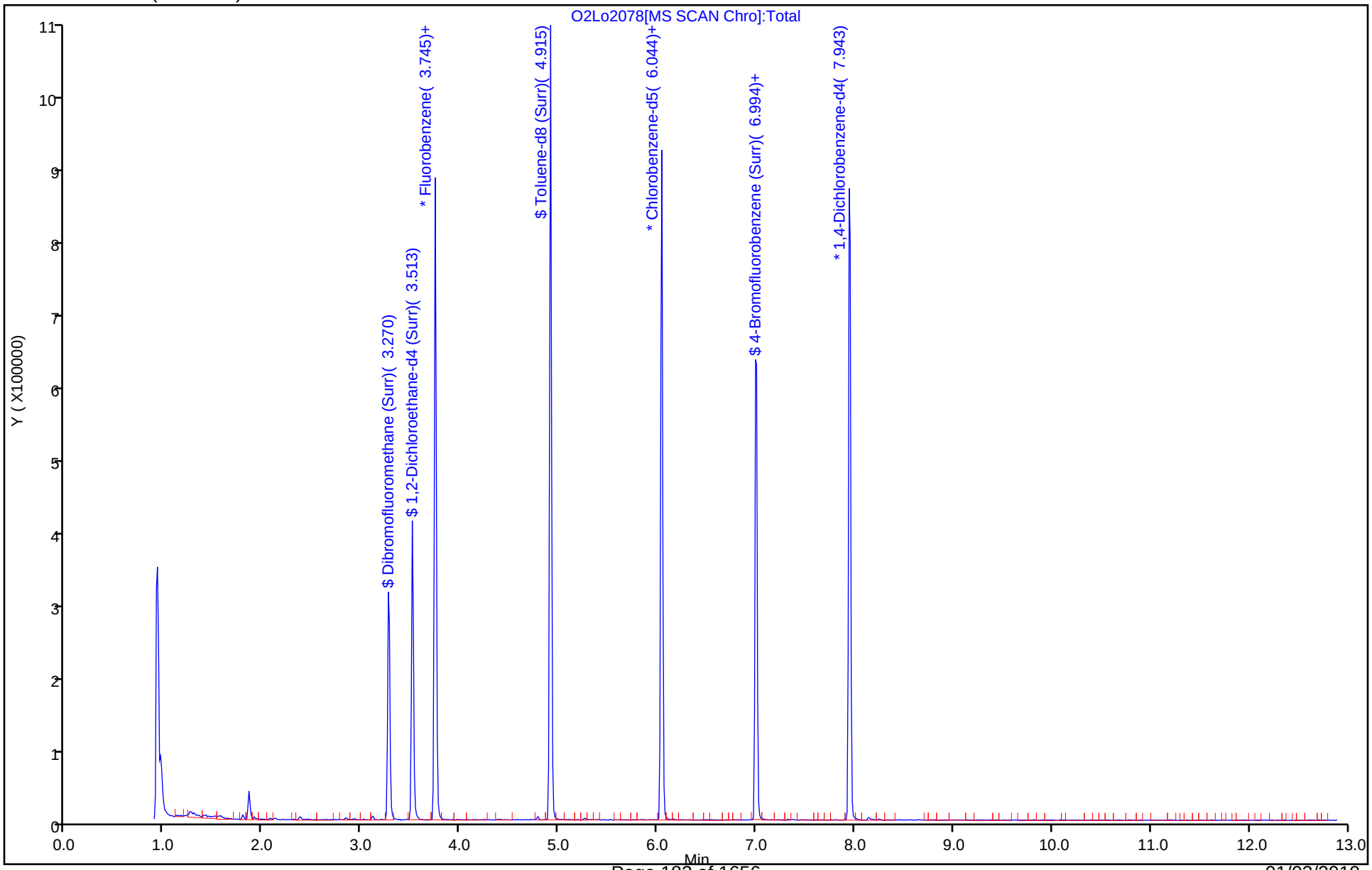
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-Dec-2018 09:57:19 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2078.D				
Injection Date:	20-Dec-2018 18:35:30	Instrument ID:	CMSO2	Operator ID:	EA
Lims ID:	680-162184-A-15	Lab Sample ID:	680-162184-15	Worklist Smp#:	25
Client ID:	VOCDUP_20181212				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	2014_MSO2	Limit Group:	8260B		

Column: Rtx-624 (0.18 mm)



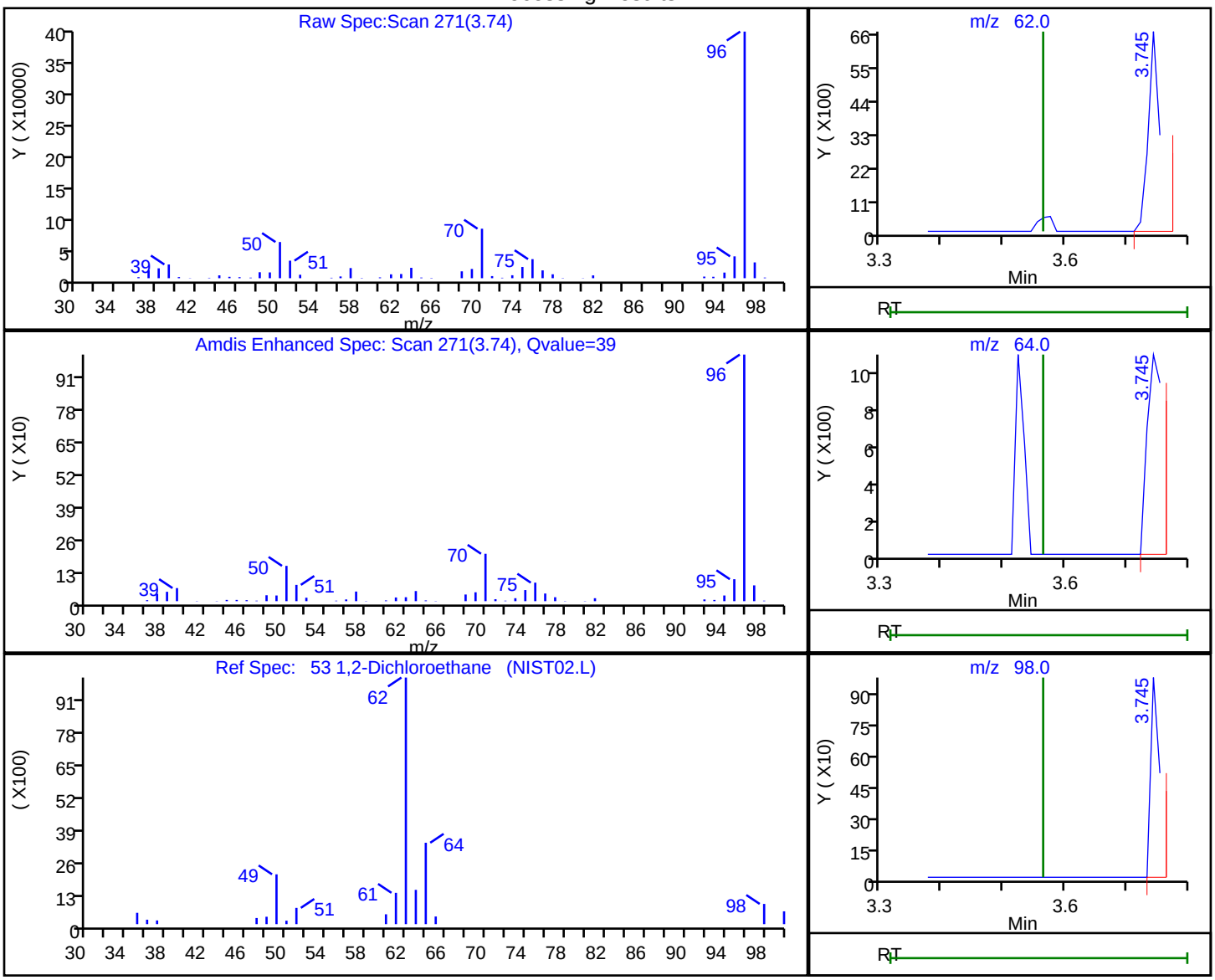
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2078.D				
Injection Date:	20-Dec-2018 18:35:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-15	Lab Sample ID:	680-162184-15		
Client ID:	VOCDUP_20181212				
Operator ID:	EA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

53 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.74	62.00	8426	1.614339
3.74	64.00	1577	
3.74	98.00	944	

Reviewer: soparaky, 21-Dec-2018 09:56:54

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

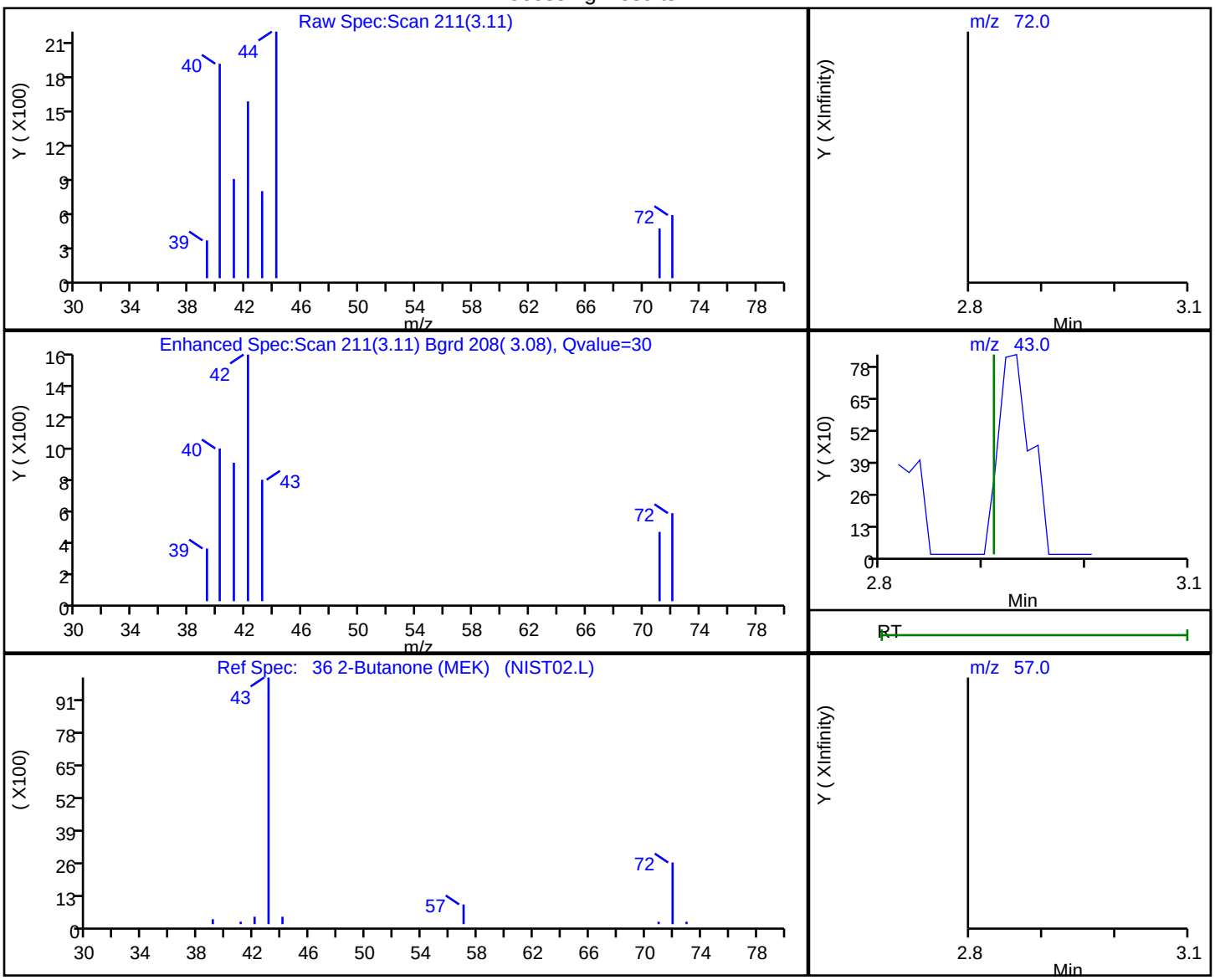
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2078.D				
Injection Date:	20-Dec-2018 18:35:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-15	Lab Sample ID:	680-162184-15		
Client ID:	VOCDUP_20181212				
Operator ID:	EA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.11	72.00	578	1.003853
3.11	43.00	1031	
2.91	57.00	0	

Reviewer: soparaky, 21-Dec-2018 09:56:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

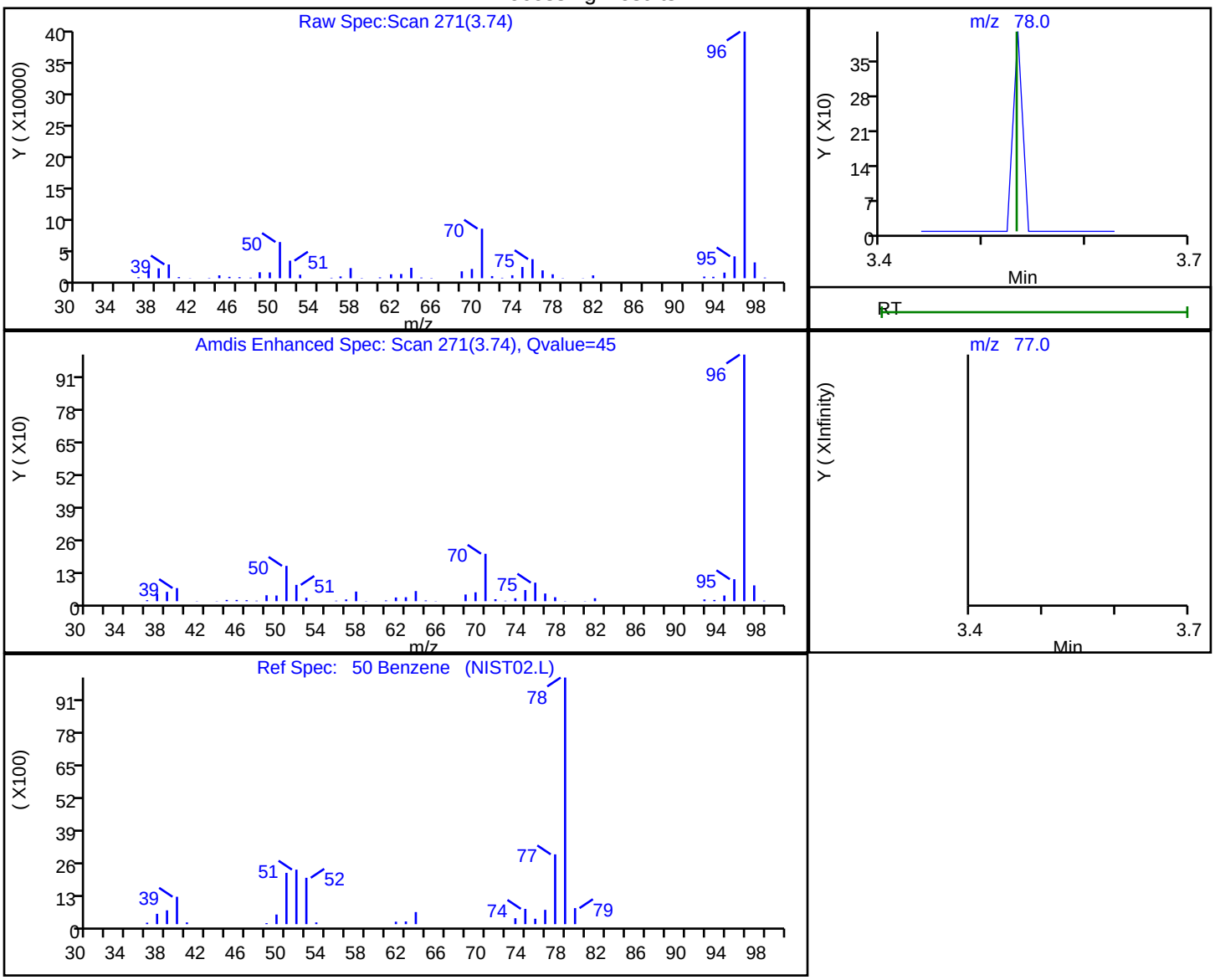
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2078.D				
Injection Date:	20-Dec-2018 18:35:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-15	Lab Sample ID:	680-162184-15		
Client ID:	VOCDUP_20181212				
Operator ID:	EA	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

50 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.74	78.00	489	0.039943
3.74	77.00	9432	

Reviewer: soparaky, 21-Dec-2018 09:56:56

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 680-162184-17

Matrix: Water | Lab File ID: O2Lo2062.D

Analysis Method: 8260B | Date Collected: 12/12/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 12:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U *	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 680-162184-17

Matrix: Water | Lab File ID: O2Lo2062.D

Analysis Method: 8260B | Date Collected: 12/12/2018 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 12:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		73-131
2037-26-5	Toluene-d8 (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-122
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2062.D				
Lims ID:	680-162184-A-17				
Client ID:	TRIP BLANK				
Sample Type:	Client				
Inject. Date:	20-Dec-2018 12:17:30	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Sample Info:	680-0052745-009				
Operator ID:	EA	Instrument ID:	CMSO2		
Method:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m				
Limit Group:	8260B				
Last Update:	21-Dec-2018 09:48:36	Calib Date:	12-Nov-2018 15:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D				
Column 1 :	Rtx-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0321				

First Level Reviewer: manniona Date: 20-Dec-2018 14:46:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.270	3.269	0.001	97	186566	50.0	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.513	3.511	0.002	98	255094	48.7	
* 55 Fluorobenzene	96	3.745	3.743	0.002	98	683374	50.0	
$ 69 Toluene-d8 (Surr)	98	4.916	4.914	0.002	99	619835	47.0	
* 81 Chlorobenzene-d5	82	6.045	6.043	0.002	88	267756	50.0	
$ 92 4-Bromofluorobenzene (Surr	95	6.994	7.003	-0.009	93	246817	46.4	
* 109 1,4-Dichlorobenzene-d4	152	7.954	7.952	0.002	97	249245	50.0	

Reagents:

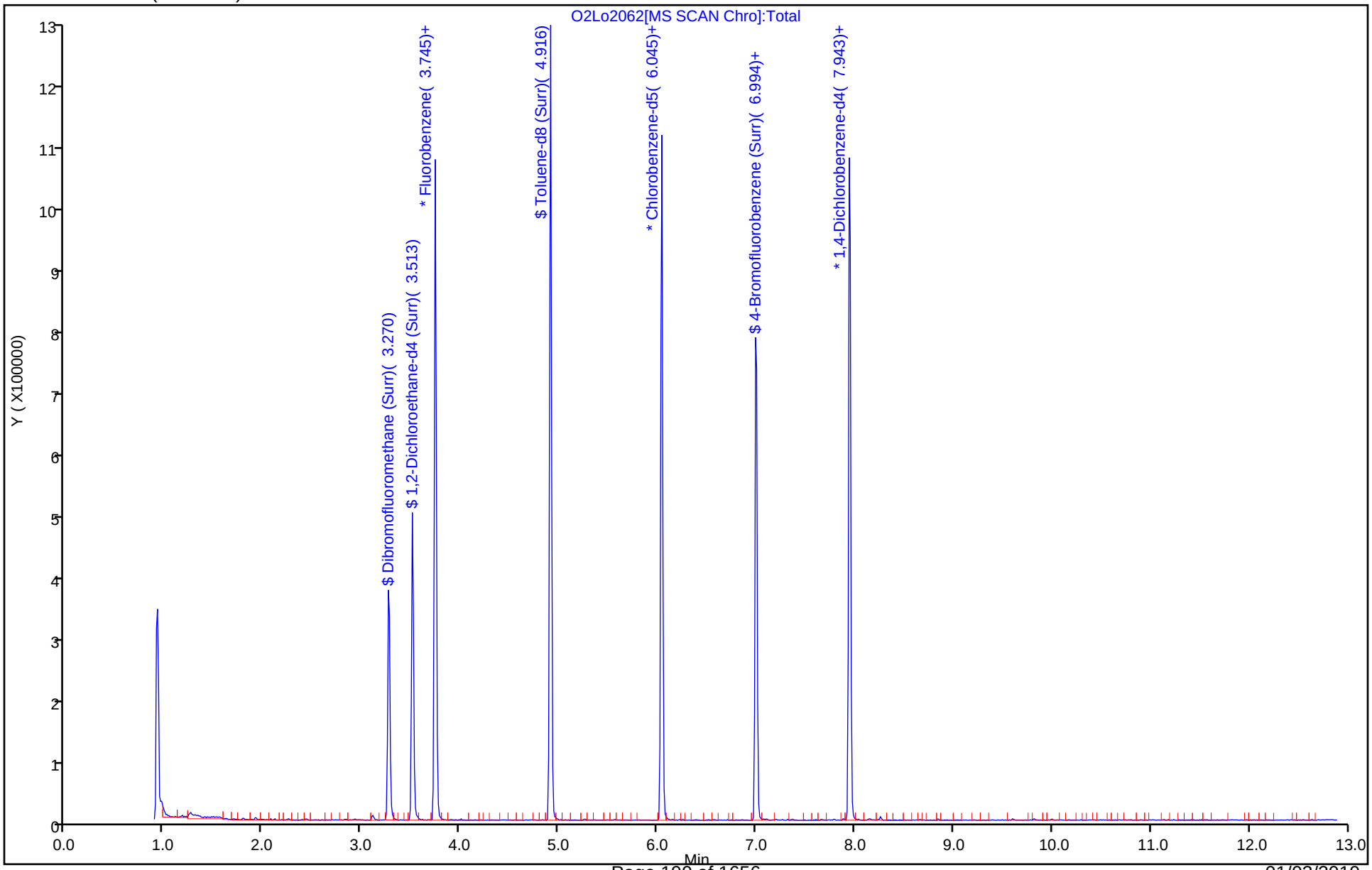
DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-Dec-2018 09:50:54 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2062.D				
Injection Date:	20-Dec-2018 12:17:30	Instrument ID:	CMSO2	Operator ID:	EA
Lims ID:	680-162184-A-17	Lab Sample ID:	680-162184-17	Worklist Smp#:	9
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	2014_MSO2	Limit Group:	8260B		

Column: Rtx-624 (0.18 mm)



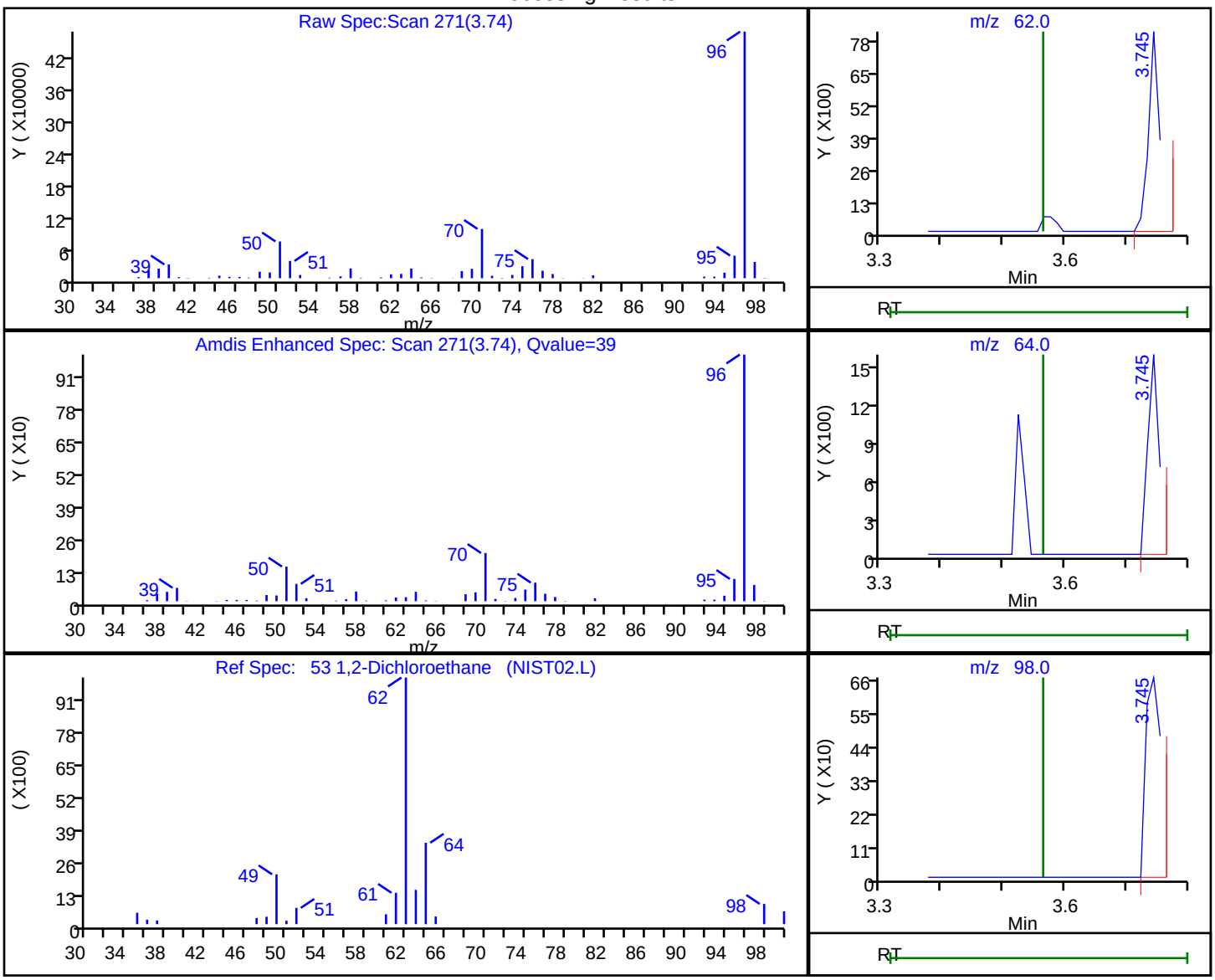
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2062.D				
Injection Date:	20-Dec-2018 12:17:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-17	Lab Sample ID:	680-162184-17		
Client ID:	TRIP BLANK				
Operator ID:	EA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

53 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.74	62.00	10218	1.631900
3.74	64.00	1904	
3.74	98.00	1086	

Reviewer: manniona, 20-Dec-2018 14:45:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

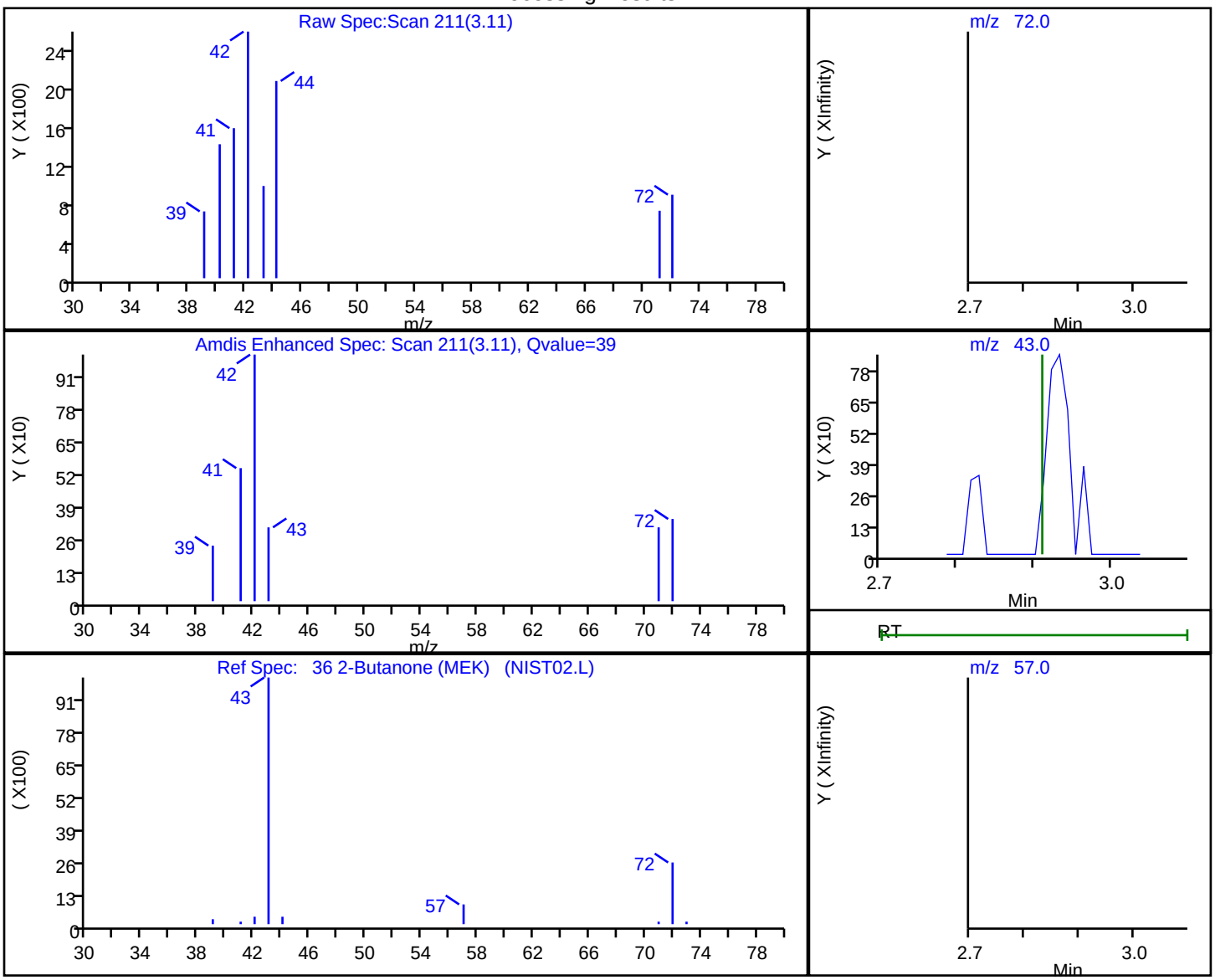
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2062.D				
Injection Date:	20-Dec-2018 12:17:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-17	Lab Sample ID:	680-162184-17		
Client ID:	TRIP BLANK				
Operator ID:	EA	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.11	72.00	1126	1.630178
3.11	43.00	1283	
2.91	57.00	0	

Reviewer: manniona, 20-Dec-2018 14:45:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-552203/5	AAL1804.D
Level 2	IC 680-552203/6	AAL1805.D
Level 3	IC 680-552203/7	AAL1806.D
Level 4	IC 680-552203/8	AAL1807.D
Level 5	IC 680-552203/9	AAL1808.D
Level 6	ICIS 680-552203/10	AAL1809.D
Level 7	IC 680-552203/11	AAL1810.D
Level 8	IC 680-552203/12	AAL1811.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3179 0.2958	0.3238 0.3052	0.3129 0.2904	0.3099	0.3176	Ave		0.3092				3.7		15.0			
Vinyl chloride	0.2762 0.2876	0.3066 0.2902	0.2936 0.2907	0.3075	0.3034	Ave		0.2945				3.7		15.0			
Chloromethane	0.3796 0.3902	0.4312 0.3846	0.4017 0.3852	0.4205	0.4125	Ave		0.4007			0.1000	4.7		15.0			
1,3-Butadiene	0.2567 0.2606	0.2719 0.2671	0.2686 0.2648	0.2774	0.2851	Ave		0.2690				3.4		15.0			
Bromomethane	0.2139 0.1888	0.2288 0.1734	0.2130 +++++	0.2107	0.2028	Ave		0.2045				8.9		15.0			
Chloroethane	0.1757 0.1636	0.1751 0.1483	0.1732 +++++	0.1850	0.1735	Ave		0.1706				6.8		15.0			
Dichlorofluoromethane	0.3717 0.3740	0.3883 0.3639	0.3871 0.3288	0.3970	0.3883	Ave		0.3749				5.7		15.0			
Trichlorofluoromethane	0.3114 0.3214	0.3397 0.3265	0.3432 0.3073	0.3415	0.3405	Ave		0.3289				4.4		15.0			
Ethyl ether	0.1731 0.2102	0.1654 0.2149	0.1849 0.2100	0.1863	0.1908	Ave		0.1919				9.5		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2063 0.2320	0.2080 0.2460	0.2231 0.2297	0.2182	0.2406	Ave		0.2255				6.4		15.0			
Acrolein	0.0635 0.0654	0.0585 0.0513	0.0636 0.0644	0.0627	0.0641	Ave		0.0617				7.6		15.0			
1,1-Dichloroethene	0.2361 0.2456	0.2517 0.2468	0.2484 0.2417	0.2454	0.2572	Ave		0.2466				2.6		15.0			
Acetone	0.0253 0.0222	0.0243 0.0218	0.0206 0.0217	0.0219	0.0212	Ave		0.0224				7.1		15.0			
Iodomethane	0.4434 0.4371	0.4282 0.4378	0.4110 0.4372	0.4332	0.4336	Ave		0.4327				2.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7716 0.7426	0.8107 0.7499	0.7674 0.7587	0.7898	0.7735	Ave		0.7705				2.8		15.0			
Allyl chloride	0.1468 0.1689	0.1655 0.1717	0.1633 0.1584	0.1716	0.1709	Ave		0.1646				5.2		15.0			
Methyl acetate	0.1337 0.1471	0.1347 0.1528	0.1403 0.1539	0.1460	0.1421	Ave		0.1438				5.2		15.0			
Methylene Chloride	0.3904 0.2735	0.3463 0.2721	0.2950 0.2669	0.2922	0.2793	Ave		0.3020				14.5		15.0			
tert-Butyl alcohol	0.0197 0.0246	0.0212 0.0235	0.0227 0.0220	0.0233	0.0234	Ave		0.0225				6.8		15.0			
Methyl tert-butyl ether	0.6629 0.6814	0.6290 0.7091	0.6606 0.7091	0.6559	0.6734	Ave		0.6727				4.0		15.0			
trans-1,2-Dichloroethene	0.2624 0.2848	0.2474 0.2826	0.2740 0.2804	0.2785	0.2870	Ave		0.2746				4.9		15.0			
Acrylonitrile	0.0797 0.0949	0.0862 0.0935	0.0859 0.0922	0.0916	0.0929	Ave		0.0896				5.8		15.0			
Hexane	0.2755 0.3297	0.2589 0.3608	0.2740 0.3408	0.2949	0.3276	Ave		0.3078				12.0		15.0			
1,1-Dichloroethane	0.3978 0.4300	0.4389 0.4173	0.4257 0.4053	0.4435	0.4332	Ave		0.4240			0.1000	3.8		15.0			
Vinyl acetate	0.3802 0.4229	0.3498 0.4402	0.3785 0.4285	0.3966	0.4126	Ave		0.4012				7.6		15.0			
2,2-Dichloropropane	0.3339 0.3490	0.3275 0.3529	0.3422 0.3403	0.3486	0.3529	Ave		0.3434				2.7		15.0			
cis-1,2-Dichloroethene	0.2792 0.3174	0.3003 0.3115	0.3033 0.3073	0.3181	0.3159	Ave		0.3066				4.2		15.0			
Methyl Ethyl Ketone	0.0956 0.0983	0.0945 0.0971	0.0962 0.0916	0.1020	0.1009	Ave		0.0970				3.5		15.0			
Bromochloromethane	0.1729 0.2150	0.1948 0.2093	0.1904 0.1727	0.1955	0.1919	Ave		0.1928				7.8		15.0			
Tetrahydrofuran	0.0805 0.0659	0.0722 0.0647	0.0672 0.0627	0.0686	0.0676	Ave		0.0687				8.0		15.0			
Chloroform	0.4269 0.4284	0.4193 0.4206	0.4238 0.4108	0.4362	0.4309	Ave		0.4246				1.8		15.0			
Cyclohexane	0.3699 0.4157	0.3829 0.4366	0.3870 0.4164	0.3952	0.4240	Ave		0.4035				5.7		15.0			
1,1,1-Trichloroethane	0.3453 0.3615	0.3379 0.3742	0.3432 0.3676	0.3553	0.3676	Ave		0.3566				3.7		15.0			
Carbon tetrachloride	0.2692 0.3059	0.2771 0.3178	0.2841 0.3182	0.2908	0.3084	Ave		0.2964				6.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.2966 0.3334	0.3015 0.3470	0.3121 0.3437	0.3166	0.3326	Ave		0.3229				5.9		15.0			
Isobutanol	0.0067 0.0098	0.0073 0.0099	0.0075 0.0099	0.0090	0.0094	Lin2	-0.082	0.0095							0.9940		0.9900
Benzene	0.9658 1.0780	1.0031 1.0875	1.0292 1.0784	1.0617	1.0719	Ave		1.0470				4.2		15.0			
1,2-Dichloroethane	0.2738 0.2885	0.2899 0.2823	0.2824 0.2746	0.2923	0.2858	Ave		0.2837				2.4		15.0			
n-Heptane	0.2717 0.2662	0.2517 0.2819	0.2492 0.2713	0.2484	0.2946	Ave		0.2669				6.2		15.0			
Trichloroethene	0.2755 0.3037	0.2781 0.3092	0.2818 0.3114	0.2958	0.3055	Ave		0.2951				5.0		15.0			
Methylcyclohexane	0.3794 0.4463	0.3809 0.4798	0.4032 0.4669	0.4132	0.4507	Ave		0.4276				9.0		15.0			
1,2-Dichloropropane	0.2248 0.2659	0.2499 0.2633	0.2512 0.2600	0.2570	0.2586	Ave		0.2538				5.1		15.0			
1,4-Dioxane	+++++ 0.0032	0.0020 0.0033	0.0026 0.0033	0.0031	0.0031	Qua2	-0.051	0.0032	0						0.9990		0.9900
Dibromomethane	0.1532 0.1644	0.1524 0.1629	0.1587 0.1610	0.1638	0.1639	Ave		0.1600				3.0		15.0			
Bromodichloromethane	0.2793 0.3265	0.3143 0.3270	0.3011 0.3260	0.3146	0.3165	Ave		0.3132				5.2		15.0			
2-Chloroethyl vinyl ether	0.0685 0.1294	0.0935 0.1249	0.1026 0.1126	0.1193	0.1207	LinF		0.1158							0.9960		0.9900
cis-1,3-Dichloropropene	0.3592 0.4464	0.4072 0.4427	0.4128 0.4383	0.4332	0.4360	Ave		0.4220				6.9		15.0			
methyl isobutyl ketone	0.1510 0.2215	0.1887 0.2163	0.1946 0.2000	0.2123	0.2140	Ave		0.1998				11.4		15.0			
Toluene	0.6273 0.6997	0.6772 0.7061	0.6748 0.7008	0.7014	0.6974	Ave		0.6856				3.8		15.0			
trans-1,3-Dichloropropene	0.3717 0.3856	0.3802 0.3844	0.3850 0.3794	0.3898	0.3746	Ave		0.3813				1.6		15.0			
Ethyl methacrylate	0.2154 0.3475	0.2525 0.3471	0.2875 0.3329	0.3136	0.3251	Lin	0.0075	0.3361							0.9990		0.9900
1,1,2-Trichloroethane	0.1787 0.2192	0.2109 0.2157	0.2089 0.2126	0.2171	0.2156	Ave		0.2098				6.2		15.0			
Tetrachloroethene	0.2377 0.2628	0.2488 0.2687	0.2522 0.2683	0.2582	0.2596	Ave		0.2570				4.1		15.0			
1,3-Dichloropropane	0.3539 0.4270	0.3993 0.4206	0.4135 0.4114	0.4261	0.4162	Ave		0.4085				5.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	+++++ 0.1488	0.0855 0.1480	0.1108 0.1441	0.1330	0.1397	Qua2	-0.636	0.1456	0.0000017						0.9980		0.9900
Dibromochloromethane	0.2379 0.2826	0.2588 0.2864	0.2574 0.2914	0.2674	0.2673	Ave		0.2686				6.6		15.0			
1,2-Dibromoethane	0.2317 0.2765	0.2511 0.2756	0.2635 0.2734	0.2729	0.2689	Ave		0.2642				5.9		15.0			
Chlorobenzene	2.0881 2.1390	2.0998 2.1641	2.0189 2.1315	2.1277	2.1293	Ave		2.1123			0.3000	2.1		15.0			
Ethylbenzene	3.0542 3.3200	3.1151 3.3929	3.1410 3.3202	3.2321	3.3063	Ave		3.2352				3.7		15.0			
1,1,1,2-Tetrachloroethane	0.5896 0.7304	0.6642 0.7430	0.6498 0.7468	0.6752	0.6918	Ave		0.6863				7.8		15.0			
m-Xylene & p-Xylene	1.2936 1.4345	1.3710 1.4682	1.3218 1.4520	1.4013	1.4307	Ave		1.3966				4.5		15.0			
o-Xylene	1.2216 1.4099	1.2353 1.4400	1.2905 1.4314	1.3493	1.3846	Ave		1.3453				6.4		15.0			
Styrene	1.7935 2.3182	1.9802 2.3671	2.0107 2.3719	2.1764	2.2285	Ave		2.1558				9.7		15.0			
Bromoform	0.4217 0.5361	0.4506 0.5707	0.4543 0.6021	0.4856	0.4909	Ave		0.5015			0.1000	12.5		15.0			
Isopropylbenzene	3.0330 3.4489	3.0343 3.5649	3.1186 3.5513	3.3244	3.4328	Ave		3.3135				6.7		15.0			
Bromobenzene	0.8690 1.0561	0.9636 1.0716	0.9613 1.0811	1.0152	1.0353	Ave		1.0066				7.1		15.0			
1,1,2,2-Tetrachloroethane	0.7726 0.9431	0.8445 0.9320	0.8477 0.9322	0.8882	0.9170	Ave		0.8847			0.3000	6.7		15.0			
N-Propylbenzene	0.8901 1.0576	0.9600 1.1087	0.9535 1.1264	1.0311	1.0730	Ave		1.0251				8.1		15.0			
1,2,3-Trichloropropane	0.2325 0.2989	0.2670 0.3075	0.2667 0.3075	0.2871	0.2993	Ave		0.2833				9.3		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2307	0.1381 0.2398	0.1715 0.2455	0.2031	0.2040	LinF		0.2433							0.9990		0.9900
2-Chlorotoluene	0.8262 0.9357	0.8766 0.9470	0.8646 0.9600	0.9441	0.9302	Ave		0.9105				5.3		15.0			
1,3,5-Trimethylbenzene	2.5629 3.0001	2.6856 3.0555	2.6858 3.1074	2.8939	2.9629	Ave		2.8693				7.0		15.0			
4-Chlorotoluene	0.8011 0.9992	0.9033 1.0220	0.9229 1.0316	0.9853	0.9958	Ave		0.9577				8.1		15.0			
tert-Butylbenzene	2.4604 2.6472	2.4191 2.7692	2.4193 2.8017	2.5438	2.6358	Ave		2.5871				5.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.5629 3.1202	2.6729 3.1940	2.7829 3.2146	2.9918	3.0528	Ave		2.9490				8.4		15.0			
sec-Butylbenzene	3.4152 3.8177	3.5275 3.9722	3.4885 4.0339	3.6490	3.8415	Ave		3.7182				6.2		15.0			
p-Isopropyltoluene	2.3918 2.6462	2.4243 2.7472	2.4943 2.7284	2.5768	2.6999	Ave		2.5886				5.4		15.0			
1,3-Dichlorobenzene	1.4961 1.5353	1.4615 1.5563	1.4585 1.5542	1.5059	1.5505	Ave		1.5148				2.7		15.0			
1,4-Dichlorobenzene	1.6794 1.5895	1.6396 1.6054	1.5394 1.5935	1.6157	1.6010	Ave		1.6079				2.5		15.0			
n-Butylbenzene	2.0256 2.1597	1.9815 2.2281	1.9446 2.2182	2.1056	2.1852	Ave		2.1061				5.2		15.0			
1,2-Dichlorobenzene	1.3885 1.4625	1.3582 1.4923	1.3200 1.4895	1.4262	1.4640	Ave		1.4251				4.5		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1437	+++++ 0.1624	0.1018 0.1687	0.1173	0.1263	LinF		0.1659							0.9970		0.9900
1,2,4-Trichlorobenzene	+++++ 0.6973	0.4186 0.7800	0.4802 0.7544	0.5486	0.6071	LinF		0.7549							0.9980		0.9900
Hexachlorobutadiene	0.4032 0.3885	0.3619 0.4223	0.3505 0.4198	0.3619	0.3863	Ave		0.3868				7.0		15.0			
Naphthalene	+++++ 1.0642	0.4276 1.2821	0.4881 1.2762	0.6022	0.7840	QuaF		1.1256	0.0007916						0.9970		0.9900
1,2,3-Trichlorobenzene	+++++ 0.3035	0.0898 0.3707	0.1304 0.3568	0.1669	0.2215	QuaF		0.3312	0.0001408						0.9960		0.9900
Dibromofluoromethane (Surr)	0.2425 0.2515	0.2399 0.2474	0.2405 0.2456	0.2530	0.2464	Ave		0.2458				1.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2318 0.2410	0.2357 0.2349	0.2410 0.2276	0.2446	0.2379	Ave		0.2368				2.3		15.0			
Toluene-d8 (Surr)	1.0573 0.9871	0.9747 0.9941	0.9755 0.9851	0.9983	0.9940	Ave		0.9958				2.6		15.0			
4-Bromofluorobenzene (Surr)	+++++ 0.7503	0.8499 0.7472	0.7461 0.7383	0.7749	0.7639	Ave		0.7672				5.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-552203/5	AAL1804.D
Level 2	IC 680-552203/6	AAL1805.D
Level 3	IC 680-552203/7	AAL1806.D
Level 4	IC 680-552203/8	AAL1807.D
Level 5	IC 680-552203/9	AAL1808.D
Level 6	ICIS 680-552203/10	AAL1809.D
Level 7	IC 680-552203/11	AAL1810.D
Level 8	IC 680-552203/12	AAL1811.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	3212 154527	6238 325175	15358 634474	31092	65799	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	2791 150229	5908 309205	14412 634947	30849	62860	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	3836 203828	8309 409792	19719 841383	42181	85451	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Butadiene	FB	Ave	2594 136131	5238 284615	13184 578482	27826	59068	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Ave	2161 98617	4409 184699	10457 +++++	21137	42019	1.00 50.0	2.00 100	5.00 +++++	10.0	20.0
Chloroethane	FB	Ave	1775 85462	3373 158014	8504 +++++	18560	35933	1.00 50.0	2.00 100	5.00 +++++	10.0	20.0
Dichlorofluoromethane	FB	Ave	3756 195355	7481 387645	19000 718336	39825	80446	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	3147 167856	6546 347821	16849 671204	34255	70537	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl ether	FB	Ave	1749 109780	3186 228944	9075 458736	18694	39528	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	2085 121203	4007 262069	10954 501842	21895	49849	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrolein	FB	Ave	12839 683676	22540 1093535	62486 2814259	125880	265443	20.0 1000	40.0 2000	100 4000	200	400
1,1-Dichloroethene	FB	Ave	2386 128270	4849 262974	12192 527921	24618	53289	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Ave	1280 57905	2337 116107	5065 237272	10961	21937	5.00 250	10.0 500	25.0 1000	50.0	100
Iodomethane	FB	Ave	4480 228323	8251 466409	20175 955003	43459	89828	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	7797 387865	15620 798916	37669 1657370	79238	160242	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	1483 88201	3188 182904	8015 346091	17215	35400	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl acetate	FB	Ave	2703 153636	5190 325481	13776 672390	29292	58876	2.00 100	4.00 200	10.0 400	20.0	40.0
Methylene Chloride	FB	Ave	3945 142870	6673 289872	14481 583110	29315	57850	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butyl alcohol	FB	Ave	1992 128620	4079 250196	11142 480661	23379	48401	10.0 500	20.0 1000	50.0 2000	100	200
Methyl tert-butyl ether	FB	Ave	6699 355930	12119 755418	32429 1549048	65802	139510	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	2652 148743	4766 301087	13449 612504	27942	59449	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrylonitrile	FB	Ave	8049 495512	16616 996641	42152 2014334	91936	192394	10.0 500	20.0 1000	50.0 2000	100	200
Hexane	FB	Ave	2784 172214	4988 384390	13448 744567	29582	67868	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	4020 224577	8457 444610	20897 885290	44497	89751	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Ave	7684 441805	13479 938044	37157 1872131	79581	170944	2.00 100	4.00 200	10.0 400	20.0	40.0
2,2-Dichloropropane	FB	Ave	3374 182288	6311 375984	16800 743375	34976	73098	1.00 50.0	2.00 100	5.00 200	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	2821 165763	5787 331822	14889 671284	31912	65445	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl Ethyl Ketone	FB	Ave	4829 256761	9102 517353	23607 1000973	51141	104536	5.00 250	10.0 500	25.0 1000	50.0	100
Bromochloromethane	FB	Ave	1747 112324	3753 223026	9346 377155	19613	39764	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	1626 68843	2784 137926	6595 273955	13770	27994	2.00 100	4.00 200	10.0 400	20.0	40.0
Chloroform	FB	Ave	4314 223762	8079 448106	20806 897405	43764	89258	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Ave	3738 217145	7378 465105	18995 909535	39651	87843	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	3489 188817	6511 398649	16849 802901	35646	76152	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Ave	2720 159767	5340 338543	13944 695009	29178	63888	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Ave	2997 174168	5809 369735	15322 750706	31758	68899	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isobutanol	FB	Lin2	1697 127973	3507 264887	9223 540688	22557	48940	25.0 1250	50.0 2500	125 5000	250	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	9759 563090	19327 1158652	50524 2355776	106510	222052	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane	FB	Ave	2767 150686	5586 300749	13863 599796	29325	59198	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Heptane	FB	Ave	2745 139049	4849 300331	12233 592750	24919	61023	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichloroethene	FB	Ave	2784 158656	5359 329385	13835 680266	29676	63289	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methylcyclohexane	FB	Ave	3834 233103	7339 511223	19792 1019873	41454	93375	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	2272 138866	4815 280545	12331 567927	25787	53567	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Qua2	+++++ 33019	769 71077	2504 143987	6291	12688	+++++ 1000	40.0 2000	100 4000	200	400
Dibromomethane	FB	Ave	1548 85883	2937 173598	7789 351725	16433	33951	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromodichloromethane	FB	Ave	2822 170530	6056 348332	14782 712188	31566	65562	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	LinF	692 67605	1801 133041	5035 246076	11965	25009	1.00 50.0	2.00 100	5.00 200	10.0	20.0
cis-1,3-Dichloropropene	FB	Ave	3630 233162	7846 471664	20265 957441	43462	90315	1.00 50.0	2.00 100	5.00 200	10.0	20.0
methyl isobutyl ketone	FB	Ave	7627 578364	18178 1152286	47774 2184587	106476	221623	5.00 250	10.0 500	25.0 1000	50.0	100
Toluene	FB	Ave	6339 365462	13048 752265	33123 1530889	70364	144482	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	FB	Ave	3756 201393	7325 409519	18901 828828	39103	77600	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl methacrylate	FB	Lin	2177 181510	4866 369789	14115 727189	31461	67345	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	FB	Ave	1806 114509	4063 229854	10255 464315	21776	44671	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	FB	Ave	2402 137277	4793 286277	12382 585997	25903	53781	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	FB	Ave	3576 223036	7693 448066	20297 898651	42746	86224	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	FB	Qua2	+++++ 388624	8240 788561	27190 1573488	66698	144734	+++++ 250	10.0 500	25.0 1000	50.0	100
Dibromochloromethane	FB	Ave	2404 147620	4987 305090	12635 636561	26824	55366	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromoethane	FB	Ave	2341 144411	4839 293664	12933 597252	27378	55696	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	8497 428195	16883 868801	40695 1772321	86212	172915	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	12428 664598	25046 1362127	63315 2760721	130966	268494	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2399 146218	5340 298278	13099 620964	27359	56177	1.00 50.0	2.00 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	5264 287163	11023 589422	26644 1207356	56782	116179	1.00 50.0	2.00 100	5.00 200	10.0	20.0
o-Xylene	CBNZ d5	Ave	4971 282242	9932 578129	26014 1190164	54675	112442	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Styrene	CBNZ d5	Ave	7298 464067	15921 950326	40531 1972210	88187	180971	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBNZ d5	Ave	1716 107313	3623 229122	9157 500645	19678	39866	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	12342 690419	24397 1431191	62863 2952893	134705	278765	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	CBNZ d5	Ave	3536 211404	7748 430221	19378 898937	41134	84071	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	3144 188786	6790 374177	17087 775110	35988	74466	1.00 50.0	2.00 100	5.00 200	10.0	20.0
N-Propylbenzene	CBNZ d5	Ave	3622 211716	7719 445107	19219 936613	41781	87133	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	CBNZ d5	Ave	946 59825	2147 123451	5375 255657	11633	24309	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	CBNZ d5	LinF	+++++ 46187	1110 96258	3457 204147	8228	16565	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
2-Chlorotoluene	CBNZ d5	Ave	3362 187312	7048 380190	17428 798194	38253	75538	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	CBNZ d5	Ave	10429 600569	21593 1226679	54139 2583768	117259	240610	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Chlorotoluene	CBNZ d5	Ave	3260 200026	7263 410304	18603 857766	39923	80868	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butylbenzene	CBNZ d5	Ave	10012 529929	19450 1111760	48767 2329620	103074	214047	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	CBNZ d5	Ave	10429 624610	21491 1282293	56095 2672920	121227	247909	1.00 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butylbenzene	CBNZ d5	Ave	13897 764233	28362 1594702	70318 3354172	147856	311955	1.00 50.0	2.00 100	5.00 200	10.0	20.0
p-Isopropyltoluene	DCBd 4	Ave	11912 695248	23976 1457632	62156 3051934	130838	277806	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	7451 403378	14454 825765	36345 1738533	76464	159536	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 552203

SDG No.:

Instrument ID: CMSAA GC Column: DB-VRX (20m ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/18/2018 10:06 Calibration End Date: 12/18/2018 12:45 Calibration ID: 62345

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	8364 417623	16215 851818	38361 1782456	82036	164737	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	10088 567432	19597 1182232	48457 2481263	106911	224846	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	6915 384264	13432 791790	32893 1666154	72415	150642	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	LinF	+++++ 37743	+++++ 86182	2538 188695	5956	13000	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	LinF	+++++ 183194	4140 413876	11967 843823	27858	62469	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	2008 102077	3579 224059	8734 469557	18376	39745	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCBd 4	QuaF	+++++ 279607	4229 680271	12162 1427597	30575	80666	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	QuaF	+++++ 79732	888 196688	3249 399144	8472	22789	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	2450 131350	4623 263571	11806 536508	25382	51042	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	2342 125903	4541 250267	11829 497125	24537	49276	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	FB	Ave	10684 515582	18781 1059130	47886 2151817	100147	205912	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	+++++ 197137	8405 396482	18593 825854	39347	78607	+++++ 50.0	2.00 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin2 = Linear 1/conc^2 ISTD
LinF = Linear ISTD forced zero
Qua2 = Quadratic 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 18-Dec-2018 10:06:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-005
Operator ID: jk Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 13:56:11 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: kitchingsj Date: 18-Dec-2018 13:40:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.914	3.908	0.006	100	505244	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	83	203460	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	249015	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.446	3.446	0.000	54	2450	1.00	0.9862	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.713	3.712	0.001	94	2342	1.00	0.9788	
$ 6 Toluene-d8 (Surr)	98	5.068	5.062	0.006	99	10684	1.00	1.06	
$ 7 4-Bromofluorobenzene (Surr	95	7.164	7.153	0.011	95	6610	1.00	1.73	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	97	3212	1.00	1.03	a
10 Vinyl chloride	62	1.252	1.252	0.000	97	2791	1.00	0.9379	
12 Butadiene	54	1.258	1.257	0.001	92	2594	1.00	0.9542	
11 Chloromethane	50	1.258	1.257	0.001	54	3836	1.00	0.9474	
14 Bromomethane	96	1.437	1.432	0.005	97	2161	1.00	1.05	
15 Chloroethane	64	1.486	1.475	0.011	95	1775	1.00	1.03	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	91	3756	1.00	0.99	
18 Trichlorofluoromethane	101	1.590	1.589	0.001	99	3147	1.00	0.9468	
20 Ethyl ether	59	1.747	1.747	0.000	89	1749	1.00	0.9018	
22 1,1,2-Trichloro-1,2,2-trif	101	1.873	1.867	0.006	95	2085	1.00	0.9150	
23 Acrolein	56	1.884	1.878	0.006	95	12839	20.0	20.6	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	96	2386	1.00	0.9575	
25 Acetone	58	1.971	1.970	0.001	88	1280	5.00	5.66	
26 Iodomethane	142	2.036	2.036	0.000	94	4480	1.00	1.02	
27 Carbon disulfide	76	2.063	2.063	0.000	98	7797	1.00	1.00	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	93	1483	1.00	0.8915	
29 Methyl acetate	43	2.156	2.156	0.000	78	2703	2.00	1.86	
32 Methylene Chloride	84	2.254	2.259	-0.005	84	3945	1.00	1.29	
33 2-Methyl-2-propanol	59	2.292	2.281	0.011	97	1992	10.0	8.74	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	97	6699	1.00	0.9855	
36 trans-1,2-Dichloroethene	96	2.401	2.395	0.006	92	2652	1.00	0.9556	
37 Acrylonitrile	53	2.466	2.460	0.006	96	8049	10.0	8.89	
38 Hexane	57	2.520	2.520	0.000	89	2784	1.00	0.8952	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	98	4020	1.00	0.9383	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.727	2.722	0.005	98	7684	2.00	1.90	
47 2,2-Dichloropropane	77	3.097	3.097	0.000	91	3374	1.00	0.9723	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	98	2821	1.00	0.9105	
49 2-Butanone (MEK)	43	3.141	3.130	0.011	99	4829	5.00	4.93	
51 Chlorobromomethane	49	3.293	3.293	0.000	76	1747	1.00	0.8966	
50 Tetrahydrofuran	42	3.304	3.293	0.011	86	1626	2.00	2.34	
52 Chloroform	83	3.332	3.331	0.001	98	4314	1.00	1.01	
54 Cyclohexane	56	3.429	3.429	0.000	85	3738	1.00	0.9169	
55 1,1,1-Trichloroethane	97	3.435	3.440	-0.005	94	3489	1.00	0.9683	
57 Carbon tetrachloride	117	3.533	3.527	0.006	96	2720	1.00	0.9081	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	94	2997	1.00	0.9184	
60 Isobutyl alcohol	43	3.674	3.647	0.027	89	1697	25.0	26.4	M
61 Benzene	78	3.702	3.702	0.000	95	9759	1.00	0.9225	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	94	2767	1.00	0.9652	
63 n-Heptane	43	3.816	3.816	0.000	80	2745	1.00	1.02	
65 Trichloroethene	132	4.170	4.164	0.006	91	2784	1.00	0.9335	
66 Methylcyclohexane	83	4.251	4.251	0.000	93	3834	1.00	0.8874	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	93	2272	1.00	0.8858	
69 1,4-Dioxane	88	4.464	4.447	0.017	33	238	20.0	23.0	a
68 Dibromomethane	93	4.458	4.458	0.000	87	1548	1.00	0.9572	
70 Dichlorobromomethane	83	4.562	4.562	0.000	96	2822	1.00	0.8918	
72 2-Chloroethyl vinyl ether	63	4.801	4.790	0.011	76	692	1.00	0.5913	a
73 cis-1,3-Dichloropropene	75	4.905	4.899	0.006	85	3630	1.00	0.8513	
75 4-Methyl-2-pentanone (MIBK	43	5.019	5.008	0.011	94	7627	5.00	3.78	
76 Toluene	92	5.117	5.117	0.000	93	6339	1.00	0.9150	
77 trans-1,3-Dichloropropene	75	5.346	5.340	0.006	51	3756	1.00	0.9747	
78 Ethyl methacrylate	69	5.373	5.356	0.017	77	2177	1.00	0.6186	a
79 1,1,2-Trichloroethane	83	5.482	5.476	0.006	97	1806	1.00	0.8517	
80 Tetrachloroethene	164	5.509	5.509	0.000	89	2402	1.00	0.9248	
81 1,3-Dichloropropane	76	5.618	5.612	0.006	90	3576	1.00	0.8663	
82 2-Hexanone	43	5.683	5.650	0.033	90	2519	5.00	6.08	a
85 Chlorodibromomethane	129	5.765	5.759	0.006	96	2404	1.00	0.8856	
86 Ethylene Dibromide	107	5.868	5.863	0.005	93	2341	1.00	0.8769	
88 Chlorobenzene	112	6.227	6.227	0.000	97	8497	1.00	0.9886	
89 Ethylbenzene	91	6.287	6.287	0.000	97	12428	1.00	0.9440	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.293	0.005	88	2399	1.00	0.8590	a
92 m-Xylene & p-Xylene	106	6.385	6.380	0.005	97	5264	1.00	0.9262	
95 o-Xylene	106	6.707	6.701	0.006	95	4971	1.00	0.9080	
96 Styrene	104	6.739	6.728	0.011	97	7298	1.00	0.8319	
97 Bromoform	173	6.908	6.897	0.011	91	1716	1.00	0.8409	
98 Isopropylbenzene	105	6.995	6.989	0.006	94	12342	1.00	0.9153	
100 Bromobenzene	156	7.278	7.273	0.006	91	3536	1.00	0.8632	
101 1,1,2,2-Tetrachloroethane	83	7.305	7.300	0.005	98	3144	1.00	0.8734	
102 N-Propylbenzene	120	7.333	7.321	0.012	100	3622	1.00	0.8683	
103 1,2,3-Trichloropropane	110	7.343	7.338	0.005	92	946	1.00	0.8206	
104 trans-1,4-Dichloro-2-buten	53	7.387	7.354	0.033	1	312	1.00	0.3151	
105 2-Chlorotoluene	126	7.425	7.419	0.006	96	3362	1.00	0.9074	
106 1,3,5-Trimethylbenzene	105	7.480	7.479	0.001	94	10429	1.00	0.8932	
107 4-Chlorotoluene	126	7.523	7.512	0.011	94	3260	1.00	0.8366	
108 tert-Butylbenzene	119	7.735	7.730	0.005	97	10012	1.00	0.9510	
109 1,2,4-Trimethylbenzene	105	7.790	7.784	0.006	94	10429	1.00	0.8691	
110 sec-Butylbenzene	105	7.915	7.915	0.000	98	13897	1.00	0.9185	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.040	8.035	0.005	97	11912	1.00	0.9240	
111 1,3-Dichlorobenzene	146	8.046	8.040	0.006	97	7451	1.00	0.9877	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	91	8364	1.00	1.04	
115 n-Butylbenzene	91	8.383	8.378	0.005	97	10088	1.00	0.9618	
116 1,2-Dichlorobenzene	146	8.438	8.432	0.006	98	6915	1.00	0.9743	
117 1,2-Dibromo-3-Chloropropan	157	9.118	9.102	0.016	1	224	1.00	0.2711	a
118 1,2,4-Trichlorobenzene	180	9.788	9.760	0.028	87	1886	1.00	0.5017	
119 Hexachlorobutadiene	225	9.858	9.858	0.000	95	2008	1.00	1.04	
120 Naphthalene	128	10.005	9.973	0.033	93	1963	1.00	0.3501	Ma
121 1,2,3-Trichlorobenzene	180	10.207	10.179	0.028	1	321	1.00	0.1946	Ma
S 127 1,3-Dichloropropene, Total	1				0		2.00	1.83	
S 126 Xylenes, Total	1				0		2.00	1.83	
S 125 1,2-Dichloroethene, Total	1				0		2.00	1.87	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_MMIX_01940	Amount Added:	0.10	Units: uL
VM_Acrolein_00193	Amount Added:	0.10	Units: uL

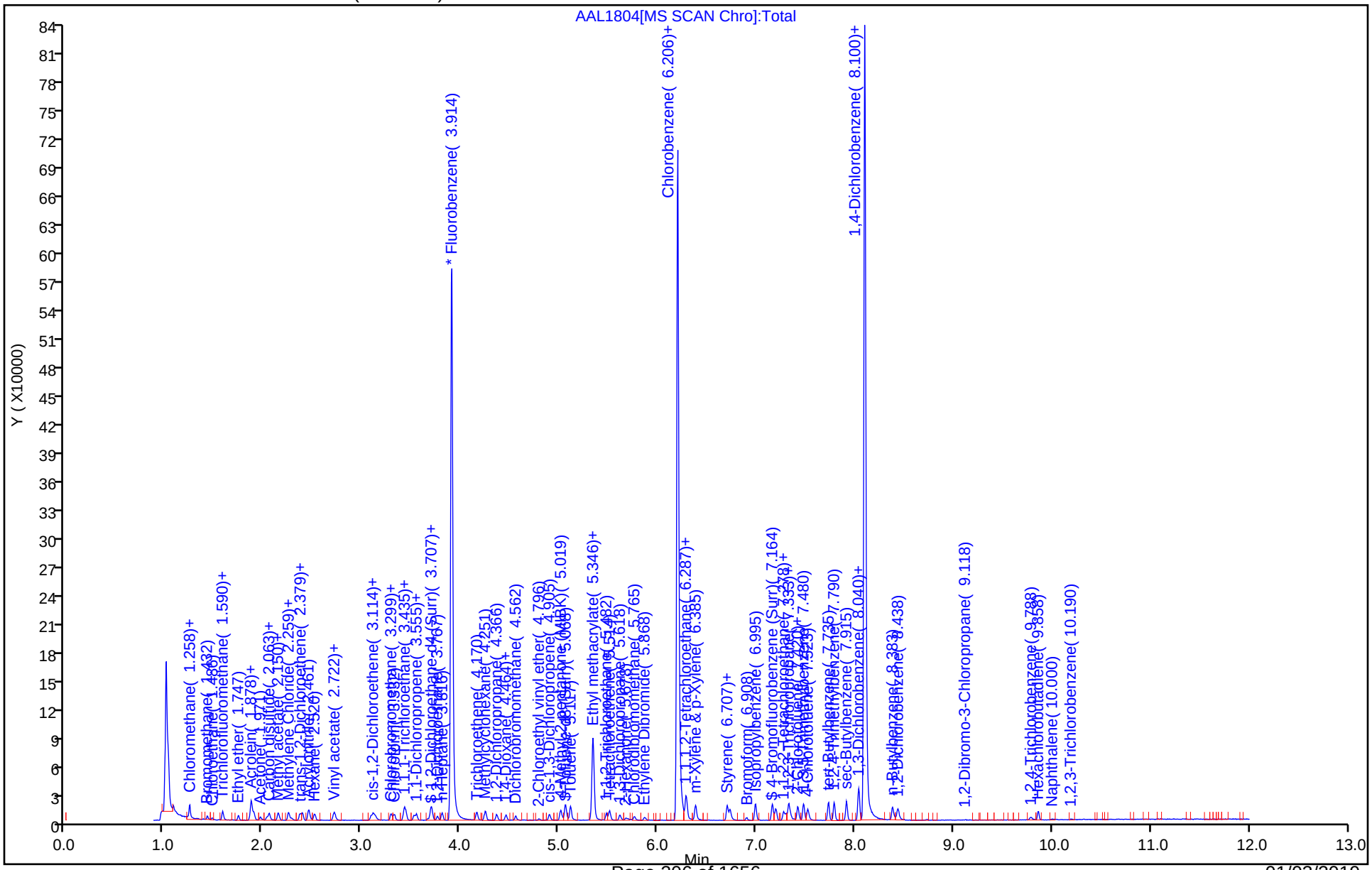
Report Date: 18-Dec-2018 13:56:13 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D

Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA	Operator ID:	jk
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260AQ	Limit Group:	8260B		

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

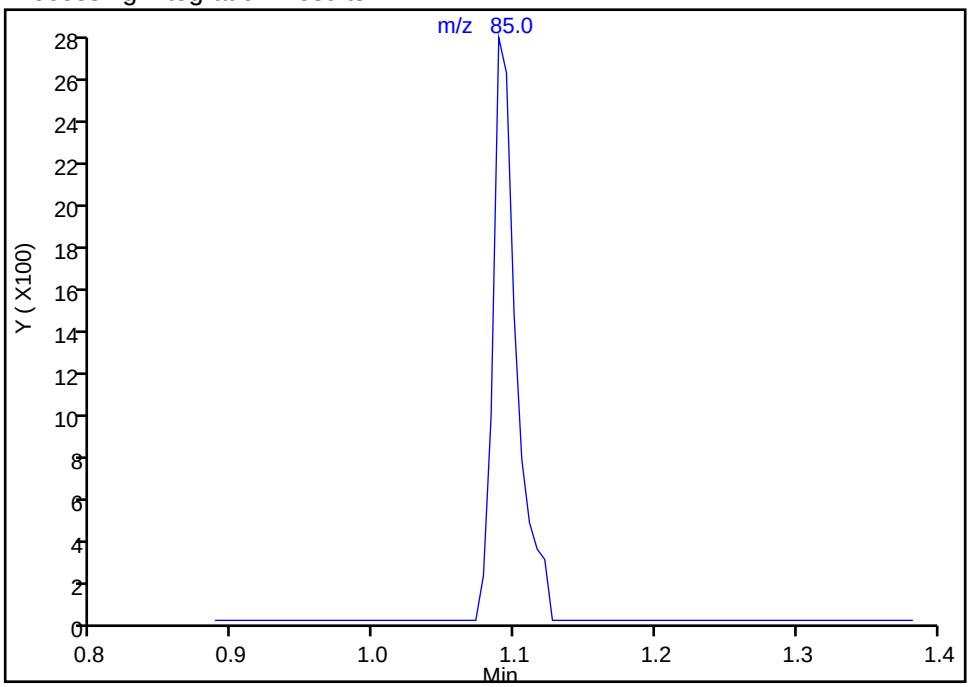
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

9 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

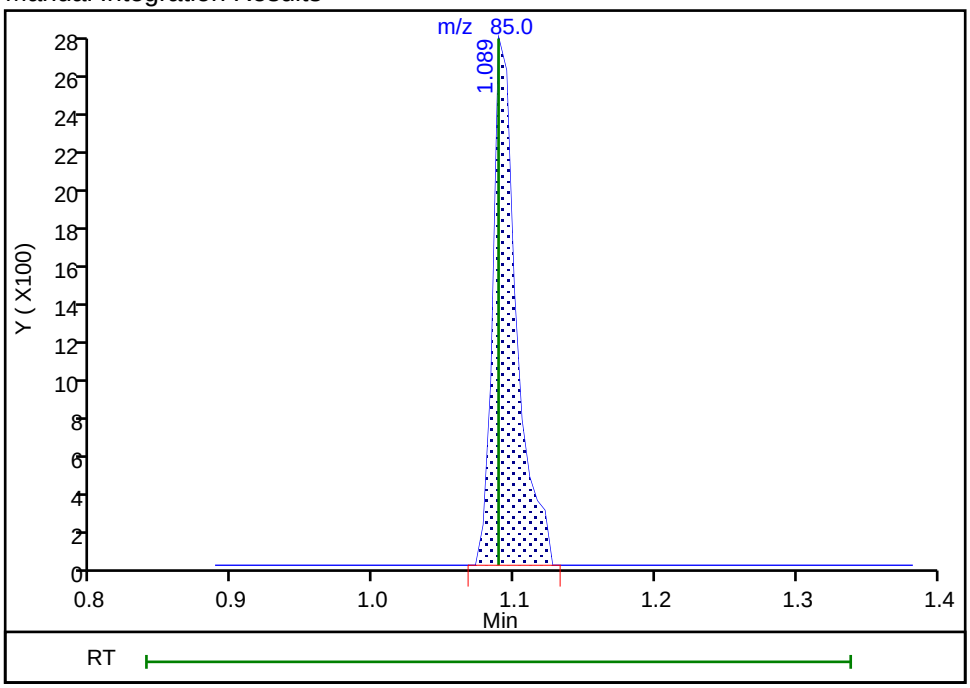
Not Detected
Expected RT: 1.09

Processing Integration Results



Manual Integration Results

RT: 1.09
Area: 3212
Amount: 1.028050
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:38:05
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

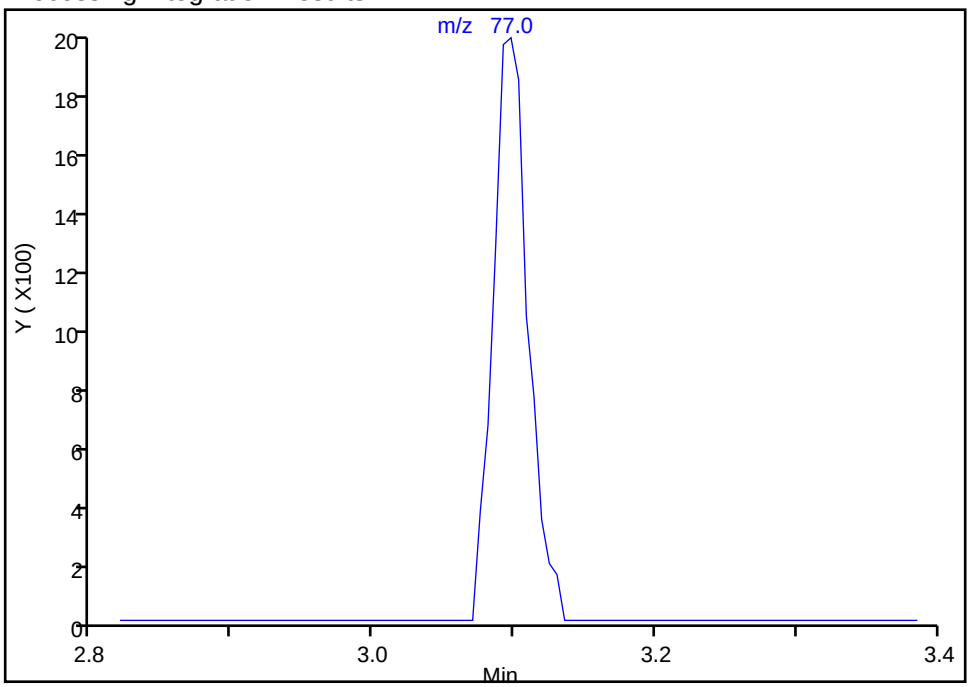
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

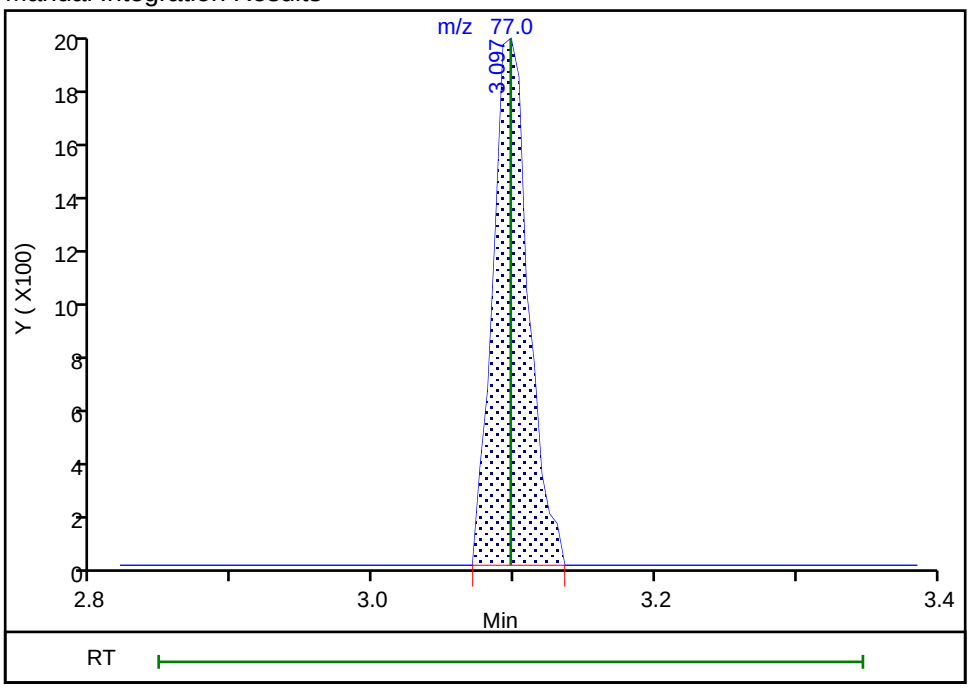
Not Detected
Expected RT: 3.10

Processing Integration Results



RT: 3.10
Area: 3374
Amount: 0.972265
Amount Units: ug/l

Manual Integration Results



Reviewer: kitchingsj, 18-Dec-2018 13:45:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah

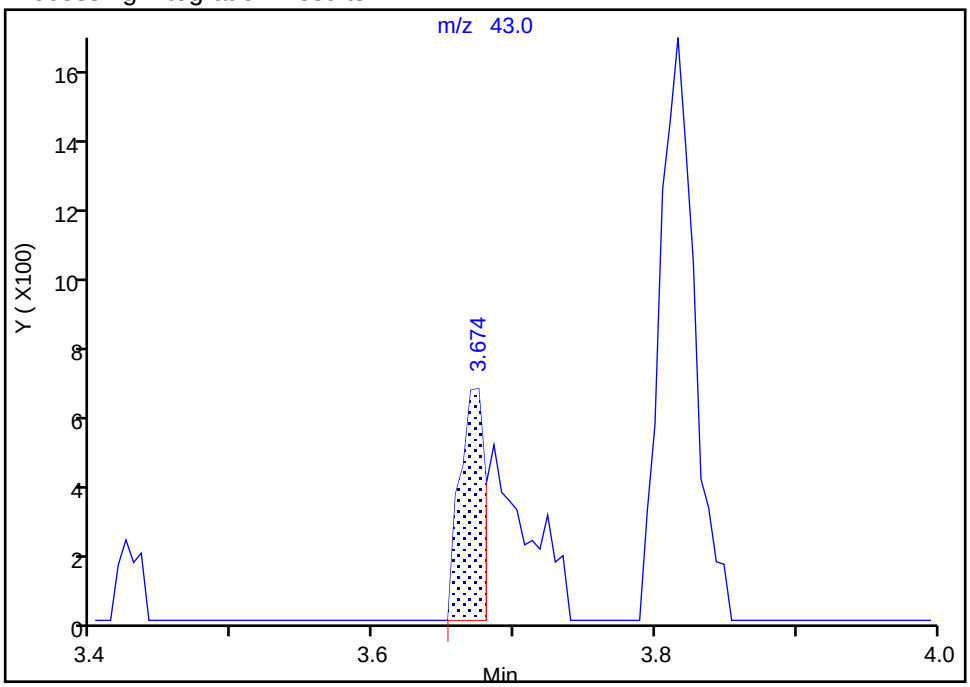
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

60 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

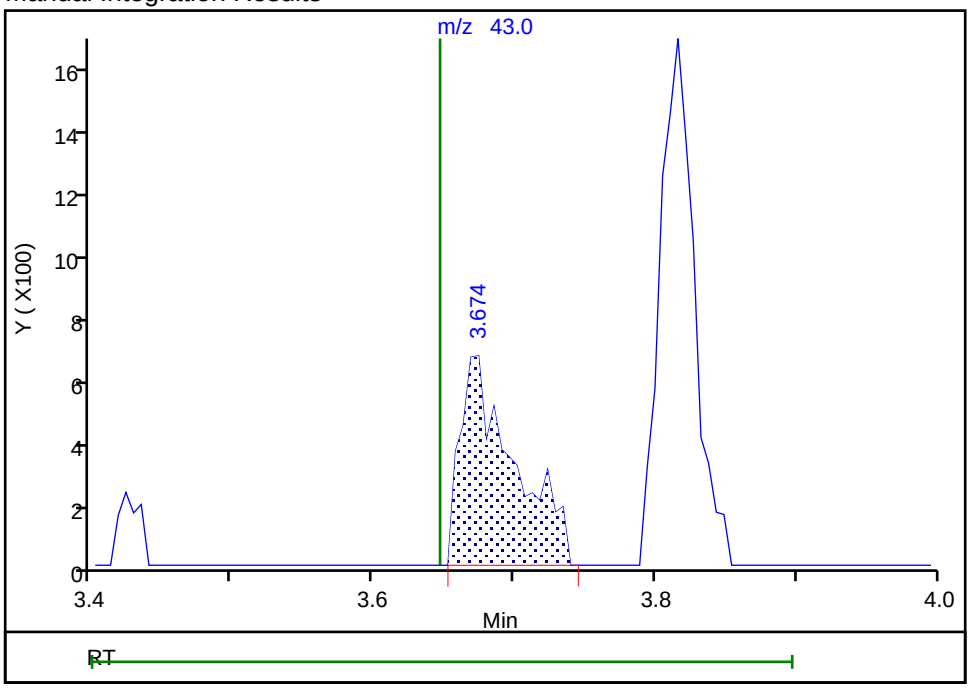
Processing Integration Results

RT: 3.67
Area: 799
Amount: 7.988751
Amount Units: ug/l



Manual Integration Results

RT: 3.67
Area: 1697
Amount: 26.396060
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:38:37
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

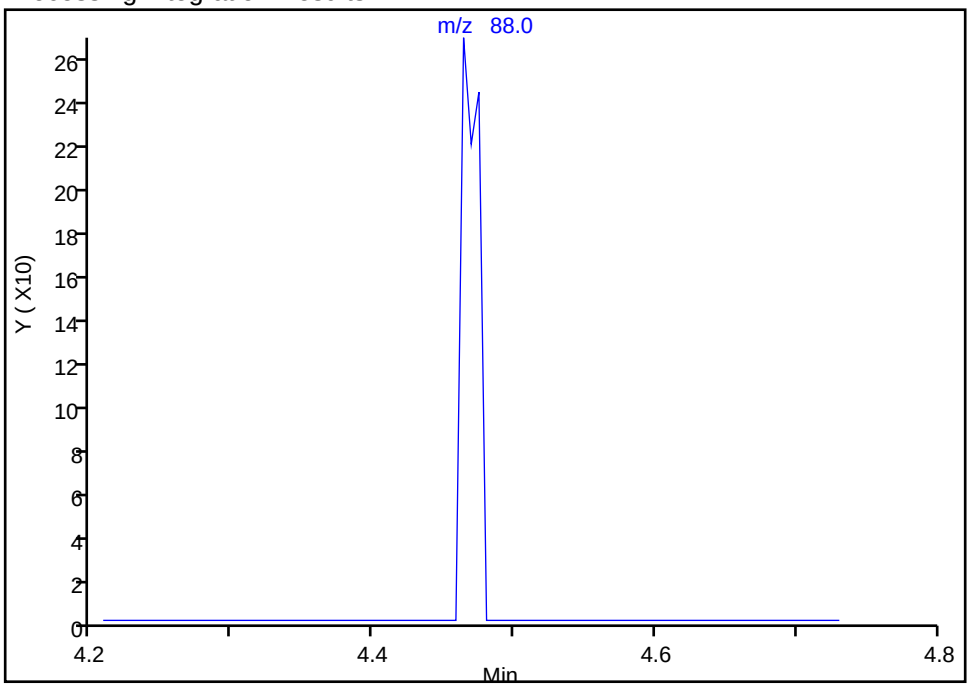
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

69 1,4-Dioxane, CAS: 123-91-1

Signal: 1

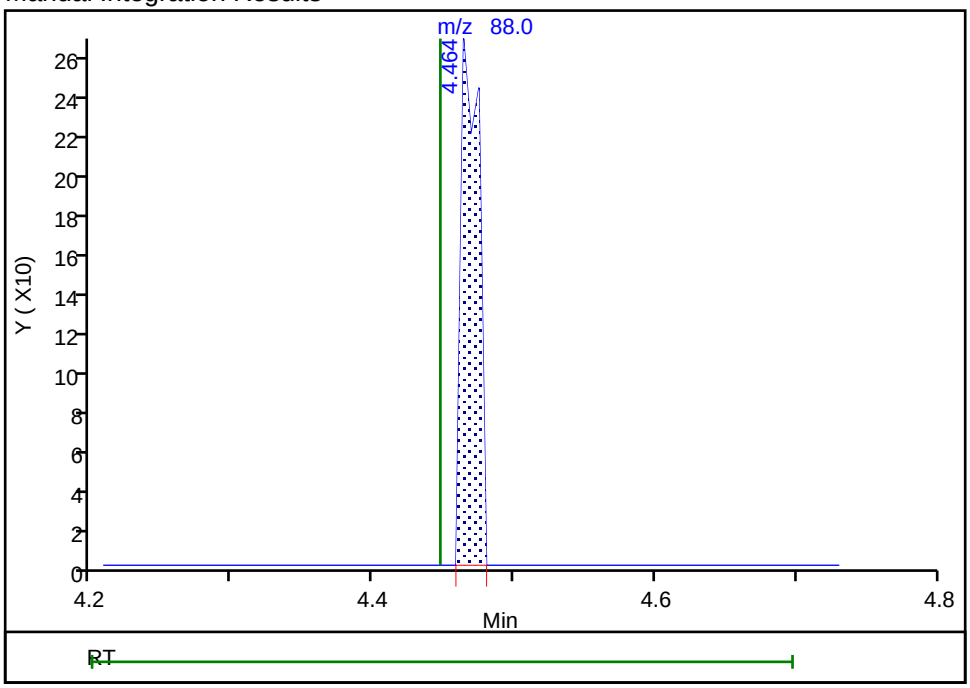
Processing Integration Results

Not Detected
Expected RT: 4.45



Manual Integration Results

RT: 4.46
Area: 238
Amount: 23.032257
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:38:59
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

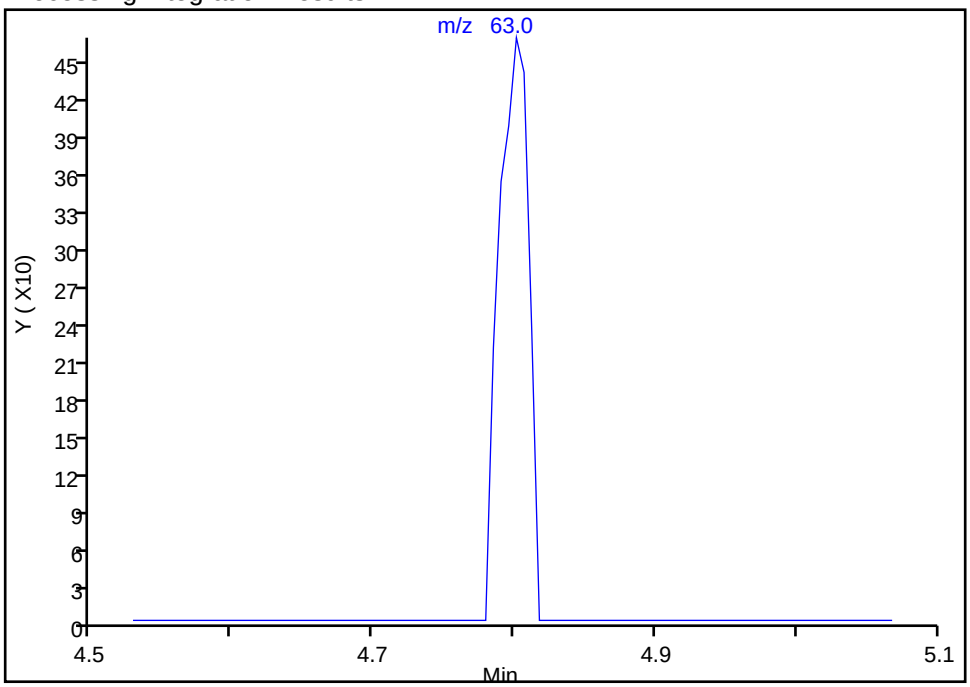
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

72 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

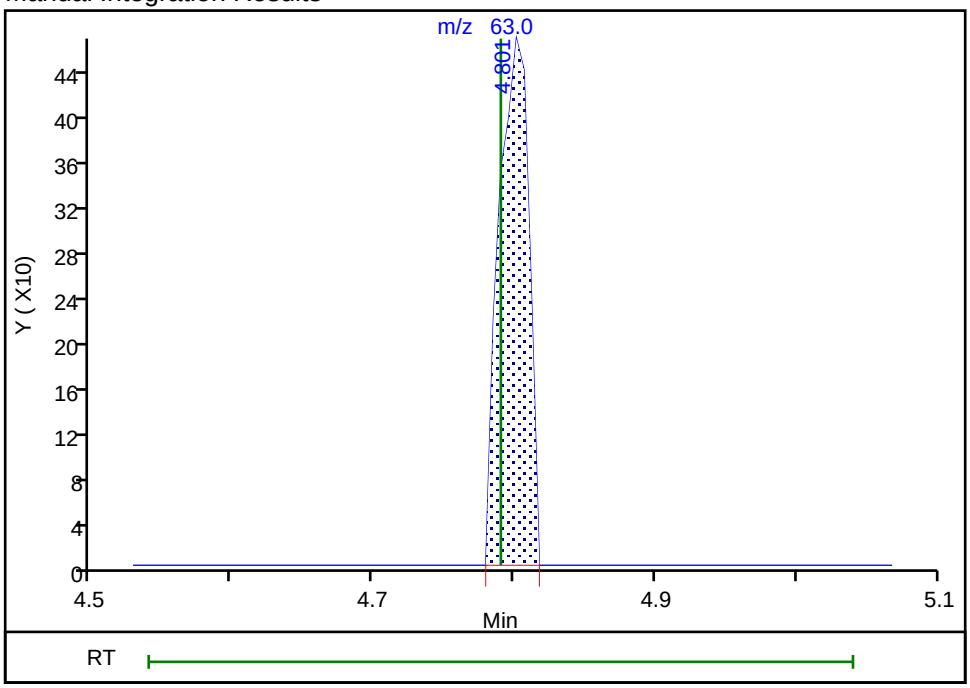
Not Detected
Expected RT: 4.79

Processing Integration Results



Manual Integration Results

RT: 4.80
Area: 692
Amount: 0.591319
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:38:54
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

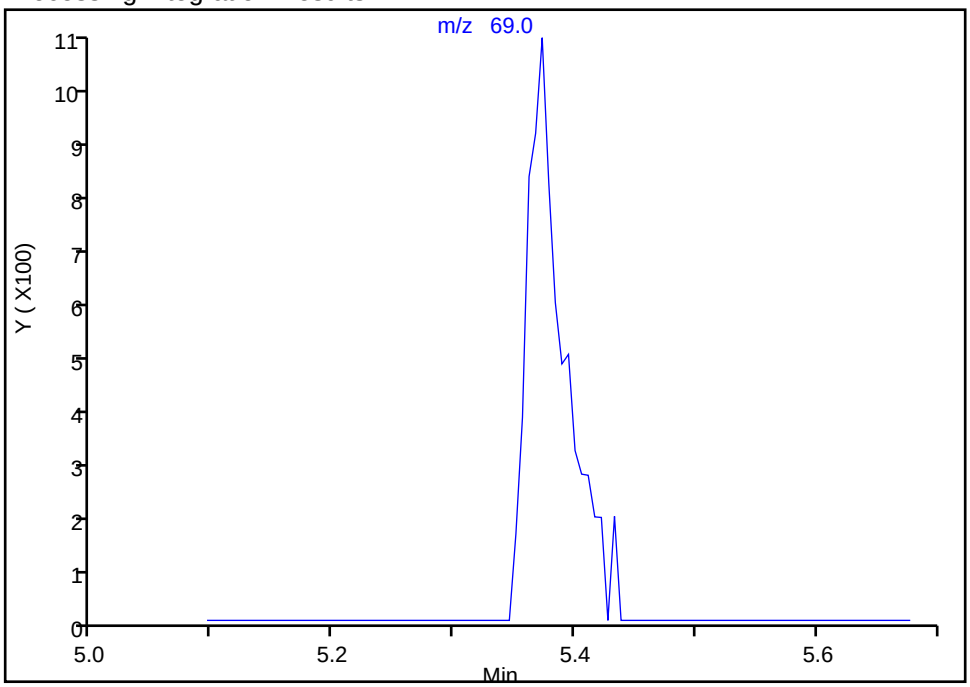
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

78 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

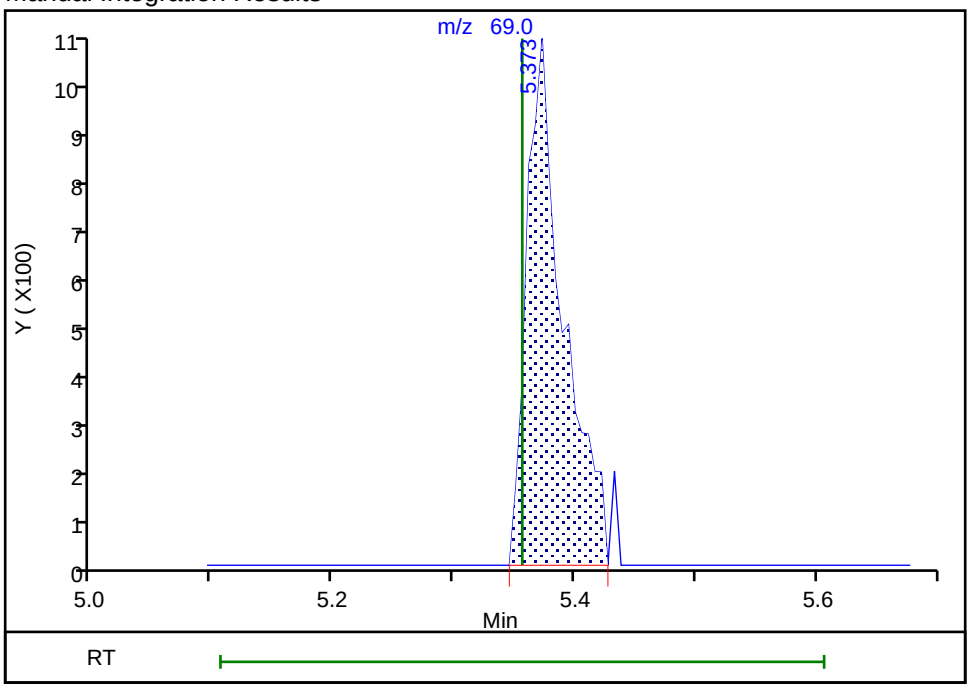
Not Detected
Expected RT: 5.36

Processing Integration Results



RT: 5.37
Area: 2177
Amount: 0.618591
Amount Units: ug/l

Manual Integration Results



Reviewer: kitchingsj, 18-Dec-2018 13:39:07
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

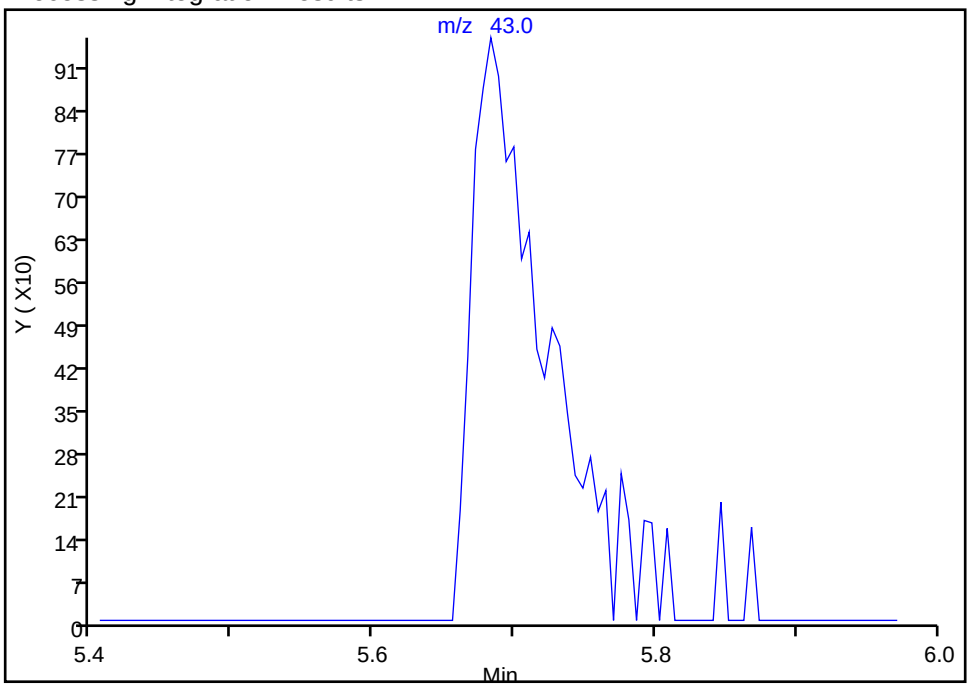
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

82 2-Hexanone, CAS: 591-78-6

Signal: 1

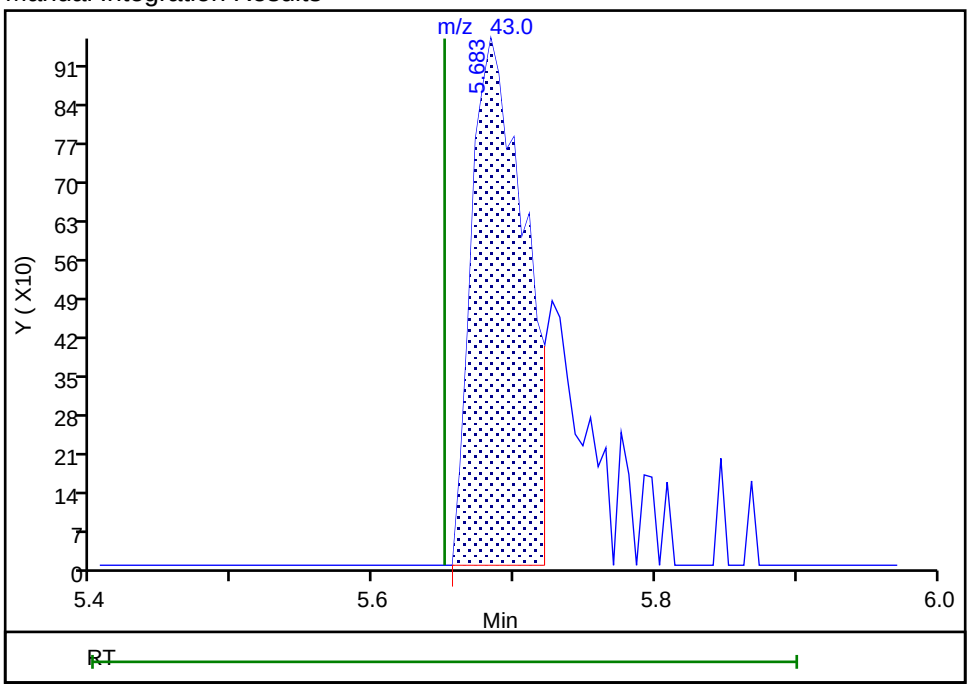
Not Detected
Expected RT: 5.65

Processing Integration Results



Manual Integration Results

RT: 5.68
Area: 2519
Amount: 6.077888
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:39:16
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

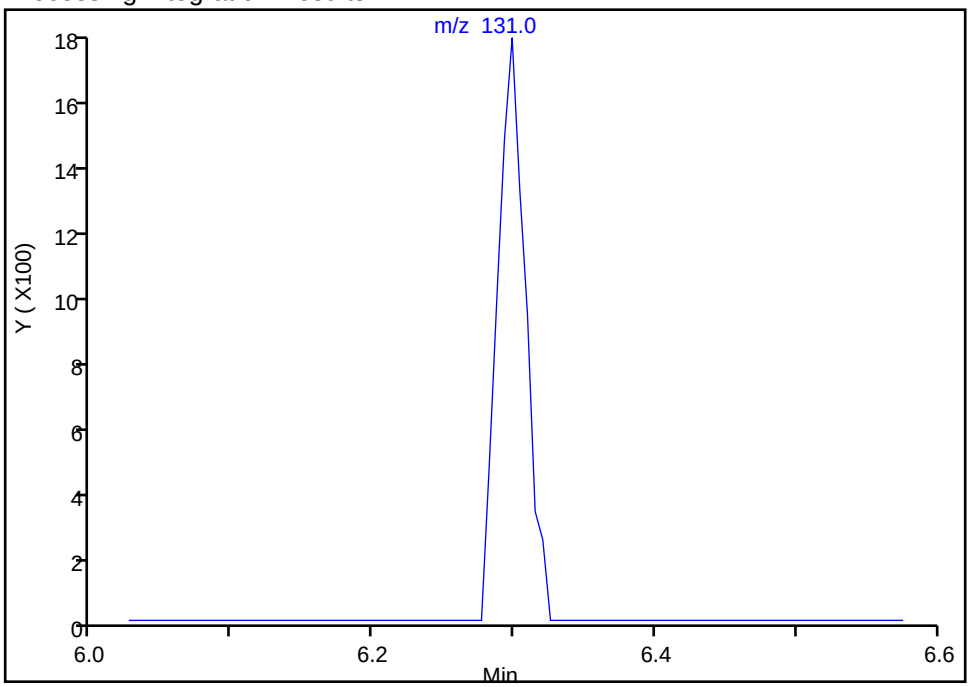
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

90 1,1,1,2-Tetrachloroethane, CAS: 630-20-6

Signal: 1

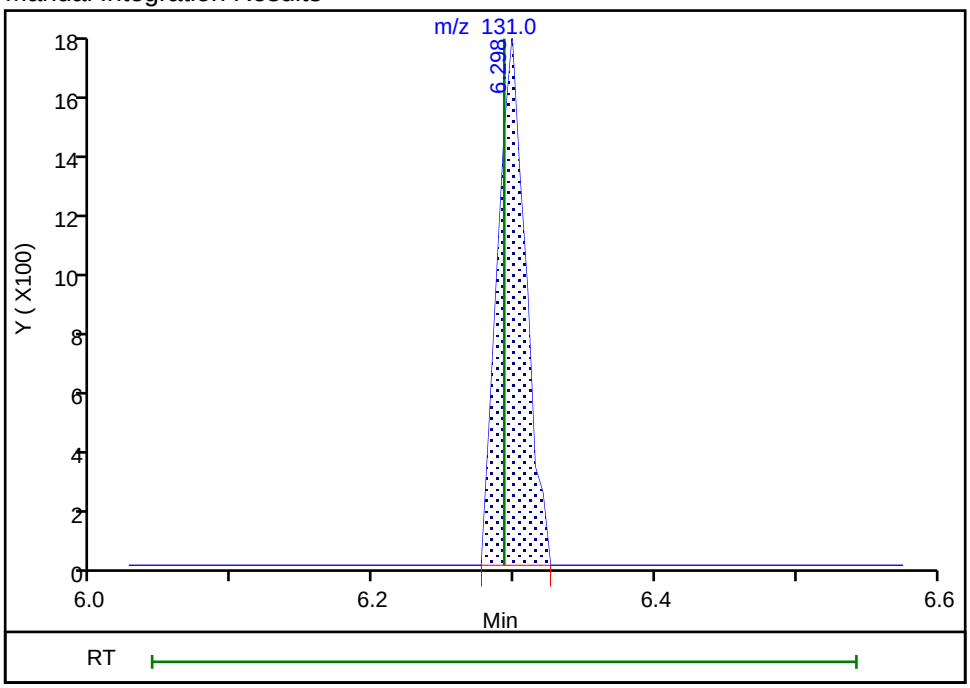
Processing Integration Results

Not Detected
Expected RT: 6.29



Manual Integration Results

RT: 6.30
Area: 2399
Amount: 0.858977
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:39:30
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

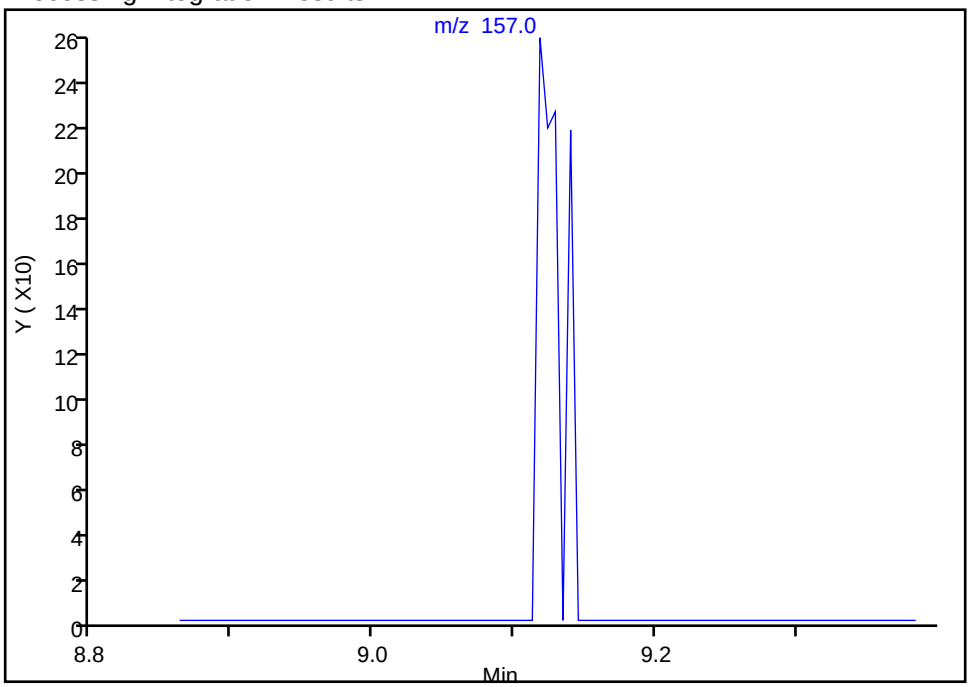
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

117 1,2-Dibromo-3-Chloropropane, CAS: 96-12-8

Signal: 1

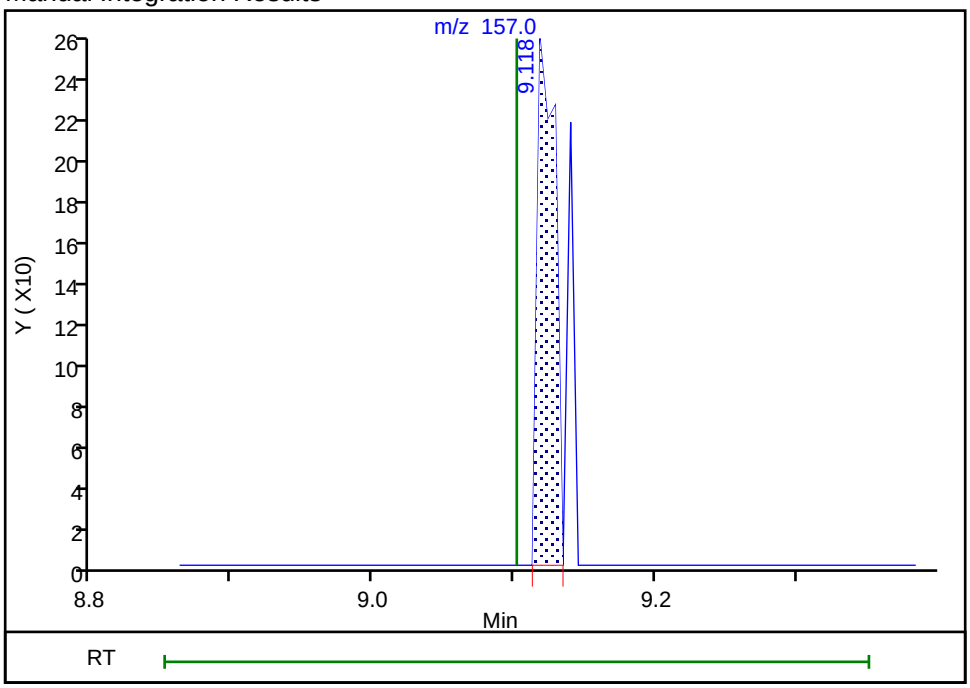
Not Detected
Expected RT: 9.10

Processing Integration Results



RT: 9.12
Area: 224
Amount: 0.271144
Amount Units: ug/l

Manual Integration Results



Reviewer: kitchingsj, 18-Dec-2018 13:39:53
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

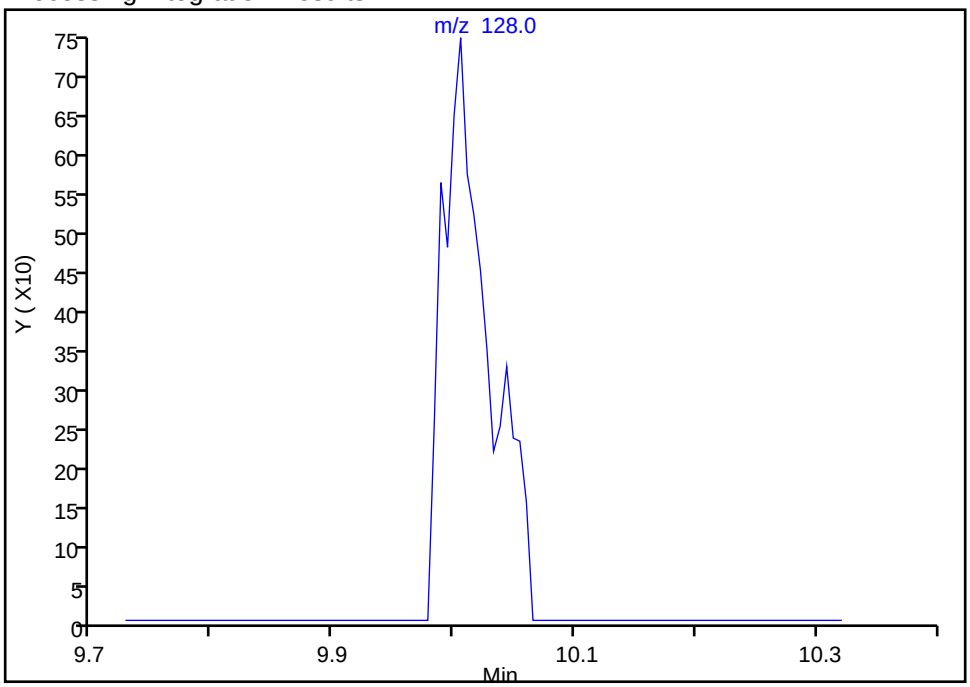
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

120 Naphthalene, CAS: 91-20-3

Signal: 1

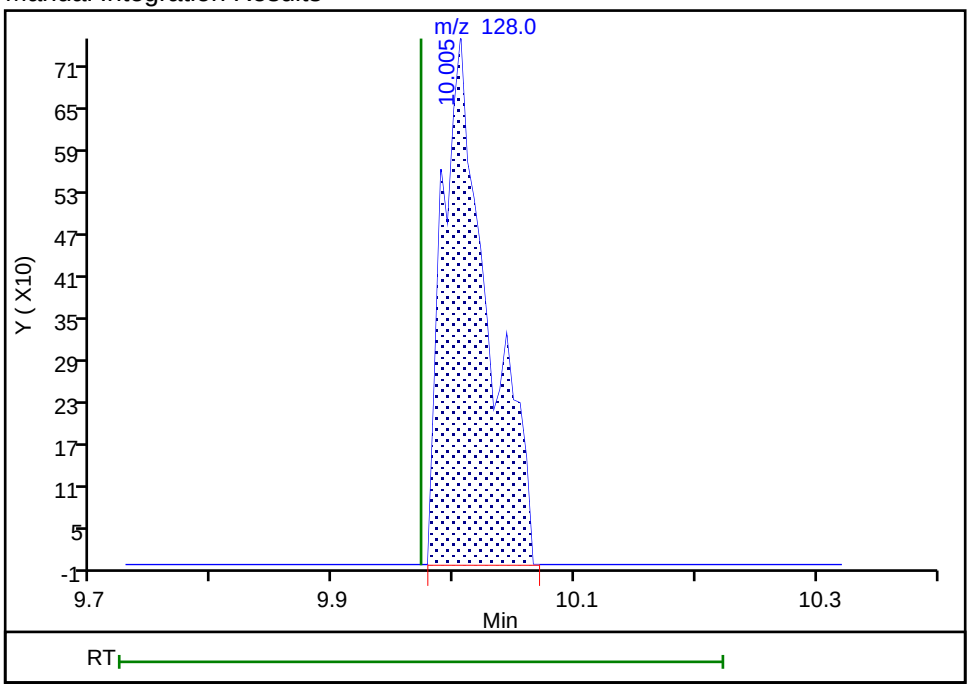
Not Detected
Expected RT: 9.97

Processing Integration Results



Manual Integration Results

RT: 10.01
Area: 1963
Amount: 0.350093
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:40:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

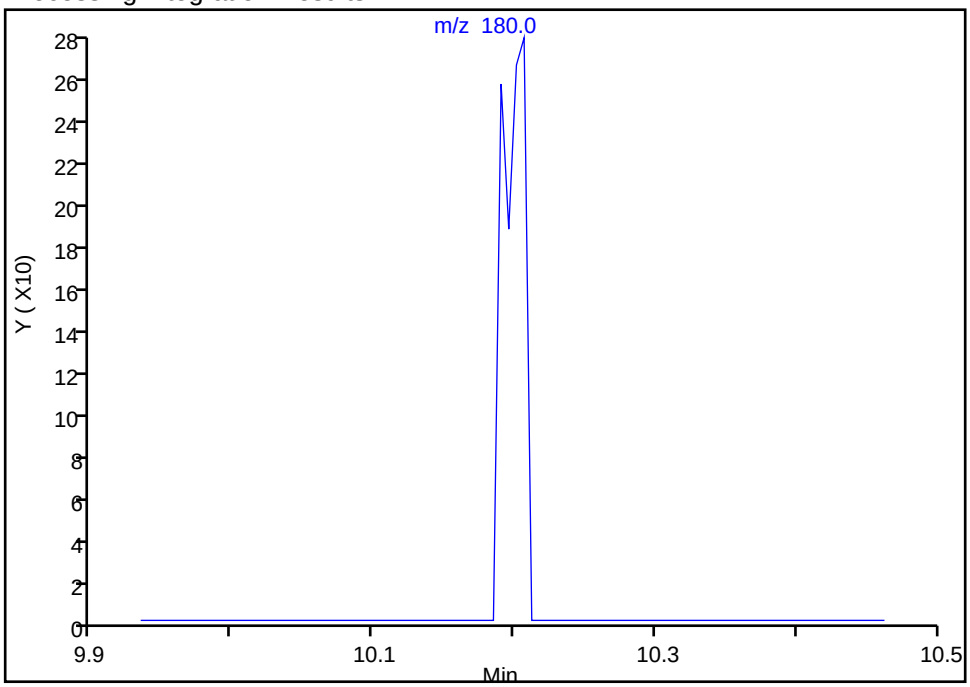
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1804.D				
Injection Date:	18-Dec-2018 10:06:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

121 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

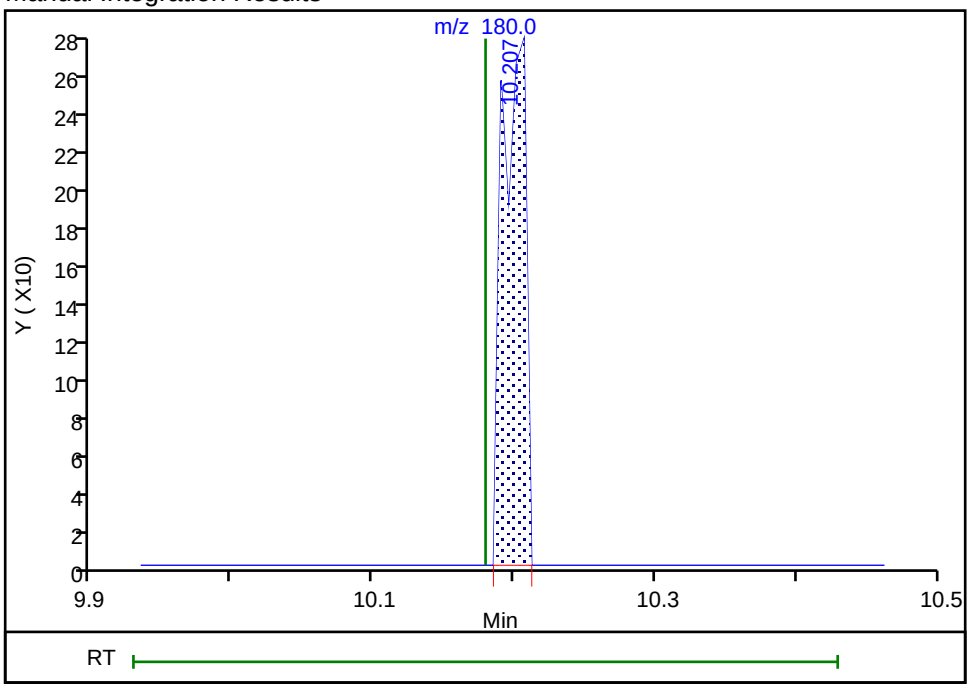
Not Detected
Expected RT: 10.18

Processing Integration Results



RT: 10.21
Area: 321
Amount: 0.194611
Amount Units: ug/l

Manual Integration Results



Reviewer: kitchingsj, 18-Dec-2018 13:40:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1805.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 18-Dec-2018 10:29:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-006
Operator ID: jk Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 13:56:18 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: kitchingsj Date: 18-Dec-2018 13:41:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.914	3.908	0.006	100	481690	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	82	201007	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	247247	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.446	3.446	0.000	97	4623	2.00	1.95	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	90	4541	2.00	1.99	
$ 6 Toluene-d8 (Surr)	98	5.068	5.062	0.006	99	18781	2.00	1.96	
$ 7 4-Bromofluorobenzene (Surr	95	7.158	7.153	0.005	97	8405	2.00	2.22	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	99	6238	2.00	2.09	
10 Vinyl chloride	62	1.252	1.252	0.000	97	5908	2.00	2.08	
11 Chloromethane	50	1.257	1.257	0.000	56	8309	2.00	2.15	
12 Butadiene	54	1.257	1.257	0.000	92	5238	2.00	2.02	
14 Bromomethane	96	1.432	1.432	0.000	99	4409	2.00	2.24	
15 Chloroethane	64	1.481	1.475	0.006	97	3373	2.00	2.05	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	88	7481	2.00	2.07	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	97	6546	2.00	2.07	
20 Ethyl ether	59	1.747	1.747	0.000	92	3186	2.00	1.72	
22 1,1,2-Trichloro-1,2,2-trif	101	1.873	1.867	0.006	52	4007	2.00	1.84	
23 Acrolein	56	1.878	1.878	0.000	96	22540	40.0	37.9	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	94	4849	2.00	2.04	
25 Acetone	58	1.971	1.970	0.001	90	2337	10.0	10.8	
26 Iodomethane	142	2.036	2.036	0.000	96	8251	2.00	1.98	
27 Carbon disulfide	76	2.063	2.063	0.000	98	15620	2.00	2.10	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	95	3188	2.00	2.01	
29 Methyl acetate	43	2.161	2.156	0.005	97	5190	4.00	3.75	
32 Methylene Chloride	84	2.259	2.259	0.000	84	6673	2.00	2.29	
33 2-Methyl-2-propanol	59	2.286	2.281	0.005	98	4079	20.0	18.8	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	12119	2.00	1.87	
36 trans-1,2-Dichloroethene	96	2.395	2.395	0.000	91	4766	2.00	1.80	
37 Acrylonitrile	53	2.460	2.460	0.000	96	16616	20.0	19.2	
38 Hexane	57	2.520	2.520	0.000	88	4988	2.00	1.68	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	98	8457	2.00	2.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.727	2.722	0.005	99	13479	4.00	3.49	
47 2,2-Dichloropropane	77	3.092	3.097	-0.005	93	6311	2.00	1.91	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	99	5787	2.00	1.96	
49 2-Butanone (MEK)	43	3.135	3.130	0.005	100	9102	10.0	9.74	
50 Tetrahydrofuran	42	3.299	3.293	0.006	79	2784	4.00	4.21	
51 Chlorobromomethane	49	3.293	3.293	0.000	75	3753	2.00	2.02	
52 Chloroform	83	3.331	3.331	0.000	98	8079	2.00	1.97	
54 Cyclohexane	56	3.429	3.429	0.000	87	7378	2.00	1.90	
55 1,1,1-Trichloroethane	97	3.435	3.440	-0.005	97	6511	2.00	1.90	
57 Carbon tetrachloride	117	3.527	3.527	0.000	94	5340	2.00	1.87	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	95	5809	2.00	1.87	
60 Isobutyl alcohol	43	3.663	3.647	0.016	89	3507	50.0	47.1	
61 Benzene	78	3.702	3.702	0.000	96	19327	2.00	1.92	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	96	5586	2.00	2.04	
63 n-Heptane	43	3.816	3.816	0.000	83	4849	2.00	1.89	
65 Trichloroethene	132	4.164	4.164	0.000	93	5359	2.00	1.88	
66 Methylcyclohexane	83	4.251	4.251	0.000	92	7339	2.00	1.78	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	96	4815	2.00	1.97	
69 1,4-Dioxane	88	4.469	4.447	0.022	35	769	40.0	40.5	
68 Dibromomethane	93	4.458	4.458	0.000	89	2937	2.00	1.90	
70 Dichlorobromomethane	83	4.562	4.562	0.000	98	6056	2.00	2.01	
72 2-Chloroethyl vinyl ether	63	4.796	4.790	0.006	91	1801	2.00	1.61	
73 cis-1,3-Dichloropropene	75	4.905	4.899	0.006	88	7846	2.00	1.93	
75 4-Methyl-2-pentanone (MIBK	43	5.013	5.008	0.005	93	18178	10.0	9.44	
76 Toluene	92	5.117	5.117	0.000	94	13048	2.00	1.98	
77 trans-1,3-Dichloropropene	75	5.346	5.340	0.006	49	7325	2.00	1.99	
78 Ethyl methacrylate	69	5.367	5.356	0.011	84	4866	2.00	1.48	
79 1,1,2-Trichloroethane	83	5.482	5.476	0.006	95	4063	2.00	2.01	
80 Tetrachloroethene	164	5.514	5.509	0.005	93	4793	2.00	1.94	
81 1,3-Dichloropropane	76	5.618	5.612	0.006	90	7693	2.00	1.95	
82 2-Hexanone	43	5.667	5.650	0.017	92	8240	10.0	10.2	
85 Chlorodibromomethane	129	5.765	5.759	0.006	95	4987	2.00	1.93	
86 Ethylene Dibromide	107	5.868	5.863	0.005	98	4839	2.00	1.90	
88 Chlorobenzene	112	6.227	6.227	0.000	97	16883	2.00	1.99	
89 Ethylbenzene	91	6.287	6.287	0.000	97	25046	2.00	1.93	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.293	0.005	91	5340	2.00	1.94	
92 m-Xylene & p-Xylene	106	6.385	6.380	0.005	97	11023	2.00	1.96	
95 o-Xylene	106	6.706	6.701	0.005	94	9932	2.00	1.84	
96 Styrene	104	6.734	6.728	0.006	97	15921	2.00	1.84	
97 Bromoform	173	6.902	6.897	0.005	97	3623	2.00	1.80	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	24397	2.00	1.83	
100 Bromobenzene	156	7.278	7.273	0.006	96	7748	2.00	1.91	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	96	6790	2.00	1.91	
102 N-Propylbenzene	120	7.327	7.321	0.006	100	7719	2.00	1.87	
103 1,2,3-Trichloropropane	110	7.349	7.338	0.011	93	2147	2.00	1.89	
104 trans-1,4-Dichloro-2-buten	53	7.376	7.354	0.022	76	1110	2.00	1.13	
105 2-Chlorotoluene	126	7.420	7.419	0.001	96	7048	2.00	1.93	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	95	21593	2.00	1.87	
107 4-Chlorotoluene	126	7.518	7.512	0.006	95	7263	2.00	1.89	
108 tert-Butylbenzene	119	7.730	7.730	0.000	96	19450	2.00	1.87	
109 1,2,4-Trimethylbenzene	105	7.790	7.784	0.006	95	21491	2.00	1.81	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	28362	2.00	1.90	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	23976	2.00	1.87	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	98	14454	2.00	1.93	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	96	16215	2.00	2.04	
115 n-Butylbenzene	91	8.383	8.378	0.005	97	19597	2.00	1.88	
116 1,2-Dichlorobenzene	146	8.437	8.432	0.005	99	13432	2.00	1.91	
117 1,2-Dibromo-3-Chloropropan	157	9.112	9.102	0.010	79	734	2.00	0.8948	
118 1,2,4-Trichlorobenzene	180	9.777	9.760	0.017	92	4140	2.00	1.11	
119 Hexachlorobutadiene	225	9.864	9.858	0.006	94	3579	2.00	1.87	
120 Naphthalene	128	10.000	9.973	0.028	96	4229	2.00	0.7594	M
121 1,2,3-Trichlorobenzene	180	10.196	10.179	0.017	87	888	2.00	0.5421	Ma
S 125 1,2-Dichloroethene, Total	1				0		4.00	3.76	
S 126 Xylenes, Total	1				0		4.00	3.80	
S 127 1,3-Dichloropropene, Total	1				0		4.00	3.92	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_MMIX_01940	Amount Added:	0.20	Units: uL
VM_Acrolein_00193	Amount Added:	0.20	Units: uL

Report Date: 18-Dec-2018 13:56:20 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1805.D

Injection Date: 18-Dec-2018 10:29:30 Instrument ID: CMSAA Operator ID: jk

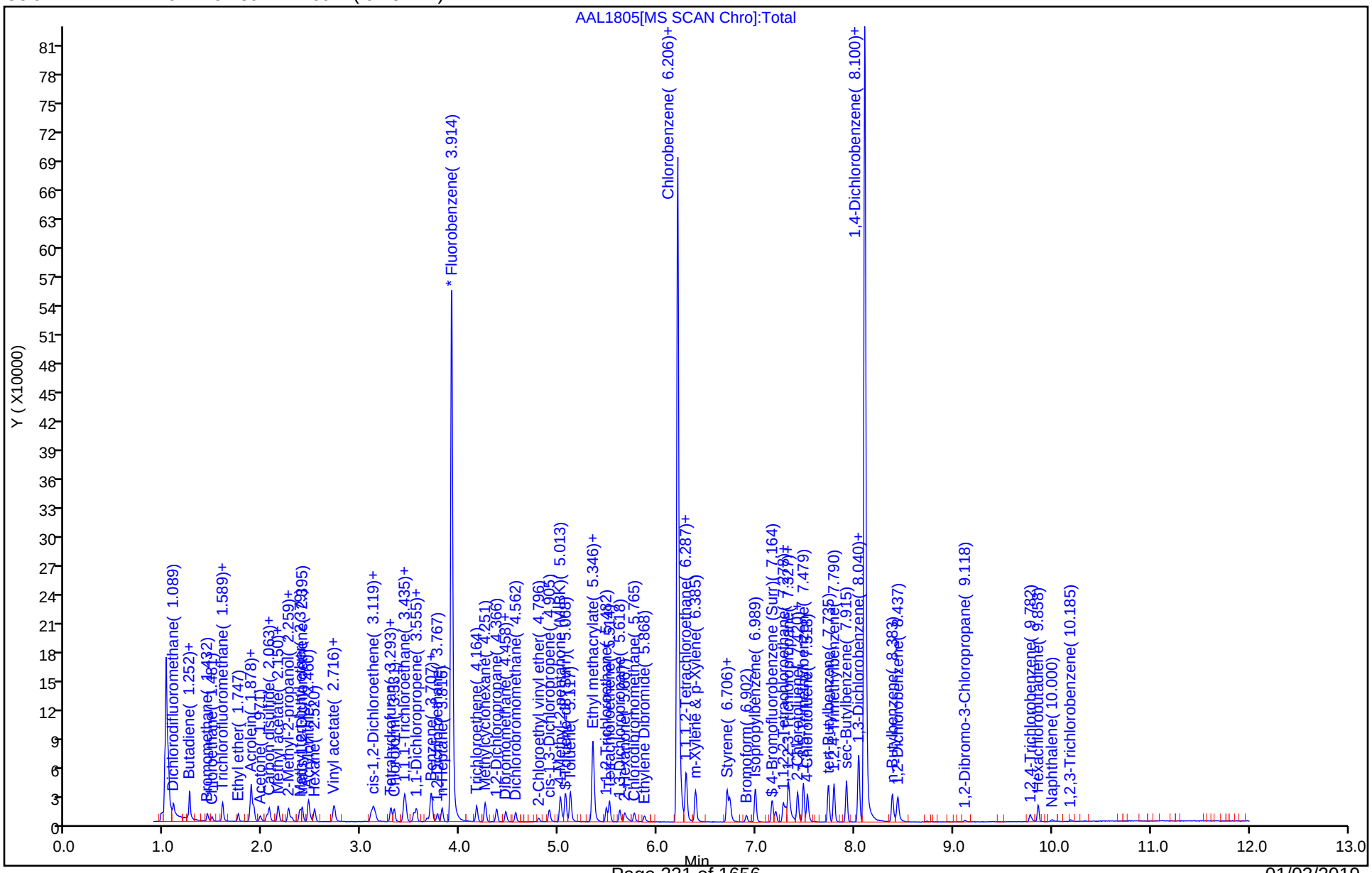
Lims ID: ic Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

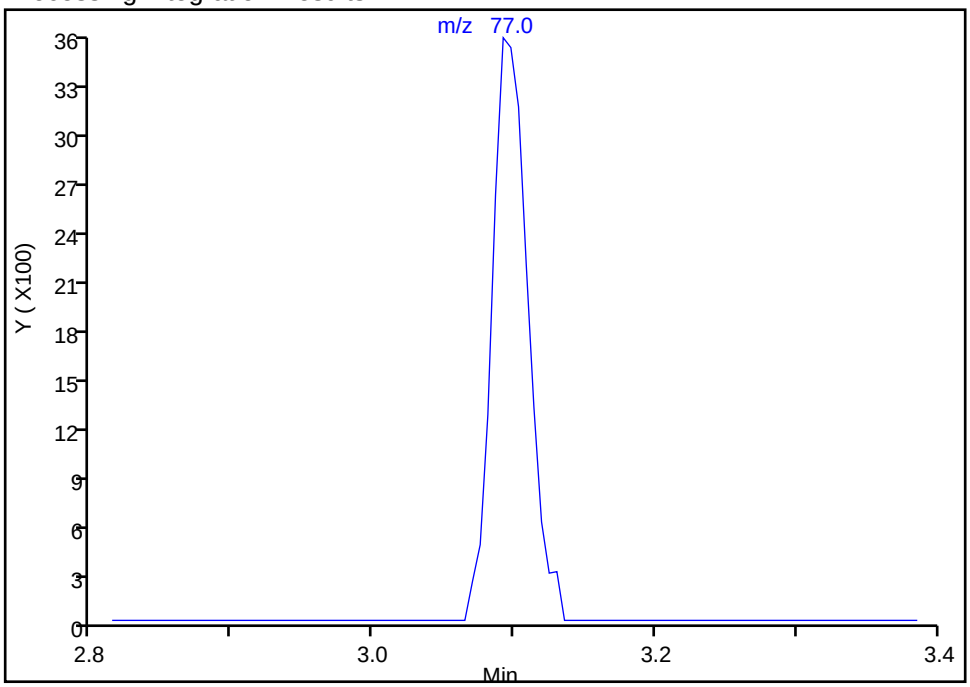
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1805.D				
Injection Date:	18-Dec-2018 10:29:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

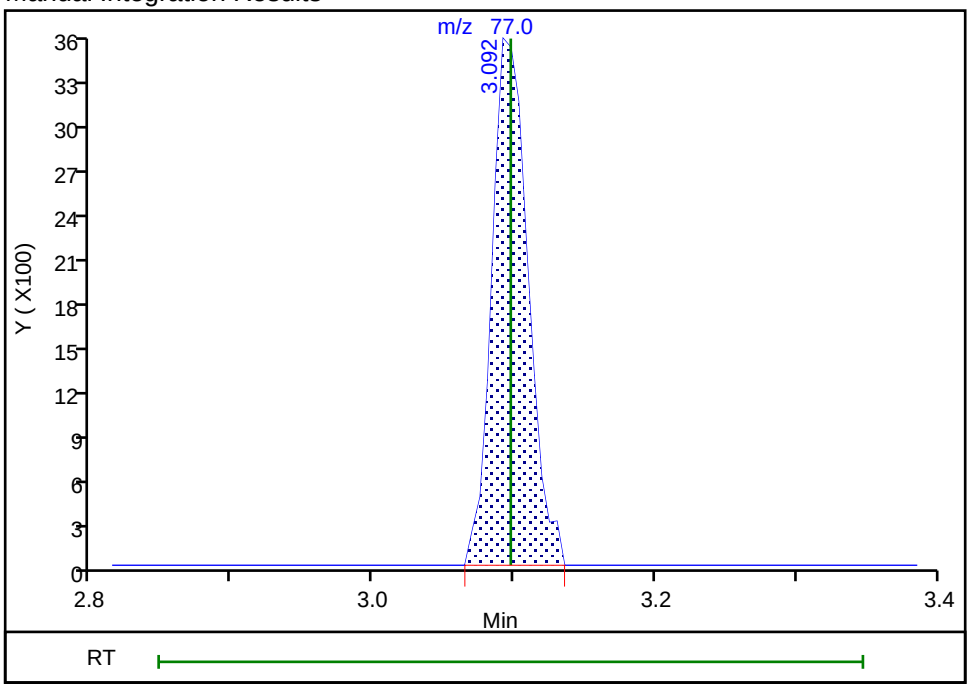
Processing Integration Results

Not Detected
Expected RT: 3.10



Manual Integration Results

RT: 3.09
Area: 6311
Amount: 1.907529
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:45:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

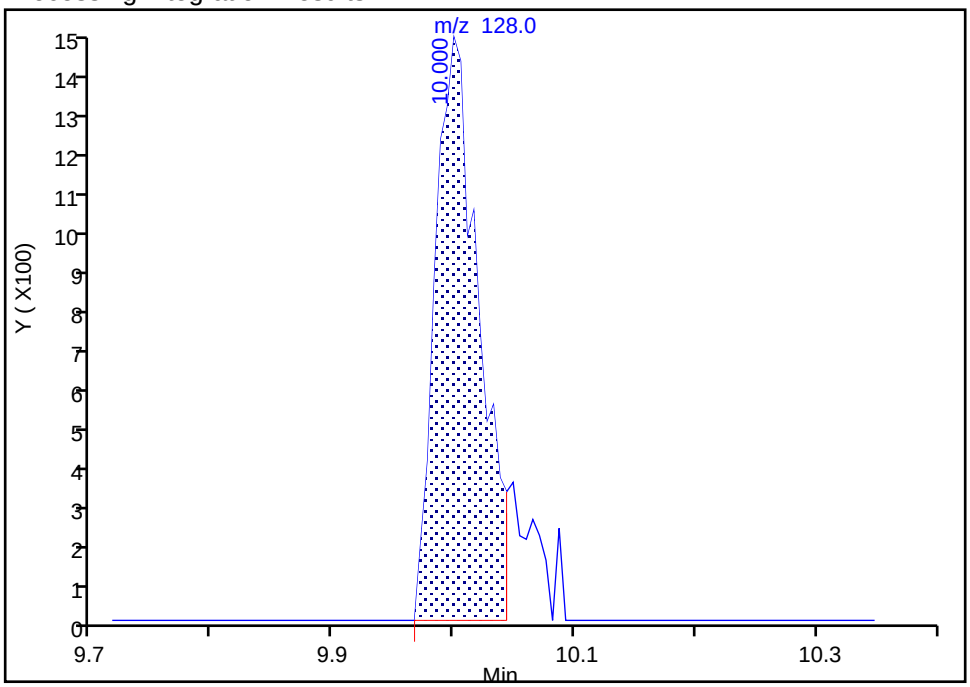
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1805.D				
Injection Date:	18-Dec-2018 10:29:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

120 Naphthalene, CAS: 91-20-3

Signal: 1

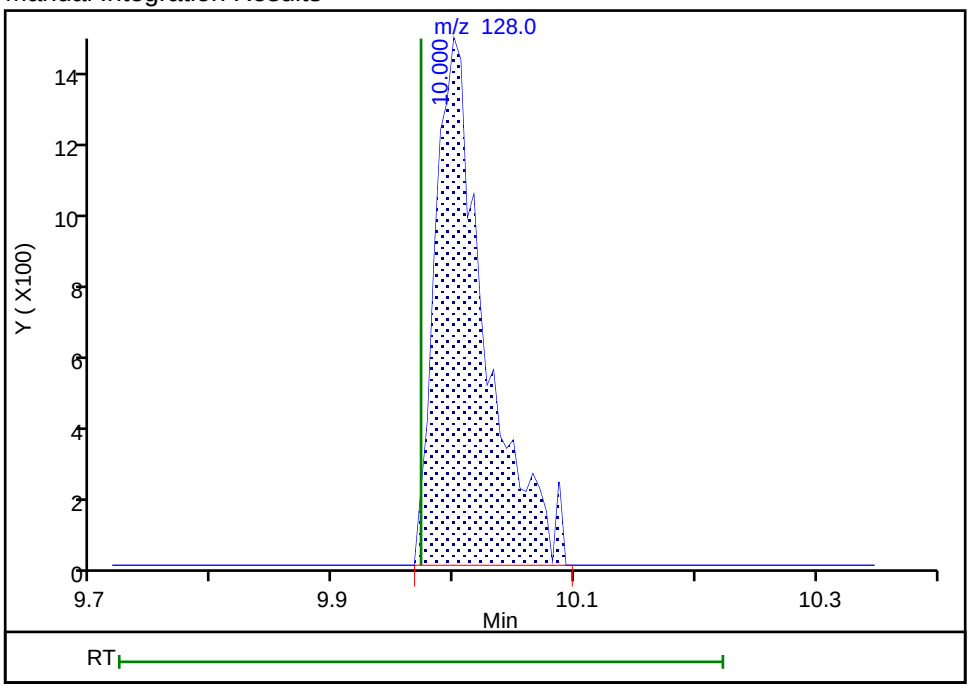
Processing Integration Results

RT: 10.00
Area: 3700
Amount: 0.592953
Amount Units: ug/l



Manual Integration Results

RT: 10.00
Area: 4229
Amount: 0.759399
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:41:37

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

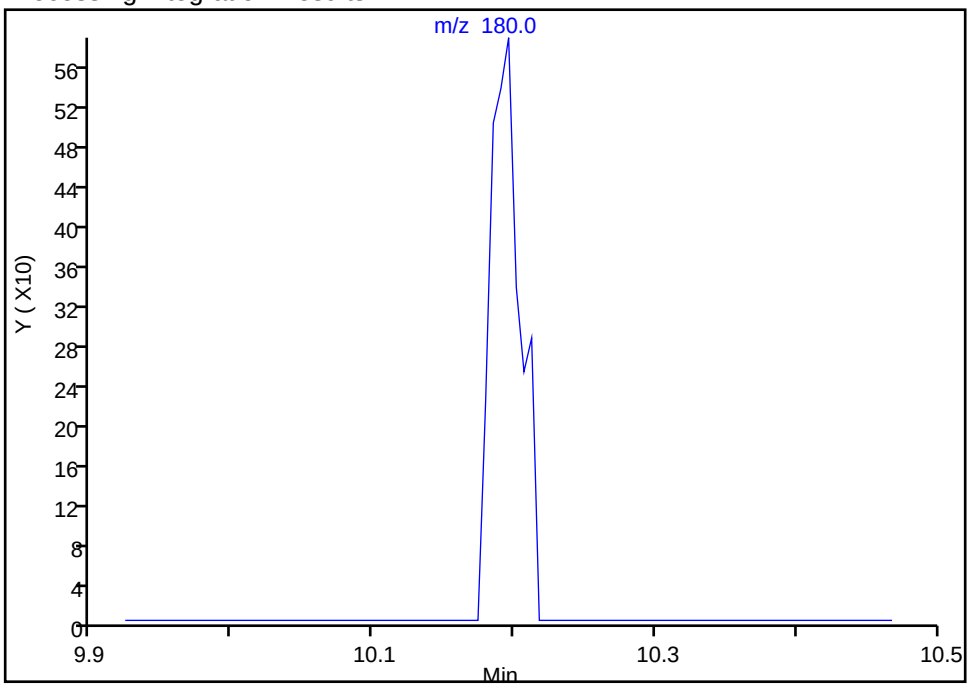
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1805.D				
Injection Date:	18-Dec-2018 10:29:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

121 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

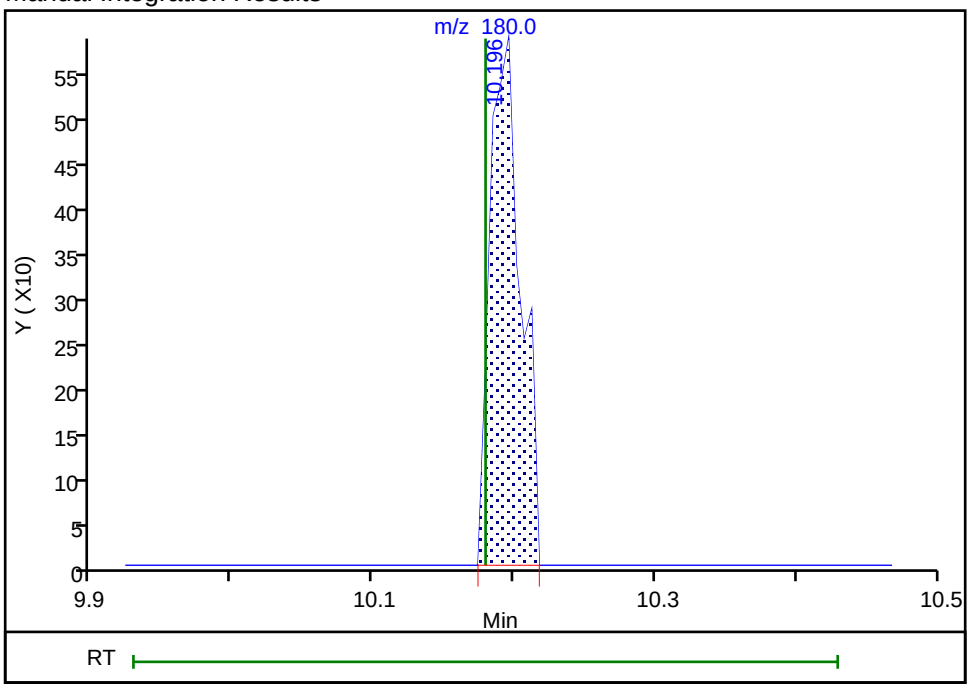
Not Detected
Expected RT: 10.18

Processing Integration Results



Manual Integration Results

RT: 10.20
Area: 888
Amount: 0.542132
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:41:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1806.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 18-Dec-2018 10:51:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-007
Operator ID: jk Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 13:56:24 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: kitchingsj Date: 18-Dec-2018 13:42:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.914	3.908	0.006	100	490884	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	83	201573	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	249190	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.446	0.005	99	11806	5.00	4.89	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	94	11829	5.00	5.09	
$ 6 Toluene-d8 (Surr)	98	5.068	5.062	0.006	99	47886	5.00	4.90	
$ 7 4-Bromofluorobenzene (Surr	95	7.158	7.153	0.005	98	18593	5.00	4.86	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	99	15358	5.00	5.06	
10 Vinyl chloride	62	1.252	1.252	0.000	98	14412	5.00	4.98	
12 Butadiene	54	1.257	1.257	0.000	92	13184	5.00	4.99	
11 Chloromethane	50	1.257	1.257	0.000	68	19719	5.00	5.01	
14 Bromomethane	96	1.437	1.432	0.005	97	10457	5.00	5.21	
15 Chloroethane	64	1.481	1.475	0.006	98	8504	5.00	5.08	
17 Dichlorofluoromethane	67	1.589	1.584	0.005	99	19000	5.00	5.16	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	98	16849	5.00	5.22	
20 Ethyl ether	59	1.747	1.747	0.000	97	9075	5.00	4.82	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.867	0.000	96	10954	5.00	4.95	
23 Acrolein	56	1.878	1.878	0.000	95	62486	100.0	103.1	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	12192	5.00	5.04	
25 Acetone	58	1.971	1.970	0.000	89	5065	25.0	23.1	
26 Iodomethane	142	2.036	2.036	0.000	96	20175	5.00	4.75	
27 Carbon disulfide	76	2.063	2.063	0.000	98	37669	5.00	4.98	
28 3-Chloro-1-propene	76	2.156	2.150	0.006	93	8015	5.00	4.96	
29 Methyl acetate	43	2.156	2.156	0.000	97	13776	10.0	9.76	
32 Methylene Chloride	84	2.259	2.259	0.000	86	14481	5.00	4.88	
33 2-Methyl-2-propanol	59	2.286	2.281	0.005	99	11142	50.0	50.3	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	97	32429	5.00	4.91	
36 trans-1,2-Dichloroethene	96	2.401	2.395	0.006	91	13449	5.00	4.99	
37 Acrylonitrile	53	2.460	2.460	0.000	96	42152	50.0	47.9	
38 Hexane	57	2.520	2.520	0.000	88	13448	5.00	4.45	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	20897	5.00	5.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.722	2.722	0.000	99	37157	10.0	9.43	
47 2,2-Dichloropropane	77	3.097	3.097	0.000	93	16800	5.00	4.98	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	99	14889	5.00	4.95	
49 2-Butanone (MEK)	43	3.135	3.130	0.005	97	23607	25.0	24.8	
51 Chlorobromomethane	49	3.293	3.293	0.000	78	9346	5.00	4.94	
50 Tetrahydrofuran	42	3.299	3.293	0.006	80	6595	10.0	9.78	
52 Chloroform	83	3.331	3.331	0.000	99	20806	5.00	4.99	
54 Cyclohexane	56	3.429	3.429	0.000	87	18995	5.00	4.80	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	16849	5.00	4.81	
57 Carbon tetrachloride	117	3.533	3.527	0.006	96	13944	5.00	4.79	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	97	15322	5.00	4.83	
60 Isobutyl alcohol	43	3.658	3.647	0.011	97	9223	125.0	107.8	
61 Benzene	78	3.702	3.702	0.000	94	50524	5.00	4.92	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	96	13863	5.00	4.98	
63 n-Heptane	43	3.816	3.816	0.000	87	12233	5.00	4.67	
65 Trichloroethene	132	4.164	4.164	0.000	93	13835	5.00	4.77	
66 Methylcyclohexane	83	4.251	4.251	0.000	92	19792	5.00	4.72	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	93	12331	5.00	4.95	
69 1,4-Dioxane	88	4.458	4.447	0.011	36	2504	100.0	94.8	
68 Dibromomethane	93	4.458	4.458	0.000	90	7789	5.00	4.96	
70 Dichlorobromomethane	83	4.562	4.562	0.000	98	14782	5.00	4.81	
72 2-Chloroethyl vinyl ether	63	4.796	4.790	0.006	94	5035	5.00	4.43	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	20265	5.00	4.89	
75 4-Methyl-2-pentanone (MIBK	43	5.013	5.008	0.005	92	47774	25.0	24.4	
76 Toluene	92	5.117	5.117	0.000	93	33123	5.00	4.92	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	56	18901	5.00	5.05	
78 Ethyl methacrylate	69	5.362	5.356	0.006	86	14115	5.00	4.26	
79 1,1,2-Trichloroethane	83	5.482	5.476	0.006	96	10255	5.00	4.98	
80 Tetrachloroethene	164	5.514	5.509	0.005	94	12382	5.00	4.91	
81 1,3-Dichloropropane	76	5.618	5.612	0.006	90	20297	5.00	5.06	
82 2-Hexanone	43	5.661	5.650	0.011	92	27190	25.0	23.4	
85 Chlorodibromomethane	129	5.765	5.759	0.006	98	12635	5.00	4.79	
86 Ethylene Dibromide	107	5.868	5.863	0.005	97	12933	5.00	4.99	
88 Chlorobenzene	112	6.227	6.227	0.000	98	40695	5.00	4.78	
89 Ethylbenzene	91	6.287	6.287	0.000	97	63315	5.00	4.85	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.293	0.005	94	13099	5.00	4.73	
92 m-Xylene & p-Xylene	106	6.385	6.380	0.005	98	26644	5.00	4.73	
95 o-Xylene	106	6.706	6.701	0.005	96	26014	5.00	4.80	
96 Styrene	104	6.734	6.728	0.006	98	40531	5.00	4.66	
97 Bromoform	173	6.897	6.897	0.000	98	9157	5.00	4.53	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	62863	5.00	4.71	
100 Bromobenzene	156	7.278	7.273	0.006	90	19378	5.00	4.77	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	17087	5.00	4.79	
102 N-Propylbenzene	120	7.327	7.321	0.006	100	19219	5.00	4.65	
103 1,2,3-Trichloropropane	110	7.343	7.338	0.005	94	5375	5.00	4.71	
104 trans-1,4-Dichloro-2-buten	53	7.365	7.354	0.011	83	3457	5.00	3.52	
105 2-Chlorotoluene	126	7.420	7.419	0.001	96	17428	5.00	4.75	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	95	54139	5.00	4.68	
107 4-Chlorotoluene	126	7.518	7.512	0.006	95	18603	5.00	4.82	
108 tert-Butylbenzene	119	7.735	7.730	0.005	96	48767	5.00	4.68	
109 1,2,4-Trimethylbenzene	105	7.790	7.784	0.006	96	56095	5.00	4.72	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	70318	5.00	4.69	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	62156	5.00	4.82	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	99	36345	5.00	4.81	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	96	38361	5.00	4.79	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	48457	5.00	4.62	
116 1,2-Dichlorobenzene	146	8.437	8.432	0.005	98	32893	5.00	4.63	
117 1,2-Dibromo-3-Chloropropan	157	9.112	9.102	0.010	90	2538	5.00	3.07	
118 1,2,4-Trichlorobenzene	180	9.777	9.760	0.017	93	11967	5.00	3.18	
119 Hexachlorobutadiene	225	9.864	9.858	0.006	97	8734	5.00	4.53	
120 Naphthalene	128	9.989	9.973	0.017	99	12162	5.00	2.16	M
121 1,2,3-Trichlorobenzene	180	10.190	10.179	0.011	94	3249	5.00	1.97	M
S 127 1,3-Dichloropropene, Total	1				0		10.0	9.94	
S 126 Xylenes, Total	1				0		10.0	9.53	
S 125 1,2-Dichloroethene, Total	1				0		10.0	9.93	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_MMIX_01940	Amount Added:	0.50	Units: uL
VM_Acrolein_00193	Amount Added:	0.50	Units: uL

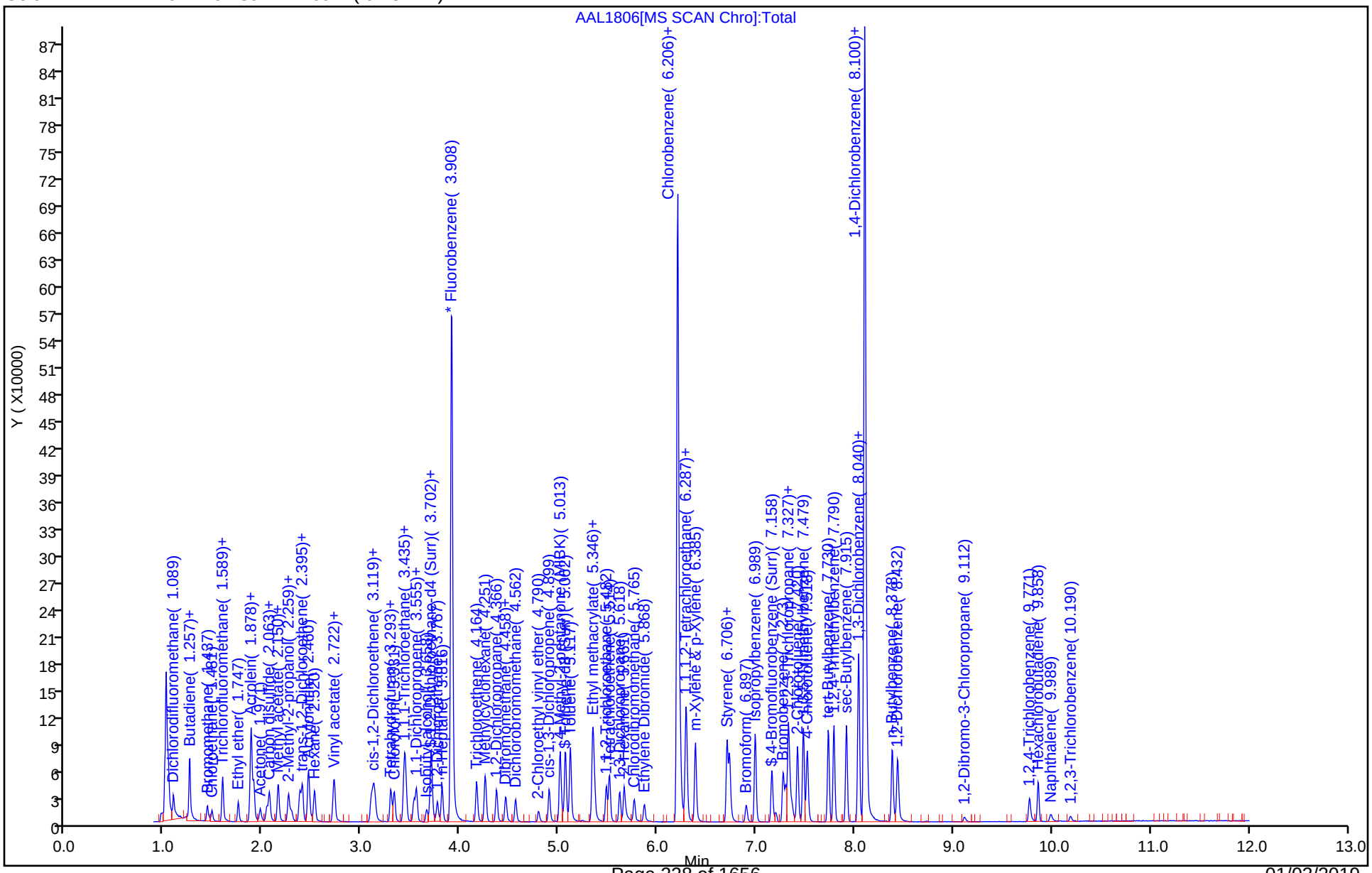
Report Date: 18-Dec-2018 13:56:26 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1806.D

Injection Date:	18-Dec-2018 10:51:30	Instrument ID:	CMSAA	Operator ID:	jk
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260AQ	Limit Group:	8260B		

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

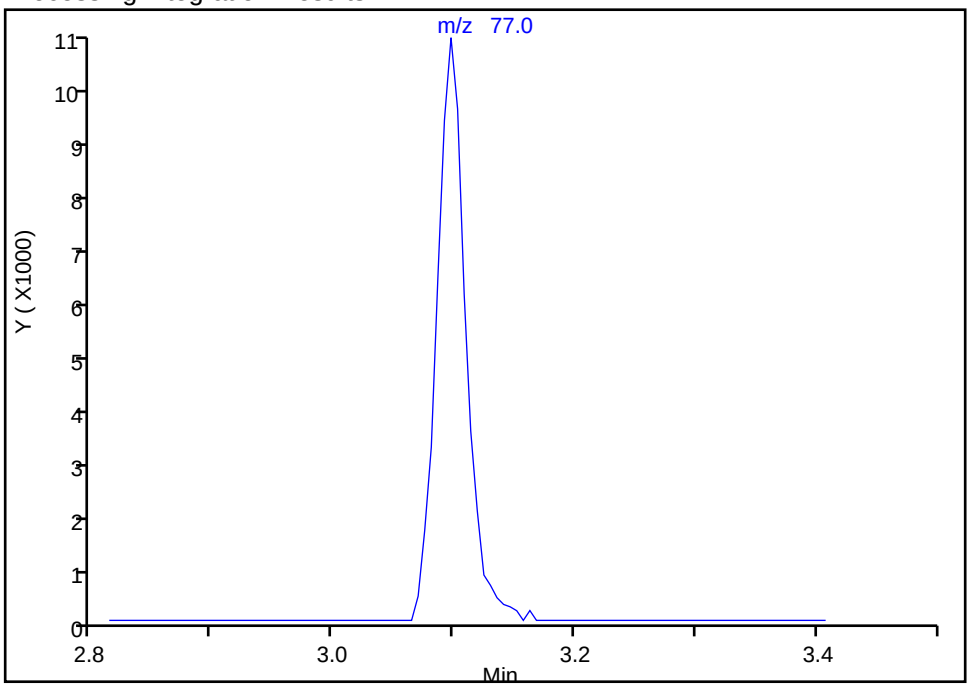
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1806.D				
Injection Date:	18-Dec-2018 10:51:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

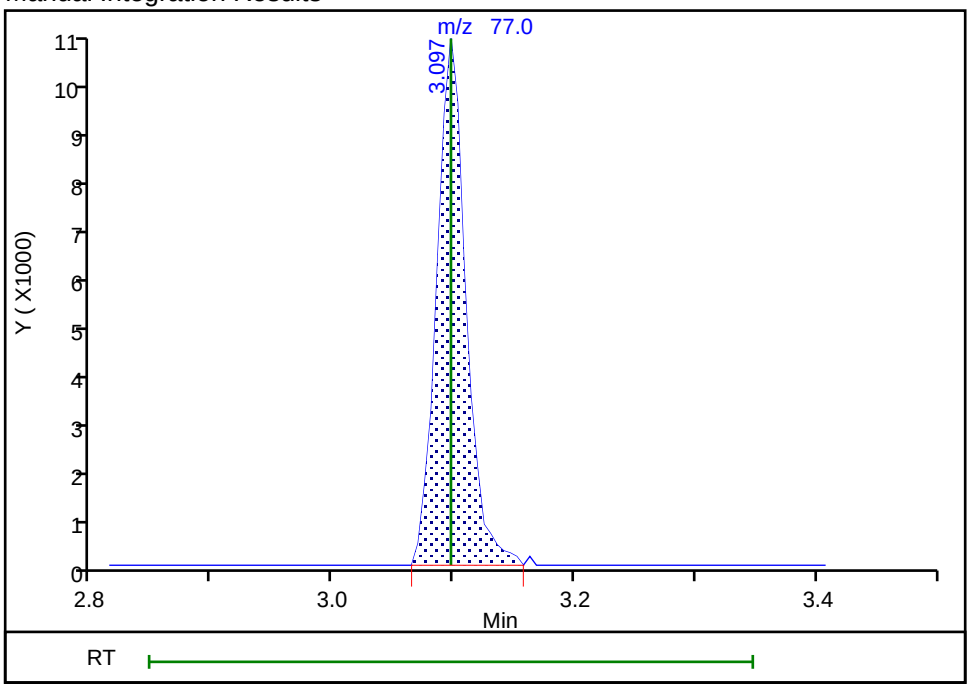
Not Detected
Expected RT: 3.10

Processing Integration Results



RT: 3.10
Area: 16800
Amount: 4.982772
Amount Units: ug/l

Manual Integration Results



Reviewer: kitchingsj, 18-Dec-2018 13:45:10
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

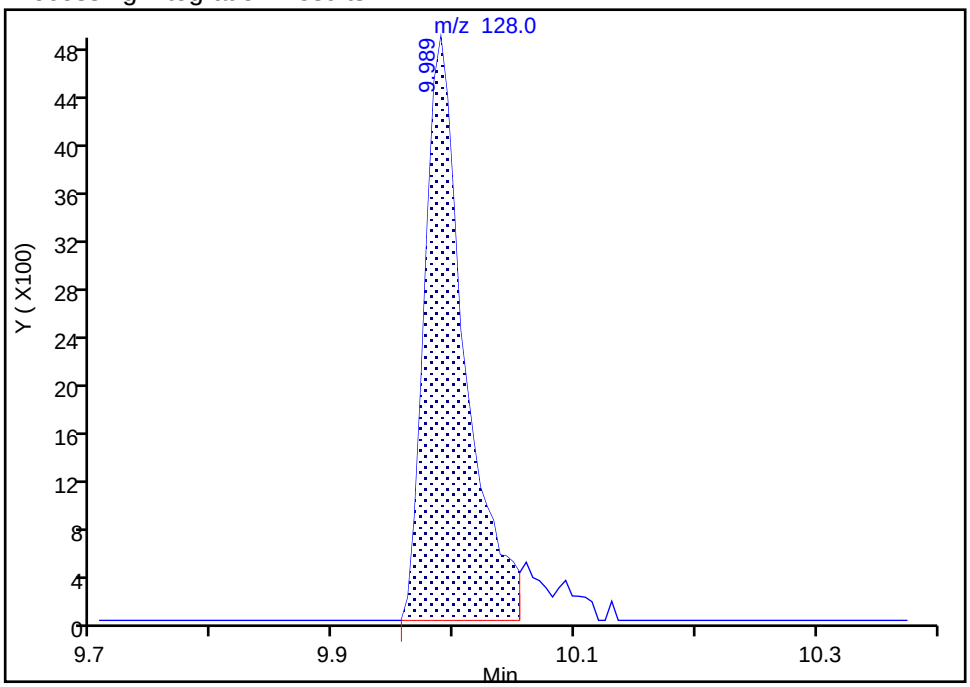
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1806.D				
Injection Date:	18-Dec-2018 10:51:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

120 Naphthalene, CAS: 91-20-3

Signal: 1

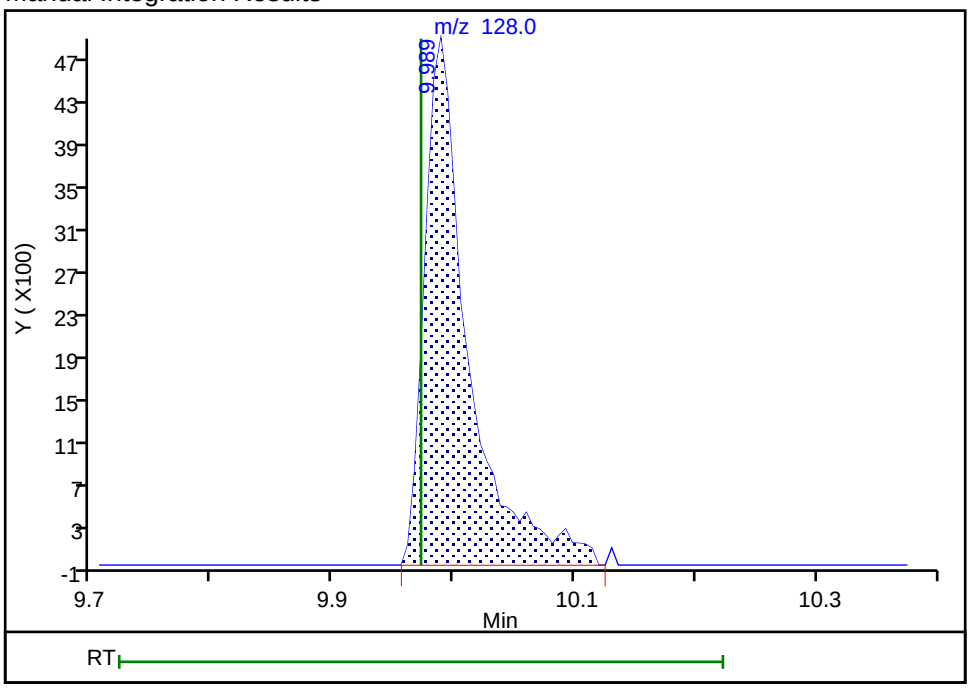
Processing Integration Results

RT: 9.99
Area: 11165
Amount: 1.775319
Amount Units: ug/l



Manual Integration Results

RT: 9.99
Area: 12162
Amount: 2.164756
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:42:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

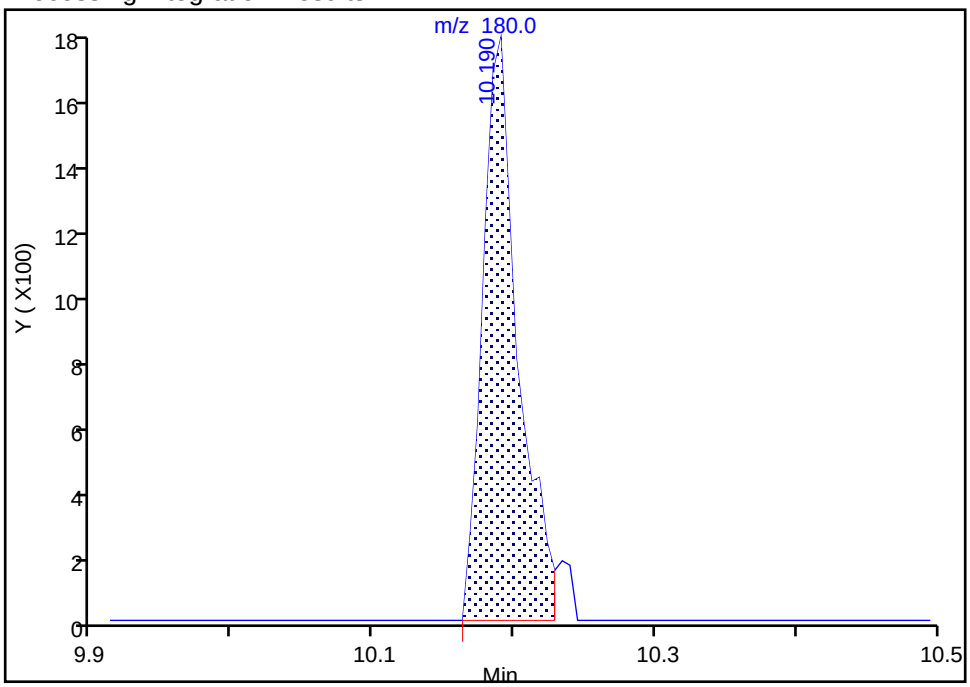
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1806.D				
Injection Date:	18-Dec-2018 10:51:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

121 1,2,3-Trichlorobenzene, CAS: 87-61-6

Signal: 1

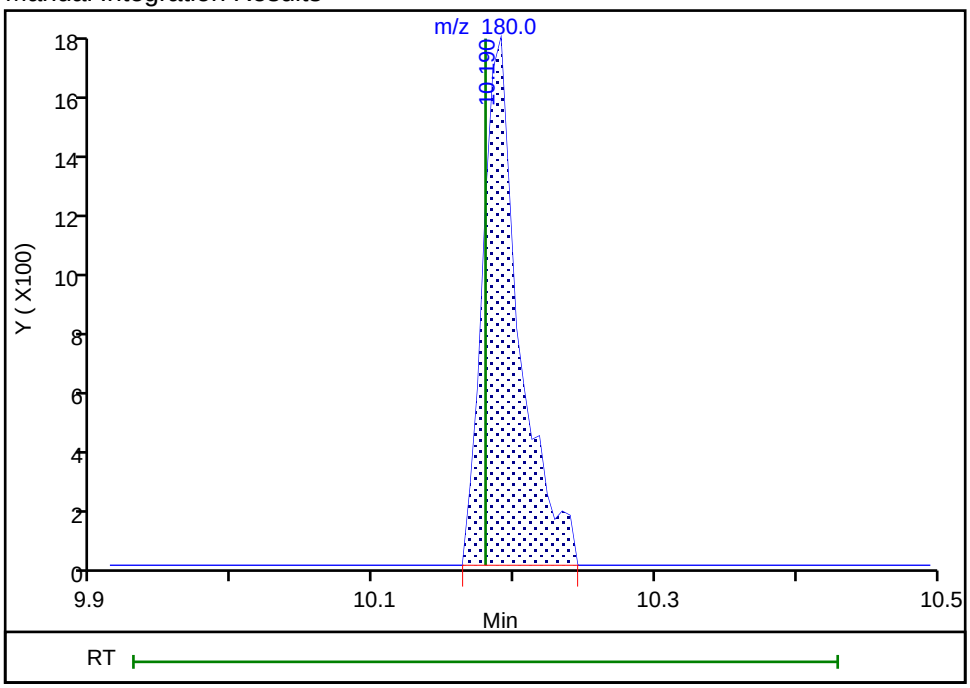
Processing Integration Results

RT: 10.19
Area: 3134
Amount: 1.769323
Amount Units: ug/l



Manual Integration Results

RT: 10.19
Area: 3249
Amount: 1.966887
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:42:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1807.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 18-Dec-2018 11:14:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-008
Operator ID: jk Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 13:56:30 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: kitchingsj Date: 18-Dec-2018 13:43:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.914	3.908	0.006	100	501607	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	82	202599	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	253879	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.446	0.005	98	25382	10.0	10.3	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	94	24537	10.0	10.3	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	100147	10.0	10.0	
$ 7 4-Bromofluorobenzene (Surr	95	7.158	7.153	0.005	98	39347	10.0	10.1	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	98	31092	10.0	10.0	
10 Vinyl chloride	62	1.252	1.252	0.000	98	30849	10.0	10.4	
11 Chloromethane	50	1.257	1.257	0.000	67	42181	10.0	10.5	
12 Butadiene	54	1.257	1.257	0.000	91	27826	10.0	10.3	
14 Bromomethane	96	1.432	1.432	0.000	98	21137	10.0	10.3	
15 Chloroethane	64	1.481	1.475	0.006	97	18560	10.0	10.8	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	98	39825	10.0	10.6	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	98	34255	10.0	10.4	
20 Ethyl ether	59	1.747	1.747	0.000	94	18694	10.0	9.71	
22 1,1,2-Trichloro-1,2,2-trif	101	1.872	1.867	0.005	96	21895	10.0	9.68	
23 Acrolein	56	1.878	1.878	0.000	95	125880	200.0	203.3	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	94	24618	10.0	9.95	
25 Acetone	58	1.970	1.970	0.000	89	10961	50.0	48.8	
26 Iodomethane	142	2.036	2.036	0.000	96	43459	10.0	10.0	
27 Carbon disulfide	76	2.063	2.063	0.000	98	79238	10.0	10.3	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	94	17215	10.0	10.4	
29 Methyl acetate	43	2.156	2.156	0.000	97	29292	20.0	20.3	
32 Methylene Chloride	84	2.259	2.259	0.000	85	29315	10.0	9.68	
33 2-Methyl-2-propanol	59	2.286	2.281	0.005	98	23379	100.0	103.4	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	65802	10.0	9.75	
36 trans-1,2-Dichloroethene	96	2.395	2.395	0.000	89	27942	10.0	10.1	
37 Acrylonitrile	53	2.460	2.460	0.000	96	91936	100.0	102.3	
38 Hexane	57	2.520	2.520	0.000	89	29582	10.0	9.58	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	44497	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.722	2.722	0.000	99	79581	20.0	19.8	
47 2,2-Dichloropropane	77	3.097	3.097	0.000	93	34976	10.0	10.2	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	99	31912	10.0	10.4	
49 2-Butanone (MEK)	43	3.135	3.130	0.005	98	51141	50.0	52.5	
50 Tetrahydrofuran	42	3.299	3.293	0.006	89	13770	20.0	20.0	
51 Chlorobromomethane	49	3.293	3.293	0.000	83	19613	10.0	10.1	
52 Chloroform	83	3.331	3.331	0.000	99	43764	10.0	10.3	
54 Cyclohexane	56	3.429	3.429	0.000	86	39651	10.0	9.80	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	35646	10.0	9.96	
57 Carbon tetrachloride	117	3.527	3.527	0.000	97	29178	10.0	9.81	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	98	31758	10.0	9.80	
60 Isobutyl alcohol	43	3.653	3.647	0.006	95	22557	250.0	246.0	
61 Benzene	78	3.702	3.702	0.000	95	106510	10.0	10.1	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	29325	10.0	10.3	
63 n-Heptane	43	3.816	3.816	0.000	85	24919	10.0	9.31	
65 Trichloroethene	132	4.164	4.164	0.000	94	29676	10.0	10.0	
66 Methylcyclohexane	83	4.251	4.251	0.000	92	41454	10.0	9.66	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	25787	10.0	10.1	
69 1,4-Dioxane	88	4.458	4.447	0.011	50	6291	200.0	210.0	
68 Dibromomethane	93	4.458	4.458	0.000	91	16433	10.0	10.2	
70 Dichlorobromomethane	83	4.562	4.562	0.000	99	31566	10.0	10.0	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	95	11965	10.0	10.3	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	43462	10.0	10.3	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	93	106476	50.0	53.1	
76 Toluene	92	5.117	5.117	0.000	94	70364	10.0	10.2	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	93	39103	10.0	10.2	
78 Ethyl methacrylate	69	5.362	5.356	0.006	86	31461	10.0	9.31	
79 1,1,2-Trichloroethane	83	5.482	5.476	0.006	96	21776	10.0	10.3	
80 Tetrachloroethene	164	5.514	5.509	0.005	95	25903	10.0	10.0	
81 1,3-Dichloropropane	76	5.618	5.612	0.006	89	42746	10.0	10.4	
82 2-Hexanone	43	5.656	5.650	0.006	93	66698	50.0	50.0	
85 Chlorodibromomethane	129	5.765	5.759	0.006	98	26824	10.0	9.95	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	27378	10.0	10.3	
88 Chlorobenzene	112	6.227	6.227	0.000	99	86212	10.0	10.1	
89 Ethylbenzene	91	6.287	6.287	0.000	97	130966	10.0	10.0	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.293	0.005	95	27359	10.0	9.84	
92 m-Xylene & p-Xylene	106	6.385	6.380	0.005	99	56782	10.0	10.0	
95 o-Xylene	106	6.706	6.701	0.005	95	54675	10.0	10.0	
96 Styrene	104	6.728	6.728	0.000	97	88187	10.0	10.1	
97 Bromoform	173	6.897	6.897	0.000	98	19678	10.0	9.68	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	134705	10.0	10.0	
100 Bromobenzene	156	7.273	7.273	0.000	90	41134	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	35988	10.0	10.0	
102 N-Propylbenzene	120	7.327	7.321	0.006	100	41781	10.0	10.1	
103 1,2,3-Trichloropropane	110	7.343	7.338	0.005	92	11633	10.0	10.1	
104 trans-1,4-Dichloro-2-buten	53	7.365	7.354	0.011	86	8228	10.0	8.35	
105 2-Chlorotoluene	126	7.419	7.419	0.000	96	38253	10.0	10.4	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	94	117259	10.0	10.1	
107 4-Chlorotoluene	126	7.517	7.512	0.005	95	39923	10.0	10.3	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	103074	10.0	9.83	
109 1,2,4-Trimethylbenzene	105	7.790	7.784	0.006	96	121227	10.0	10.1	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	147856	10.0	9.81	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	130838	10.0	9.95	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	100	76464	10.0	9.94	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	96	82036	10.0	10.0	
115 n-Butylbenzene	91	8.378	8.378	0.000	98	106911	10.0	10.0	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	72415	10.0	10.0	
117 1,2-Dibromo-3-Chloropropan	157	9.112	9.102	0.010	90	5956	10.0	7.07	
118 1,2,4-Trichlorobenzene	180	9.766	9.760	0.006	93	27858	10.0	7.27	
119 Hexachlorobutadiene	225	9.858	9.858	0.000	97	18376	10.0	9.36	
120 Naphthalene	128	9.983	9.973	0.011	99	30575	10.0	5.33	
121 1,2,3-Trichlorobenzene	180	10.185	10.179	0.006	95	8472	10.0	5.03	
S 125 1,2-Dichloroethene, Total	1				0		20.0	20.5	
S 126 Xylenes, Total	1				0		20.0	20.1	
S 127 1,3-Dichloropropene, Total	1				0		20.0	20.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_MMIX_01940	Amount Added:	1.00	Units: uL
VM_Acrolein_00193	Amount Added:	1.00	Units: uL

Report Date: 18-Dec-2018 13:56:32 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1807.D

Injection Date: 18-Dec-2018 11:14:30 Instrument ID: CMSAA Operator ID: jk

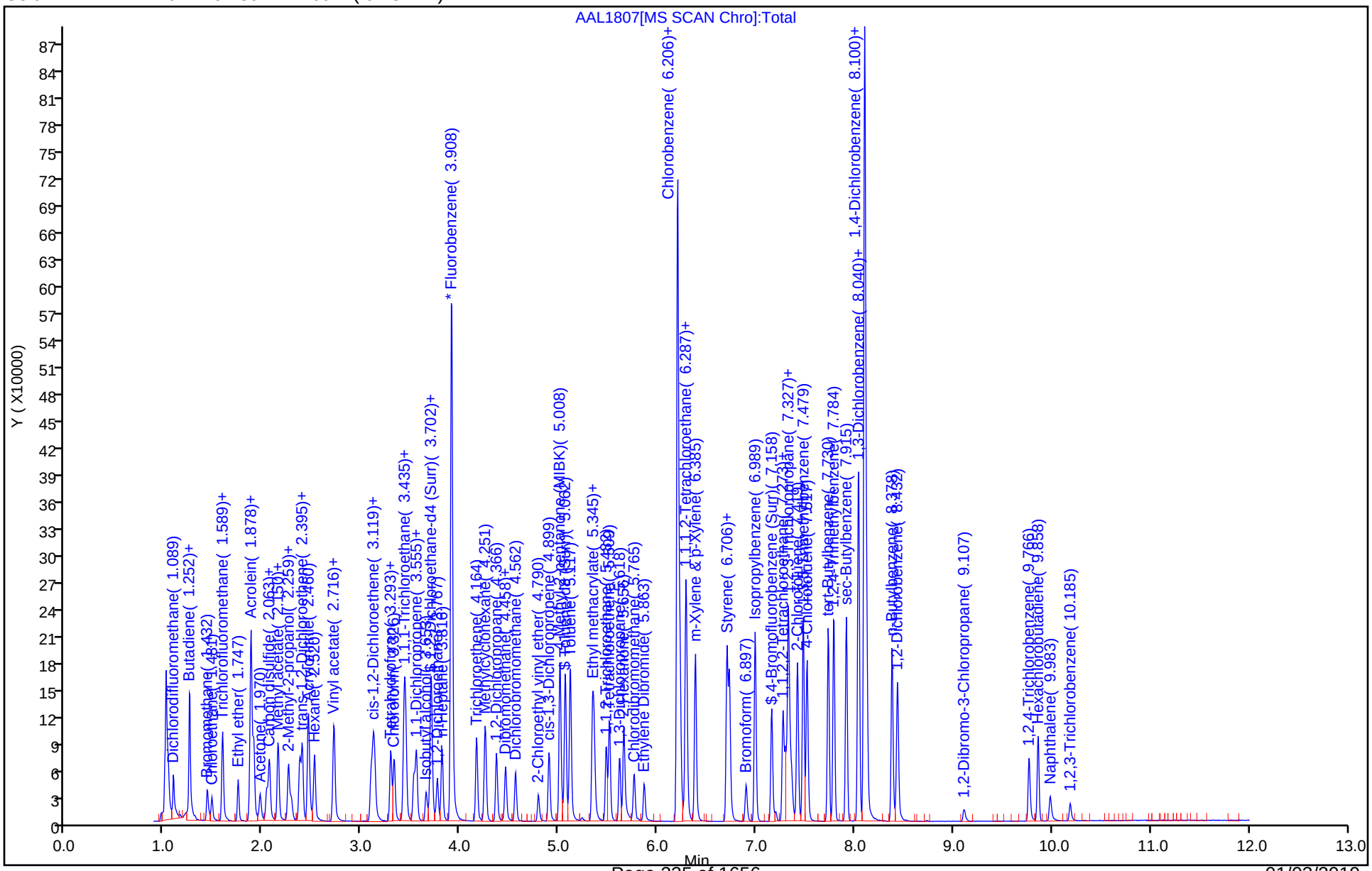
Lims ID: ic Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

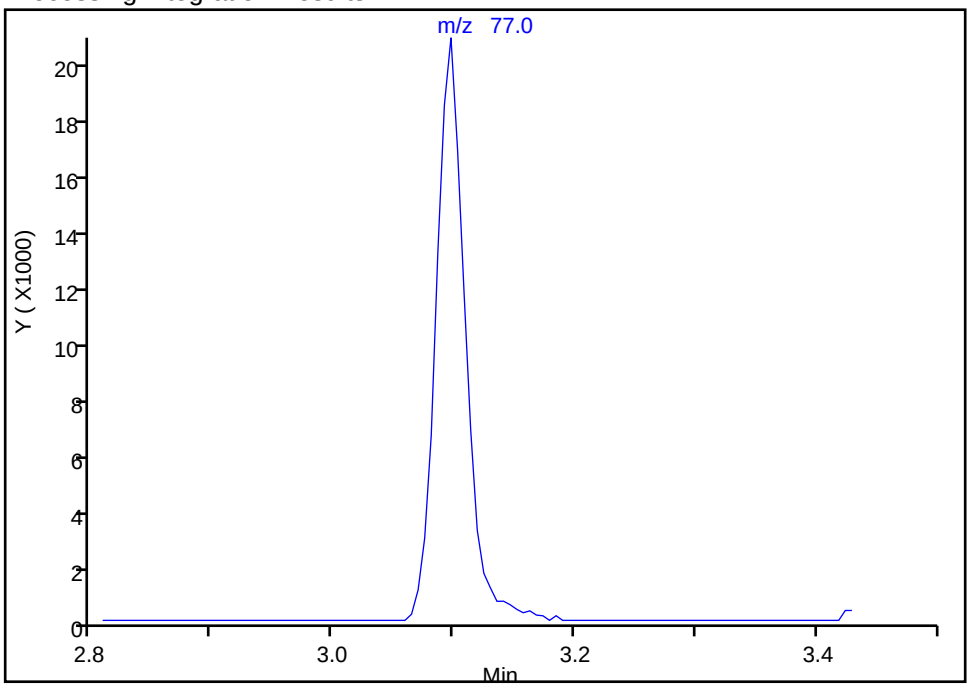
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1807.D				
Injection Date:	18-Dec-2018 11:14:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

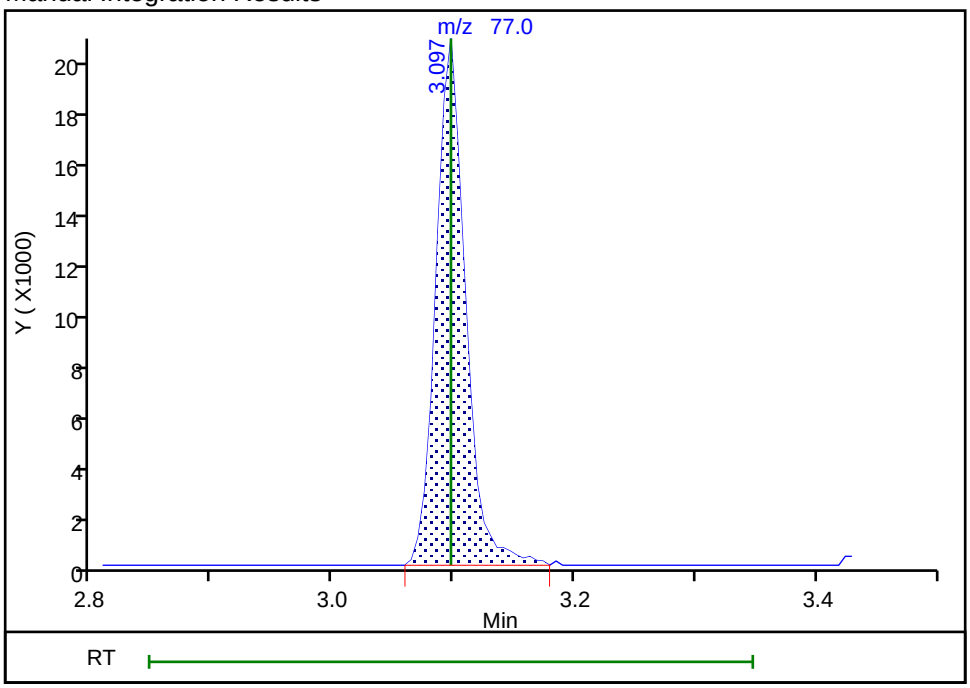
Not Detected
Expected RT: 3.10

Processing Integration Results



Manual Integration Results

RT: 3.10
Area: 34976
Amount: 10.151897
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:44:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1808.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 18-Dec-2018 11:37:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-009
Operator ID: jk Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 13:56:36 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: kitchingsj Date: 18-Dec-2018 13:44:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	517900	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	83	203017	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	257239	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	51042	20.0	20.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	97	49276	20.0	20.1	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	205912	20.0	20.0	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	78607	20.0	19.9	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	99	65799	20.0	20.5	
10 Vinyl chloride	62	1.252	1.252	0.000	98	62860	20.0	20.6	
12 Butadiene	54	1.257	1.257	0.000	91	59068	20.0	21.2	
11 Chloromethane	50	1.257	1.257	0.000	66	85451	20.0	20.6	
14 Bromomethane	96	1.432	1.432	0.000	99	42019	20.0	19.8	
15 Chloroethane	64	1.481	1.481	0.000	98	35933	20.0	20.3	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	99	80446	20.0	20.7	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	99	70537	20.0	20.7	
20 Ethyl ether	59	1.747	1.747	0.000	94	39528	20.0	19.9	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.872	-0.005	97	49849	20.0	21.3	
23 Acrolein	56	1.878	1.878	0.000	94	265443	400.0	415.3	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	53289	20.0	20.9	
25 Acetone	58	1.970	1.970	0.000	89	21937	100.0	94.7	
26 Iodomethane	142	2.036	2.036	0.000	95	89828	20.0	20.0	
27 Carbon disulfide	76	2.063	2.063	0.000	98	160242	20.0	20.1	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	95	35400	20.0	20.8	
29 Methyl acetate	43	2.156	2.156	0.000	97	58876	40.0	39.5	
32 Methylene Chloride	84	2.259	2.259	0.000	84	57850	20.0	18.5	
33 2-Methyl-2-propanol	59	2.286	2.286	0.000	99	48401	200.0	207.3	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	139510	20.0	20.0	
36 trans-1,2-Dichloroethene	96	2.395	2.395	0.000	90	59449	20.0	20.9	
37 Acrylonitrile	53	2.460	2.460	0.000	96	192394	200.0	207.3	
38 Hexane	57	2.520	2.520	0.000	89	67868	20.0	21.3	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	89751	20.0	20.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.722	2.722	0.000	99	170944	40.0	41.1	
47 2,2-Dichloropropane	77	3.097	3.097	0.000	93	73098	20.0	20.5	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	95	65445	20.0	20.6	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	98	104536	100.0	104.0	
51 Chlorobromomethane	49	3.293	3.293	0.000	90	39764	20.0	19.9	
50 Tetrahydrofuran	42	3.293	3.293	0.000	92	27994	40.0	39.4	
52 Chloroform	83	3.331	3.331	0.000	99	89258	20.0	20.3	
54 Cyclohexane	56	3.429	3.429	0.000	85	87843	20.0	21.0	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	98	76152	20.0	20.6	
57 Carbon tetrachloride	117	3.527	3.527	0.000	97	63888	20.0	20.8	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	97	68899	20.0	20.6	
60 Isobutyl alcohol	43	3.647	3.647	0.000	96	48940	500.0	507.3	
61 Benzene	78	3.701	3.701	0.000	95	222052	20.0	20.5	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	59198	20.0	20.1	
63 n-Heptane	43	3.816	3.816	0.000	87	61023	20.0	22.1	
65 Trichloroethene	132	4.164	4.164	0.000	93	63289	20.0	20.7	
66 Methylcyclohexane	83	4.251	4.251	0.000	92	93375	20.0	21.1	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	53567	20.0	20.4	
69 1,4-Dioxane	88	4.453	4.453	0.000	88	12688	400.0	394.5	
68 Dibromomethane	93	4.458	4.458	0.000	92	33951	20.0	20.5	
70 Dichlorobromomethane	83	4.562	4.562	0.000	99	65562	20.0	20.2	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	95	25009	20.0	20.8	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	90315	20.0	20.7	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	93	221623	100.0	107.1	
76 Toluene	92	5.117	5.117	0.000	93	144482	20.0	20.3	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	97	77600	20.0	19.6	
78 Ethyl methacrylate	69	5.356	5.356	0.000	86	67345	20.0	19.3	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	44671	20.0	20.6	
80 Tetrachloroethene	164	5.514	5.514	0.000	94	53781	20.0	20.2	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	86224	20.0	20.4	
82 2-Hexanone	43	5.656	5.656	0.000	92	144734	100.0	100.2	
85 Chlorodibromomethane	129	5.765	5.765	0.000	98	55366	20.0	19.9	
86 Ethylene Dibromide	107	5.863	5.863	0.000	99	55696	20.0	20.4	
88 Chlorobenzene	112	6.227	6.227	0.000	98	172915	20.0	20.2	
89 Ethylbenzene	91	6.287	6.287	0.000	96	268494	20.0	20.4	
90 1,1,1,2-Tetrachloroethane	131	6.293	6.293	0.000	94	56177	20.0	20.2	
92 m-Xylene & p-Xylene	106	6.385	6.385	0.000	99	116179	20.0	20.5	
95 o-Xylene	106	6.706	6.701	0.005	95	112442	20.0	20.6	
96 Styrene	104	6.728	6.728	0.000	97	180971	20.0	20.7	
97 Bromoform	173	6.897	6.897	0.000	98	39866	20.0	19.6	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	278765	20.0	20.7	
100 Bromobenzene	156	7.272	7.272	0.000	90	84071	20.0	20.6	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	74466	20.0	20.7	
102 N-Propylbenzene	120	7.327	7.327	0.000	100	87133	20.0	20.9	
103 1,2,3-Trichloropropane	110	7.343	7.343	0.000	94	24309	20.0	21.1	
104 trans-1,4-Dichloro-2-buten	53	7.360	7.360	0.000	86	16565	20.0	16.8	
105 2-Chlorotoluene	126	7.419	7.419	0.000	96	75538	20.0	20.4	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	94	240610	20.0	20.7	
107 4-Chlorotoluene	126	7.517	7.517	0.000	95	80868	20.0	20.8	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	214047	20.0	20.4	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	247909	20.0	20.7	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	311955	20.0	20.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	277806	20.0	20.9	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	99	159536	20.0	20.5	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	164737	20.0	19.9	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	224846	20.0	20.8	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	100	150642	20.0	20.5	
117 1,2-Dibromo-3-Chloropropan	157	9.107	9.107	0.000	89	13000	20.0	15.2	
118 1,2,4-Trichlorobenzene	180	9.766	9.766	0.000	92	62469	20.0	16.1	
119 Hexachlorobutadiene	225	9.858	9.858	0.000	98	39745	20.0	20.0	
120 Naphthalene	128	9.978	9.978	0.000	99	80666	20.0	13.8	
121 1,2,3-Trichlorobenzene	180	10.185	10.185	0.000	95	22789	20.0	13.3	
S 127 1,3-Dichloropropene, Total	1				0		40.0	40.3	
S 126 Xylenes, Total	1				0		40.0	41.1	
S 125 1,2-Dichloroethene, Total	1				0		40.0	41.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_MMIX_01940	Amount Added:	2.00	Units: uL
VM_Acrolein_00193	Amount Added:	2.00	Units: uL

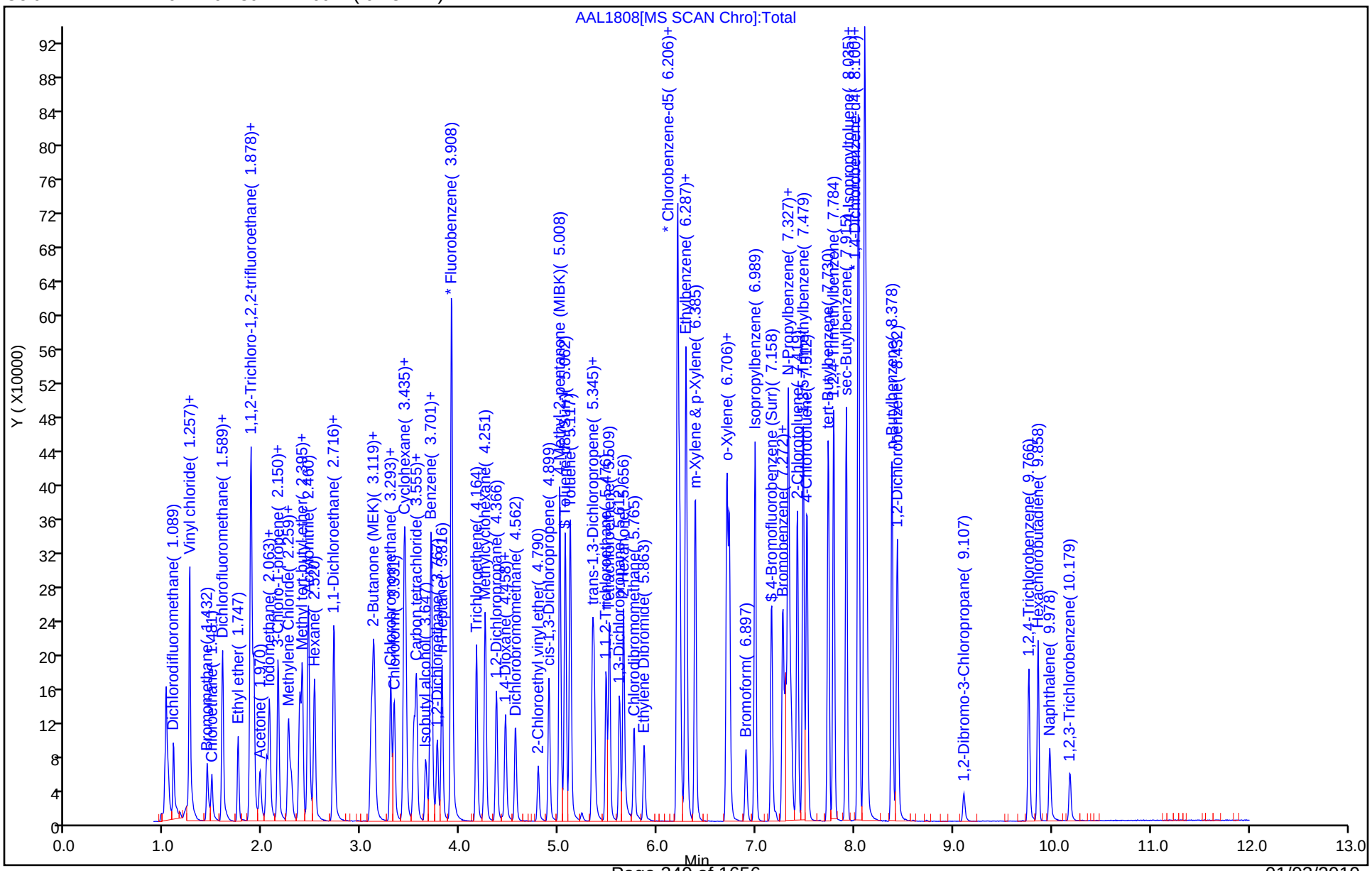
Report Date: 18-Dec-2018 13:56:39 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1808.D

Injection Date:	18-Dec-2018 11:37:30	Instrument ID:	CMSAA	Operator ID:	jk
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260AQ	Limit Group:	8260B		

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

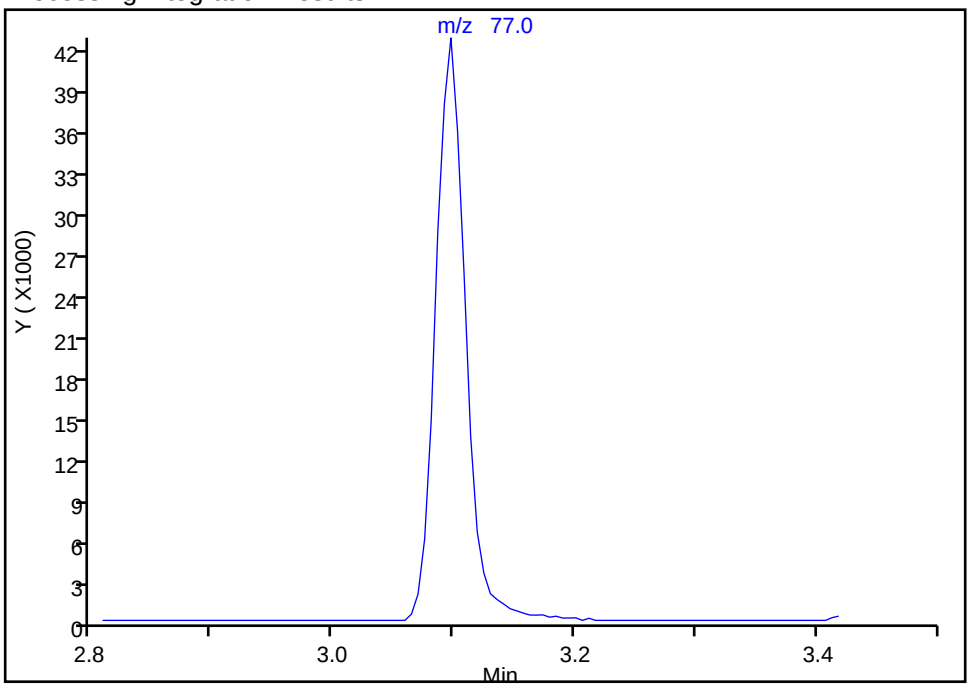
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1808.D				
Injection Date:	18-Dec-2018 11:37:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

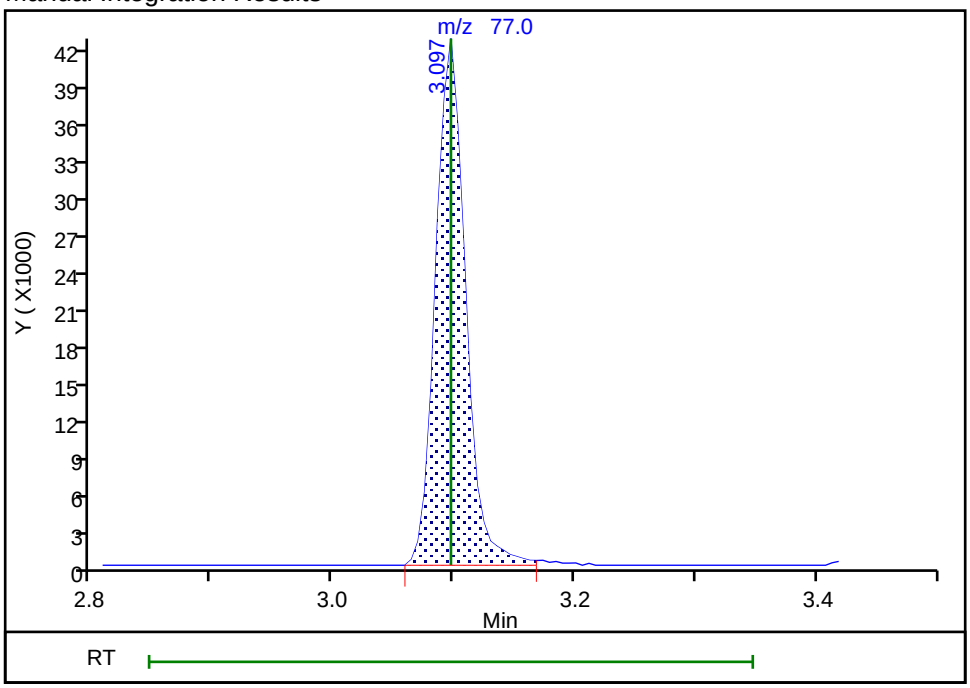
Not Detected
Expected RT: 3.10

Processing Integration Results



RT: 3.10
Area: 73098
Amount: 20.549451
Amount Units: ug/l

Manual Integration Results



Reviewer: kitchingsj, 18-Dec-2018 13:44:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1809.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 18-Dec-2018 12:00:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-010
Operator ID: jk Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 13:56:43 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: kitchingsj Date: 18-Dec-2018 13:37:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	522326	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	82	200183	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	262737	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.446	3.446	0.000	99	131350	50.0	51.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	97	125903	50.0	50.9	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	100	515582	50.0	49.6	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	197137	50.0	48.9	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	99	154527	50.0	47.8	
10 Vinyl chloride	62	1.252	1.252	0.000	98	150229	50.0	48.8	
11 Chloromethane	50	1.257	1.257	0.000	72	203828	50.0	48.7	
12 Butadiene	54	1.257	1.257	0.000	90	136131	50.0	48.4	
14 Bromomethane	96	1.432	1.432	0.000	98	98617	50.0	46.2	
15 Chloroethane	64	1.475	1.475	0.000	98	85462	50.0	47.9	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	99	195355	50.0	49.9	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	99	167856	50.0	48.8	
20 Ethyl ether	59	1.747	1.747	0.000	94	109780	50.0	54.7	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.867	0.000	97	121203	50.0	51.4	
23 Acrolein	56	1.878	1.878	0.000	94	683676	1000.0	1060.6	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	94	128270	50.0	49.8	
25 Acetone	58	1.970	1.970	0.000	90	57905	250.0	247.8	
26 Iodomethane	142	2.036	2.036	0.000	95	228323	50.0	50.5	
27 Carbon disulfide	76	2.063	2.063	0.000	98	387865	50.0	48.2	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	94	88201	50.0	51.3	
29 Methyl acetate	43	2.156	2.156	0.000	97	153636	100.0	102.3	
32 Methylene Chloride	84	2.259	2.259	0.000	85	142870	50.0	45.3	
33 2-Methyl-2-propanol	59	2.281	2.281	0.000	99	128620	500.0	546.1	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	355930	50.0	50.6	
36 trans-1,2-Dichloroethene	96	2.395	2.395	0.000	90	148743	50.0	51.8	
37 Acrylonitrile	53	2.460	2.460	0.000	96	495512	500.0	529.3	
38 Hexane	57	2.520	2.520	0.000	88	172214	50.0	53.6	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	224577	50.0	50.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.722	2.722	0.000	99	441805	100.0	105.4	
47 2,2-Dichloropropane	77	3.097	3.097	0.000	93	182288	50.0	50.8	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	95	165763	50.0	51.8	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	256761	250.0	253.3	
50 Tetrahydrofuran	42	3.293	3.293	0.000	84	68843	100.0	96.0	
51 Chlorobromomethane	49	3.293	3.293	0.000	80	112324	50.0	55.8	
52 Chloroform	83	3.331	3.331	0.000	99	223762	50.0	50.4	
54 Cyclohexane	56	3.429	3.429	0.000	85	217145	50.0	51.5	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	188817	50.0	50.7	
57 Carbon tetrachloride	117	3.527	3.527	0.000	97	159767	50.0	51.6	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	96	174168	50.0	51.6	
60 Isobutyl alcohol	43	3.647	3.647	0.000	95	127973	1250.0	1301.6	
61 Benzene	78	3.702	3.702	0.000	95	563090	50.0	51.5	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	150686	50.0	50.8	
63 n-Heptane	43	3.816	3.816	0.000	86	139049	50.0	49.9	
65 Trichloroethene	132	4.164	4.164	0.000	93	158656	50.0	51.5	
66 Methylcyclohexane	83	4.251	4.251	0.000	92	233103	50.0	52.2	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	138866	50.0	52.4	
69 1,4-Dioxane	88	4.447	4.447	0.000	89	33019	1000.0	988.0	
68 Dibromomethane	93	4.458	4.458	0.000	90	85883	50.0	51.4	
70 Dichlorobromomethane	83	4.562	4.562	0.000	99	170530	50.0	52.1	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	95	67605	50.0	55.9	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	233162	50.0	52.9	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	92	578364	250.0	277.1	
76 Toluene	92	5.117	5.117	0.000	93	365462	50.0	51.0	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	96	201393	50.0	50.6	
78 Ethyl methacrylate	69	5.356	5.356	0.000	86	181510	50.0	51.7	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	114509	50.0	52.2	
80 Tetrachloroethene	164	5.509	5.509	0.000	93	137277	50.0	51.1	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	223036	50.0	52.3	
82 2-Hexanone	43	5.650	5.650	0.000	92	388624	250.0	259.1	
85 Chlorodibromomethane	129	5.759	5.759	0.000	98	147620	50.0	52.6	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	144411	50.0	52.3	
88 Chlorobenzene	112	6.227	6.227	0.000	98	428195	50.0	50.6	
89 Ethylbenzene	91	6.287	6.287	0.000	97	664598	50.0	51.3	
90 1,1,1,2-Tetrachloroethane	131	6.293	6.293	0.000	95	146218	50.0	53.2	
92 m-Xylene & p-Xylene	106	6.380	6.380	0.000	99	287163	50.0	51.4	
95 o-Xylene	106	6.701	6.701	0.000	95	282242	50.0	52.4	
96 Styrene	104	6.728	6.728	0.000	98	464067	50.0	53.8	
97 Bromoform	173	6.897	6.897	0.000	99	107313	50.0	53.4	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	690419	50.0	52.0	
100 Bromobenzene	156	7.273	7.273	0.000	89	211404	50.0	52.5	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	188786	50.0	53.3	
102 N-Propylbenzene	120	7.327	7.321	0.006	100	211716	50.0	51.6	
103 1,2,3-Trichloropropane	110	7.338	7.338	0.000	96	59825	50.0	52.7	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.354	0.000	90	46187	50.0	47.4	
105 2-Chlorotoluene	126	7.419	7.419	0.000	96	187312	50.0	51.4	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	94	600569	50.0	52.3	
107 4-Chlorotoluene	126	7.512	7.512	0.000	95	200026	50.0	52.2	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	529929	50.0	51.2	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	624610	50.0	52.9	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	764233	50.0	51.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	695248	50.0	51.1	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	99	403378	50.0	50.7	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	417623	50.0	49.4	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	567432	50.0	51.3	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	384264	50.0	51.3	
117 1,2-Dibromo-3-Chloropropan	157	9.102	9.102	0.000	89	37743	50.0	43.3	
118 1,2,4-Trichlorobenzene	180	9.760	9.760	0.000	93	183194	50.0	46.2	
119 Hexachlorobutadiene	225	9.858	9.858	0.000	98	102077	50.0	50.2	
120 Naphthalene	128	9.973	9.973	0.000	99	279607	50.0	45.8	
121 1,2,3-Trichlorobenzene	180	10.179	10.179	0.000	95	79732	50.0	45.0	
S 125 1,2-Dichloroethene, Total	1				0		100.0	103.6	
S 126 Xylenes, Total	1				0		100.0	103.8	
S 127 1,3-Dichloropropene, Total	1				0		100.0	103.4	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_MMIX_01940	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL

Report Date: 18-Dec-2018 13:56:46 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1809.D

Injection Date: 18-Dec-2018 12:00:30 Instrument ID: CMSAA Operator ID: jk

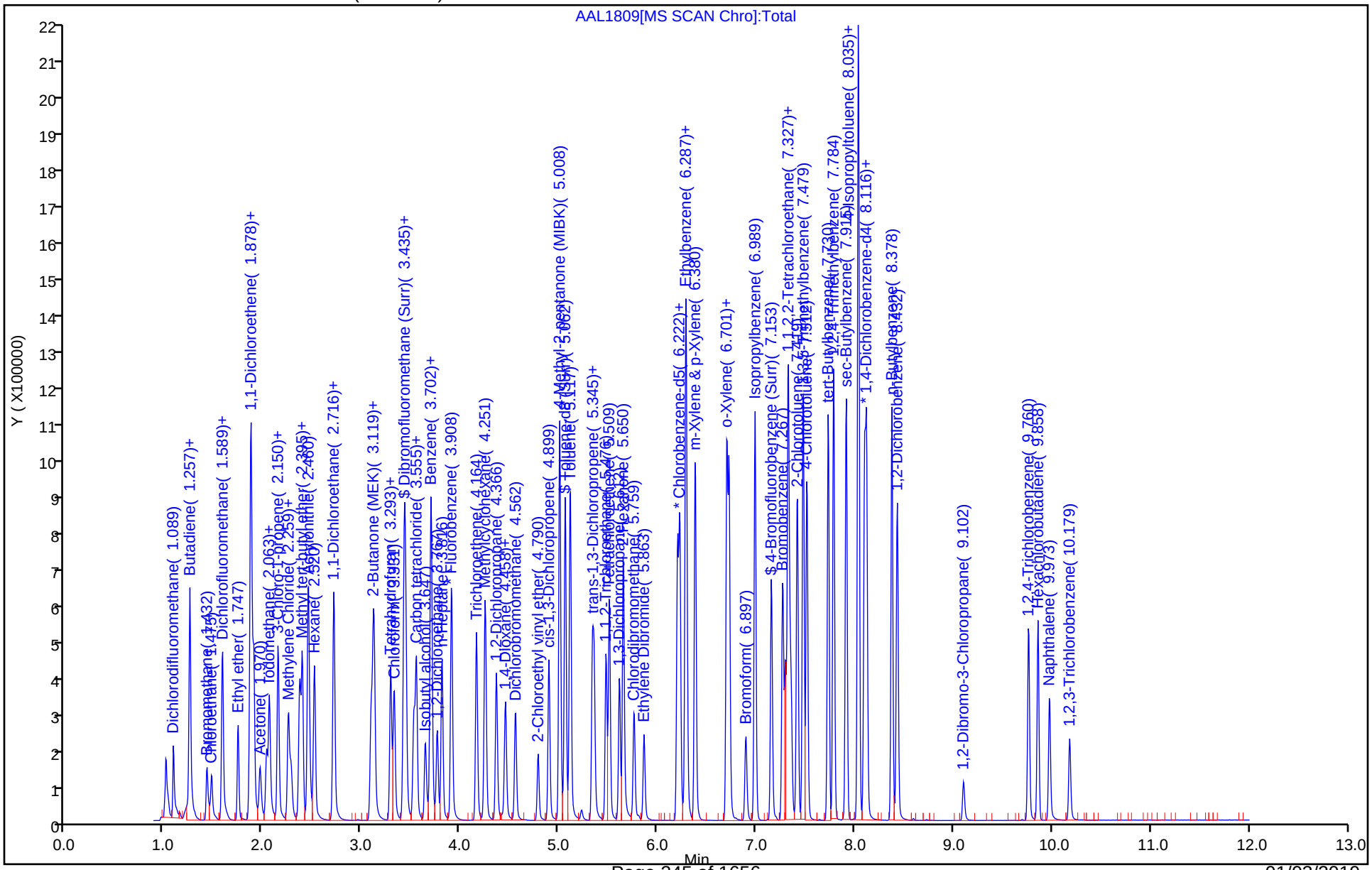
Lims ID: icis Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



TestAmerica Savannah

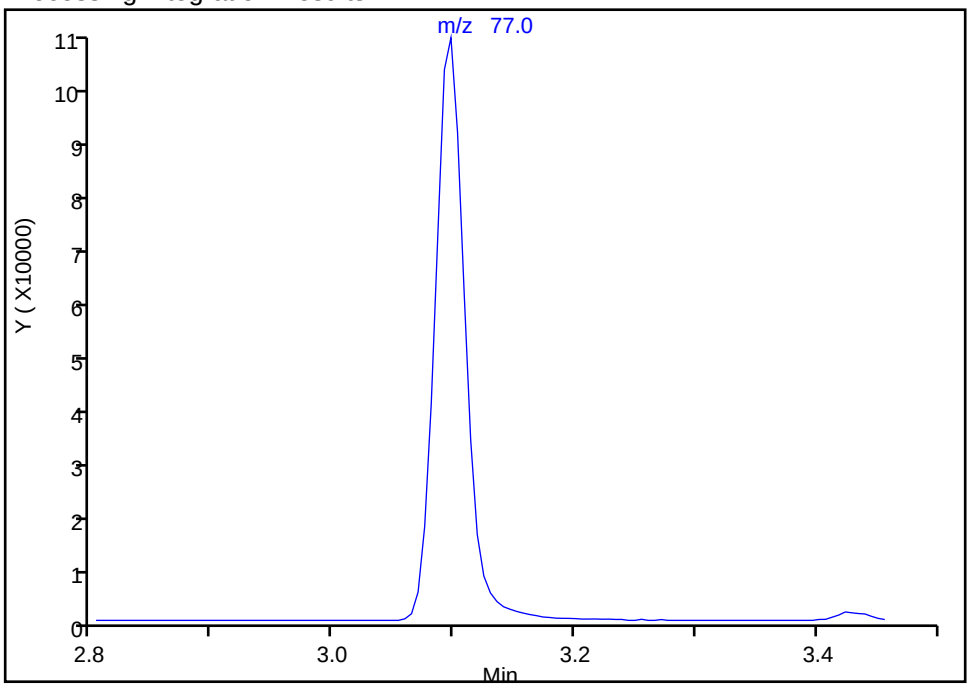
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1809.D				
Injection Date:	18-Dec-2018 12:00:30	Instrument ID:	CMSAA		
Lims ID:	icis				
Client ID:					
Operator ID:	jk	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

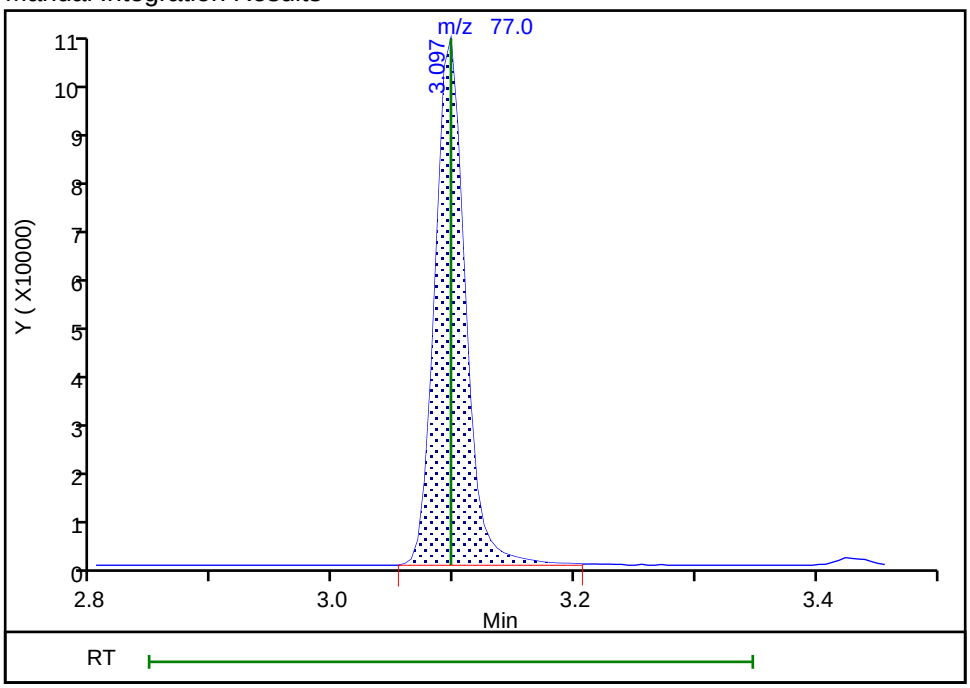
Not Detected
Expected RT: 3.10

Processing Integration Results



RT: 3.10
Area: 182288
Amount: 50.810922
Amount Units: ug/l

Manual Integration Results



Reviewer: kitchingsj, 18-Dec-2018 13:46:21
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1810.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 18-Dec-2018 12:22:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-011
Operator ID: jk Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 13:56:50 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: kitchingsj Date: 18-Dec-2018 13:47:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.909	3.908	0.001	100	532692	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	81	200734	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	91	265295	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.446	0.005	99	263571	100.0	100.6	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.713	3.712	0.001	96	250267	100.0	99.2	
$ 6 Toluene-d8 (Surr)	98	5.063	5.062	0.001	99	1059130	100.0	99.8	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	396482	100.0	97.4	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	99	325175	100.0	98.7	
10 Vinyl chloride	62	1.247	1.252	-0.005	98	309205	100.0	98.6	
12 Butadiene	54	1.263	1.257	0.006	90	284615	100.0	99.3	
11 Chloromethane	50	1.258	1.257	0.001	99	409792	100.0	96.0	
14 Bromomethane	96	1.426	1.432	-0.006	99	184699	100.0	84.8	
15 Chloroethane	64	1.475	1.475	0.000	98	158014	100.0	86.9	
17 Dichlorofluoromethane	67	1.579	1.584	-0.005	99	387645	100.0	97.1	
18 Trichlorofluoromethane	101	1.590	1.589	0.001	99	347821	100.0	99.3	
20 Ethyl ether	59	1.742	1.747	-0.005	95	228944	100.0	112.0	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.867	0.000	96	262069	100.0	109.1	
23 Acrolein	56	1.878	1.878	0.000	94	1093535	2000.0	1663.4	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	262974	100.0	100.1	
25 Acetone	58	1.971	1.970	0.001	90	116107	500.0	487.2	
26 Iodomethane	142	2.036	2.036	0.000	96	466409	100.0	101.2	
27 Carbon disulfide	76	2.063	2.063	0.000	98	798916	100.0	97.3	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	94	182904	100.0	104.3	
29 Methyl acetate	43	2.156	2.156	0.000	97	325481	200.0	212.4	
32 Methylene Chloride	84	2.254	2.259	-0.005	84	289872	100.0	90.1	
33 2-Methyl-2-propanol	59	2.286	2.281	0.005	99	250196	1000.0	1041.6	
34 Methyl tert-butyl ether	73	2.368	2.373	-0.005	96	755418	100.0	105.4	
36 trans-1,2-Dichloroethene	96	2.395	2.395	0.000	89	301087	100.0	102.9	
37 Acrylonitrile	53	2.455	2.460	-0.005	96	996641	1000.0	1043.9	
38 Hexane	57	2.520	2.520	0.000	88	384390	100.0	117.2	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	444610	100.0	98.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.716	2.722	-0.006	99	938044	200.0	219.5	
47 2,2-Dichloropropane	77	3.097	3.097	0.000	93	375984	100.0	102.8	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	95	331822	100.0	101.6	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	517353	500.0	500.5	
51 Chlorobromomethane	49	3.293	3.293	0.000	79	223026	100.0	108.6	
50 Tetrahydrofuran	42	3.293	3.293	0.000	89	137926	200.0	188.5	
52 Chloroform	83	3.332	3.331	0.001	99	448106	100.0	99.1	
54 Cyclohexane	56	3.430	3.429	0.001	85	465105	100.0	108.2	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	398649	100.0	104.9	
57 Carbon tetrachloride	117	3.528	3.527	0.001	97	338543	100.0	107.2	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	96	369735	100.0	107.5	
60 Isobutyl alcohol	43	3.642	3.647	-0.005	96	264887	2500.0	2632.8	
61 Benzene	78	3.702	3.702	0.000	95	1158652	100.0	103.9	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	300749	100.0	99.5	
63 n-Heptane	43	3.811	3.816	-0.005	86	300331	100.0	105.6	
65 Trichloroethene	132	4.164	4.164	0.000	94	329385	100.0	104.8	
66 Methylcyclohexane	83	4.252	4.251	0.001	92	511223	100.0	112.2	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	280545	100.0	103.7	
69 1,4-Dioxane	88	4.447	4.447	0.000	88	71077	2000.0	2048.4	
68 Dibromomethane	93	4.458	4.458	0.000	90	173598	100.0	101.8	
70 Dichlorobromomethane	83	4.556	4.562	-0.006	99	348332	100.0	104.4	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	95	133041	100.0	107.8	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	471664	100.0	104.9	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	92	1152286	500.0	541.4	
76 Toluene	92	5.117	5.117	0.000	93	752265	100.0	103.0	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	96	409519	100.0	100.8	
78 Ethyl methacrylate	69	5.357	5.356	0.001	86	369789	100.0	103.3	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	229854	100.0	102.8	
80 Tetrachloroethene	164	5.509	5.509	0.000	94	286277	100.0	104.5	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	448066	100.0	103.0	
82 2-Hexanone	43	5.651	5.650	0.001	92	788561	500.0	509.7	
85 Chlorodibromomethane	129	5.759	5.759	0.000	98	305090	100.0	106.6	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	293664	100.0	104.3	
88 Chlorobenzene	112	6.228	6.227	0.001	98	868801	100.0	102.5	
89 Ethylbenzene	91	6.287	6.287	0.000	97	1362127	100.0	104.9	
90 1,1,1,2-Tetrachloroethane	131	6.293	6.293	0.000	95	298278	100.0	108.3	
92 m-Xylene & p-Xylene	106	6.380	6.380	0.000	98	589422	100.0	105.1	
95 o-Xylene	106	6.701	6.701	0.000	95	578129	100.0	107.0	
96 Styrene	104	6.728	6.728	0.000	98	950326	100.0	109.8	
97 Bromoform	173	6.897	6.897	0.000	99	229122	100.0	113.8	
98 Isopropylbenzene	105	6.990	6.989	0.001	94	1431191	100.0	107.6	
100 Bromobenzene	156	7.267	7.273	-0.005	90	430221	100.0	106.5	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	374177	100.0	105.4	
102 N-Propylbenzene	120	7.327	7.321	0.006	100	445107	100.0	108.2	
103 1,2,3-Trichloropropane	110	7.338	7.338	0.000	96	123451	100.0	108.5	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.354	0.000	89	96258	100.0	98.5	
105 2-Chlorotoluene	126	7.420	7.419	0.001	96	380190	100.0	104.0	
106 1,3,5-Trimethylbenzene	105	7.480	7.479	0.001	94	1226679	100.0	106.5	
107 4-Chlorotoluene	126	7.512	7.512	0.000	95	410304	100.0	106.7	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	1111760	100.0	107.0	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	1282293	100.0	108.3	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	1594702	100.0	106.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.035	8.035	0.000	99	1457632	100.0	106.1	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	98	825765	100.0	102.7	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	851818	100.0	99.8	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	1182232	100.0	105.8	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	791790	100.0	104.7	
117 1,2-Dibromo-3-Chloropropan	157	9.102	9.102	0.000	88	86182	100.0	97.9	
118 1,2,4-Trichlorobenzene	180	9.760	9.760	0.000	93	413876	100.0	103.3	
119 Hexachlorobutadiene	225	9.858	9.858	0.000	99	224059	100.0	109.2	
120 Naphthalene	128	9.973	9.973	0.001	99	680271	100.0	106.0	
121 1,2,3-Trichlorobenzene	180	10.180	10.179	0.001	95	196688	100.0	107.1	
S 127 1,3-Dichloropropene, Total	1				0		200.0	205.7	
S 126 Xylenes, Total	1				0		200.0	212.2	
S 125 1,2-Dichloroethene, Total	1				0		200.0	204.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added: 5.00	Units: uL
VM_MMIX_01940	Amount Added: 10.00	Units: uL
VM_Acrolein_00193	Amount Added: 10.00	Units: uL

Report Date: 18-Dec-2018 13:56:53 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1810.D

Injection Date: 18-Dec-2018 12:22:30 Instrument ID: CMSAA Operator ID: jk

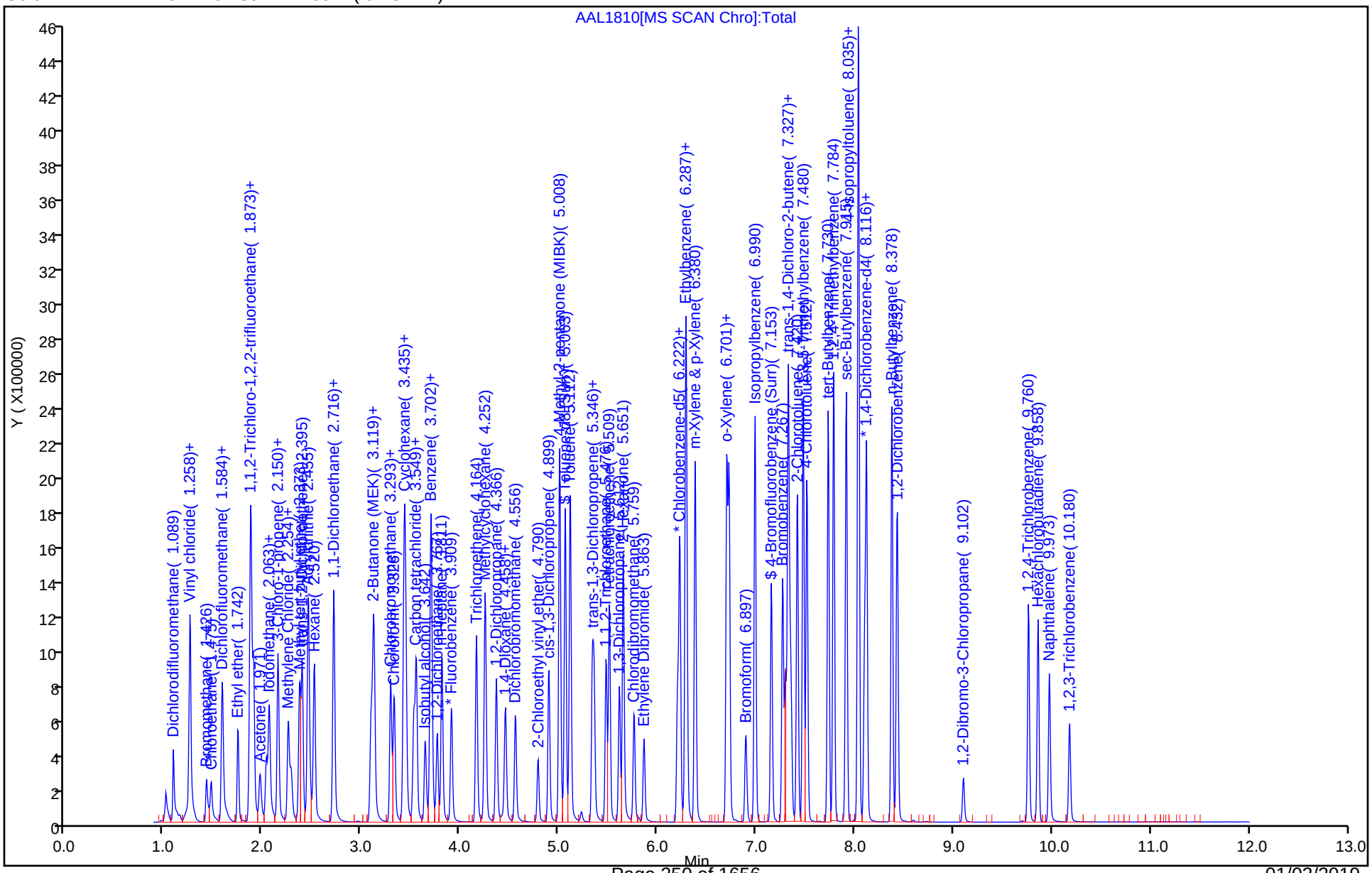
Lims ID: ic Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 10

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



TestAmerica Savannah

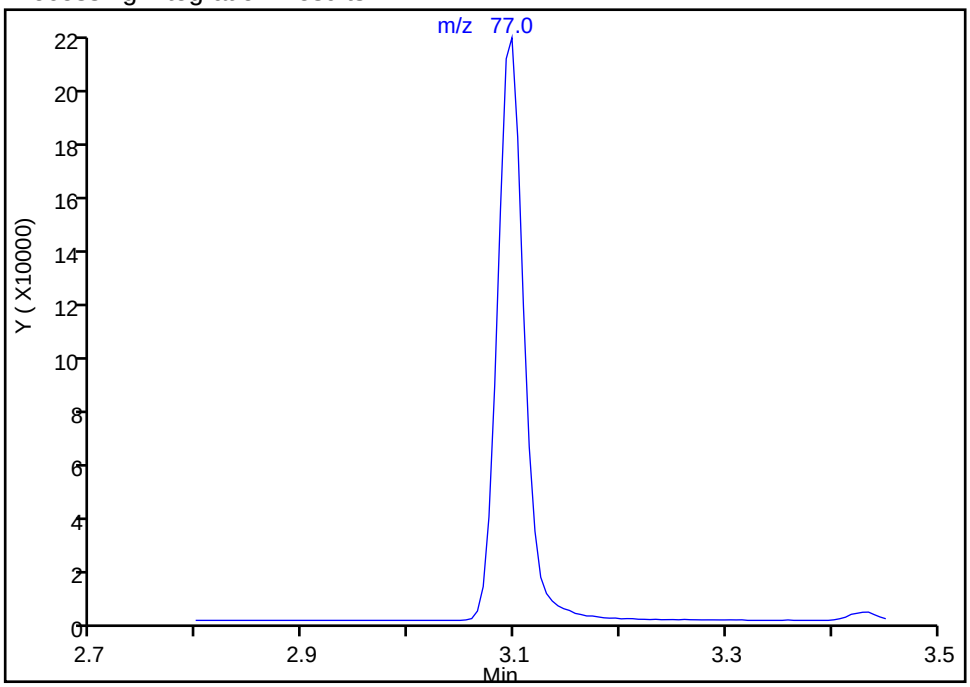
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1810.D				
Injection Date:	18-Dec-2018 12:22:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

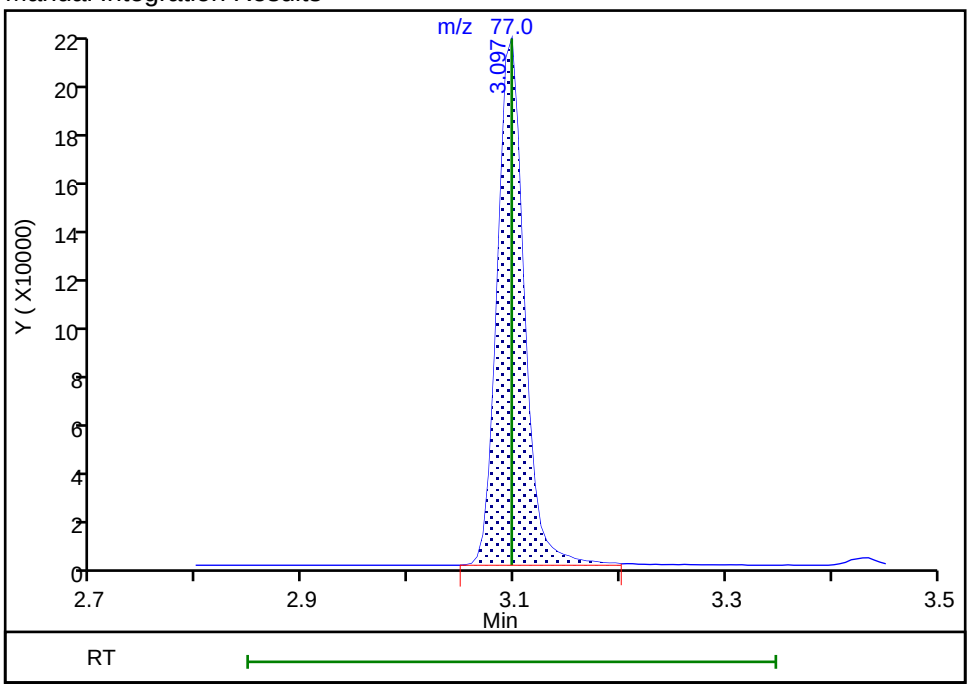
Not Detected
Expected RT: 3.10

Processing Integration Results



Manual Integration Results

RT: 3.10
Area: 375984
Amount: 102.7623
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:46:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 18-Dec-2018 12:45:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-012
Operator ID: jk Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 13:56:58 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

First Level Reviewer: kitchingsj Date: 18-Dec-2018 13:48:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	546114	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	83	207872	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	279650	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.446	3.446	0.000	99	536508	200.0	199.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.707	3.712	-0.005	96	497125	200.0	192.2	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	2151817	200.0	197.9	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	825854	200.0	192.5	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	99	634474	200.0	187.9	
10 Vinyl chloride	62	1.246	1.252	-0.006	98	634947	200.0	197.4	
11 Chloromethane	50	1.257	1.257	0.000	76	841383	200.0	192.3	
12 Butadiene	54	1.257	1.257	0.000	90	578482	200.0	196.9	
14 Bromomethane	96	1.415	1.432	-0.017	99	268912	200.0	120.4	
15 Chloroethane	64	1.464	1.475	-0.011	98	210934	200.0	113.2	
17 Dichlorofluoromethane	67	1.573	1.584	-0.011	99	718336	200.0	175.4	
18 Trichlorofluoromethane	101	1.584	1.589	-0.005	99	671204	200.0	186.8	
20 Ethyl ether	59	1.742	1.747	-0.005	94	458736	200.0	218.8	
22 1,1,2-Trichloro-1,2,2-trif	101	1.862	1.867	-0.005	96	501842	200.0	203.7	
23 Acrolein	56	1.878	1.878	0.000	94	2814259	4000.0	4175.6	
24 1,1-Dichloroethene	96	1.900	1.905	-0.005	93	527921	200.0	196.0	
25 Acetone	58	1.970	1.970	0.000	90	237272	1000.0	971.2	
26 Iodomethane	142	2.030	2.036	-0.006	95	955003	200.0	202.1	
27 Carbon disulfide	76	2.058	2.063	-0.005	98	1657370	200.0	196.9	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	94	346091	200.0	192.5	
29 Methyl acetate	43	2.150	2.156	-0.006	97	672390	400.0	428.0	
32 Methylene Chloride	84	2.254	2.259	-0.005	83	583110	200.0	176.8	
33 2-Methyl-2-propanol	59	2.286	2.281	0.005	99	480661	2000.0	1952.0	
34 Methyl tert-butyl ether	73	2.368	2.373	-0.005	96	1549048	200.0	210.8	
36 trans-1,2-Dichloroethene	96	2.395	2.395	0.000	89	612504	200.0	204.2	
37 Acrylonitrile	53	2.460	2.460	0.000	97	2014334	2000.0	2058.0	
38 Hexane	57	2.515	2.520	-0.005	87	744567	200.0	221.5	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	885290	200.0	191.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.716	2.722	-0.006	99	1872131	400.0	427.3	
47 2,2-Dichloropropane	77	3.092	3.097	-0.005	92	743375	200.0	198.2	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	96	671284	200.0	200.4	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	1000973	1000.0	944.6	
50 Tetrahydrofuran	42	3.293	3.293	0.000	83	273955	400.0	365.2	
51 Chlorobromomethane	49	3.293	3.293	0.000	93	377155	200.0	179.1	
52 Chloroform	83	3.326	3.331	-0.005	100	897405	200.0	193.5	
54 Cyclohexane	56	3.429	3.429	0.000	84	909535	200.0	206.4	
55 1,1,1-Trichloroethane	97	3.435	3.440	-0.005	97	802901	200.0	206.2	
57 Carbon tetrachloride	117	3.527	3.527	0.000	97	695009	200.0	214.7	
58 1,1-Dichloropropene	75	3.549	3.555	-0.006	97	750706	200.0	212.8	
60 Isobutyl alcohol	43	3.647	3.647	0.000	95	540688	5000.0	5233.4	
61 Benzene	78	3.696	3.702	-0.006	95	2355776	200.0	206.0	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	599796	200.0	193.6	
63 n-Heptane	43	3.810	3.816	-0.006	85	592750	200.0	203.4	
65 Trichloroethene	132	4.164	4.164	0.000	93	680266	200.0	211.0	
66 Methylcyclohexane	83	4.251	4.251	0.000	91	1019873	200.0	218.4	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	95	567927	200.0	204.8	
69 1,4-Dioxane	88	4.447	4.447	0.000	88	143987	4000.0	3964.8	
68 Dibromomethane	93	4.458	4.458	0.000	90	351725	200.0	201.2	
70 Dichlorobromomethane	83	4.556	4.562	-0.006	98	712188	200.0	208.2	
72 2-Chloroethyl vinyl ether	63	4.785	4.790	-0.005	95	246076	200.0	194.5	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	87	957441	200.0	207.7	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	91	2184587	1000.0	1001.1	
76 Toluene	92	5.117	5.117	0.000	93	1530889	200.0	204.4	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	97	828828	200.0	199.0	
78 Ethyl methacrylate	69	5.356	5.356	0.000	89	727189	200.0	198.1	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	464315	200.0	202.6	
80 Tetrachloroethene	164	5.514	5.509	0.005	94	585997	200.0	208.7	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	898651	200.0	201.4	
82 2-Hexanone	43	5.650	5.650	0.000	91	1573488	1000.0	982.6	
85 Chlorodibromomethane	129	5.765	5.759	0.006	98	636561	200.0	216.9	
86 Ethylene Dibromide	107	5.863	5.863	0.000	99	597252	200.0	207.0	
88 Chlorobenzene	112	6.227	6.227	0.000	98	1772321	200.0	201.8	
89 Ethylbenzene	91	6.287	6.287	0.000	96	2760721	200.0	205.3	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.293	0.005	95	620964	200.0	217.6	
92 m-Xylene & p-Xylene	106	6.380	6.380	0.000	98	1207356	200.0	207.9	
95 o-Xylene	106	6.706	6.701	0.005	96	1190164	200.0	212.8	
96 Styrene	104	6.728	6.728	0.000	98	1972210	200.0	220.0	
97 Bromoform	173	6.897	6.897	0.000	99	500645	200.0	240.1	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	2952893	200.0	214.4	
100 Bromobenzene	156	7.272	7.273	0.000	89	898937	200.0	214.8	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	775110	200.0	210.7	
102 N-Propylbenzene	120	7.327	7.321	0.006	100	936613	200.0	219.8	
103 1,2,3-Trichloropropane	110	7.343	7.338	0.005	96	255657	200.0	217.1	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.354	0.000	85	204147	200.0	201.8	
105 2-Chlorotoluene	126	7.419	7.419	0.000	95	798194	200.0	210.9	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	95	2583768	200.0	216.6	
107 4-Chlorotoluene	126	7.517	7.512	0.005	94	857766	200.0	215.4	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	2329620	200.0	216.6	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	2672920	200.0	218.0	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	3354172	200.0	217.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.040	8.035	0.005	98	3051934	200.0	210.8	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	73	1738533	200.0	205.2	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	1782456	200.0	198.2	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	2481263	200.0	210.6	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	1666154	200.0	209.0	
117 1,2-Dibromo-3-Chloropropan	157	9.102	9.102	0.000	86	188695	200.0	203.4	
118 1,2,4-Trichlorobenzene	180	9.760	9.760	0.000	93	843823	200.0	199.9	
119 Hexachlorobutadiene	225	9.858	9.858	0.000	99	469557	200.0	217.1	
120 Naphthalene	128	9.972	9.973	0.000	99	1427597	200.0	198.9	
121 1,2,3-Trichlorobenzene	180	10.179	10.179	0.000	95	399144	200.0	198.7	
S 125 1,2-Dichloroethene, Total	1				0		400.0	404.6	
S 126 Xylenes, Total	1				0		400.0	420.7	
S 127 1,3-Dichloropropene, Total	1				0		400.0	406.7	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added: 5.00	Units: uL
VM_MMIX_01940	Amount Added: 20.00	Units: uL
VM_Acrolein_00193	Amount Added: 20.00	Units: uL

Report Date: 18-Dec-2018 13:57:00 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Injection Date: 18-Dec-2018 12:45:30 Instrument ID: CMSAA Operator ID: jk

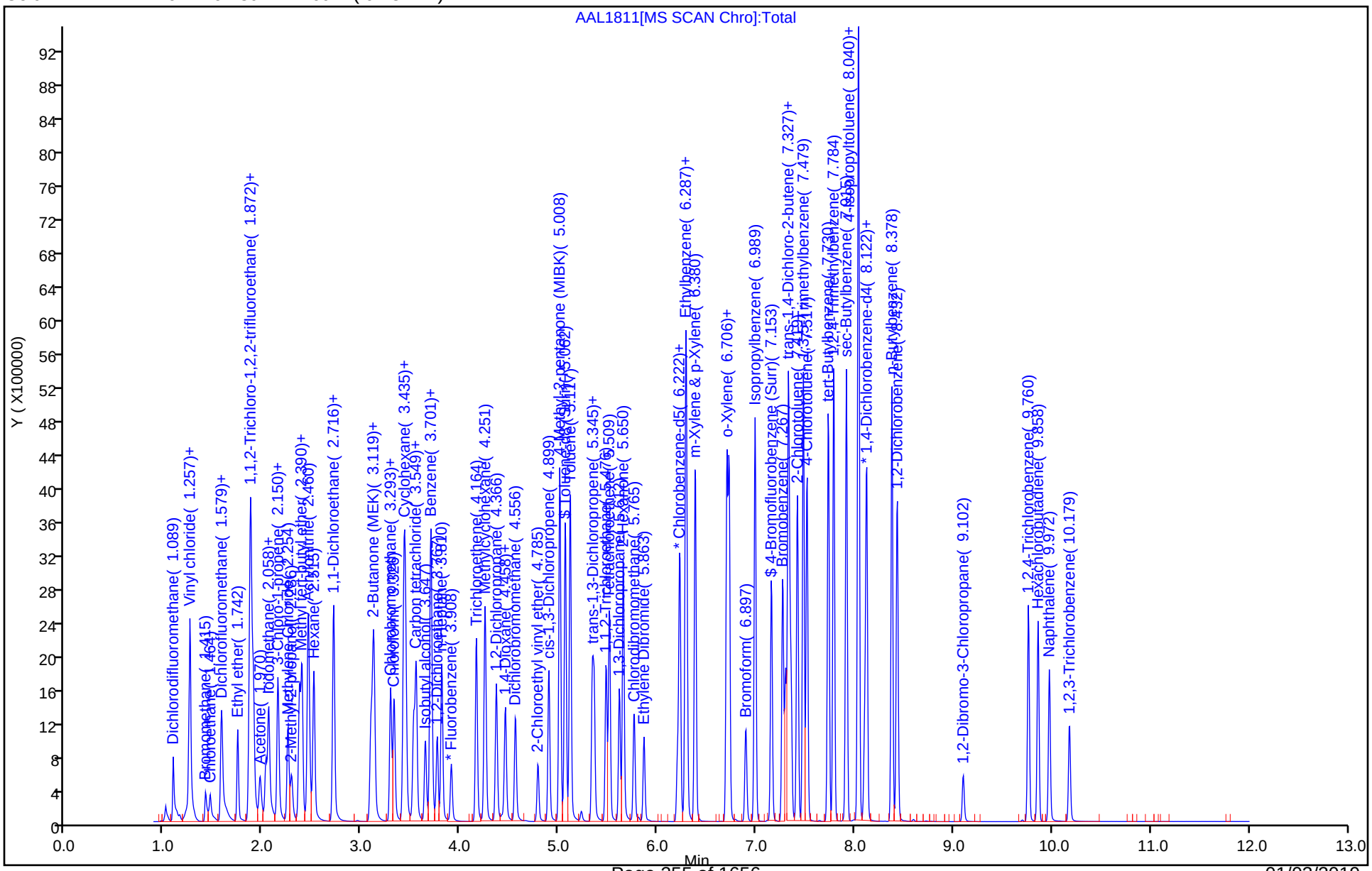
Lims ID: ic Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 11

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

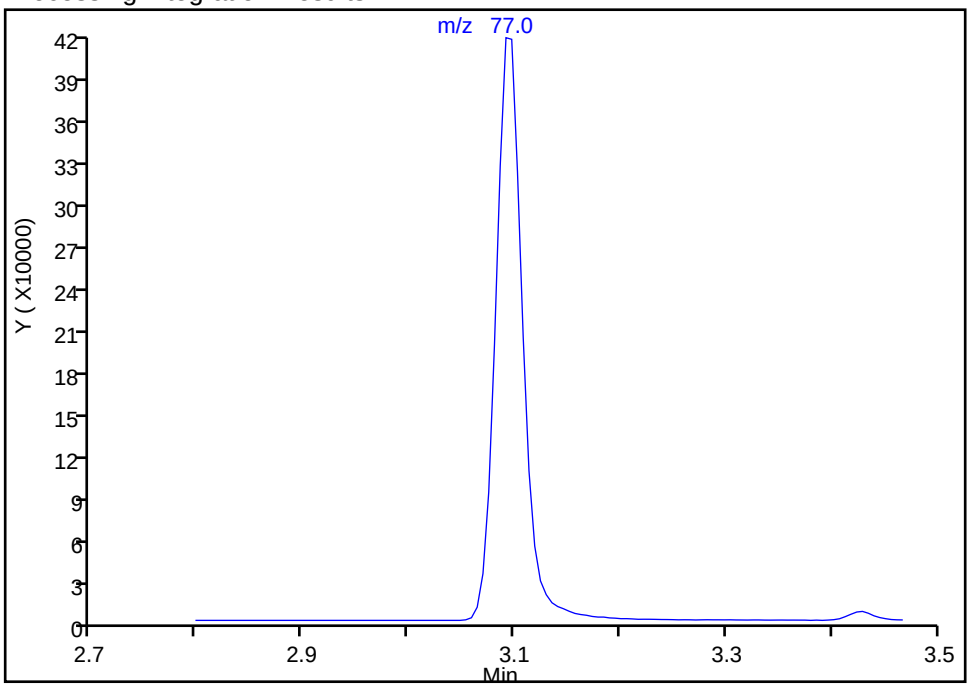
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D				
Injection Date:	18-Dec-2018 12:45:30	Instrument ID:	CMSAA		
Lims ID:	ic				
Client ID:					
Operator ID:	jk	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

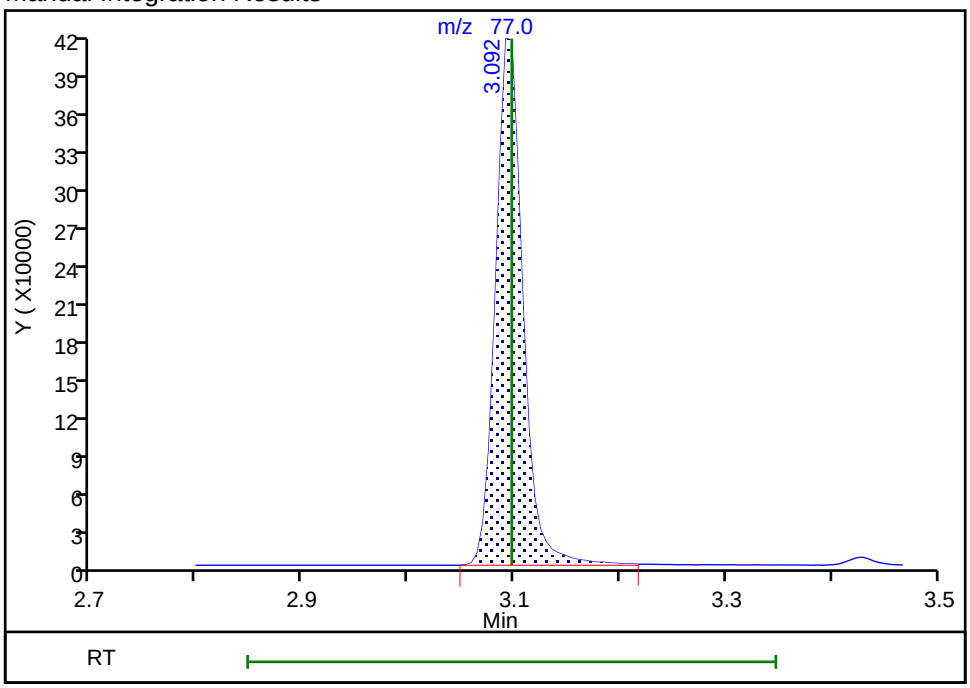
Not Detected
Expected RT: 3.10

Processing Integration Results



Manual Integration Results

RT: 3.09
Area: 743375
Amount: 198.1825
Amount Units: ug/l



Reviewer: kitchingsj, 18-Dec-2018 13:47:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-547166/5	OK01211.D
Level 2	IC 680-547166/6	OK01212.D
Level 3	IC 680-547166/7	OK01213.D
Level 4	IC 680-547166/8	OK01214.D
Level 5	IC 680-547166/9	OK01215.D
Level 6	ICIS 680-547166/10	OK01216.D
Level 7	IC 680-547166/11	OK01217.D
Level 8	IC 680-547166/12	OK01218.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2999 0.2732	0.2319 0.2826	0.2419 0.2953	0.2816	0.2806	Ave		0.2734				8.8		15.0			
Vinyl chloride	0.2820 0.2759	0.2471 0.2837	0.2451 0.2846	0.2585	0.2678	Ave		0.2681				6.0		15.0			
1,3-Butadiene	0.3155 0.3071	0.3001 0.3170	0.2890 0.3302	0.3168	0.3151	Ave		0.3113				4.0		15.0			
Chloromethane	0.6561 0.4998	0.5520 0.5257	0.4988 0.5361	0.4965	0.5003	Ave		0.5332			0.1000	10.1		15.0			
Bromomethane	0.1515 +++++	0.1566 +++++	0.1387 +++++	0.1346	0.1194	Ave		0.1402				10.5		15.0			
Chloroethane	0.1616 0.1345	0.1756 0.1093	0.1369 0.0778	0.1513	0.1456	Qua	0.0811	0.1442	-0.000335						0.9990		0.9900
Dichlorofluoromethane	0.4772 0.3641	0.4263 0.3524	0.3388 0.2933	0.3720	0.3737	Ave		0.3747				14.9		15.0			
Trichlorofluoromethane	0.3162 0.3268	0.2929 0.3147	0.3108 0.2756	0.3355	0.3403	Ave		0.3141				6.9		15.0			
Ethyl ether	0.2541 0.2931	0.2917 0.2967	0.2811 0.2814	0.2954	0.3012	Ave		0.2868				5.2		15.0			
Acrolein	0.0429 0.0695	0.0441 0.0857	0.0405 0.0873	0.0427	0.0529	LinF		0.0858							0.9950		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1836 0.1908	0.1782 0.1945	0.1651 0.1889	0.1898	0.1923	Ave		0.1854				5.2		15.0			
1,1-Dichloroethene	0.2473 0.2365	0.2372 0.2340	0.2261 0.2251	0.2363	0.2401	Ave		0.2353				3.1		15.0			
Acetone	0.0519 0.0418	0.0454 0.0439	0.0428 0.0451	0.0430	0.0435	Ave		0.0447				7.0		15.0			
Iodomethane	0.2988 0.3806	0.3512 0.3857	0.3521 0.3897	0.3641	0.3743	Ave		0.3621				8.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7413 0.7432	0.7242 0.7645	0.7002 0.7631	0.7291	0.7389	Ave		0.7381				2.8		15.0			
Methyl acetate	0.4243 0.4201	0.4221 0.4416	0.3991 0.4472	0.4134	0.4239	Ave		0.4240				3.6		15.0			
Allyl chloride	0.1574 0.1821	0.1655 0.1704	0.1732 0.1527	0.1791	0.1819	Ave		0.1703				6.5		15.0			
Methylene Chloride	0.3506 0.2656	0.3312 0.2648	0.2951 0.2631	0.2598	0.2738	Ave		0.2880				12.1		15.0			
tert-Butyl alcohol	0.0522 0.0547	0.0555 0.0562	0.0543 0.0589	0.0571	0.0564	Ave		0.0557				3.6		15.0			
Acrylonitrile	0.1975 0.2100	0.2057 0.2150	0.1968 0.2075	0.2025	0.2086	Ave		0.2055				3.0		15.0			
Methyl tert-butyl ether	0.9619 0.9655	1.0391 0.9640	0.9933 0.9018	0.9458	0.9765	Ave		0.9685				4.0		15.0			
trans-1,2-Dichloroethene	0.2677 0.2811	0.2891 0.2832	0.2670 0.2559	0.2932	0.2834	Ave		0.2776				4.6		15.0			
Hexane	0.4661 0.4277	0.4320 0.4276	0.3456 0.4254	0.4147	0.4247	Ave		0.4205				8.0		15.0			
Vinyl acetate	0.9860 1.0841	1.1574 1.0916	1.0420 1.0082	1.0544	1.0901	Ave		1.0642				5.1		15.0			
1,1-Dichloroethane	0.5101 0.5411	0.5663 0.5462	0.5203 0.5116	0.5500	0.5476	Ave		0.5367			0.1000	3.8		15.0			
Methyl Ethyl Ketone	0.0453 0.0524	0.0546 0.0508	0.0493 0.0484	0.0512	0.0524	Ave		0.0505				5.7		15.0			
cis-1,2-Dichloroethene	0.6694 0.5262	0.5872 0.5294	0.5283 0.4950	0.5444	0.5502	Ave		0.5538				9.7		15.0			
2,2-Dichloropropane	0.4130 0.4195	0.4256 0.4172	0.4000 0.4021	0.4179	0.4254	Ave		0.4151				2.3		15.0			
Bromochloromethane	0.1701 0.1723	0.1649 0.1717	0.1750 0.1658	0.1695	0.1712	Ave		0.1701				2.0		15.0			
Tetrahydrofuran	0.2801 0.1954	0.2446 0.1968	0.2153 0.1908	0.1996	0.2058	Ave		0.2160				14.3		15.0			
Chloroform	0.5694 0.5052	0.5066 0.5006	0.4878 0.4785	0.4936	0.4944	Ave		0.5045				5.5		15.0			
1,1,1-Trichloroethane	0.4007 0.4337	0.4464 0.4465	0.4212 0.4284	0.4203	0.4341	Ave		0.4289				3.5		15.0			
Cyclohexane	0.3756 0.3830	0.3489 0.3868	0.3300 0.3884	0.3816	0.3836	Ave		0.3722				5.7		15.0			
Carbon tetrachloride	0.3081 0.3654	0.3039 0.3649	0.3254 0.3622	0.3686	0.3571	Ave		0.3444				7.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.3448 0.3649	0.3310 0.3730	0.3385 0.3626	0.3579	0.3684	Ave		0.3551				4.3		15.0			
Isobutanol	0.0292 0.0292	0.0306 0.0316	0.0284 0.0319	0.0301	0.0305	Ave		0.0302				4.0		15.0			
Benzene	1.0319 1.1024	1.0972 1.0891	1.0638 1.0556	1.0963	1.0600	Ave		1.0746				2.4		15.0			
1,2-Dichloroethane	0.4120 0.4689	0.4701 0.4786	0.4483 0.4562	0.4625	0.4684	Ave		0.4581				4.5		15.0			
n-Heptane	0.6189 0.4846	0.3979 0.4777	0.4289 0.4805	0.4726	0.4629	Ave		0.4780				13.5		15.0			
Trichloroethene	0.3751 0.2686	0.2976 0.2672	0.2863 0.2700	0.2674	0.2674	Ave		0.2874				12.9		15.0			
Methylcyclohexane	0.4082 0.4186	0.3806 0.4179	0.3597 0.4159	0.4178	0.4108	Ave		0.4037				5.4		15.0			
1,2-Dichloropropane	0.2941 0.3195	0.3017 0.3192	0.3136 0.3121	0.3158	0.3158	Ave		0.3115				2.9		15.0			
1,4-Dioxane	+++++ 0.0057	0.0043 0.0057	0.0047 0.0061	0.0050	0.0054	Ave		0.0053				11.8		15.0			
Dibromomethane	0.1865 0.1991	0.1740 0.1938	0.1965 0.1878	0.1886	0.1892	Ave		0.1894				4.0		15.0			
Bromodichloromethane	0.3916 0.4041	0.4092 0.4069	0.3988 0.3906	0.3852	0.3943	Ave		0.3976				2.2		15.0			
2-Chloroethyl vinyl ether	0.2434 0.2547	0.2527 0.2566	0.2334 0.2545	0.2424	0.2550	Ave		0.2491				3.3		15.0			
cis-1,3-Dichloropropene	0.4530 0.4939	0.5045 0.4868	0.4699 0.4778	0.4835	0.4937	Ave		0.4829				3.3		15.0			
methyl isobutyl ketone	0.5806 0.5516	0.5830 0.5598	0.5157 0.5644	0.5503	0.5633	Ave		0.5586				3.8		15.0			
Toluene	0.6500 0.6766	0.6466 0.6589	0.6619 0.6669	0.6610	0.6709	Ave		0.6616				1.5		15.0			
trans-1,3-Dichloropropene	0.4250 0.4534	0.4612 0.4580	0.4515 0.4414	0.4427	0.4436	Ave		0.4471				2.6		15.0			
Ethyl methacrylate	0.4520 0.4347	0.4477 0.4318	0.4213 0.4453	0.4394	0.4314	Ave		0.4379				2.3		15.0			
1,1,2-Trichloroethane	0.2218 0.2225	0.2349 0.2221	0.2163 0.2156	0.2318	0.2280	Ave		0.2241				3.1		15.0			
Tetrachloroethene	0.1515 0.1954	0.1873 0.1970	0.1928 0.1977	0.1929	0.1969	Ave		0.1889				8.2		15.0			
1,3-Dichloropropane	0.4674 0.4652	0.4751 0.4596	0.4458 0.4480	0.4610	0.4591	Ave		0.4601				2.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.3640 0.3958	0.4054 0.4130	0.3760 0.4125	0.3965	0.4067	Ave		0.3962				4.5		15.0			
Dibromochloromethane	0.2681 0.2889	0.3081 0.2904	0.2868 0.2885	0.2895	0.2933	Ave		0.2892				3.8		15.0			
1,2-Dibromoethane	0.2342 0.2862	0.2917 0.2812	0.2974 0.2850	0.2796	0.2947	Ave		0.2813				7.1		15.0			
Chlorobenzene	1.7280 1.7388	1.8450 1.7633	1.8028 1.7698	1.8087	1.8386	Ave		1.7869			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.6964 0.6338	0.6279 0.6298	0.6281 0.6027	0.6681	0.6523	Ave		0.6424				4.5		15.0			
Ethylbenzene	2.9210 3.1048	2.9884 3.0676	3.1131 3.0016	3.0944	3.1388	Ave		3.0537				2.5		15.0			
m-Xylene & p-Xylene	2.5105 2.4485	2.4514 2.4980	2.4261 2.4598	2.4292	2.5501	Ave		2.4717				1.8		15.0			
o-Xylene	2.5843 2.5259	2.6330 2.5210	2.6751 2.4756	2.5528	2.6248	Ave		2.5741				2.6		15.0			
Styrene	1.8301 1.8931	1.8424 1.9054	1.8814 1.9107	1.9296	1.9747	Ave		1.8959				2.4		15.0			
Bromoform	0.4824 0.5427	0.5594 0.5569	0.5292 0.5692	0.5292	0.5701	Ave		0.5424			0.1000	5.4		15.0			
Isopropylbenzene	2.7587 2.8720	2.7575 2.9007	2.9106 2.9176	2.9076	2.9497	Ave		2.8718				2.6		15.0			
Bromobenzene	0.7220 0.7197	0.7405 0.7320	0.7399 0.7401	0.7500	0.7481	Ave		0.7365				1.5		15.0			
1,1,2,2-Tetrachloroethane	1.0027 0.9265	1.0737 0.9699	0.9922 0.9598	0.9615	0.9797	Ave		0.9832			0.3000	4.4		15.0			
trans-1,4-Dichloro-2-butene	0.3774 0.4476	0.4643 0.4697	0.4267 0.4602	0.4582	0.4586	Ave		0.4454				6.8		15.0			
1,2,3-Trichloropropane	0.2796 0.2959	0.2920 0.3086	0.3196 0.3029	0.3125	0.3145	Ave		0.3032				4.4		15.0			
N-Propylbenzene	3.3069 3.5684	3.4704 3.5959	3.3722 3.6033	3.6148	3.6034	Ave		3.5169				3.4		15.0			
2-Chlorotoluene	2.2393 2.1625	2.3409 2.2462	2.3257 2.2207	2.2165	2.2515	Ave		2.2504				2.6		15.0			
1,3,5-Trimethylbenzene	2.4028 2.4812	2.6067 2.5052	2.4552 2.4260	2.5711	2.5646	Ave		2.5016				2.9		15.0			
4-Chlorotoluene	2.5945 2.5436	2.6396 2.5879	2.6319 2.5574	2.5498	2.6447	Ave		2.5937				1.6		15.0			
tert-Butylbenzene	1.9967 2.0260	1.9339 2.0607	2.0677 2.0628	2.0695	2.0933	Ave		2.0388				2.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.6461 2.5867	2.7105 2.5980	2.6647 2.6017	2.6593	2.6571	Ave		2.6405				1.6		15.0			
sec-Butylbenzene	2.9813 3.0198	2.9663 3.0951	2.9203 3.0812	3.0641	3.1522	Ave		3.0350				2.5		15.0			
1,3-Dichlorobenzene	1.4375 1.5140	1.5137 1.5109	1.4395 1.4947	1.4884	1.5206	Ave		1.4899				2.2		15.0			
p-Isopropyltoluene	2.8976 2.9055	2.6732 2.9694	2.6633 2.8321	2.8615	2.8969	Ave		2.8374				3.9		15.0			
1,4-Dichlorobenzene	1.6417 1.5680	1.6087 1.5664	1.4927 1.5340	1.5811	1.5479	Ave		1.5676				2.9		15.0			
1,2-Dichlorobenzene	1.4681 1.4735	1.5418 1.4666	1.4815 1.3782	1.4937	1.4989	Ave		1.4753				3.1		15.0			
n-Butylbenzene	2.5057 2.6805	2.3933 2.7047	2.3990 2.5461	2.6088	2.6282	Ave		2.5583				4.7		15.0			
1,2-Dibromo-3-Chloropropane	0.2267 0.2905	0.2836 0.2958	0.2839 0.2956	0.2919	0.2876	Ave		0.2819				8.1		15.0			
1,2,4-Trichlorobenzene	0.9306 1.0849	1.0821 1.0486	1.0204 1.0372	1.0146	1.0719	Ave		1.0363				4.9		15.0			
Hexachlorobutadiene	0.3785 0.4571	0.4010 0.4639	0.4289 0.4501	0.4372	0.4537	Ave		0.4338				6.9		15.0			
Naphthalene	2.7848 2.9836	2.9666 2.8981	2.8438 2.8291	2.9321	2.9603	Ave		2.8998				2.5		15.0			
1,2,3-Trichlorobenzene	0.9749 1.0650	1.0408 1.0236	0.9944 0.9962	1.0355	1.0553	Ave		1.0232				3.1		15.0			
Dibromofluoromethane (Surr)	0.3446 0.2595	0.2859 0.2590	0.2650 0.2459	0.2599	0.2640	Ave		0.2730				11.4		15.0			
1,2-Dichloroethane-d4 (Surr)	0.4718 0.3648	0.4031 0.3696	0.3724 0.3495	0.3696	0.3677	Ave		0.3836				10.1		15.0			
Toluene-d8 (Surr)	1.1974 0.9104	1.0244 0.9110	0.8972 0.9196	0.9338	0.9230	Ave		0.9646				10.6		15.0			
4-Bromofluorobenzene (Surr)	+++++ 1.0345	1.2680 1.0090	1.0459 1.0179	1.0625	1.0265	Ave		1.0663				8.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-547166/5	OK01211.D
Level 2	IC 680-547166/6	OK01212.D
Level 3	IC 680-547166/7	OK01213.D
Level 4	IC 680-547166/8	OK01214.D
Level 5	IC 680-547166/9	OK01215.D
Level 6	ICIS 680-547166/10	OK01216.D
Level 7	IC 680-547166/11	OK01217.D
Level 8	IC 680-547166/12	OK01218.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	3350 143663	4866 288812	13494 610768	30676	59161	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	3150 145085	5184 289974	13670 588591	28169	56459	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Butadiene	FB	Ave	3524 161453	6298 323921	16122 682986	34514	66425	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	7329 262785	11582 537250	27824 1108969	54094	105478	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Ave	1693 +++++	3286 +++++	7736 +++++	14661	25170	1.00 +++++	2.00 +++++	5.00 +++++	10.0	20.0
Chloroethane	FB	Qua	1805 70707	3685 111678	7635 160998	16487	30690	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dichlorofluoromethane	FB	Ave	5331 191474	8946 360091	18898 606710	40535	78770	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	3532 171813	6146 321554	17337 570062	36552	71732	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl ether	FB	Ave	2839 154093	6120 303225	15681 582093	32181	63492	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrolein	FB	LinF	9585 730762	18506 1752187	45138 3612265	92945	223082	20.0 1000	40.0 2000	100 4000	200	400
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	2051 100345	3740 198786	9211 390674	20678	40544	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethene	FB	Ave	2763 124337	4978 239137	12611 465707	25741	50620	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Ave	2898 109946	4767 224076	11949 466802	23451	45844	5.00 250	10.0 500	25.0 1000	50.0	100
Iodomethane	FB	Ave	3338 200146	7370 394114	19640 806107	39667	78905	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	8281 390798	15195 781223	39055 1578461	79441	155771	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Methyl acetate	FB	Ave	9480 441844	17715 902665	44525 1850171	90086	178706	2.00 100	4.00 200	10.0 400	20.0	40.0
Allyl chloride	FB	Ave	1758 95743	3473 174155	9661 315917	19513	38351	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methylene Chloride	FB	Ave	3917 139635	6949 270643	16462 544130	28303	57715	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butyl alcohol	FB	Ave	5830 287437	11648 574838	30307 1217729	62210	118909	10.0 500	20.0 1000	50.0 2000	100	200
Acrylonitrile	FB	Ave	22065 1104009	43167 2197574	109774 4291594	220670	439737	10.0 500	20.0 1000	50.0 2000	100	200
Methyl tert-butyl ether	FB	Ave	10746 507668	21804 985177	55402 1865434	103049	205864	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	2990 147803	6067 289446	14891 529240	31940	59738	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexane	FB	Ave	5207 224902	9064 436974	19277 879874	45178	89526	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Ave	22030 1140073	48570 2231072	116239 4170766	229755	459617	2.00 100	4.00 200	10.0 400	20.0	40.0
1,1-Dichloroethane	FB	Ave	5699 284546	11882 558156	29023 1058141	59924	115441	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl Ethyl Ketone	FB	Ave	2529 137746	5724 259444	13746 500856	27871	55252	5.00 250	10.0 500	25.0 1000	50.0	100
cis-1,2-Dichloroethene	FB	Ave	7478 276711	12321 540978	29469 1023822	59316	115995	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	4614 220587	8931 426324	22308 831693	45532	89682	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromochloromethane	FB	Ave	1900 90621	3461 175486	9761 343050	18463	36097	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	6258 205481	10263 402248	24014 789215	43502	86764	2.00 100	4.00 200	10.0 400	20.0	40.0
Chloroform	FB	Ave	6361 265637	10630 511547	27208 989757	53783	104232	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	4476 228037	9366 456289	23494 886124	45795	91509	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Ave	4196 201400	7320 395238	18405 803338	41571	80875	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Ave	3442 192127	6376 372925	18147 749119	40155	75285	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Ave	3852 191867	6946 381182	18879 750027	38993	77661	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isobutanol	FB	Ave	8160 383799	16042 806451	39602 1651901	82015	160499	25.0 1250	50.0 2500	125 5000	250	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	11528 579659	23023 1113037	59336 2183542	119443	223459	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane	FB	Ave	4603 246581	9865 489093	25004 943545	50388	98734	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Heptane	FB	Ave	6914 254836	8349 488175	23920 993983	51492	97578	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichloroethene	FB	Ave	4190 141235	6245 273020	15966 558574	29132	56361	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methylcyclohexane	FB	Ave	4560 220128	7987 427086	20061 860294	45517	86604	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	3285 168017	6331 326182	17489 645607	34408	66578	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	+++++ 59693	1815 116715	5189 250714	10976	22676	+++++ 1000	40.0 2000	100 4000	200	400
Dibromomethane	FB	Ave	2083 104672	3652 198096	10962 388559	20544	39878	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromodichloromethane	FB	Ave	4375 212471	8586 415818	22244 807897	41966	83133	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	2719 133917	5303 262190	13018 526477	26413	53748	1.00 50.0	2.00 100	5.00 200	10.0	20.0
cis-1,3-Dichloropropene	FB	Ave	5061 259683	10586 497526	26212 988238	52679	104072	1.00 50.0	2.00 100	5.00 200	10.0	20.0
methyl isobutyl ketone	FB	Ave	32428 1450142	61165 2860195	143807 5837296	299755	593743	5.00 250	10.0 500	25.0 1000	50.0	100
Toluene	FB	Ave	7261 355765	13567 673377	36918 1379476	72013	141424	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	FB	Ave	4748 238385	9677 468033	25182 913132	48237	93523	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl methacrylate	FB	Ave	5049 228597	9394 441227	23497 921066	47878	90947	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	FB	Ave	2478 117013	4929 226929	12066 446041	25256	48059	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	FB	Ave	1692 102754	3930 201366	10751 409036	21015	41515	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	FB	Ave	5221 244606	9968 469682	24864 926670	50227	96789	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	FB	Ave	20331 1040471	42529 2110368	104846 4266107	215968	428716	5.00 250	10.0 500	25.0 1000	50.0	100
Dibromochloromethane	FB	Ave	2995 151885	6464 296801	15997 596812	31538	61833	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromoethane	FB	Ave	2616 150493	6120 287407	16589 589499	30468	62120	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	7769 372366	15715 735288	40670 1537843	79301	155232	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3131 135718	5348 262625	14169 523739	29291	55072	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	13133 664880	25454 1279151	70231 2608155	135677	265012	1.00 50.0	2.00 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	11287 524331	20880 1041646	54731 2137386	106509	215309	1.00 50.0	2.00 100	5.00 200	10.0	20.0
o-Xylene	CBNZ d5	Ave	11619 540922	22427 1051214	60350 2151102	111930	221612	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Styrene	CBNZ d5	Ave	8228 405391	15693 794544	42444 1660293	84602	166728	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBNZ d5	Ave	2169 116209	4765 232203	11938 494564	23201	48131	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	12403 615024	23487 1209559	65662 2535218	127485	249043	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	CBNZ d5	Ave	3246 154129	6307 305218	16692 643086	32885	63162	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	4508 198406	9145 404445	22384 833963	42157	82713	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	CBNZ d5	Ave	1697 95861	3955 195845	9627 399910	20089	38720	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	CBNZ d5	Ave	1257 63358	2487 128690	7209 263228	13701	26551	1.00 50.0	2.00 100	5.00 200	10.0	20.0
N-Propylbenzene	CBNZ d5	Ave	14868 764166	29559 1499459	76075 3131016	158491	304240	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chlorotoluene	CBNZ d5	Ave	10068 463090	19939 936627	52467 1929626	97183	190096	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	CBNZ d5	Ave	10803 531342	22203 1044649	55389 2108045	112729	216533	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Chlorotoluene	CBNZ d5	Ave	11665 544711	22483 1079114	59374 2222204	111799	223290	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butylbenzene	CBNZ d5	Ave	8977 433852	16472 859288	46646 1792455	90740	176738	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	CBNZ d5	Ave	11897 553942	23087 1083335	60114 2260726	116596	224342	1.00 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butylbenzene	CBNZ d5	Ave	13404 646679	25266 1290624	65880 2677361	134345	266140	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	5777 288304	12041 573637	31115 1203798	60591	118439	1.00 50.0	2.00 100	5.00 200	10.0	20.0
p-Isopropyltoluene	DCBd 4	Ave	11645 553277	21265 1127410	57569 2280900	116487	225640	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 547166

SDG No.:

Instrument ID: CMSO2 GC Column: Rtx-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 11/12/2018 12:50 Calibration End Date: 11/12/2018 15:35 Calibration ID: 61589

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	6598 298583	12797 594737	32265 1235407	64363	120563	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	5900 280591	12265 556841	32024 1109949	60807	116751	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	10070 510431	19038 1026908	51855 2050569	106200	204707	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	911 55317	2256 112323	6136 238031	11883	22403	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	3740 206582	8608 398132	22056 835308	41303	83487	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	1521 87035	3190 176118	9271 362466	17797	35335	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCBd 4	Ave	11192 568152	23599 1100320	61470 2278481	119361	230572	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	3918 202793	8279 388620	21495 802301	42153	82199	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	3850 136454	6000 264634	14779 508587	28312	55659	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	5271 191819	8458 377696	20771 722890	40264	77511	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	FB	Ave	13376 478715	21494 930944	50042 1902118	101736	194580	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	+++++ 196995	10087 383081	22608 819784	43253	79957	+++++ 50.0	2.00 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
LinF = Linear ISTD forced zero
Qua = Quadratic ISTD

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-Nov-2018 12:50:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-005
Operator ID: MJY Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:06:48 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: intarachau Date: 13-Nov-2018 09:53:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.030	1.031	-0.001	96	3350	1.00	1.10	a
2 Vinyl chloride	62	1.167	1.168	-0.001	96	3150	1.00	1.05	
4 Chloromethane	50	1.178	1.178	0.000	86	7329	1.00	1.23	
3 Butadiene	54	1.178	1.178	0.000	95	3524	1.00	1.01	
5 Bromomethane	94	1.325	1.315	0.010	86	1693	1.00	1.08	Ma
6 Chloroethane	64	1.378	1.368	0.010	93	1805	1.00	0.5588	a
7 Dichlorofluoromethane	67	1.473	1.474	-0.001	97	5331	1.00	1.27	
8 Trichlorofluoromethane	101	1.494	1.495	-0.001	94	3532	1.00	1.01	
11 Ethyl ether	59	1.631	1.632	-0.001	87	2839	1.00	0.8860	
13 Acrolein	56	1.716	1.716	0.000	95	9585	20.0	10.0	
14 1,1-Dichloroethene	96	1.779	1.769	0.010	94	2763	1.00	1.05	
12 1,1,2-Trichloro-1,2,2-trif	151	1.779	1.769	0.010	63	2051	1.00	0.99	
15 Acetone	58	1.790	1.790	0.000	86	2898	5.00	5.80	
17 Iodomethane	142	1.874	1.875	-0.001	93	3338	1.00	0.8253	
18 Carbon disulfide	76	1.927	1.917	0.010	99	8281	1.00	1.00	
20 Methyl acetate	43	1.979	1.970	0.009	99	9480	2.00	2.00	
19 3-Chloro-1-propene	76	1.990	1.991	-0.001	89	1758	1.00	0.9241	
22 Methylene Chloride	84	2.085	2.075	0.010	94	3917	1.00	1.22	
23 2-Methyl-2-propanol	59	2.117	2.128	-0.011	98	5830	10.0	9.38	
26 Acrylonitrile	53	2.222	2.223	-0.001	96	22065	10.0	9.61	
24 Methyl tert-butyl ether	73	2.243	2.244	-0.001	96	10746	1.00	0.99	
25 trans-1,2-Dichloroethene	96	2.254	2.244	0.010	96	2990	1.00	0.9643	
27 Hexane	57	2.433	2.434	-0.001	87	5207	1.00	1.11	
30 Vinyl acetate	43	2.539	2.529	0.010	100	22030	2.00	1.85	
29 1,1-Dichloroethane	63	2.539	2.539	0.000	52	5699	1.00	0.9506	
36 2-Butanone (MEK)	72	2.929	2.919	0.010	98	2529	5.00	4.48	
33 2,2-Dichloropropane	77	2.939	2.929	0.010	56	4614	1.00	1.00	
34 cis-1,2-Dichloroethene	61	2.929	2.929	0.000	76	7478	1.00	1.21	
39 Chlorobromomethane	130	3.098	3.098	0.000	95	1900	1.00	1.00	
38 Tetrahydrofuran	42	3.108	3.098	0.010	95	6258	2.00	2.59	
41 Chloroform	83	3.161	3.161	0.000	96	6361	1.00	1.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.277	3.267	0.010	88	3850	1.00	1.26	a
43 1,1,1-Trichloroethane	97	3.277	3.278	-0.001	98	4476	1.00	0.9342	
42 Cyclohexane	84	3.330	3.330	0.000	94	4196	1.00	1.01	
45 Carbon tetrachloride	117	3.393	3.383	0.010	86	3442	1.00	0.8945	
46 1,1-Dichloropropene	75	3.393	3.394	-0.001	82	3852	1.00	0.9709	
47 Isobutyl alcohol	43	3.456	3.457	-0.001	92	8160	25.0	24.2	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.509	3.510	-0.001	96	5271	1.00	1.23	a
50 Benzene	78	3.530	3.531	-0.001	97	11528	1.00	0.9603	
53 1,2-Dichloroethane	62	3.572	3.573	-0.001	94	4603	1.00	0.8994	
* 55 Fluorobenzene	96	3.741	3.742	-0.001	98	558564	50.0	50.0	
54 n-Heptane	43	3.741	3.742	-0.001	37	6914	1.00	1.29	
57 Trichloroethene	132	4.005	4.005	0.000	93	4190	1.00	1.30	
59 Methylcyclohexane	83	4.174	4.174	0.000	82	4560	1.00	1.01	
60 1,2-Dichloropropane	63	4.195	4.195	0.000	93	3285	1.00	0.9441	
62 1,4-Dioxane	88	4.269	4.248	0.020	54	693	20.0	11.8	
63 Dibromomethane	93	4.258	4.259	-0.001	94	2083	1.00	0.9843	
64 Dichlorobromomethane	83	4.385	4.385	0.000	96	4375	1.00	0.9850	
65 2-Chloroethyl vinyl ether	63	4.606	4.596	0.010	92	2719	1.00	0.9771	
67 cis-1,3-Dichloropropene	75	4.712	4.712	0.000	95	5061	1.00	0.9382	
68 4-Methyl-2-pentanone (MIBK	43	4.828	4.828	0.000	98	32428	5.00	5.20	
$ 69 Toluene-d8 (Surr)	98	4.912	4.913	-0.001	97	13376	1.00	1.24	
70 Toluene	92	4.965	4.965	0.000	93	7261	1.00	0.9824	
71 trans-1,3-Dichloropropene	75	5.155	5.145	0.010	89	4748	1.00	0.9506	
72 Ethyl methacrylate	69	5.197	5.197	0.000	94	5049	1.00	1.03	
73 1,1,2-Trichloroethane	83	5.302	5.303	-0.001	91	2478	1.00	0.9897	
74 Tetrachloroethene	164	5.355	5.356	-0.001	92	1692	1.00	0.8016	
75 1,3-Dichloropropane	76	5.418	5.419	-0.001	91	5221	1.00	1.02	
76 2-Hexanone	43	5.471	5.472	-0.001	99	20331	5.00	4.59	
78 Chlorodibromomethane	129	5.587	5.588	-0.001	93	2995	1.00	0.9271	
79 Ethylene Dibromide	107	5.682	5.683	-0.001	95	2616	1.00	0.8326	a
* 81 Chlorobenzene-d5	82	6.041	6.041	0.000	90	224800	50.0	50.0	
82 Chlorobenzene	112	6.062	6.062	0.000	96	7769	1.00	0.9670	
84 1,1,1,2-Tetrachloroethane	131	6.136	6.136	0.000	90	3131	1.00	1.08	
83 Ethylbenzene	91	6.146	6.147	-0.001	97	13133	1.00	0.9566	
85 m-Xylene & p-Xylene	91	6.252	6.252	0.000	96	11287	1.00	1.02	
87 o-Xylene	91	6.558	6.558	0.000	90	11619	1.00	1.00	
88 Styrene	104	6.579	6.579	0.000	93	8228	1.00	0.9653	
89 Bromoform	173	6.716	6.716	0.000	88	2169	1.00	0.8895	
90 Isopropylbenzene	105	6.863	6.864	-0.001	97	12403	1.00	0.9606	
$ 92 4-Bromofluorobenzene (Surr	95	7.001	7.001	0.000	88	7787	1.00	1.82	
93 Bromobenzene	156	7.117	7.107	0.010	93	3246	1.00	0.9802	
94 1,1,2,2-Tetrachloroethane	83	7.117	7.117	0.000	95	4508	1.00	1.02	
97 trans-1,4-Dichloro-2-buten	53	7.148	7.149	-0.001	1	1697	1.00	0.8475	a
96 1,2,3-Trichloropropane	110	7.159	7.159	0.000	91	1257	1.00	0.9221	a
95 N-Propylbenzene	91	7.201	7.202	-0.001	99	14868	1.00	0.9403	
98 2-Chlorotoluene	91	7.264	7.265	-0.001	96	10068	1.00	1.00	a
99 1,3,5-Trimethylbenzene	105	7.359	7.360	-0.001	94	10803	1.00	0.9605	
100 4-Chlorotoluene	91	7.370	7.370	0.000	97	11665	1.00	1.00	
103 tert-Butylbenzene	119	7.612	7.613	-0.001	91	8977	1.00	0.9793	
105 1,2,4-Trimethylbenzene	105	7.665	7.655	0.010	97	11897	1.00	1.00	
106 sec-Butylbenzene	105	7.792	7.792	0.000	98	13404	1.00	0.9823	
108 1,3-Dichlorobenzene	146	7.887	7.887	0.000	91	5777	1.00	0.9648	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.929	7.929	0.000	96	11645	1.00	1.02	
* 109 1,4-Dichlorobenzene-d4	152	7.950	7.951	-0.001	97	200945	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.971	7.972	-0.001	90	6598	1.00	1.05	
113 n-Butylbenzene	91	8.256	8.256	0.000	98	10070	1.00	0.9794	
114 1,2-Dichlorobenzene	146	8.256	8.256	0.000	76	5900	1.00	1.00	
115 1,2-Dibromo-3-Chloropropan	157	8.920	8.921	-0.001	81	911	1.00	0.8040	
117 1,2,4-Trichlorobenzene	180	9.606	9.596	0.010	92	3740	1.00	0.8980	
118 Hexachlorobutadiene	225	9.722	9.723	-0.001	85	1521	1.00	0.8725	
119 Naphthalene	128	9.817	9.807	0.010	98	11192	1.00	0.9604	
120 1,2,3-Trichlorobenzene	180	9.996	9.997	-0.001	92	3918	1.00	0.9528	
S 122 1,2-Dichloroethene, Total	1				0		2.00	2.17	
S 123 Xylenes, Total	1				0		2.00	2.02	
S 124 1,3-Dichloropropene, Total	1				0		2.00	1.89	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

DOD ISTD_00163	Amount Added:	5.00	Units: uL
VM_MMIX_01936	Amount Added:	0.10	Units: uL
VM_Acrolein_00189	Amount Added:	0.10	Units: uL

Report Date: 13-Nov-2018 10:06:49 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D

Injection Date: 12-Nov-2018 12:50:30 Instrument ID: CMSO2 Operator ID: MJY

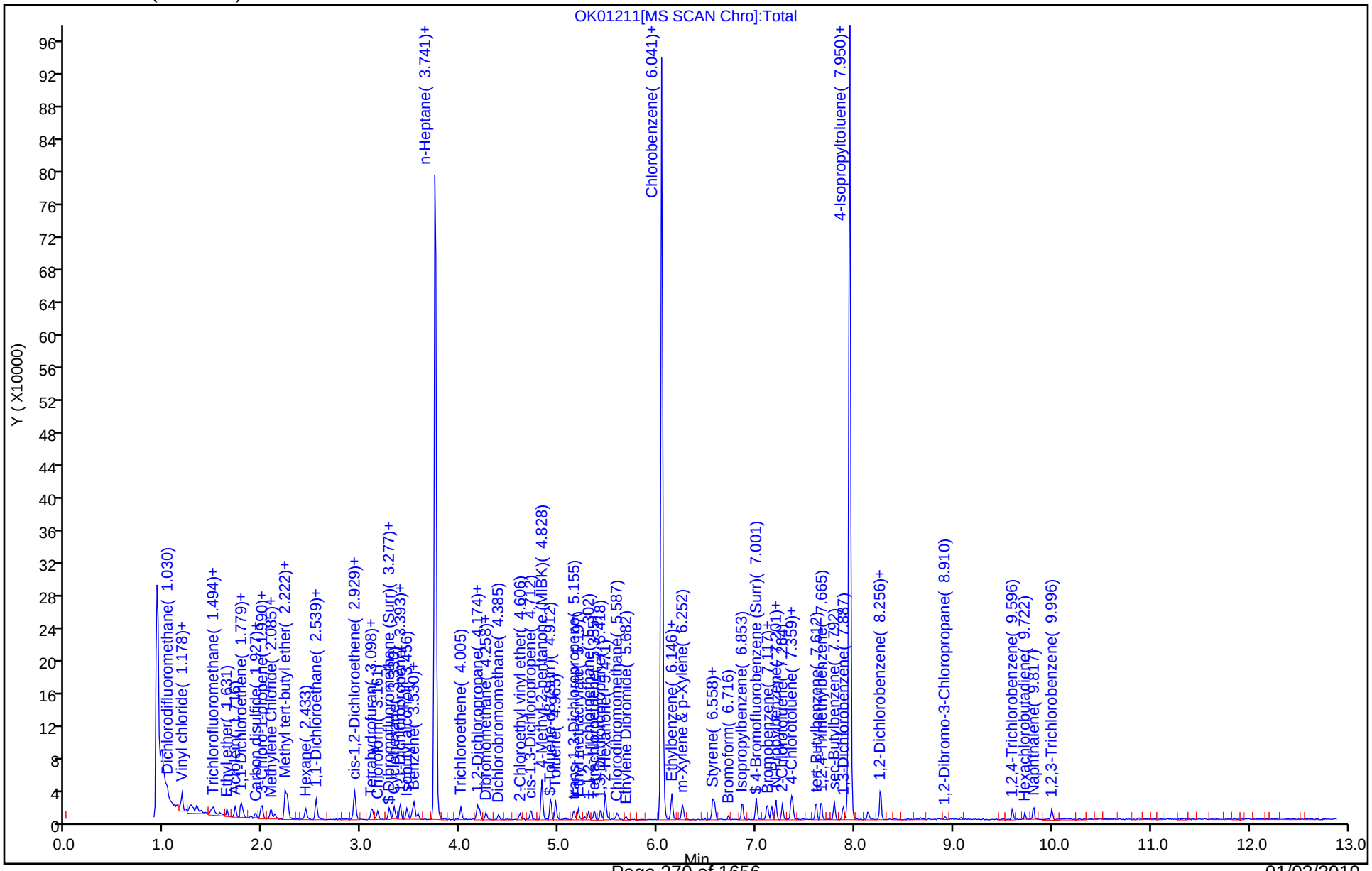
Lims ID: ic Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

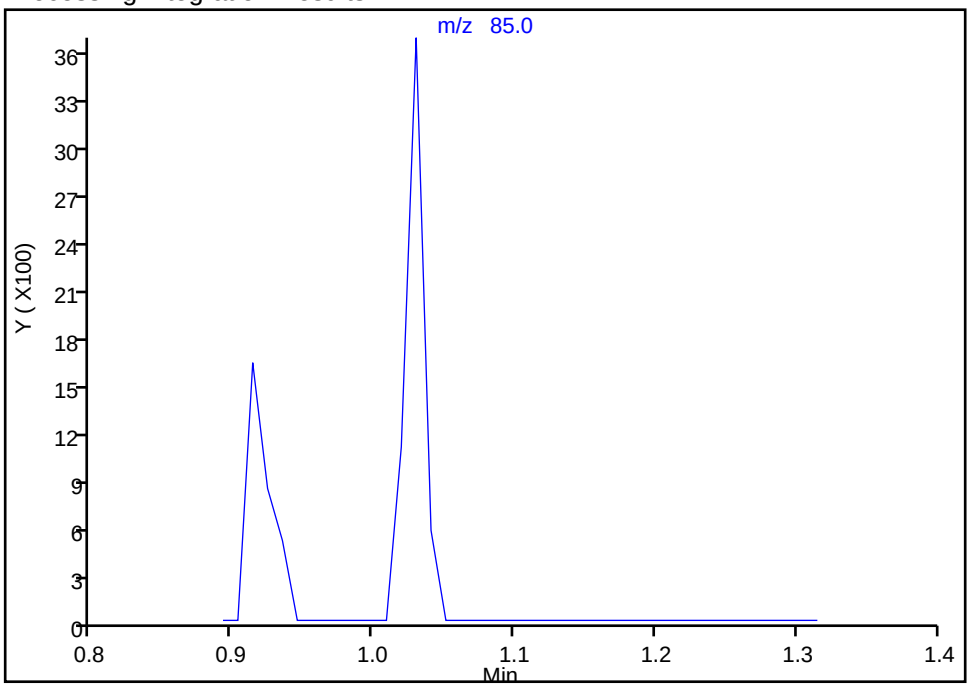
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

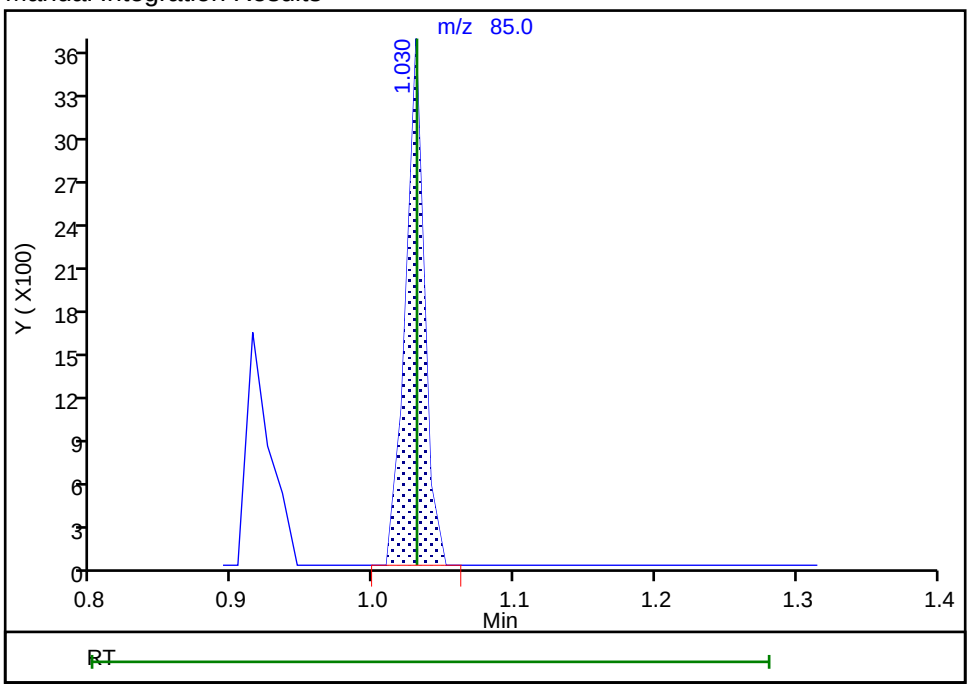
Processing Integration Results

Not Detected
Expected RT: 1.03



Manual Integration Results

RT: 1.03
Area: 3350
Amount: 1.096938
Amount Units: ug/l



Reviewer: intarachau, 13-Nov-2018 09:52:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

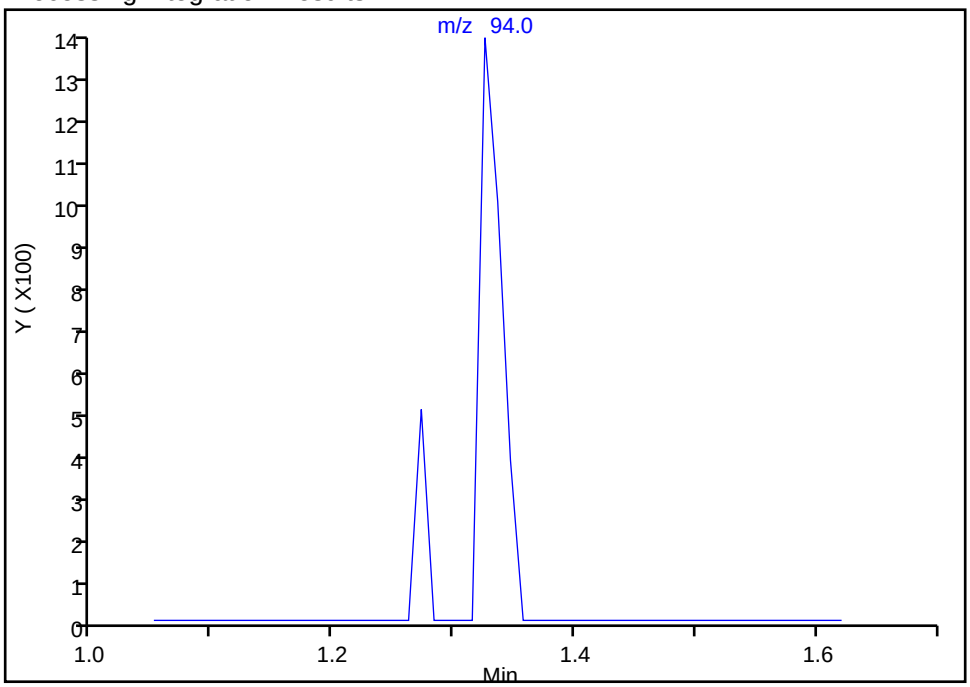
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

5 Bromomethane, CAS: 74-83-9

Signal: 1

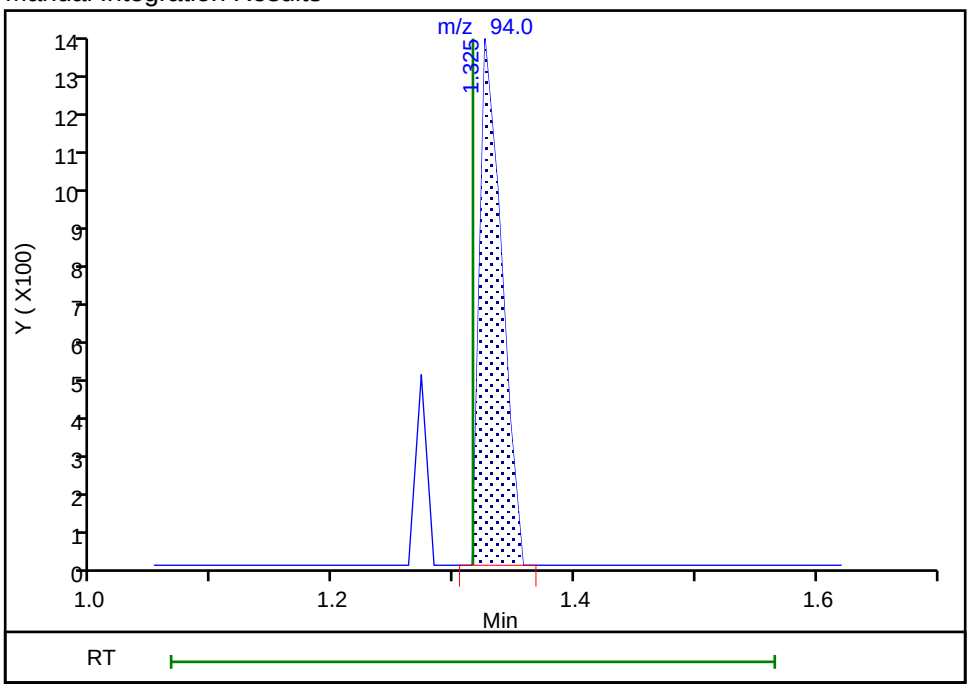
Processing Integration Results

RT: 1.33
Area: 0
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 1.33
Area: 1693
Amount: 1.081244
Amount Units: ug/l



Reviewer: proctors, 13-Nov-2018 09:42:31
Audit Action: Assigned Compound ID Audit Reason: Missed Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

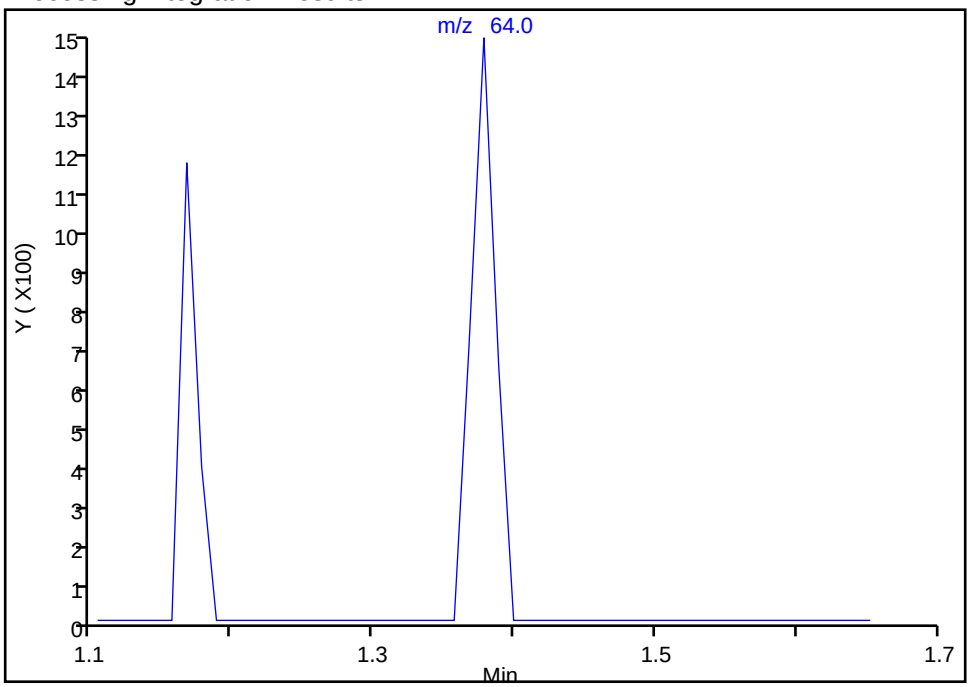
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

6 Chloroethane, CAS: 75-00-3

Signal: 1

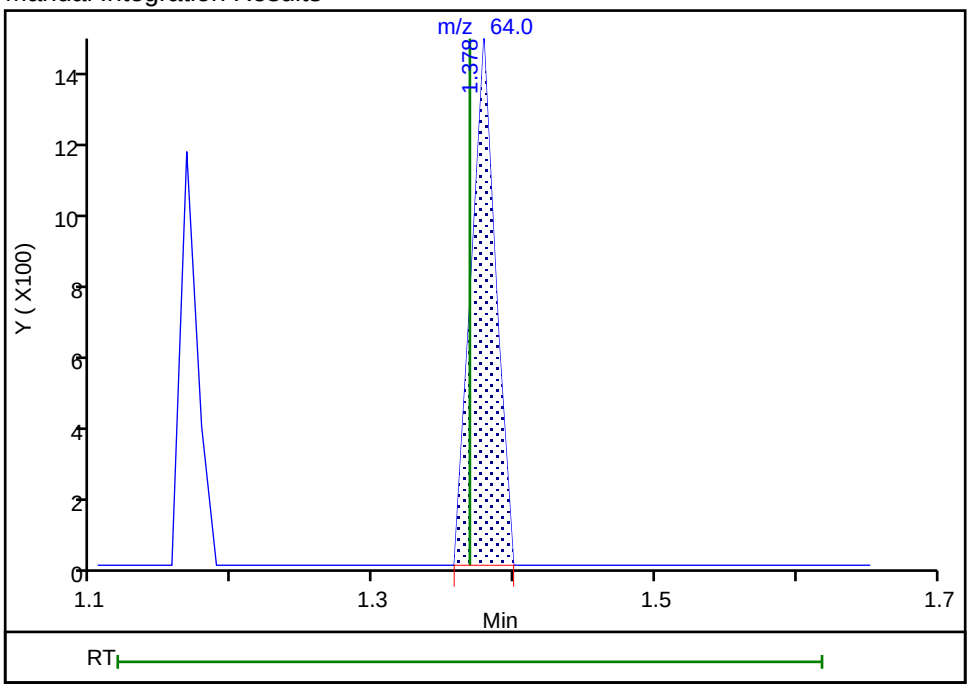
Not Detected
Expected RT: 1.37

Processing Integration Results



RT: 1.38
Area: 1805
Amount: 0.558846
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 13-Nov-2018 09:52:35
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

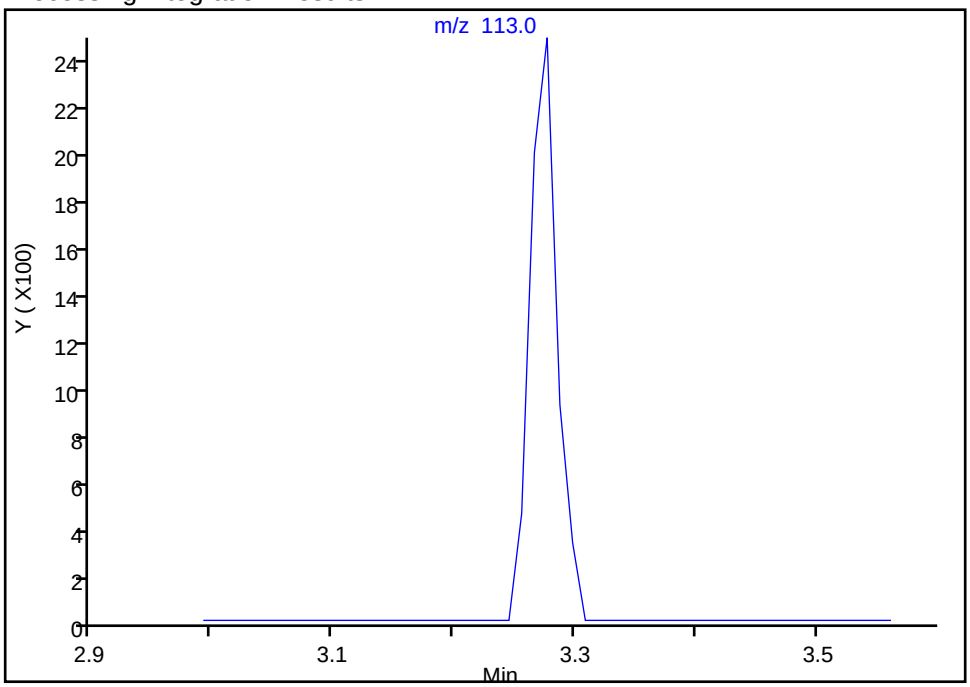
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

$ 44 Dibromofluoromethane (Surr), CAS: 1868-53-7

Signal: 1

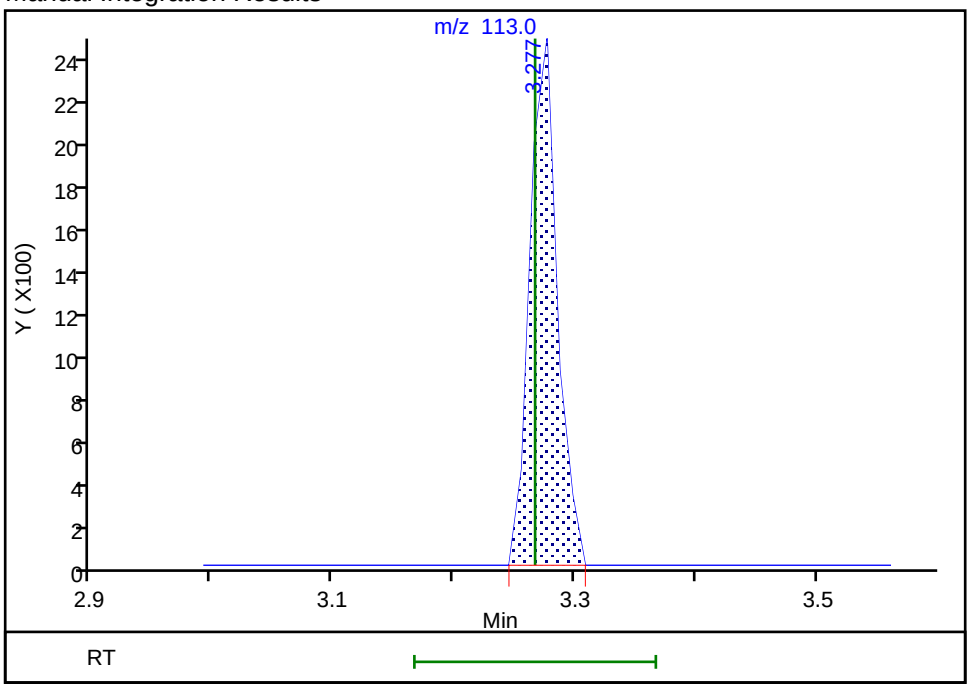
Processing Integration Results

Not Detected
Expected RT: 3.27



Manual Integration Results

RT: 3.28
Area: 3850
Amount: 1.262530
Amount Units: ug/l



Reviewer: intarachau, 13-Nov-2018 09:52:19
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

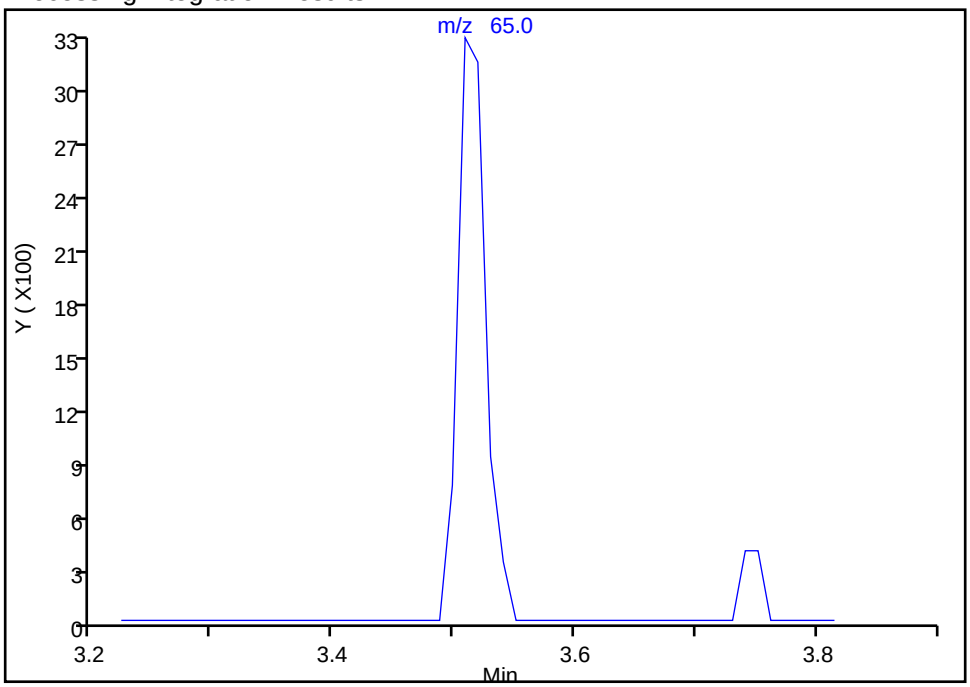
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

$ 51 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

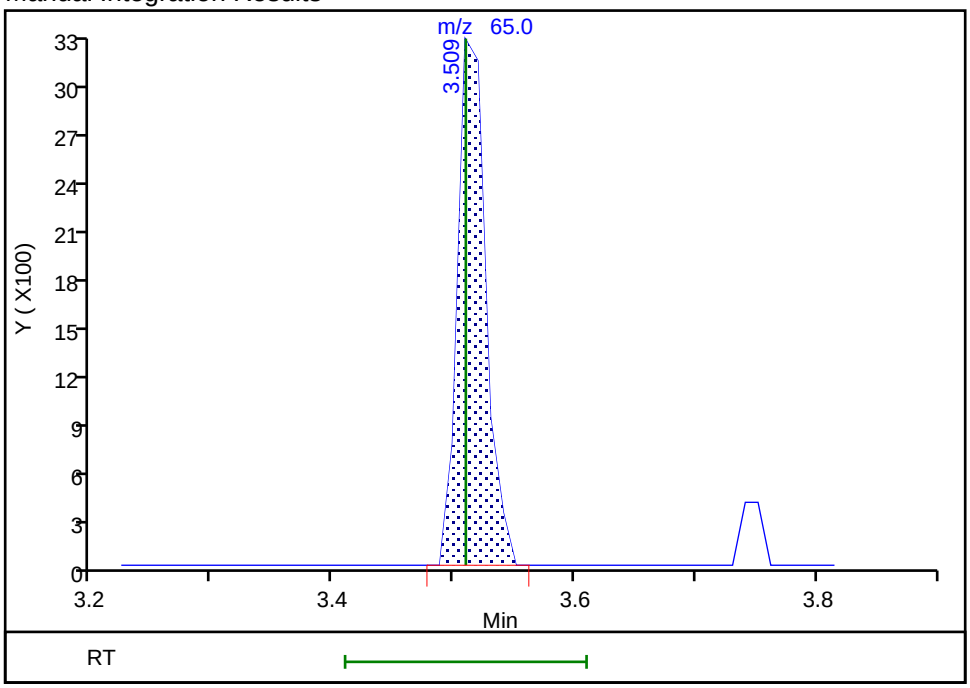
Not Detected
Expected RT: 3.51

Processing Integration Results



RT: 3.51
Area: 5271
Amount: 1.230167
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 13-Nov-2018 09:52:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

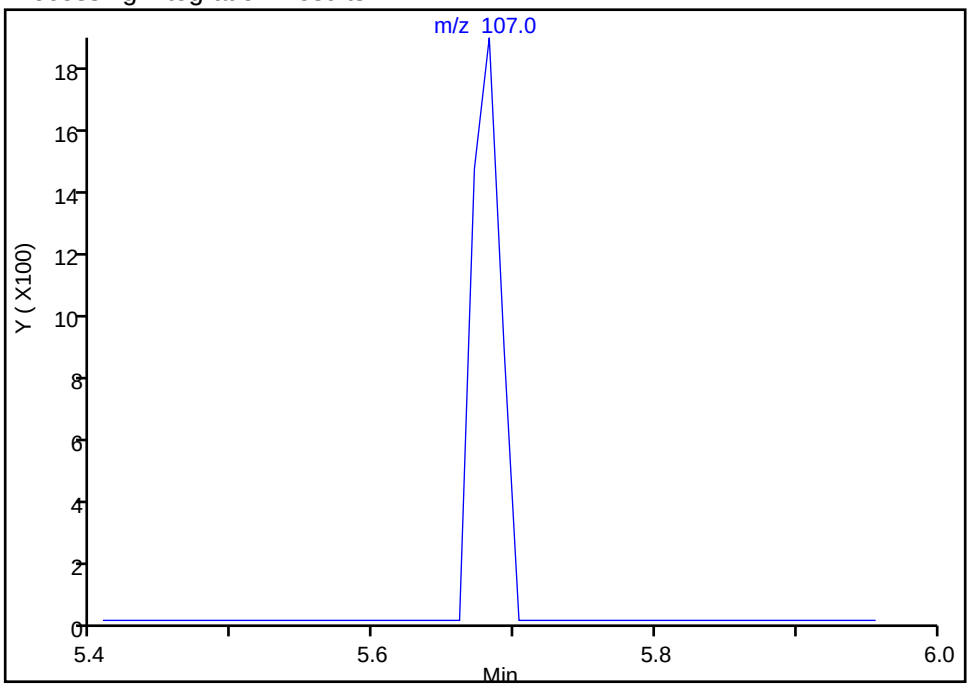
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

79 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

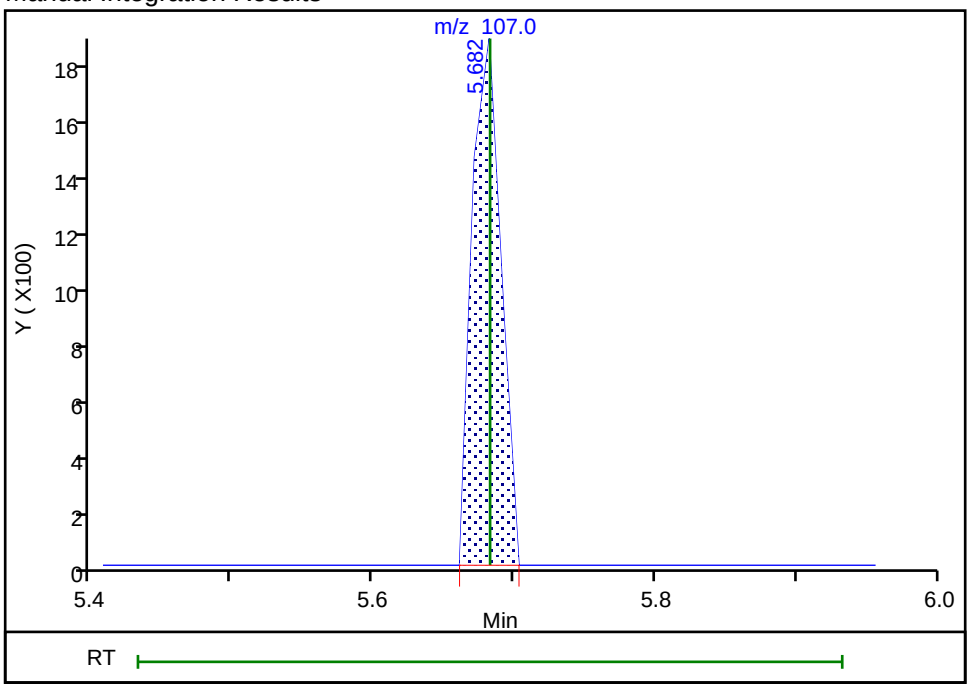
Processing Integration Results

Not Detected
Expected RT: 5.68



Manual Integration Results

RT: 5.68
Area: 2616
Amount: 0.832607
Amount Units: ug/l



Reviewer: intarachau, 13-Nov-2018 09:52:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

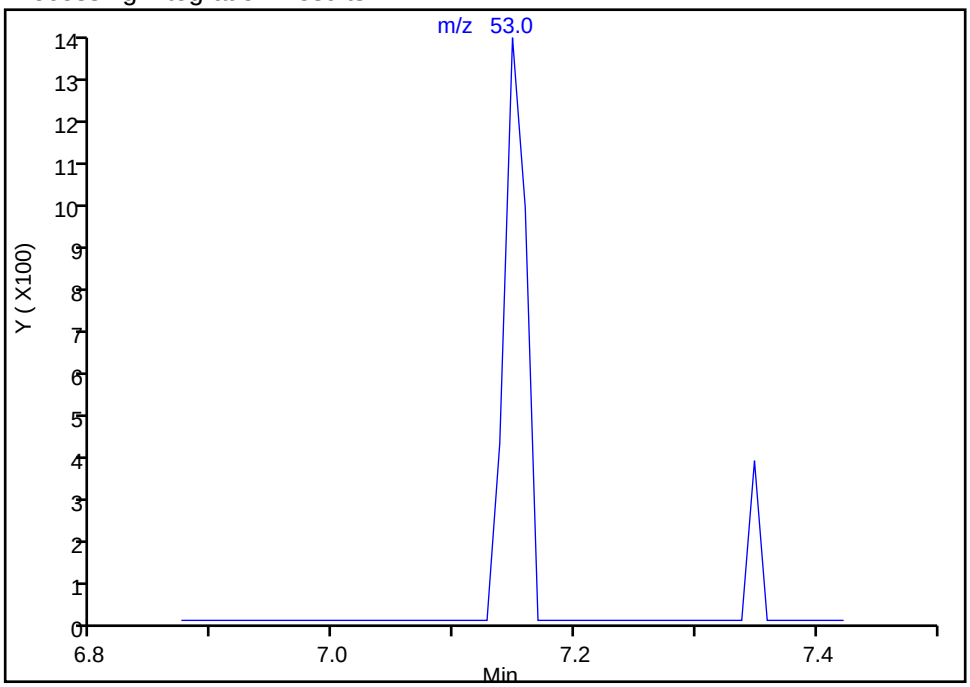
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

97 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

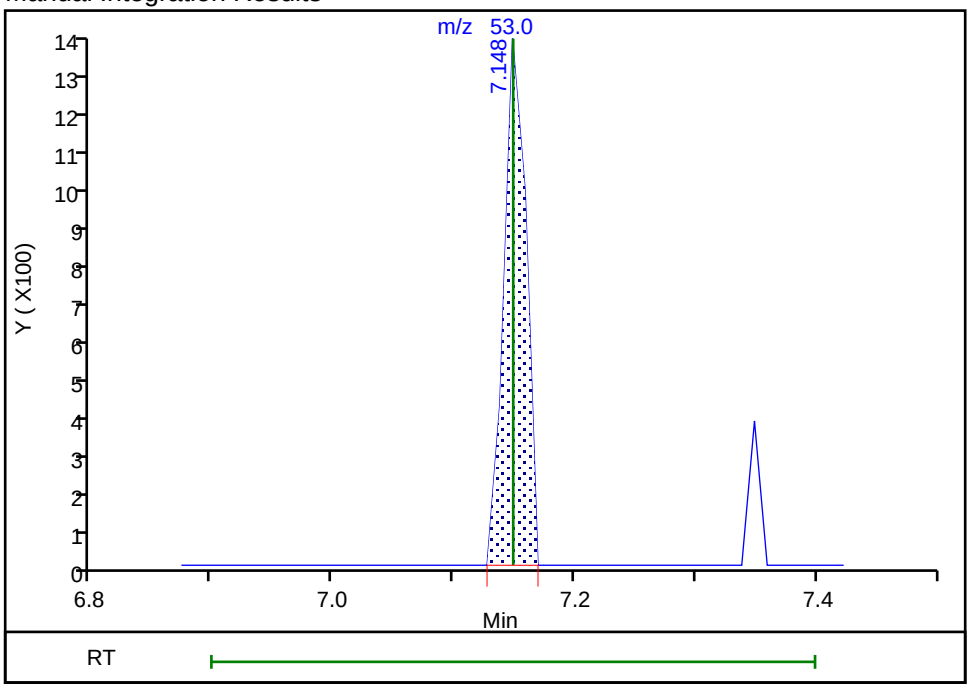
Not Detected
Expected RT: 7.15

Processing Integration Results



RT: 7.15
Area: 1697
Amount: 0.847520
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 13-Nov-2018 09:53:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

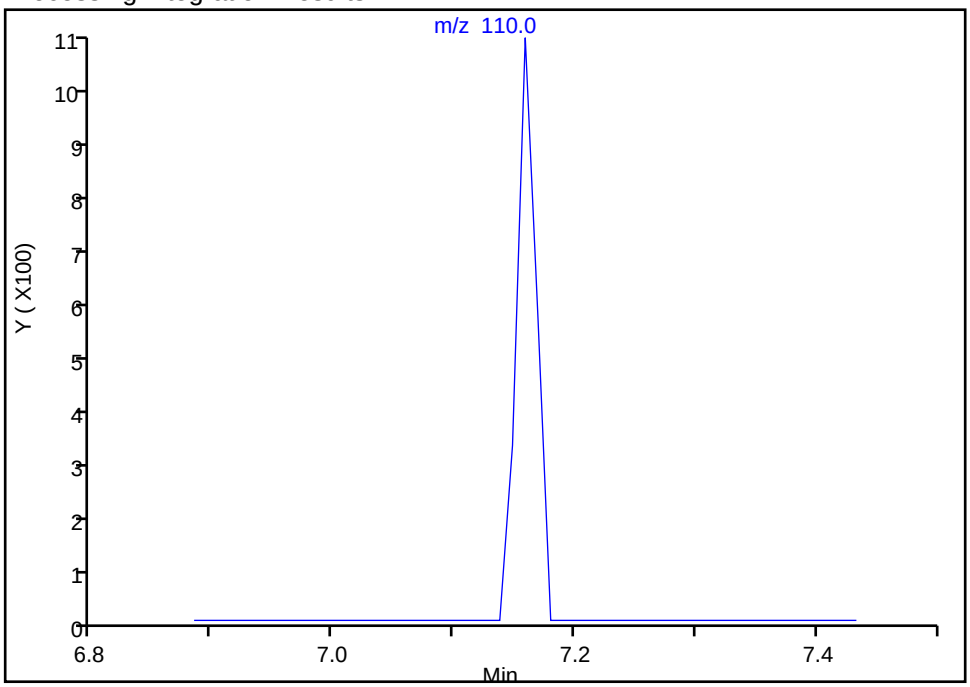
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

96 1,2,3-Trichloropropane, CAS: 96-18-4

Signal: 1

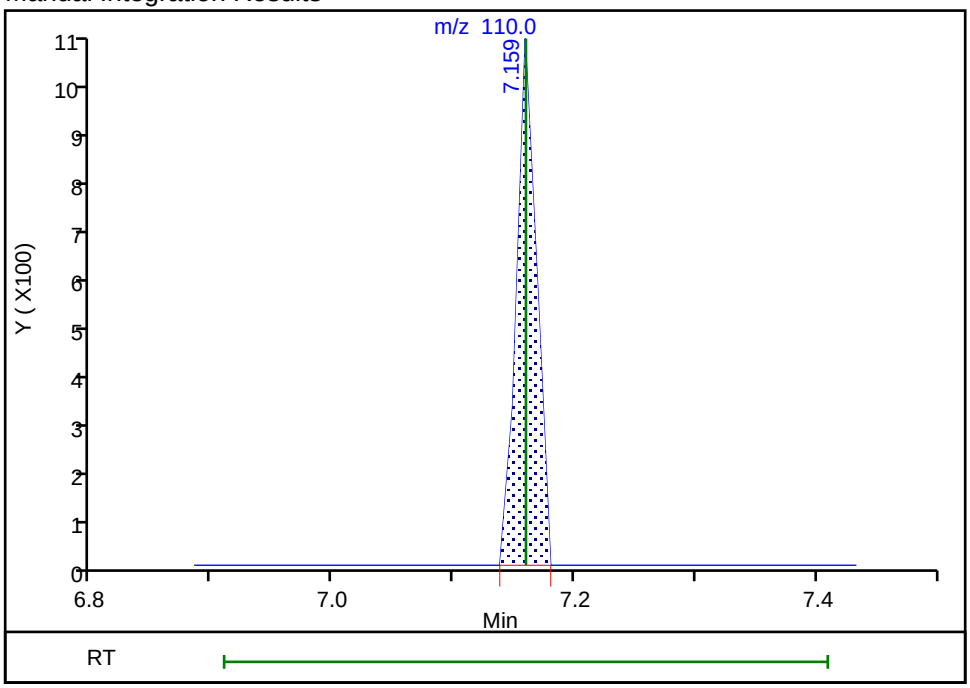
Not Detected
Expected RT: 7.16

Processing Integration Results



Manual Integration Results

RT: 7.16
Area: 1257
Amount: 0.922147
Amount Units: ug/l



Reviewer: intarachau, 13-Nov-2018 09:53:10
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

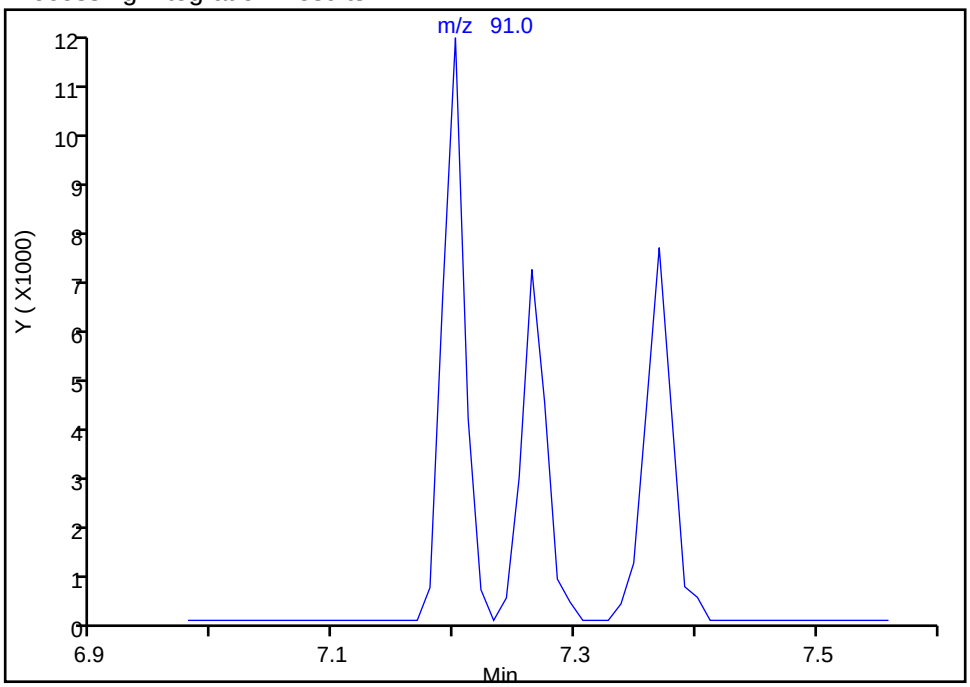
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01211.D				
Injection Date:	12-Nov-2018 12:50:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	4	Worklist Smp#:	5
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

98 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

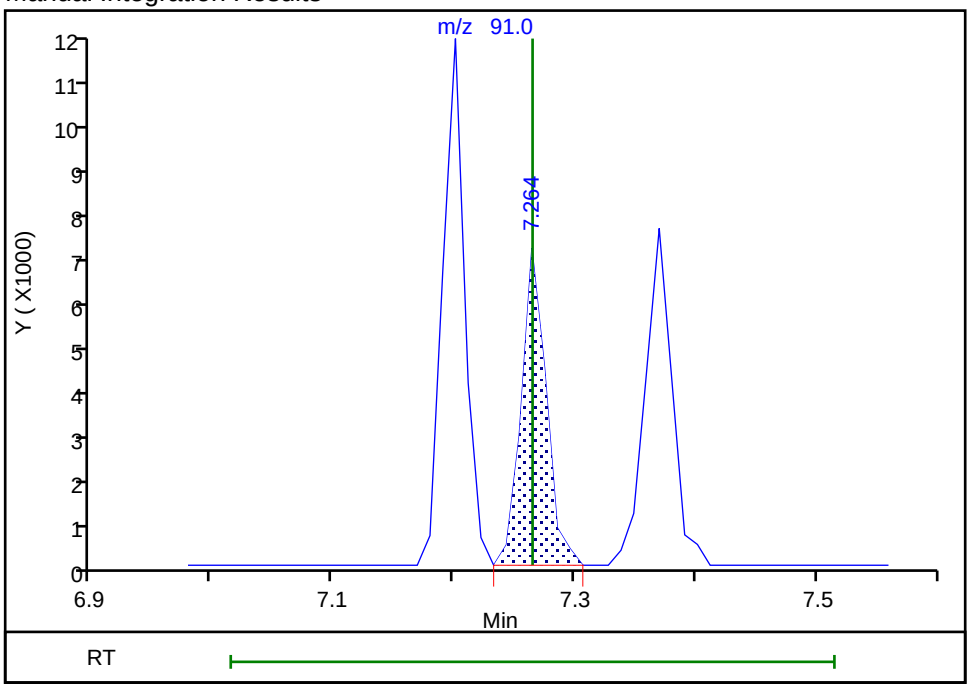
Not Detected
Expected RT: 7.26

Processing Integration Results



Manual Integration Results

RT: 7.26
Area: 10068
Amount: 0.995073
Amount Units: ug/l



Reviewer: intarachau, 13-Nov-2018 09:53:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01212.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-Nov-2018 13:14:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-006
Operator ID: MJY Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:06:54 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: intarachau Date: 13-Nov-2018 09:52:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.022	1.031	-0.009	98	4866	2.00	1.70	a
2 Vinyl chloride	62	1.170	1.168	0.002	98	5184	2.00	1.84	
3 Butadiene	54	1.180	1.178	0.002	94	6298	2.00	1.93	
4 Chloromethane	50	1.180	1.178	0.002	52	11582	2.00	2.07	
5 Bromomethane	94	1.328	1.315	0.013	96	3286	2.00	2.23	
6 Chloroethane	64	1.381	1.368	0.013	96	3685	2.00	1.88	
7 Dichlorofluoromethane	67	1.476	1.474	0.002	96	8946	2.00	2.28	
8 Trichlorofluoromethane	101	1.497	1.495	0.002	98	6146	2.00	1.87	
11 Ethyl ether	59	1.634	1.632	0.002	88	6120	2.00	2.03	
13 Acrolein	56	1.718	1.716	0.002	97	18506	40.0	20.6	
12 1,1,2-Trichloro-1,2,2-trif	151	1.771	1.769	0.002	91	3740	2.00	1.92	
14 1,1-Dichloroethene	96	1.771	1.769	0.002	95	4978	2.00	2.02	
15 Acetone	58	1.792	1.790	0.002	84	4767	10.0	10.2	
17 Iodomethane	142	1.877	1.875	0.002	97	7370	2.00	1.94	
18 Carbon disulfide	76	1.919	1.917	0.002	100	15195	2.00	1.96	
20 Methyl acetate	43	1.972	1.970	0.002	97	17715	4.00	3.98	
19 3-Chloro-1-propene	76	1.993	1.991	0.002	89	3473	2.00	1.94	
22 Methylene Chloride	84	2.077	2.075	0.002	94	6949	2.00	2.30	
23 2-Methyl-2-propanol	59	2.119	2.128	-0.009	98	11648	20.0	19.9	
26 Acrylonitrile	53	2.225	2.223	0.002	94	43167	20.0	20.0	
25 trans-1,2-Dichloroethene	96	2.246	2.244	0.002	98	6067	2.00	2.08	
24 Methyl tert-butyl ether	73	2.246	2.244	0.002	97	21804	2.00	2.15	
27 Hexane	57	2.436	2.434	0.002	93	9064	2.00	2.05	
30 Vinyl acetate	43	2.531	2.529	0.002	100	48570	4.00	4.35	
29 1,1-Dichloroethane	63	2.541	2.539	0.002	51	11882	2.00	2.11	
36 2-Butanone (MEK)	72	2.921	2.919	0.002	98	5724	10.0	10.8	
34 cis-1,2-Dichloroethene	61	2.931	2.929	0.002	91	12321	2.00	2.12	
33 2,2-Dichloropropane	77	2.931	2.929	0.002	94	8931	2.00	2.05	
38 Tetrahydrofuran	42	3.111	3.098	0.013	93	10263	4.00	4.53	
39 Chlorobromomethane	130	3.100	3.098	0.002	95	3461	2.00	1.94	
41 Chloroform	83	3.164	3.161	0.003	94	10630	2.00	2.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.269	3.267	0.002	74	6000	2.00	2.10	
43 1,1,1-Trichloroethane	97	3.280	3.278	0.002	96	9366	2.00	2.08	
42 Cyclohexane	84	3.332	3.330	0.002	96	7320	2.00	1.87	
45 Carbon tetrachloride	117	3.385	3.383	0.002	90	6376	2.00	1.76	
46 1,1-Dichloropropene	75	3.396	3.394	0.002	83	6946	2.00	1.86	
47 Isobutyl alcohol	43	3.459	3.457	0.002	96	16042	50.0	50.7	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.512	3.510	0.002	98	8458	2.00	2.10	a
50 Benzene	78	3.533	3.531	0.002	97	23023	2.00	2.04	
53 1,2-Dichloroethane	62	3.564	3.573	-0.009	96	9865	2.00	2.05	
54 n-Heptane	43	3.744	3.742	0.002	77	8349	2.00	1.66	
* 55 Fluorobenzene	96	3.744	3.742	0.002	98	524576	50.0	50.0	
57 Trichloroethene	132	4.007	4.005	0.002	96	6245	2.00	2.07	
59 Methylcyclohexane	83	4.176	4.174	0.002	90	7987	2.00	1.89	
60 1,2-Dichloropropane	63	4.197	4.195	0.002	88	6331	2.00	1.94	
62 1,4-Dioxane	88	4.261	4.248	0.013	56	1815	40.0	32.9	
63 Dibromomethane	93	4.261	4.259	0.002	93	3652	2.00	1.84	
64 Dichlorobromomethane	83	4.387	4.385	0.002	96	8586	2.00	2.06	
65 2-Chloroethyl vinyl ether	63	4.598	4.596	0.002	92	5303	2.00	2.03	
67 cis-1,3-Dichloropropene	75	4.714	4.712	0.002	96	10586	2.00	2.09	
68 4-Methyl-2-pentanone (MIBK	43	4.830	4.828	0.002	99	61165	10.0	10.4	
$ 69 Toluene-d8 (Surr)	98	4.915	4.913	0.002	97	21494	2.00	2.12	
70 Toluene	92	4.967	4.965	0.002	92	13567	2.00	1.95	
71 trans-1,3-Dichloropropene	75	5.147	5.145	0.002	95	9677	2.00	2.06	
72 Ethyl methacrylate	69	5.199	5.197	0.002	91	9394	2.00	2.04	
73 1,1,2-Trichloroethane	83	5.305	5.303	0.002	91	4929	2.00	2.10	
74 Tetrachloroethene	164	5.358	5.356	0.002	95	3930	2.00	1.98	
75 1,3-Dichloropropane	76	5.421	5.419	0.002	95	9968	2.00	2.06	
76 2-Hexanone	43	5.474	5.472	0.002	98	42529	10.0	10.2	
78 Chlorodibromomethane	129	5.590	5.588	0.002	97	6464	2.00	2.13	
79 Ethylene Dibromide	107	5.685	5.683	0.002	95	6120	2.00	2.07	
* 81 Chlorobenzene-d5	82	6.043	6.041	0.002	88	212939	50.0	50.0	
82 Chlorobenzene	112	6.064	6.062	0.002	94	15715	2.00	2.07	
84 1,1,1,2-Tetrachloroethane	131	6.138	6.136	0.002	91	5348	2.00	1.95	
83 Ethylbenzene	91	6.149	6.147	0.002	98	25454	2.00	1.96	
85 m-Xylene & p-Xylene	91	6.254	6.252	0.002	98	20880	2.00	1.98	
87 o-Xylene	91	6.560	6.558	0.002	93	22427	2.00	2.05	
88 Styrene	104	6.581	6.579	0.002	92	15693	2.00	1.94	
89 Bromoform	173	6.718	6.716	0.002	94	4765	2.00	2.06	
90 Isopropylbenzene	105	6.856	6.864	-0.008	97	23487	2.00	1.92	
$ 92 4-Bromofluorobenzene (Surr	95	7.003	7.001	0.002	89	10087	2.00	2.38	
93 Bromobenzene	156	7.109	7.107	0.002	95	6307	2.00	2.01	
94 1,1,2,2-Tetrachloroethane	83	7.119	7.117	0.002	97	9145	2.00	2.18	
97 trans-1,4-Dichloro-2-buten	53	7.151	7.149	0.002	80	3955	2.00	2.09	a
96 1,2,3-Trichloropropane	110	7.161	7.159	0.002	94	2487	2.00	1.93	
95 N-Propylbenzene	91	7.204	7.202	0.002	99	29559	2.00	1.97	
98 2-Chlorotoluene	91	7.267	7.265	0.002	95	19939	2.00	2.08	a
99 1,3,5-Trimethylbenzene	105	7.351	7.360	-0.009	91	22203	2.00	2.08	
100 4-Chlorotoluene	91	7.372	7.370	0.002	98	22483	2.00	2.04	
103 tert-Butylbenzene	119	7.604	7.613	-0.009	91	16472	2.00	1.90	
105 1,2,4-Trimethylbenzene	105	7.657	7.655	0.002	97	23087	2.00	2.05	
106 sec-Butylbenzene	105	7.794	7.792	0.002	98	25266	2.00	1.95	
108 1,3-Dichlorobenzene	146	7.879	7.887	-0.008	94	12041	2.00	2.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.921	7.929	-0.008	96	21265	2.00	1.88	
* 109 1,4-Dichlorobenzene-d4	152	7.953	7.951	0.002	97	198870	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.974	7.972	0.002	92	12797	2.00	2.05	
114 1,2-Dichlorobenzene	146	8.258	8.256	0.002	80	12265	2.00	2.09	
113 n-Butylbenzene	91	8.258	8.256	0.002	99	19038	2.00	1.87	
115 1,2-Dibromo-3-Chloropropan	157	8.923	8.921	0.002	88	2256	2.00	2.01	
117 1,2,4-Trichlorobenzene	180	9.598	9.596	0.002	91	8608	2.00	2.09	
118 Hexachlorobutadiene	225	9.725	9.723	0.002	90	3190	2.00	1.85	
119 Naphthalene	128	9.809	9.807	0.002	98	23599	2.00	2.05	
120 1,2,3-Trichlorobenzene	180	9.999	9.997	0.002	93	8279	2.00	2.03	
S 122 1,2-Dichloroethene, Total	1				0		4.00	4.20	
S 123 Xylenes, Total	1				0		4.00	4.03	
S 124 1,3-Dichloropropene, Total	1				0		4.00	4.15	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

VM_MMIX_01936	Amount Added:	0.20	Units: uL
VM_Acrolein_00189	Amount Added:	0.20	Units: uL
DOD ISTD_00163	Amount Added:	5.00	Units: uL

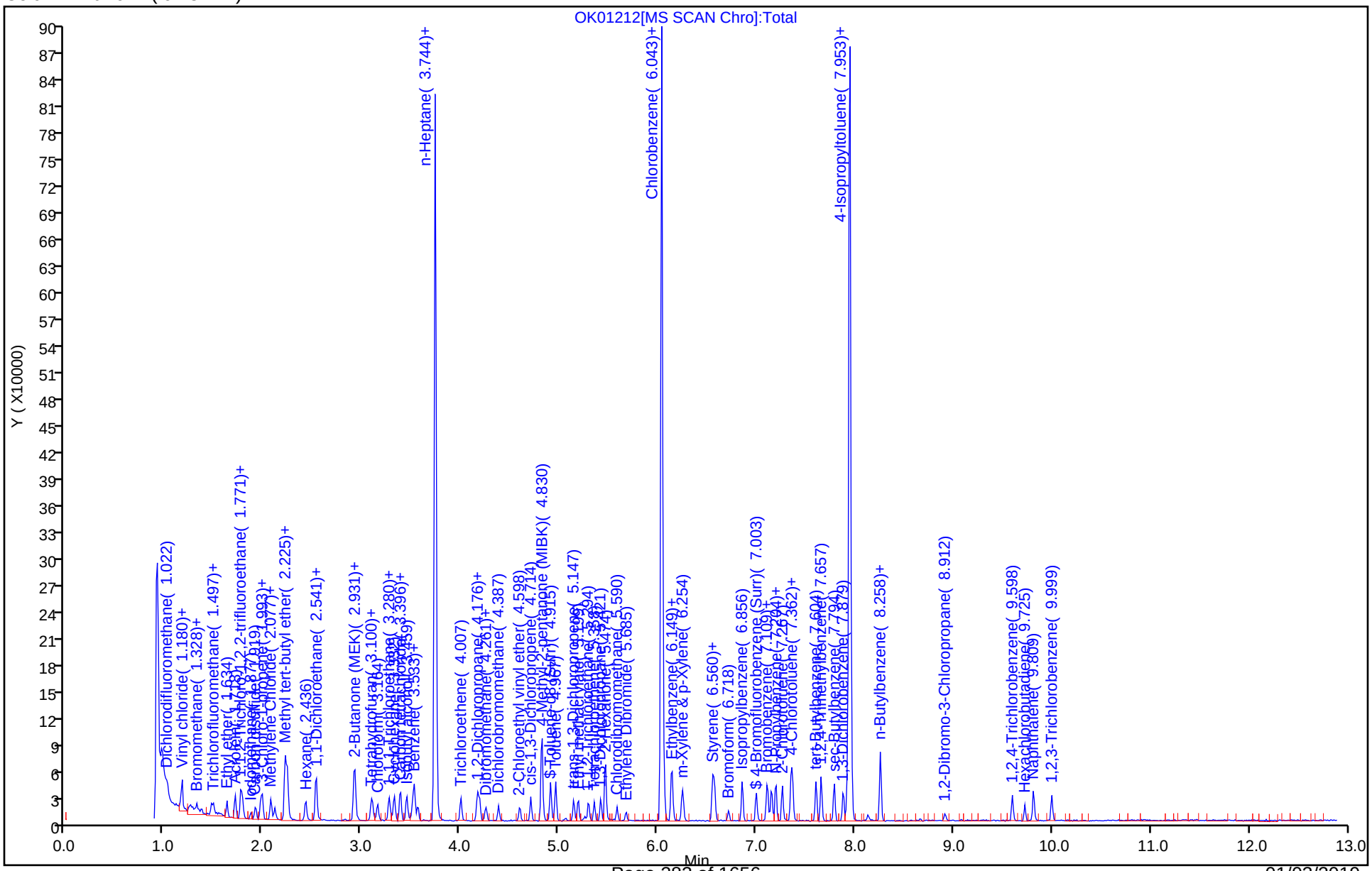
Report Date: 13-Nov-2018 10:06:55 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01212.D

Injection Date:	12-Nov-2018 13:14:30	Instrument ID:	CMSO2	Operator ID:	MJY
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	2014_MSO2	Limit Group:	8260B		

Column: Rtx-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

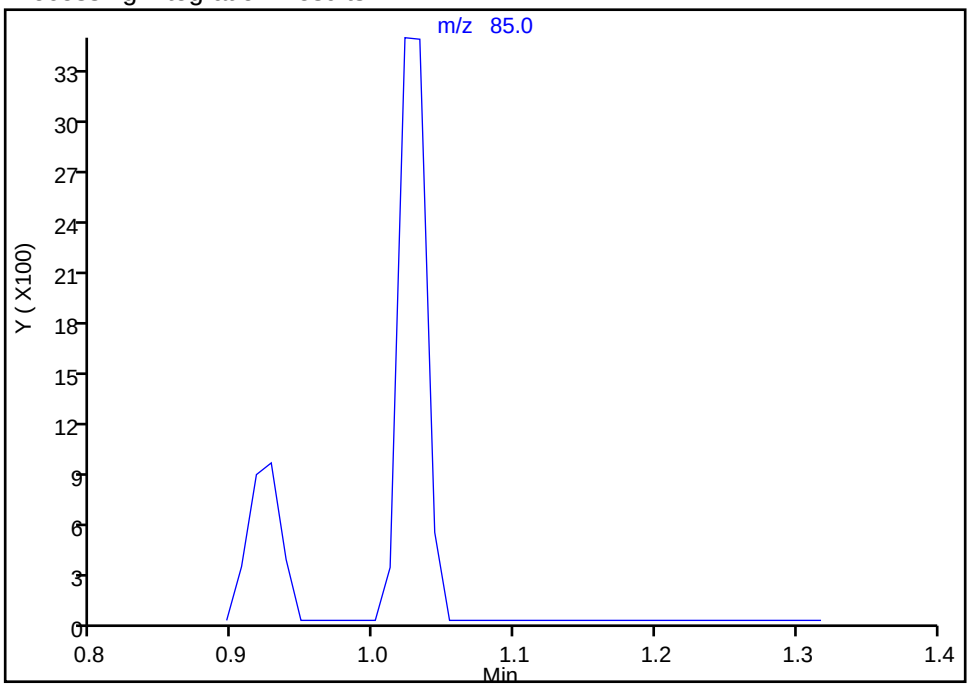
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01212.D				
Injection Date:	12-Nov-2018 13:14:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

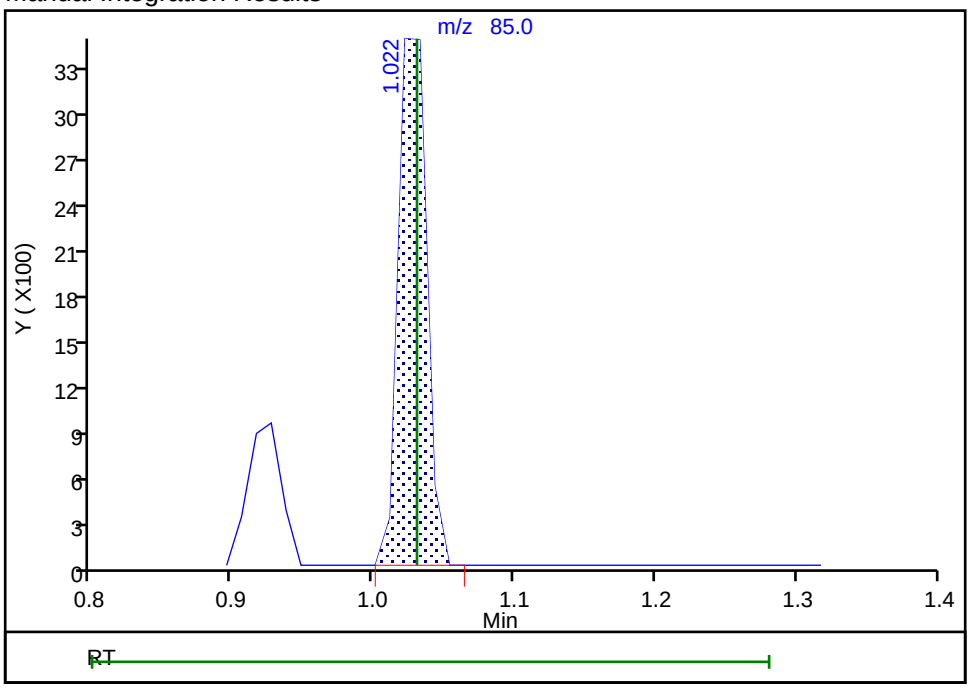
Not Detected
Expected RT: 1.03

Processing Integration Results



RT: 1.02
Area: 4866
Amount: 1.696579
Amount Units: ug/l

Manual Integration Results



Reviewer: intarachau, 13-Nov-2018 09:51:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

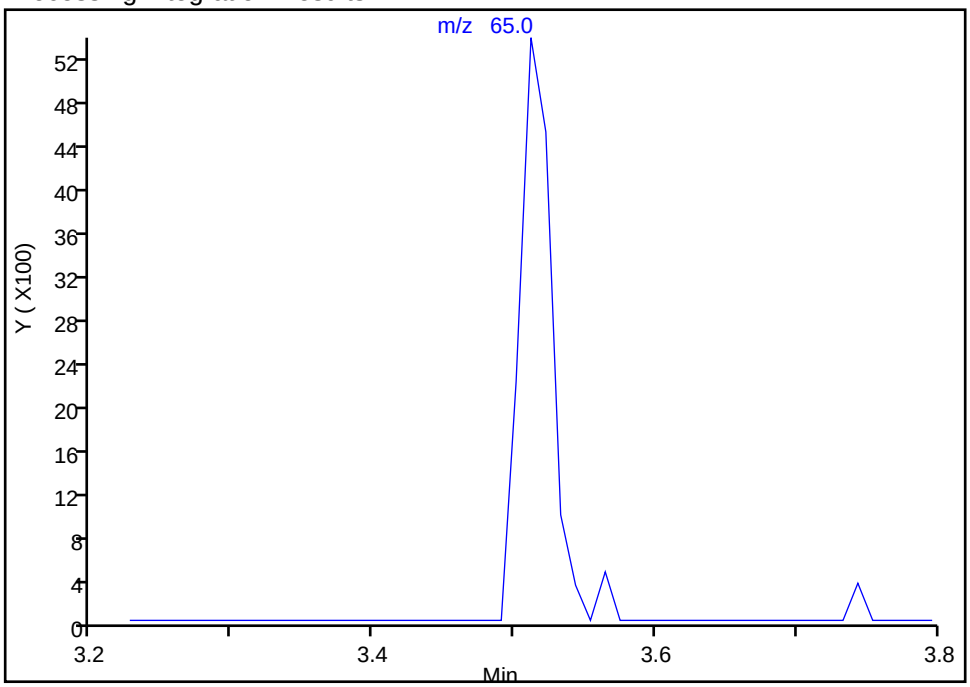
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01212.D				
Injection Date:	12-Nov-2018 13:14:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

$ 51 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

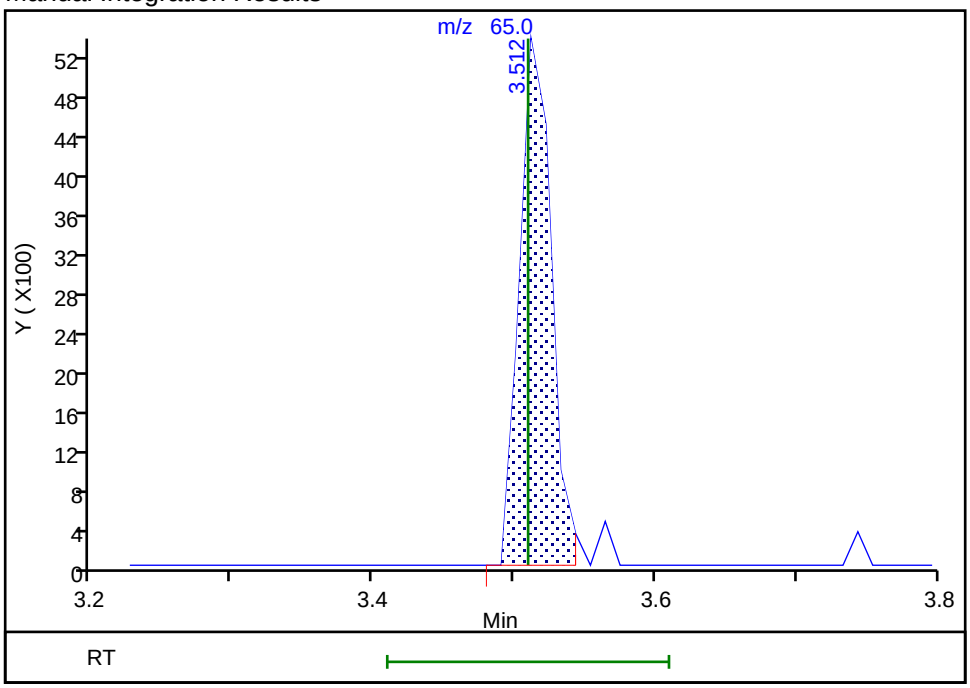
Processing Integration Results

Not Detected
Expected RT: 3.51



Manual Integration Results

RT: 3.51
Area: 8458
Amount: 2.101858
Amount Units: ug/l



Reviewer: intarachau, 13-Nov-2018 09:50:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

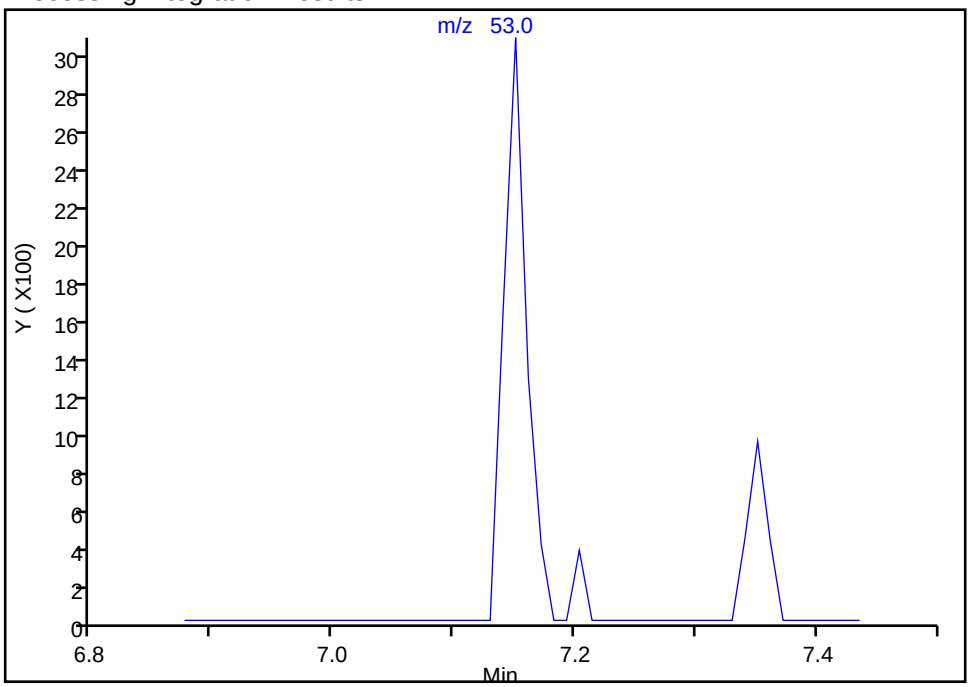
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01212.D				
Injection Date:	12-Nov-2018 13:14:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

97 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

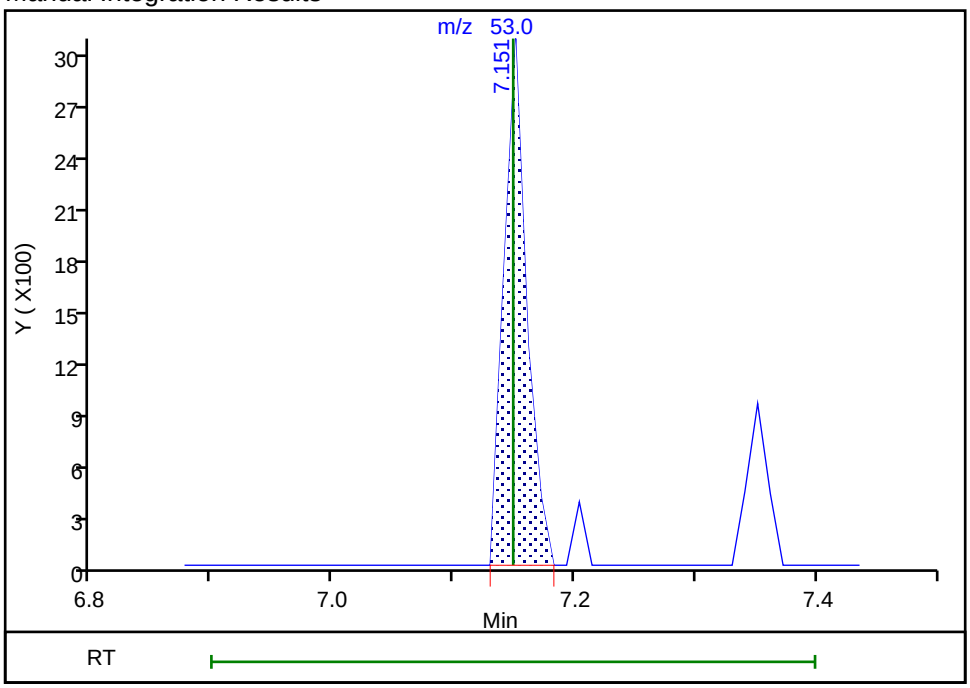
Not Detected
Expected RT: 7.15

Processing Integration Results



Manual Integration Results

RT: 7.15
Area: 3955
Amount: 2.085239
Amount Units: ug/l



Reviewer: intarachau, 13-Nov-2018 09:51:36
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

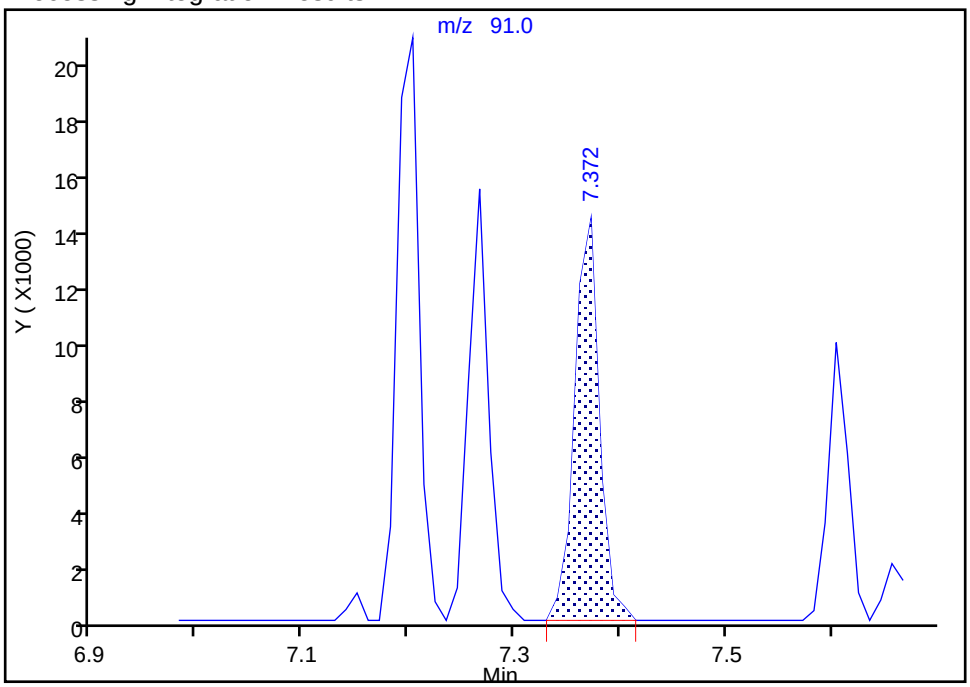
Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01212.D				
Injection Date:	12-Nov-2018 13:14:30	Instrument ID:	CMSO2		
Lims ID:	ic				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	5	Worklist Smp#:	6
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

98 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

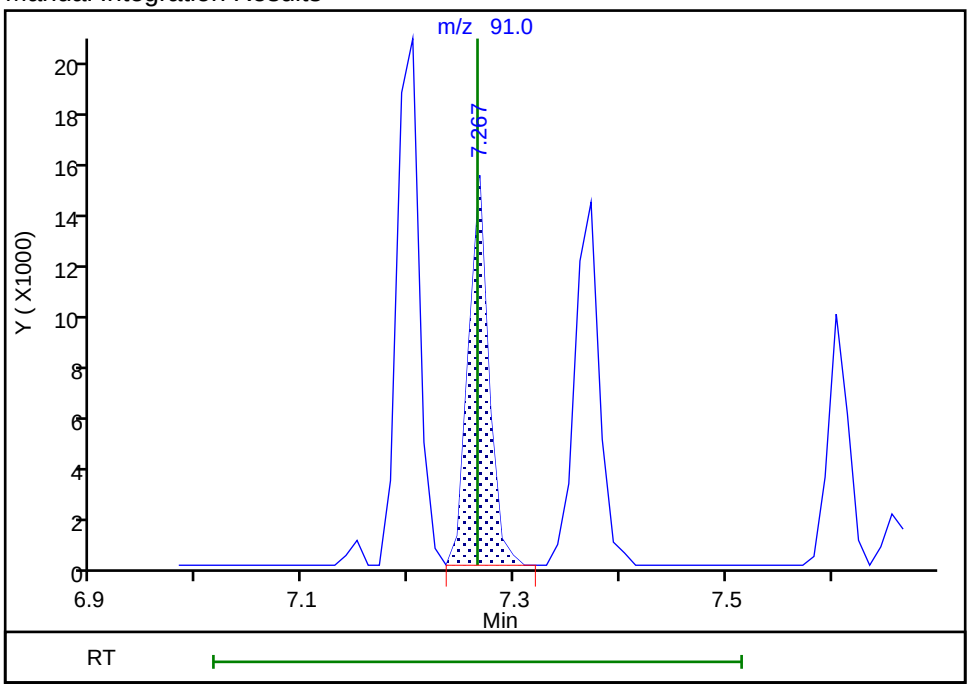
Processing Integration Results

RT: 7.37
Area: 22483
Amount: 2.300648
Amount Units: ug/l



Manual Integration Results

RT: 7.27
Area: 19939
Amount: 2.080446
Amount Units: ug/l



Reviewer: intarachau, 13-Nov-2018 09:51:41
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01213.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-Nov-2018 13:37:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-007
Operator ID: MJY Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:07:00 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: intarachau Date: 13-Nov-2018 09:50:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.031	1.031	0.000	99	13494	5.00	4.42	
2 Vinyl chloride	62	1.168	1.168	0.000	99	13670	5.00	4.57	
4 Chloromethane	50	1.179	1.178	0.001	61	27824	5.00	4.68	
3 Butadiene	54	1.179	1.178	0.001	97	16122	5.00	4.64	
5 Bromomethane	94	1.327	1.315	0.012	97	7736	5.00	4.95	
6 Chloroethane	64	1.379	1.368	0.011	94	7635	5.00	4.23	
7 Dichlorofluoromethane	67	1.474	1.474	0.000	98	18898	5.00	4.52	
8 Trichlorofluoromethane	101	1.495	1.495	0.000	99	17337	5.00	4.95	
11 Ethyl ether	59	1.633	1.632	0.001	90	15681	5.00	4.90	
13 Acrolein	56	1.717	1.716	0.001	96	45138	100.0	47.2	
14 1,1-Dichloroethene	96	1.780	1.769	0.011	98	12611	5.00	4.80	
12 1,1,2-Trichloro-1,2,2-trif	151	1.770	1.769	0.001	80	9211	5.00	4.45	
15 Acetone	58	1.791	1.790	0.001	85	11949	25.0	24.0	
17 Iodomethane	142	1.875	1.875	0.000	99	19640	5.00	4.86	
18 Carbon disulfide	76	1.928	1.917	0.011	100	39055	5.00	4.74	
20 Methyl acetate	43	1.970	1.970	0.000	98	44525	10.0	9.41	
19 3-Chloro-1-propene	76	1.991	1.991	0.000	88	9661	5.00	5.09	
22 Methylene Chloride	84	2.076	2.075	0.001	96	16462	5.00	5.12	
23 2-Methyl-2-propanol	59	2.118	2.128	-0.010	99	30307	50.0	48.8	
26 Acrylonitrile	53	2.223	2.223	0.000	94	109774	50.0	47.9	
24 Methyl tert-butyl ether	73	2.244	2.244	0.000	97	55402	5.00	5.13	
25 trans-1,2-Dichloroethene	96	2.255	2.244	0.011	98	14891	5.00	4.81	
27 Hexane	57	2.434	2.434	0.000	92	19277	5.00	4.11	
30 Vinyl acetate	43	2.529	2.529	0.000	100	116239	10.0	9.79	
29 1,1-Dichloroethane	63	2.540	2.539	0.001	99	29023	5.00	4.85	
36 2-Butanone (MEK)	72	2.919	2.919	0.000	98	13746	25.0	24.4	
33 2,2-Dichloropropane	77	2.930	2.929	0.001	96	22308	5.00	4.82	
34 cis-1,2-Dichloroethene	61	2.930	2.929	0.001	92	29469	5.00	4.77	
39 Chlorobromomethane	130	3.099	3.098	0.001	97	9761	5.00	5.14	
38 Tetrahydrofuran	42	3.109	3.098	0.011	93	24014	10.0	9.96	
41 Chloroform	83	3.162	3.161	0.001	95	27208	5.00	4.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.268	3.267	0.001	97	14779	5.00	4.85	
43 1,1,1-Trichloroethane	97	3.278	3.278	0.000	98	23494	5.00	4.91	
42 Cyclohexane	84	3.331	3.330	0.001	97	18405	5.00	4.43	
45 Carbon tetrachloride	117	3.394	3.383	0.011	90	18147	5.00	4.72	
46 1,1-Dichloropropene	75	3.394	3.394	0.000	88	18879	5.00	4.77	
47 Isobutyl alcohol	43	3.457	3.457	0.000	95	39602	125.0	117.6	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.510	0.000	95	20771	5.00	4.85	
50 Benzene	78	3.531	3.531	0.000	98	59336	5.00	4.95	
53 1,2-Dichloroethane	62	3.573	3.573	0.000	97	25004	5.00	4.89	
* 55 Fluorobenzene	96	3.742	3.742	0.000	99	557763	50.0	50.0	
54 n-Heptane	43	3.742	3.742	0.000	85	23920	5.00	4.49	
57 Trichloroethene	132	4.006	4.005	0.001	96	15966	5.00	4.98	
59 Methylcyclohexane	83	4.175	4.174	0.001	91	20061	5.00	4.45	
60 1,2-Dichloropropane	63	4.196	4.195	0.001	92	17489	5.00	5.03	
62 1,4-Dioxane	88	4.259	4.248	0.011	50	5189	100.0	88.4	
63 Dibromomethane	93	4.259	4.259	0.000	95	10962	5.00	5.19	
64 Dichlorobromomethane	83	4.386	4.385	0.001	97	22244	5.00	5.02	
65 2-Chloroethyl vinyl ether	63	4.607	4.596	0.011	88	13018	5.00	4.69	
67 cis-1,3-Dichloropropene	75	4.713	4.712	0.001	95	26212	5.00	4.87	
68 4-Methyl-2-pentanone (MIBK	43	4.829	4.828	0.001	99	143807	25.0	23.1	
$ 69 Toluene-d8 (Surr)	98	4.913	4.913	0.000	98	50042	5.00	4.65	
70 Toluene	92	4.966	4.965	0.001	93	36918	5.00	5.00	
71 trans-1,3-Dichloropropene	75	5.145	5.145	0.000	96	25182	5.00	5.05	
72 Ethyl methacrylate	69	5.198	5.197	0.001	94	23497	5.00	4.81	
73 1,1,2-Trichloroethane	83	5.303	5.303	0.000	91	12066	5.00	4.83	
74 Tetrachloroethene	164	5.356	5.356	0.000	91	10751	5.00	5.10	
75 1,3-Dichloropropane	76	5.419	5.419	0.000	93	24864	5.00	4.84	
76 2-Hexanone	43	5.472	5.472	0.000	99	104846	25.0	23.7	
78 Chlorodibromomethane	129	5.588	5.588	0.000	97	15997	5.00	4.96	
79 Ethylene Dibromide	107	5.683	5.683	0.000	92	16589	5.00	5.29	
* 81 Chlorobenzene-d5	82	6.042	6.041	0.001	89	225597	50.0	50.0	
82 Chlorobenzene	112	6.063	6.062	0.001	94	40670	5.00	5.04	
84 1,1,1,2-Tetrachloroethane	131	6.137	6.136	0.001	93	14169	5.00	4.89	
83 Ethylbenzene	91	6.147	6.147	0.000	98	70231	5.00	5.10	
85 m-Xylene & p-Xylene	91	6.253	6.252	0.001	98	54731	5.00	4.91	
87 o-Xylene	91	6.559	6.558	0.001	92	60350	5.00	5.20	
88 Styrene	104	6.580	6.579	0.001	93	42444	5.00	4.96	
89 Bromoform	173	6.717	6.716	0.001	97	11938	5.00	4.88	
90 Isopropylbenzene	105	6.854	6.864	-0.010	96	65662	5.00	5.07	
$ 92 4-Bromofluorobenzene (Surr	95	7.002	7.001	0.001	87	22608	5.00	4.90	
93 Bromobenzene	156	7.107	7.107	0.000	95	16692	5.00	5.02	
94 1,1,2,2-Tetrachloroethane	83	7.118	7.117	0.001	98	22384	5.00	5.05	
97 trans-1,4-Dichloro-2-buten	53	7.149	7.149	0.000	80	9627	5.00	4.79	
96 1,2,3-Trichloropropane	110	7.160	7.159	0.001	97	7209	5.00	5.27	
95 N-Propylbenzene	91	7.202	7.202	0.000	99	76075	5.00	4.79	
98 2-Chlorotoluene	91	7.265	7.265	0.000	97	52467	5.00	5.17	
99 1,3,5-Trimethylbenzene	105	7.360	7.360	0.000	92	55389	5.00	4.91	
100 4-Chlorotoluene	91	7.371	7.370	0.001	98	59374	5.00	5.07	
103 tert-Butylbenzene	119	7.603	7.613	-0.010	93	46646	5.00	5.07	
105 1,2,4-Trimethylbenzene	105	7.656	7.655	0.001	98	60114	5.00	5.05	
106 sec-Butylbenzene	105	7.793	7.792	0.001	99	65880	5.00	4.81	
108 1,3-Dichlorobenzene	146	7.888	7.887	0.001	97	31115	5.00	4.83	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.930	7.929	0.001	97	57569	5.00	4.69	
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.951	0.000	97	216154	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.972	7.972	0.000	94	32265	5.00	4.76	
113 n-Butylbenzene	91	8.257	8.256	0.001	98	51855	5.00	4.69	
114 1,2-Dichlorobenzene	146	8.257	8.256	0.001	80	32024	5.00	5.02	
115 1,2-Dibromo-3-Chloropropan	157	8.922	8.921	0.001	92	6136	5.00	5.03	
117 1,2,4-Trichlorobenzene	180	9.597	9.596	0.001	94	22056	5.00	4.92	
118 Hexachlorobutadiene	225	9.723	9.723	0.000	92	9271	5.00	4.94	
119 Naphthalene	128	9.818	9.807	0.011	99	61470	5.00	4.90	
120 1,2,3-Trichlorobenzene	180	9.998	9.997	0.001	97	21495	5.00	4.86	
S 122 1,2-Dichloroethene, Total	1				0		10.0	9.58	
S 123 Xylenes, Total	1				0		10.0	10.1	
S 124 1,3-Dichloropropene, Total	1				0		10.0	9.91	

Reagents:

VM_MMIX_01936	Amount Added:	0.50	Units: uL
VM_Acrolein_00189	Amount Added:	0.50	Units: uL
DOD ISTD_00163	Amount Added:	5.00	Units: uL

Report Date: 13-Nov-2018 10:07:01 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01213.D

Injection Date: 12-Nov-2018 13:37:30 Instrument ID: CMSO2 Operator ID: MJY

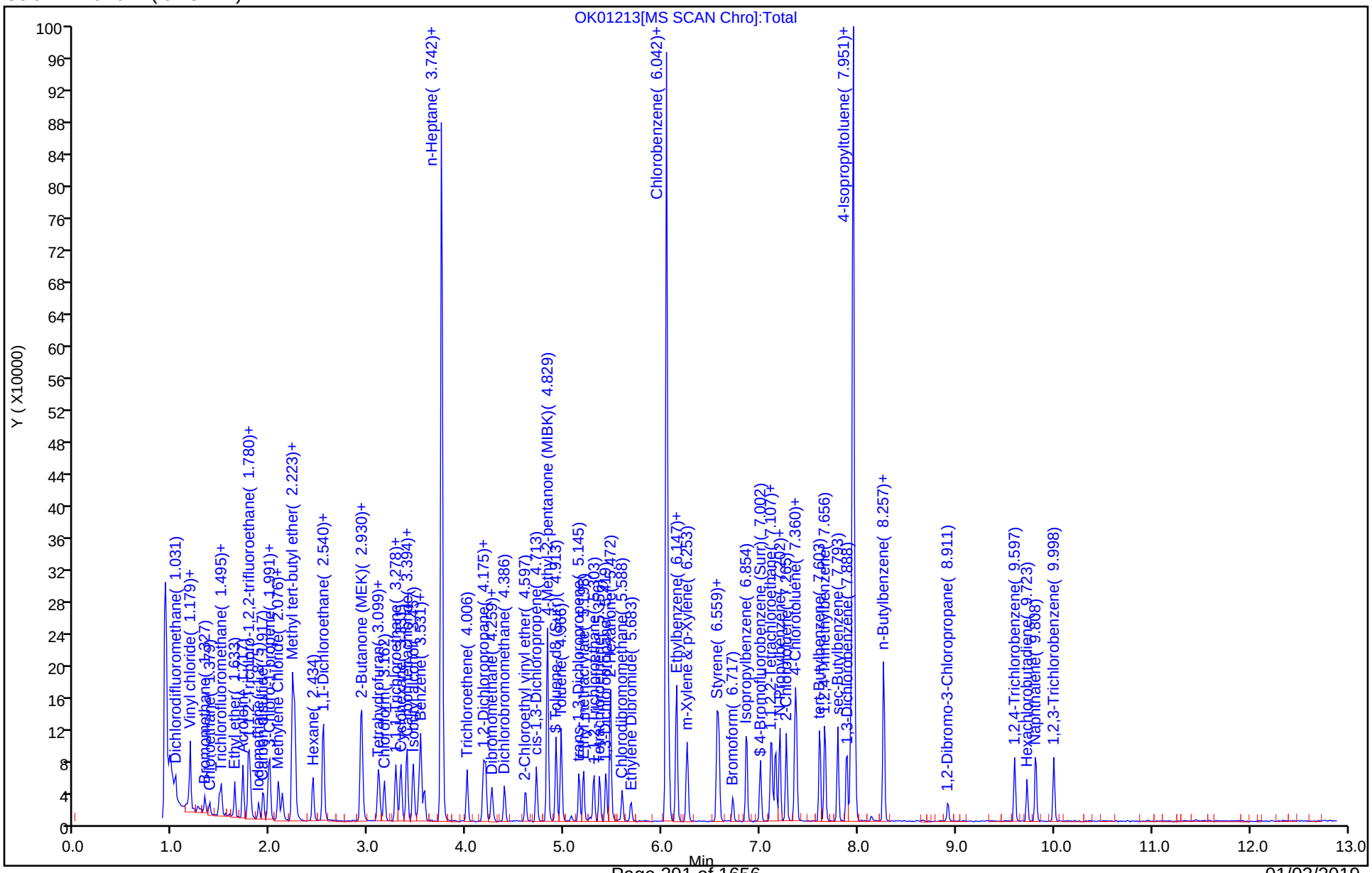
Lims ID: ic Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01214.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-Nov-2018 14:01:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-008
Operator ID: MJY Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:07:07 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: intarachau Date: 13-Nov-2018 09:49:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.031	1.031	0.000	99	30676	10.0	10.3	
2 Vinyl chloride	62	1.169	1.168	0.001	98	28169	10.0	9.64	
3 Butadiene	54	1.179	1.178	0.001	94	34514	10.0	10.2	
4 Chloromethane	50	1.179	1.178	0.001	53	54094	10.0	9.31	
5 Bromomethane	94	1.327	1.315	0.012	99	14661	10.0	9.60	
6 Chloroethane	64	1.380	1.368	0.012	97	16487	10.0	10.2	
7 Dichlorofluoromethane	67	1.474	1.474	0.000	98	40535	10.0	9.93	
8 Trichlorofluoromethane	101	1.496	1.495	0.001	98	36552	10.0	10.7	
11 Ethyl ether	59	1.633	1.632	0.001	90	32181	10.0	10.3	
13 Acrolein	56	1.717	1.716	0.001	97	92945	200.0	99.4	
12 1,1,2-Trichloro-1,2,2-trif	151	1.770	1.769	0.001	91	20678	10.0	10.2	
14 1,1-Dichloroethene	96	1.780	1.769	0.011	98	25741	10.0	10.0	
15 Acetone	58	1.791	1.790	0.001	84	23451	50.0	48.2	
17 Iodomethane	142	1.875	1.875	0.000	97	39667	10.0	10.1	
18 Carbon disulfide	76	1.918	1.917	0.001	100	79441	10.0	9.88	
20 Methyl acetate	43	1.970	1.970	0.000	98	90086	20.0	19.5	
19 3-Chloro-1-propene	76	1.991	1.991	0.000	89	19513	10.0	10.5	
22 Methylene Chloride	84	2.076	2.075	0.001	97	28303	10.0	9.02	
23 2-Methyl-2-propanol	59	2.118	2.128	-0.010	99	62210	100.0	102.6	
26 Acrylonitrile	53	2.223	2.223	0.000	96	220670	100.0	98.6	
25 trans-1,2-Dichloroethene	96	2.255	2.244	0.011	97	31940	10.0	10.6	
24 Methyl tert-butyl ether	73	2.245	2.244	0.001	96	103049	10.0	9.77	
27 Hexane	57	2.434	2.434	0.000	95	45178	10.0	9.86	
30 Vinyl acetate	43	2.529	2.529	0.000	100	229755	20.0	19.8	
29 1,1-Dichloroethane	63	2.540	2.539	0.001	100	59924	10.0	10.2	
36 2-Butanone (MEK)	72	2.920	2.919	0.001	97	27871	50.0	50.6	
34 cis-1,2-Dichloroethene	61	2.930	2.929	0.001	96	59316	10.0	9.83	
33 2,2-Dichloropropane	77	2.930	2.929	0.001	95	45532	10.0	10.1	
38 Tetrahydrofuran	42	3.110	3.098	0.012	94	43502	20.0	18.5	
39 Chlorobromomethane	130	3.099	3.098	0.001	97	18463	10.0	9.96	
41 Chloroform	83	3.162	3.161	0.001	96	53783	10.0	9.78	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.268	3.267	0.001	97	28312	10.0	9.52	
43 1,1,1-Trichloroethane	97	3.278	3.278	0.000	98	45795	10.0	9.80	
42 Cyclohexane	84	3.331	3.330	0.001	98	41571	10.0	10.3	
45 Carbon tetrachloride	117	3.394	3.383	0.011	92	40155	10.0	10.7	
46 1,1-Dichloropropene	75	3.394	3.394	0.000	94	38993	10.0	10.1	
47 Isobutyl alcohol	43	3.458	3.457	0.001	97	82015	250.0	249.4	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.510	0.000	97	40264	10.0	9.64	
50 Benzene	78	3.531	3.531	0.000	98	119443	10.0	10.2	
53 1,2-Dichloroethane	62	3.574	3.573	0.001	96	50388	10.0	10.1	
54 n-Heptane	43	3.742	3.742	0.000	92	51492	10.0	9.89	
* 55 Fluorobenzene	96	3.742	3.742	0.000	97	544754	50.0	50.0	
57 Trichloroethene	132	4.006	4.005	0.001	97	29132	10.0	9.30	
59 Methylcyclohexane	83	4.175	4.174	0.001	92	45517	10.0	10.3	
60 1,2-Dichloropropane	63	4.196	4.195	0.001	92	34408	10.0	10.1	
62 1,4-Dioxane	88	4.249	4.248	0.001	94	10976	200.0	191.4	
63 Dibromomethane	93	4.259	4.259	0.000	98	20544	10.0	9.95	
64 Dichlorobromomethane	83	4.386	4.385	0.001	97	41966	10.0	9.69	
65 2-Chloroethyl vinyl ether	63	4.597	4.596	0.001	90	26413	10.0	9.73	
67 cis-1,3-Dichloropropene	75	4.713	4.712	0.001	96	52679	10.0	10.0	
68 4-Methyl-2-pentanone (MIBK	43	4.829	4.828	0.001	98	299755	50.0	49.3	
$ 69 Toluene-d8 (Surr)	98	4.913	4.913	0.000	98	101736	10.0	9.68	
70 Toluene	92	4.966	4.965	0.001	93	72013	10.0	10.0	
71 trans-1,3-Dichloropropene	75	5.145	5.145	0.000	96	48237	10.0	9.90	
72 Ethyl methacrylate	69	5.198	5.197	0.001	96	47878	10.0	10.0	
73 1,1,2-Trichloroethane	83	5.304	5.303	0.001	93	25256	10.0	10.3	
74 Tetrachloroethene	164	5.356	5.356	0.000	94	21015	10.0	10.2	
75 1,3-Dichloropropane	76	5.420	5.419	0.001	97	50227	10.0	10.0	
76 2-Hexanone	43	5.472	5.472	0.000	99	215968	50.0	50.0	
78 Chlorodibromomethane	129	5.588	5.588	0.000	97	31538	10.0	10.0	
79 Ethylene Dibromide	107	5.683	5.683	0.000	98	30468	10.0	9.94	
* 81 Chlorobenzene-d5	82	6.042	6.041	0.001	89	219227	50.0	50.0	
82 Chlorobenzene	112	6.063	6.062	0.001	94	79301	10.0	10.1	
84 1,1,1,2-Tetrachloroethane	131	6.137	6.136	0.001	92	29291	10.0	10.4	
83 Ethylbenzene	91	6.147	6.147	0.000	99	135677	10.0	10.1	
85 m-Xylene & p-Xylene	91	6.253	6.252	0.001	98	106509	10.0	9.83	
87 o-Xylene	91	6.559	6.558	0.001	94	111930	10.0	9.92	
88 Styrene	104	6.580	6.579	0.001	93	84602	10.0	10.2	
89 Bromoform	173	6.717	6.716	0.001	95	23201	10.0	9.76	
90 Isopropylbenzene	105	6.854	6.864	-0.010	97	127485	10.0	10.1	
$ 92 4-Bromofluorobenzene (Surr	95	7.002	7.001	0.001	87	43253	10.0	9.96	
93 Bromobenzene	156	7.107	7.107	0.000	94	32885	10.0	10.2	
94 1,1,2,2-Tetrachloroethane	83	7.118	7.117	0.001	98	42157	10.0	9.78	
97 trans-1,4-Dichloro-2-buten	53	7.150	7.149	0.001	80	20089	10.0	10.3	
96 1,2,3-Trichloropropane	110	7.160	7.159	0.001	96	13701	10.0	10.3	
95 N-Propylbenzene	91	7.202	7.202	0.000	99	158491	10.0	10.3	
98 2-Chlorotoluene	91	7.266	7.265	0.001	98	97183	10.0	9.85	
99 1,3,5-Trimethylbenzene	105	7.350	7.360	-0.010	92	112729	10.0	10.3	
100 4-Chlorotoluene	91	7.371	7.370	0.001	98	111799	10.0	9.83	
103 tert-Butylbenzene	119	7.603	7.613	-0.010	94	90740	10.0	10.2	
105 1,2,4-Trimethylbenzene	105	7.656	7.655	0.001	98	116596	10.0	10.1	
106 sec-Butylbenzene	105	7.793	7.792	0.001	98	134345	10.0	10.1	
108 1,3-Dichlorobenzene	146	7.888	7.887	0.001	94	60591	10.0	9.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.920	7.929	-0.009	98	116487	10.0	10.1	
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.951	0.000	97	203545	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.972	7.972	0.000	94	64363	10.0	10.1	
114 1,2-Dichlorobenzene	146	8.257	8.256	0.001	75	60807	10.0	10.1	
113 n-Butylbenzene	91	8.257	8.256	0.001	98	106200	10.0	10.2	
115 1,2-Dibromo-3-Chloropropan	157	8.922	8.921	0.001	92	11883	10.0	10.4	
117 1,2,4-Trichlorobenzene	180	9.597	9.596	0.001	94	41303	10.0	9.79	
118 Hexachlorobutadiene	225	9.723	9.723	0.000	93	17797	10.0	10.1	
119 Naphthalene	128	9.808	9.807	0.001	99	119361	10.0	10.1	
120 1,2,3-Trichlorobenzene	180	9.998	9.997	0.001	96	42153	10.0	10.1	
S 122 1,2-Dichloroethene, Total	1				0		20.0	20.4	
S 123 Xylenes, Total	1				0		20.0	19.7	
S 124 1,3-Dichloropropene, Total	1				0		20.0	19.9	

Reagents:

VM_MMIX_01936	Amount Added:	1.00	Units: uL
VM_Acrolein_00189	Amount Added:	1.00	Units: uL
DOD ISTD_00163	Amount Added:	5.00	Units: uL

Report Date: 13-Nov-2018 10:07:08 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01214.D

Injection Date: 12-Nov-2018 14:01:30 Instrument ID: CMSO2 Operator ID: MJY

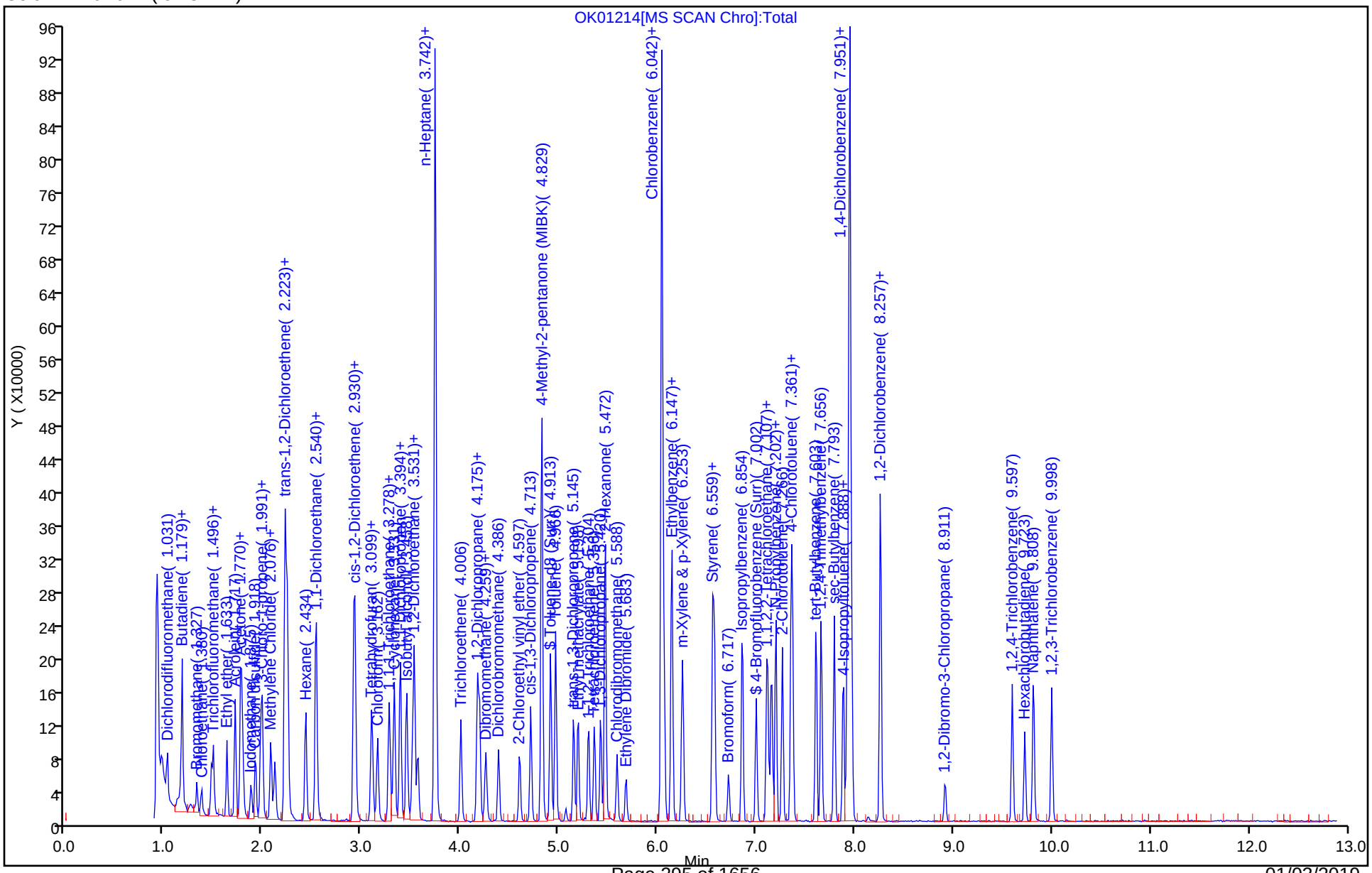
Lims ID: ic Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01215.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-Nov-2018 14:24:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-009
Operator ID: MJY Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:07:12 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: intarachau Date: 13-Nov-2018 09:48:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.031	1.031	0.000	99	59161	20.0	20.5	
2 Vinyl chloride	62	1.168	1.168	0.000	98	56459	20.0	20.0	
4 Chloromethane	50	1.179	1.179	0.000	60	105478	20.0	18.8	
3 Butadiene	54	1.179	1.179	0.000	94	66425	20.0	20.2	
5 Bromomethane	94	1.327	1.327	0.000	98	25170	20.0	17.0	
6 Chloroethane	64	1.369	1.369	0.000	97	30690	20.0	20.6	
7 Dichlorofluoromethane	67	1.474	1.474	0.000	98	78770	20.0	19.9	
8 Trichlorofluoromethane	101	1.495	1.495	0.000	98	71732	20.0	21.7	
11 Ethyl ether	59	1.633	1.633	0.000	92	63492	20.0	21.0	
13 Acrolein	56	1.717	1.717	0.000	97	223082	400.0	246.6	
14 1,1-Dichloroethene	96	1.770	1.770	0.000	97	50620	20.0	20.4	
12 1,1,2-Trichloro-1,2,2-trif	151	1.770	1.770	0.000	88	40544	20.0	20.7	
15 Acetone	58	1.791	1.791	0.000	84	45844	100.0	97.3	
17 Iodomethane	142	1.875	1.875	0.000	98	78905	20.0	20.7	
18 Carbon disulfide	76	1.917	1.917	0.000	100	155771	20.0	20.0	
20 Methyl acetate	43	1.970	1.970	0.000	98	178706	40.0	40.0	
19 3-Chloro-1-propene	76	1.991	1.991	0.000	88	38351	20.0	21.4	
22 Methylene Chloride	84	2.076	2.076	0.000	97	57715	20.0	19.0	
23 2-Methyl-2-propanol	59	2.118	2.118	0.000	99	118909	200.0	202.7	
26 Acrylonitrile	53	2.223	2.223	0.000	94	439737	200.0	203.1	
24 Methyl tert-butyl ether	73	2.244	2.244	0.000	96	205864	20.0	20.2	
25 trans-1,2-Dichloroethene	96	2.255	2.255	0.000	99	59738	20.0	20.4	
27 Hexane	57	2.434	2.434	0.000	94	89526	20.0	20.2	
30 Vinyl acetate	43	2.529	2.529	0.000	100	459617	40.0	41.0	
29 1,1-Dichloroethane	63	2.540	2.540	0.000	100	115441	20.0	20.4	
36 2-Butanone (MEK)	72	2.920	2.920	0.000	98	55252	100.0	103.7	
33 2,2-Dichloropropane	77	2.930	2.930	0.000	95	89682	20.0	20.5	
34 cis-1,2-Dichloroethene	61	2.930	2.930	0.000	90	115995	20.0	19.9	
39 Chlorobromomethane	130	3.099	3.099	0.000	95	36097	20.0	20.1	
38 Tetrahydrofuran	42	3.109	3.109	0.000	94	86764	40.0	38.1	
41 Chloroform	83	3.162	3.162	0.000	96	104232	20.0	19.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.268	3.268	0.000	97	55659	20.0	19.3	
43 1,1,1-Trichloroethane	97	3.278	3.278	0.000	98	91509	20.0	20.2	
42 Cyclohexane	84	3.331	3.331	0.000	97	80875	20.0	20.6	
45 Carbon tetrachloride	117	3.394	3.394	0.000	88	75285	20.0	20.7	
46 1,1-Dichloropropene	75	3.394	3.394	0.000	88	77661	20.0	20.7	
47 Isobutyl alcohol	43	3.458	3.458	0.000	96	160499	500.0	504.5	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.510	0.000	97	77511	20.0	19.2	
50 Benzene	78	3.531	3.531	0.000	98	223459	20.0	19.7	
53 1,2-Dichloroethane	62	3.574	3.574	0.000	97	98734	20.0	20.4	
* 55 Fluorobenzene	96	3.742	3.742	0.000	97	527028	50.0	50.0	
54 n-Heptane	43	3.742	3.742	0.000	97	97578	20.0	19.4	
57 Trichloroethene	132	4.006	4.006	0.000	97	56361	20.0	18.6	
59 Methylcyclohexane	83	4.175	4.175	0.000	90	86604	20.0	20.4	
60 1,2-Dichloropropane	63	4.196	4.196	0.000	92	66578	20.0	20.3	
62 1,4-Dioxane	88	4.249	4.249	0.000	92	22676	400.0	408.8	
63 Dibromomethane	93	4.259	4.259	0.000	97	39878	20.0	20.0	
64 Dichlorobromomethane	83	4.386	4.386	0.000	97	83133	20.0	19.8	
65 2-Chloroethyl vinyl ether	63	4.597	4.597	0.000	90	53748	20.0	20.5	
67 cis-1,3-Dichloropropene	75	4.713	4.713	0.000	97	104072	20.0	20.4	
68 4-Methyl-2-pentanone (MIBK	43	4.829	4.829	0.000	99	593743	100.0	100.8	
$ 69 Toluene-d8 (Surr)	98	4.913	4.913	0.000	99	194580	20.0	19.1	
70 Toluene	92	4.966	4.966	0.000	93	141424	20.0	20.3	
71 trans-1,3-Dichloropropene	75	5.145	5.145	0.000	96	93523	20.0	19.8	
72 Ethyl methacrylate	69	5.198	5.198	0.000	94	90947	20.0	19.7	
73 1,1,2-Trichloroethane	83	5.304	5.304	0.000	93	48059	20.0	20.3	
74 Tetrachloroethene	164	5.356	5.356	0.000	98	41515	20.0	20.8	
75 1,3-Dichloropropane	76	5.420	5.420	0.000	95	96789	20.0	20.0	
76 2-Hexanone	43	5.472	5.472	0.000	98	428716	100.0	102.7	
78 Chlorodibromomethane	129	5.588	5.588	0.000	97	61833	20.0	20.3	
79 Ethylene Dibromide	107	5.683	5.683	0.000	98	62120	20.0	21.0	
* 81 Chlorobenzene-d5	82	6.042	6.042	0.000	90	211077	50.0	50.0	
82 Chlorobenzene	112	6.063	6.063	0.000	91	155232	20.0	20.6	
84 1,1,1,2-Tetrachloroethane	131	6.137	6.137	0.000	92	55072	20.0	20.3	
83 Ethylbenzene	91	6.147	6.147	0.000	99	265012	20.0	20.6	
85 m-Xylene & p-Xylene	91	6.253	6.253	0.000	98	215309	20.0	20.6	
87 o-Xylene	91	6.559	6.559	0.000	93	221612	20.0	20.4	
88 Styrene	104	6.580	6.580	0.000	94	166728	20.0	20.8	
89 Bromoform	173	6.717	6.717	0.000	96	48131	20.0	21.0	
90 Isopropylbenzene	105	6.854	6.854	0.000	97	249043	20.0	20.5	
$ 92 4-Bromofluorobenzene (Surr	95	7.002	7.002	0.000	88	79957	20.0	19.3	
93 Bromobenzene	156	7.107	7.107	0.000	94	63162	20.0	20.3	
94 1,1,2,2-Tetrachloroethane	83	7.118	7.118	0.000	97	82713	20.0	19.9	
97 trans-1,4-Dichloro-2-buten	53	7.149	7.149	0.000	86	38720	20.0	20.6	
96 1,2,3-Trichloropropane	110	7.160	7.160	0.000	97	26551	20.0	20.7	
95 N-Propylbenzene	91	7.202	7.202	0.000	99	304240	20.0	20.5	
98 2-Chlorotoluene	91	7.266	7.266	0.000	97	190096	20.0	20.0	
99 1,3,5-Trimethylbenzene	105	7.350	7.350	0.000	92	216533	20.0	20.5	
100 4-Chlorotoluene	91	7.371	7.371	0.000	99	223290	20.0	20.4	
103 tert-Butylbenzene	119	7.614	7.614	0.000	92	176738	20.0	20.5	
105 1,2,4-Trimethylbenzene	105	7.656	7.656	0.000	98	224342	20.0	20.1	
106 sec-Butylbenzene	105	7.793	7.793	0.000	99	266140	20.0	20.8	
108 1,3-Dichlorobenzene	146	7.888	7.888	0.000	96	118439	20.0	20.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.930	7.930	0.000	98	225640	20.0	20.4	
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.951	0.000	97	194723	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.972	7.972	0.000	94	120563	20.0	19.7	
113 n-Butylbenzene	91	8.257	8.257	0.000	98	204707	20.0	20.5	
114 1,2-Dichlorobenzene	146	8.257	8.257	0.000	75	116751	20.0	20.3	
115 1,2-Dibromo-3-Chloropropan	157	8.922	8.922	0.000	92	22403	20.0	20.4	
117 1,2,4-Trichlorobenzene	180	9.597	9.597	0.000	94	83487	20.0	20.7	
118 Hexachlorobutadiene	225	9.723	9.723	0.000	93	35335	20.0	20.9	
119 Naphthalene	128	9.808	9.808	0.000	99	230572	20.0	20.4	
120 1,2,3-Trichlorobenzene	180	9.998	9.998	0.000	96	82199	20.0	20.6	
S 122 1,2-Dichloroethene, Total	1				0		40.0	40.3	
S 123 Xylenes, Total	1				0		40.0	41.0	
S 124 1,3-Dichloropropene, Total	1				0		40.0	40.3	

Reagents:

VM_MMIX_01936	Amount Added:	2.00	Units: uL
VM_Acrolein_00189	Amount Added:	2.00	Units: uL
DOD ISTD_00163	Amount Added:	5.00	Units: uL

Report Date: 13-Nov-2018 10:07:13 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01215.D

Injection Date: 12-Nov-2018 14:24:30 Instrument ID: CMSO2 Operator ID: MJY

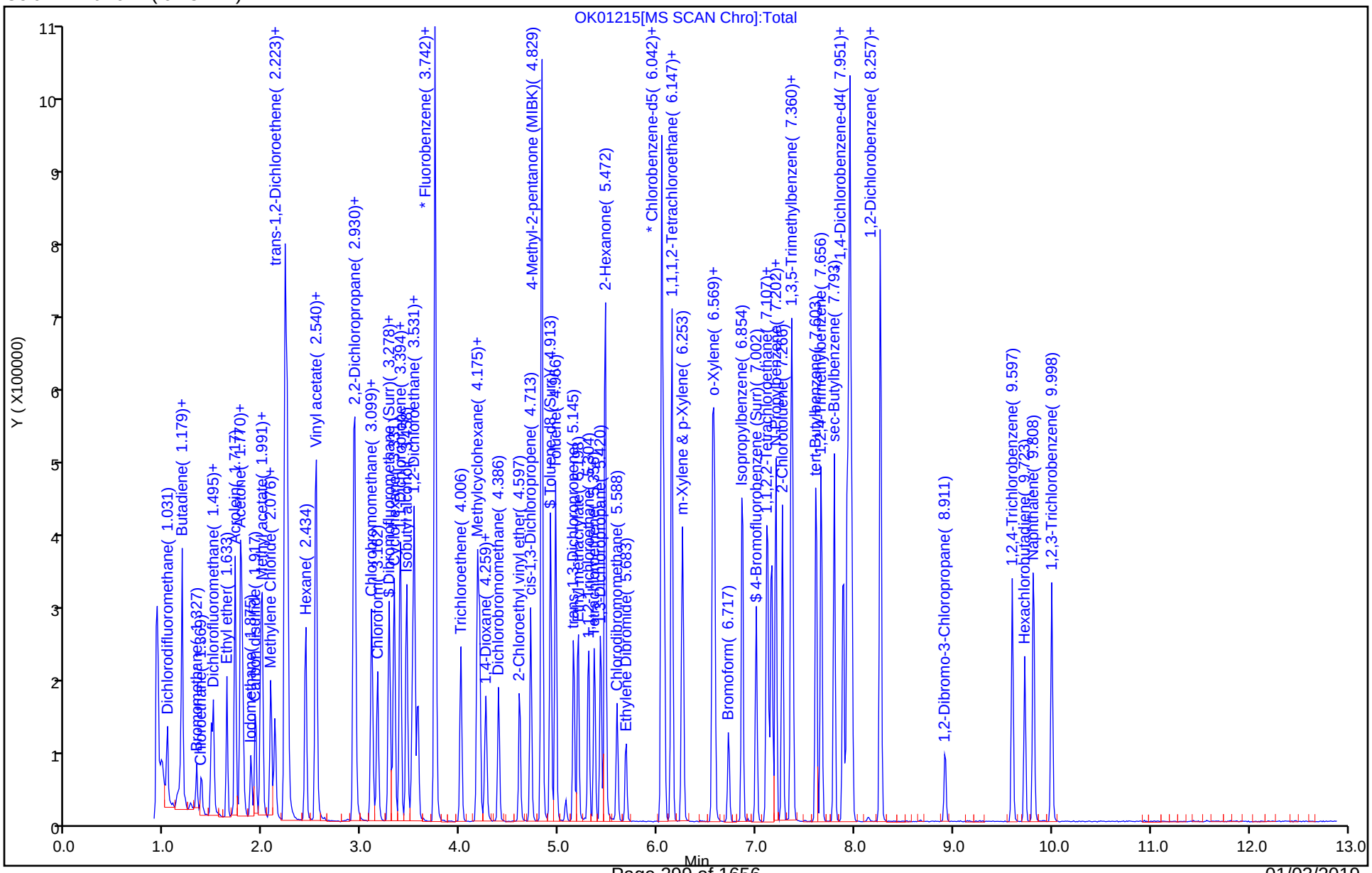
Lims ID: ic Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01216.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 12-Nov-2018 14:47:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-010
Operator ID: MJY Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:07:16 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: kitchingsj Date: 12-Nov-2018 15:43:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.031	1.031	0.000	99	143663	50.0	50.0	
2 Vinyl chloride	62	1.168	1.168	0.000	99	145085	50.0	51.5	
3 Butadiene	54	1.178	1.178	0.000	93	161453	50.0	49.3	
4 Chloromethane	50	1.178	1.178	0.000	60	262785	50.0	46.9	
5 Bromomethane	94	1.315	1.315	0.000	97	50027	50.0	33.9	
6 Chloroethane	64	1.368	1.368	0.000	97	70707	50.0	52.5	
7 Dichlorofluoromethane	67	1.474	1.474	0.000	98	191474	50.0	48.6	
8 Trichlorofluoromethane	101	1.495	1.495	0.000	100	171813	50.0	52.0	
11 Ethyl ether	59	1.632	1.632	0.000	91	154093	50.0	51.1	
13 Acrolein	56	1.716	1.716	0.000	97	730762	1000.0	809.8	
12 1,1,2-Trichloro-1,2,2-trif	151	1.769	1.769	0.000	93	100345	50.0	51.5	
14 1,1-Dichloroethene	96	1.769	1.769	0.000	95	124337	50.0	50.2	
15 Acetone	58	1.790	1.790	0.000	84	109946	250.0	233.9	
17 Iodomethane	142	1.875	1.875	0.000	98	200146	50.0	52.6	
18 Carbon disulfide	76	1.917	1.917	0.000	100	390798	50.0	50.3	
20 Methyl acetate	43	1.970	1.970	0.000	98	441844	100.0	99.1	
19 3-Chloro-1-propene	76	1.991	1.991	0.000	88	95743	50.0	53.5	
22 Methylene Chloride	84	2.075	2.075	0.000	95	139635	50.0	46.1	
23 2-Methyl-2-propanol	59	2.128	2.128	0.000	98	287437	500.0	491.0	
26 Acrylonitrile	53	2.223	2.223	0.000	95	1104009	500.0	511.0	
25 trans-1,2-Dichloroethene	96	2.244	2.244	0.000	99	147803	50.0	50.6	
24 Methyl tert-butyl ether	73	2.244	2.244	0.000	96	507668	50.0	49.8	
27 Hexane	57	2.434	2.434	0.000	94	224902	50.0	50.9	
30 Vinyl acetate	43	2.529	2.529	0.000	100	1140073	100.0	101.9	
29 1,1-Dichloroethane	63	2.539	2.539	0.000	99	284546	50.0	50.4	
36 2-Butanone (MEK)	72	2.919	2.919	0.000	98	137746	250.0	259.2	
34 cis-1,2-Dichloroethene	61	2.929	2.929	0.000	91	276711	50.0	47.5	
33 2,2-Dichloropropane	77	2.929	2.929	0.000	97	220587	50.0	50.5	
38 Tetrahydrofuran	42	3.098	3.098	0.000	93	205481	100.0	90.4	
39 Chlorobromomethane	130	3.098	3.098	0.000	96	90621	50.0	50.7	
41 Chloroform	83	3.161	3.161	0.000	97	265637	50.0	50.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.267	3.267	0.000	96	136454	50.0	47.5	
43 1,1,1-Trichloroethane	97	3.278	3.278	0.000	98	228037	50.0	50.6	
42 Cyclohexane	84	3.330	3.330	0.000	97	201400	50.0	51.5	
45 Carbon tetrachloride	117	3.383	3.383	0.000	95	192127	50.0	53.0	
46 1,1-Dichloropropene	75	3.394	3.394	0.000	92	191867	50.0	51.4	
47 Isobutyl alcohol	43	3.457	3.457	0.000	95	383799	1250.0	1209.1	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.510	0.000	98	191819	50.0	47.6	
50 Benzene	78	3.531	3.531	0.000	98	579659	50.0	51.3	
53 1,2-Dichloroethane	62	3.573	3.573	0.000	97	246581	50.0	51.2	
54 n-Heptane	43	3.742	3.742	0.000	97	254836	50.0	50.7	
* 55 Fluorobenzene	96	3.742	3.742	0.000	98	525819	50.0	50.0	
57 Trichloroethene	132	4.005	4.005	0.000	97	141235	50.0	46.7	
59 Methylcyclohexane	83	4.174	4.174	0.000	90	220128	50.0	51.9	
60 1,2-Dichloropropane	63	4.195	4.195	0.000	91	168017	50.0	51.3	
62 1,4-Dioxane	88	4.248	4.248	0.000	97	59693	1000.0	1078.6	
63 Dibromomethane	93	4.259	4.259	0.000	97	104672	50.0	52.5	
64 Dichlorobromomethane	83	4.385	4.385	0.000	98	212471	50.0	50.8	
65 2-Chloroethyl vinyl ether	63	4.596	4.596	0.000	90	133917	50.0	51.1	
67 cis-1,3-Dichloropropene	75	4.712	4.712	0.000	97	259683	50.0	51.1	
68 4-Methyl-2-pentanone (MIBK	43	4.828	4.828	0.000	98	1450142	250.0	246.9	
$ 69 Toluene-d8 (Surr)	98	4.913	4.913	0.000	99	478715	50.0	47.2	
70 Toluene	92	4.965	4.965	0.000	93	355765	50.0	51.1	
71 trans-1,3-Dichloropropene	75	5.145	5.145	0.000	96	238385	50.0	50.7	
72 Ethyl methacrylate	69	5.197	5.197	0.000	95	228597	50.0	49.6	
73 1,1,2-Trichloroethane	83	5.303	5.303	0.000	92	117013	50.0	49.6	
74 Tetrachloroethene	164	5.356	5.356	0.000	94	102754	50.0	51.7	
75 1,3-Dichloropropane	76	5.419	5.419	0.000	95	244606	50.0	50.5	
76 2-Hexanone	43	5.472	5.472	0.000	99	1040471	250.0	249.7	
78 Chlorodibromomethane	129	5.588	5.588	0.000	98	151885	50.0	49.9	
79 Ethylene Dibromide	107	5.683	5.683	0.000	98	150493	50.0	50.9	
* 81 Chlorobenzene-d5	82	6.041	6.041	0.000	90	214147	50.0	50.0	
82 Chlorobenzene	112	6.062	6.062	0.000	92	372366	50.0	48.7	
84 1,1,1,2-Tetrachloroethane	131	6.136	6.136	0.000	93	135718	50.0	49.3	
83 Ethylbenzene	91	6.147	6.147	0.000	99	664880	50.0	50.8	
85 m-Xylene & p-Xylene	91	6.252	6.252	0.000	98	524331	50.0	49.5	
87 o-Xylene	91	6.558	6.558	0.000	92	540922	50.0	49.1	
88 Styrene	104	6.579	6.579	0.000	94	405391	50.0	49.9	
89 Bromoform	173	6.716	6.716	0.000	97	116209	50.0	50.0	
90 Isopropylbenzene	105	6.864	6.864	0.000	97	615024	50.0	50.0	
$ 92 4-Bromofluorobenzene (Surr	95	7.001	7.001	0.000	86	196995	50.0	48.5	
93 Bromobenzene	156	7.107	7.107	0.000	94	154129	50.0	48.9	
94 1,1,2,2-Tetrachloroethane	83	7.117	7.117	0.000	98	198406	50.0	47.1	
97 trans-1,4-Dichloro-2-buten	53	7.149	7.149	0.000	85	95861	50.0	50.3	
96 1,2,3-Trichloropropane	110	7.159	7.159	0.000	95	63358	50.0	48.8	
95 N-Propylbenzene	91	7.202	7.202	0.000	99	764166	50.0	50.7	
98 2-Chlorotoluene	91	7.265	7.265	0.000	97	463090	50.0	48.0	
99 1,3,5-Trimethylbenzene	105	7.360	7.360	0.000	92	531342	50.0	49.6	
100 4-Chlorotoluene	91	7.370	7.370	0.000	99	544711	50.0	49.0	
103 tert-Butylbenzene	119	7.613	7.613	0.000	92	433852	50.0	49.7	
105 1,2,4-Trimethylbenzene	105	7.655	7.655	0.000	98	553942	50.0	49.0	
106 sec-Butylbenzene	105	7.792	7.792	0.000	98	646679	50.0	49.7	
108 1,3-Dichlorobenzene	146	7.887	7.887	0.000	96	288304	50.0	50.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.929	7.929	0.000	98	553277	50.0	51.2	
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.951	0.000	97	190422	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.972	7.972	0.000	96	298583	50.0	50.0	
114 1,2-Dichlorobenzene	146	8.256	8.256	0.000	74	280591	50.0	49.9	
113 n-Butylbenzene	91	8.256	8.256	0.000	98	510431	50.0	52.4	
115 1,2-Dibromo-3-Chloropropan	157	8.921	8.921	0.000	93	55317	50.0	51.5	
117 1,2,4-Trichlorobenzene	180	9.596	9.596	0.000	93	206582	50.0	52.3	
118 Hexachlorobutadiene	225	9.723	9.723	0.000	93	87035	50.0	52.7	
119 Naphthalene	128	9.807	9.807	0.000	99	568152	50.0	51.4	
120 1,2,3-Trichlorobenzene	180	9.997	9.997	0.000	95	202793	50.0	52.0	
S 122 1,2-Dichloroethene, Total	1				0		100.0	98.2	
S 123 Xylenes, Total	1				0		100.0	98.6	
S 124 1,3-Dichloropropene, Total	1				0		100.0	101.8	

Reagents:

VM_MMIX_01936	Amount Added:	5.00	Units: uL
VM_Acrolein_00189	Amount Added:	5.00	Units: uL
DOD ISTD_00163	Amount Added:	5.00	Units: uL

Report Date: 13-Nov-2018 10:07:17 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01216.D

Injection Date: 12-Nov-2018 14:47:30 Instrument ID: CMSO2 Operator ID: MJY

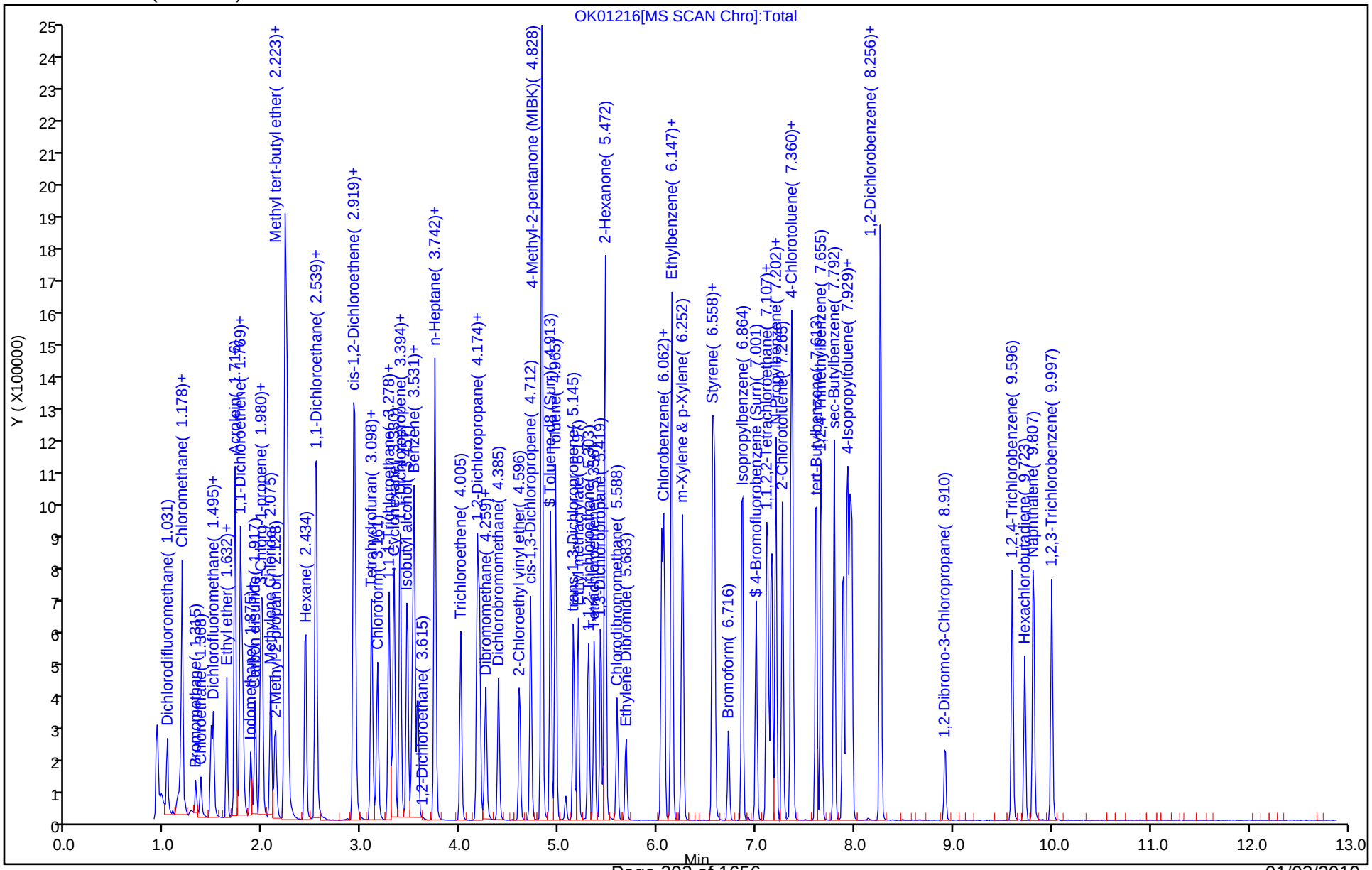
Lims ID: icis Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01217.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 12-Nov-2018 15:11:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-011
Operator ID: MJY Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:07:21 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: intarachau Date: 13-Nov-2018 09:43:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.031	1.031	0.000	100	288812	100.0	103.4	
2 Vinyl chloride	62	1.168	1.168	0.000	99	289974	100.0	105.8	
4 Chloromethane	50	1.179	1.178	0.001	61	537250	100.0	98.6	
3 Butadiene	54	1.179	1.178	0.001	92	323921	100.0	101.8	
5 Bromomethane	94	1.305	1.315	-0.010	98	67106	100.0	46.8	
6 Chloroethane	64	1.358	1.368	-0.010	94	111678	100.0	97.1	
7 Dichlorofluoromethane	67	1.463	1.474	-0.011	98	360091	100.0	94.0	
8 Trichlorofluoromethane	101	1.484	1.495	-0.011	99	321554	100.0	100.2	
11 Ethyl ether	59	1.632	1.632	0.000	90	303225	100.0	103.4	
13 Acrolein	56	1.717	1.716	0.000	97	1752187	2000.0	1998.2	
14 1,1-Dichloroethene	96	1.769	1.769	0.000	94	239137	100.0	99.4	
12 1,1,2-Trichloro-1,2,2-trif	151	1.769	1.769	0.000	97	198786	100.0	104.9	
15 Acetone	58	1.790	1.790	0.000	84	224076	500.0	490.6	
17 Iodomethane	142	1.875	1.875	0.000	98	394114	100.0	106.5	
18 Carbon disulfide	76	1.917	1.917	0.000	100	781223	100.0	103.6	
20 Methyl acetate	43	1.970	1.970	0.000	98	902665	200.0	208.3	
19 3-Chloro-1-propene	76	1.991	1.991	0.000	88	174155	100.0	100.1	
22 Methylene Chloride	84	2.075	2.075	0.000	96	270643	100.0	92.0	
23 2-Methyl-2-propanol	59	2.138	2.128	0.010	99	574838	1000.0	1010.5	
26 Acrylonitrile	53	2.223	2.223	0.000	95	2197574	1000.0	1046.6	
24 Methyl tert-butyl ether	73	2.244	2.244	0.000	97	985177	100.0	99.5	
25 trans-1,2-Dichloroethene	96	2.244	2.244	0.000	98	289446	100.0	102.0	
27 Hexane	57	2.423	2.434	-0.011	94	436974	100.0	101.7	
30 Vinyl acetate	43	2.529	2.529	0.000	100	2231072	200.0	205.1	
29 1,1-Dichloroethane	63	2.539	2.539	0.000	99	558156	100.0	101.8	
36 2-Butanone (MEK)	72	2.919	2.919	0.000	97	259444	500.0	502.3	
33 2,2-Dichloropropane	77	2.930	2.929	0.001	94	426324	100.0	100.5	
34 cis-1,2-Dichloroethene	61	2.930	2.929	0.001	90	540978	100.0	95.6	
39 Chlorobromomethane	130	3.098	3.098	0.000	97	175486	100.0	101.0	
38 Tetrahydrofuran	42	3.098	3.098	0.000	92	402248	200.0	182.2	
41 Chloroform	83	3.162	3.161	0.001	96	511547	100.0	99.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.267	3.267	0.000	97	264634	100.0	94.9	
43 1,1,1-Trichloroethane	97	3.278	3.278	0.000	99	456289	100.0	104.1	
42 Cyclohexane	84	3.330	3.330	0.000	97	395238	100.0	103.9	
46 1,1-Dichloropropene	75	3.394	3.394	0.000	94	381182	100.0	105.0	
45 Carbon tetrachloride	117	3.383	3.383	0.000	94	372925	100.0	105.9	
47 Isobutyl alcohol	43	3.478	3.457	0.021	96	806451	2500.0	2614.4	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.510	0.000	96	377696	100.0	96.4	
50 Benzene	78	3.531	3.531	0.000	98	1113037	100.0	101.4	
53 1,2-Dichloroethane	62	3.562	3.573	-0.011	97	489093	100.0	104.5	
* 55 Fluorobenzene	96	3.742	3.742	0.000	97	510970	50.0	50.0	
54 n-Heptane	43	3.742	3.742	0.000	98	488175	100.0	99.9	
57 Trichloroethene	132	4.006	4.005	0.001	97	273020	100.0	92.9	
59 Methylcyclohexane	83	4.174	4.174	0.000	90	427086	100.0	103.5	
60 1,2-Dichloropropane	63	4.195	4.195	0.000	91	326182	100.0	102.5	
62 1,4-Dioxane	88	4.259	4.248	0.011	49	116715	2000.0	2170.2	
63 Dibromomethane	93	4.259	4.259	0.000	96	198096	100.0	102.3	
64 Dichlorobromomethane	83	4.385	4.385	0.000	98	415818	100.0	102.3	
65 2-Chloroethyl vinyl ether	63	4.596	4.596	0.000	90	262190	100.0	103.0	
67 cis-1,3-Dichloropropene	75	4.712	4.712	0.000	97	497526	100.0	100.8	
68 4-Methyl-2-pentanone (MIBK	43	4.828	4.828	0.000	98	2860195	500.0	501.1	
$ 69 Toluene-d8 (Surr)	98	4.913	4.913	0.000	99	930944	100.0	94.4	
70 Toluene	92	4.965	4.965	0.000	93	673377	100.0	99.6	
71 trans-1,3-Dichloropropene	75	5.145	5.145	0.000	94	468033	100.0	102.4	
72 Ethyl methacrylate	69	5.198	5.197	0.001	95	441227	100.0	98.6	
73 1,1,2-Trichloroethane	83	5.303	5.303	0.000	92	226929	100.0	99.1	
74 Tetrachloroethene	164	5.356	5.356	0.000	95	201366	100.0	104.3	
75 1,3-Dichloropropane	76	5.419	5.419	0.000	94	469682	100.0	99.9	
76 2-Hexanone	43	5.472	5.472	0.000	98	2110368	500.0	521.2	
78 Chlorodibromomethane	129	5.588	5.588	0.000	98	296801	100.0	100.4	
79 Ethylene Dibromide	107	5.683	5.683	0.000	99	287407	100.0	100.0	
* 81 Chlorobenzene-d5	82	6.041	6.041	0.000	90	208495	50.0	50.0	
82 Chlorobenzene	112	6.062	6.062	0.000	92	735288	100.0	98.7	
84 1,1,1,2-Tetrachloroethane	131	6.136	6.136	0.000	95	262625	100.0	98.0	
83 Ethylbenzene	91	6.147	6.147	0.000	99	1279151	100.0	100.5	
85 m-Xylene & p-Xylene	91	6.252	6.252	0.000	98	1041646	100.0	101.1	
87 o-Xylene	91	6.558	6.558	0.000	92	1051214	100.0	97.9	
88 Styrene	104	6.579	6.579	0.000	93	794544	100.0	100.5	
89 Bromoform	173	6.717	6.716	0.000	96	232203	100.0	102.7	
90 Isopropylbenzene	105	6.864	6.864	0.000	97	1209559	100.0	101.0	
$ 92 4-Bromofluorobenzene (Surr	95	7.001	7.001	0.000	86	383081	100.0	94.6	
93 Bromobenzene	156	7.107	7.107	0.000	94	305218	100.0	99.4	
94 1,1,2,2-Tetrachloroethane	83	7.117	7.117	0.000	98	404445	100.0	98.6	
97 trans-1,4-Dichloro-2-buten	53	7.149	7.149	0.000	80	195845	100.0	105.5	
96 1,2,3-Trichloropropane	110	7.160	7.159	0.001	96	128690	100.0	101.8	
95 N-Propylbenzene	91	7.202	7.202	0.000	99	1499459	100.0	102.2	
98 2-Chlorotoluene	91	7.265	7.265	0.000	97	936627	100.0	99.8	
99 1,3,5-Trimethylbenzene	105	7.360	7.360	0.000	91	1044649	100.0	100.1	
100 4-Chlorotoluene	91	7.371	7.370	0.000	99	1079114	100.0	99.8	
103 tert-Butylbenzene	119	7.613	7.613	0.000	95	859288	100.0	101.1	
105 1,2,4-Trimethylbenzene	105	7.655	7.655	0.000	98	1083335	100.0	98.4	
106 sec-Butylbenzene	105	7.792	7.792	0.000	98	1290624	100.0	102.0	
108 1,3-Dichlorobenzene	146	7.887	7.887	0.000	95	573637	100.0	101.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.930	7.929	0.001	97	1127410	100.0	104.7	
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.951	0.000	96	189837	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.972	7.972	0.000	93	594737	100.0	99.9	
113 n-Butylbenzene	91	8.257	8.256	0.001	98	1026908	100.0	105.7	
114 1,2-Dichlorobenzene	146	8.257	8.256	0.001	73	556841	100.0	99.4	
115 1,2-Dibromo-3-Chloropropan	157	8.921	8.921	0.000	94	112323	100.0	104.9	
117 1,2,4-Trichlorobenzene	180	9.596	9.596	0.000	94	398132	100.0	101.2	
118 Hexachlorobutadiene	225	9.723	9.723	0.000	93	176118	100.0	106.9	
119 Naphthalene	128	9.818	9.807	0.011	99	1100320	100.0	99.9	
120 1,2,3-Trichlorobenzene	180	9.997	9.997	0.000	96	388620	100.0	100.0	
S 122 1,2-Dichloroethene, Total	1				0		200.0	197.6	
S 123 Xylenes, Total	1				0		200.0	199.0	
S 124 1,3-Dichloropropene, Total	1				0		200.0	203.3	

Reagents:

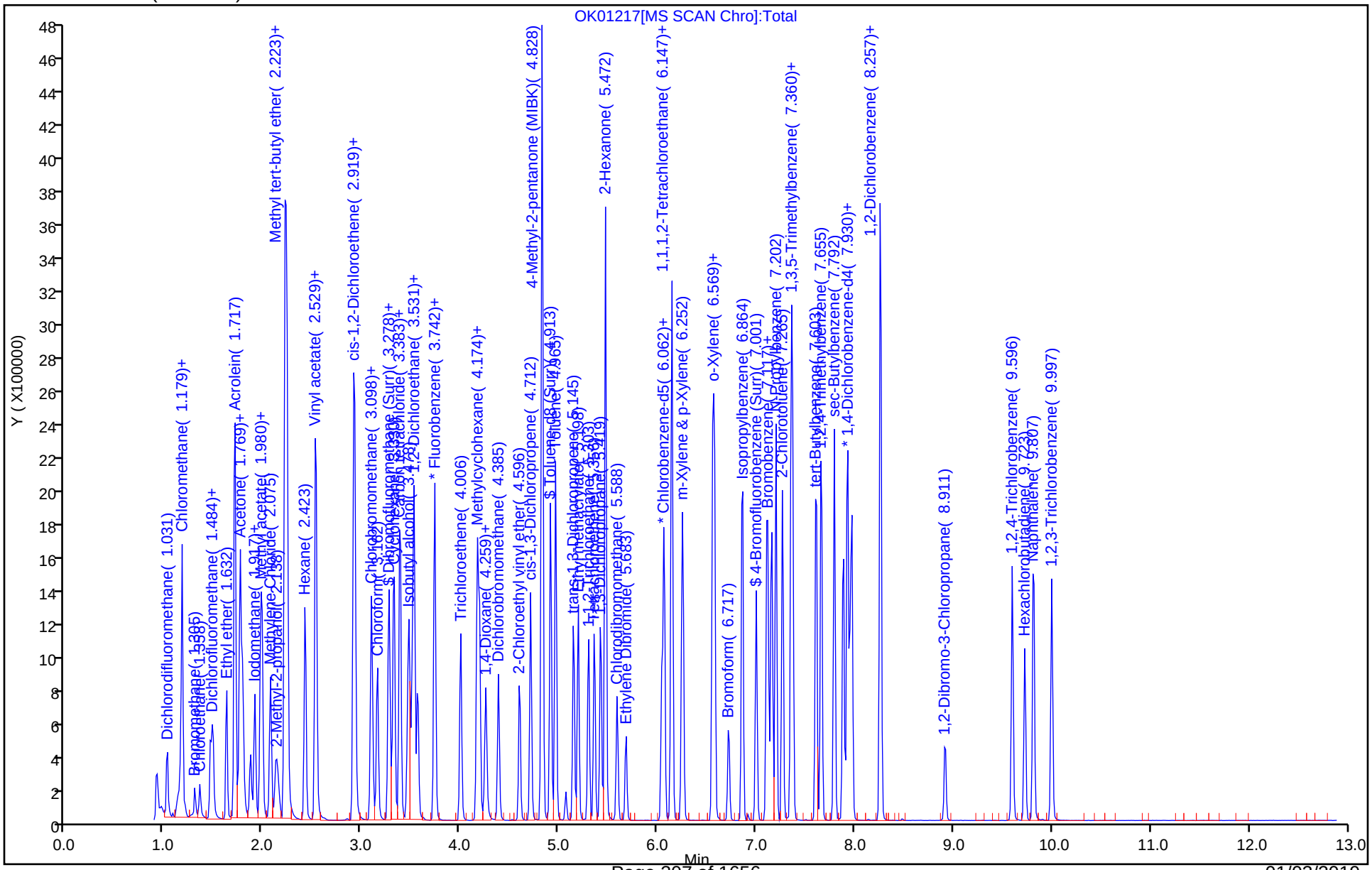
VM_MMIX_01936	Amount Added: 10.00	Units: uL
VM_Acrolein_00189	Amount Added: 10.00	Units: uL
DOD ISTD_00163	Amount Added: 5.00	Units: uL

Report Date: 13-Nov-2018 10:07:22 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01217.D				
Injection Date:	12-Nov-2018 15:11:30	Instrument ID:	CMSO2	Operator ID:	MJY
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	2014_MSO2	Limit Group:	8260B		

Column: Rtx-624 (0.18 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 12-Nov-2018 15:35:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-012
Operator ID: MJY Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:07:26 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: intarachau Date: 13-Nov-2018 09:46:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.022	1.031	-0.009	99	610768	200.0	216.0	
2 Vinyl chloride	62	1.170	1.168	0.002	99	588591	200.0	212.3	
3 Butadiene	54	1.181	1.178	0.002	95	682986	200.0	212.1	
4 Chloromethane	50	1.181	1.178	0.002	95	1108969	200.0	201.1	
5 Bromomethane	94	1.307	1.315	-0.008	99	126892	200.0	87.5	
6 Chloroethane	64	1.349	1.368	-0.019	95	160998	200.0	204.3	
7 Dichlorofluoromethane	67	1.455	1.474	-0.019	98	606710	200.0	156.5	
8 Trichlorofluoromethane	101	1.476	1.495	-0.019	99	570062	200.0	175.5	
11 Ethyl ether	59	1.624	1.632	-0.008	89	582093	200.0	196.2	
13 Acrolein	56	1.708	1.716	-0.008	97	3612265	4000.0	4070.4	
12 1,1,2-Trichloro-1,2,2-trif	151	1.761	1.769	-0.008	97	390674	200.0	203.7	
14 1,1-Dichloroethene	96	1.761	1.769	-0.008	96	465707	200.0	191.3	
15 Acetone	58	1.792	1.790	0.002	84	466802	1000.0	1010.0	
17 Iodomethane	142	1.866	1.875	-0.009	98	806107	200.0	215.3	
18 Carbon disulfide	76	1.908	1.917	-0.009	100	1578461	200.0	206.8	
20 Methyl acetate	43	1.972	1.970	0.002	98	1850171	400.0	421.9	
19 3-Chloro-1-propene	76	1.982	1.991	-0.009	89	315917	200.0	179.4	
22 Methylene Chloride	84	2.067	2.075	-0.008	96	544130	200.0	182.7	
23 2-Methyl-2-propanol	59	2.162	2.128	0.034	99	1217729	2000.0	2115.2	
26 Acrylonitrile	53	2.225	2.223	0.002	94	4291594	2000.0	2019.6	
25 trans-1,2-Dichloroethene	96	2.246	2.244	0.002	99	529240	200.0	184.4	
24 Methyl tert-butyl ether	73	2.235	2.244	-0.009	95	1865434	200.0	186.2	
27 Hexane	57	2.415	2.434	-0.019	94	879874	200.0	202.3	
30 Vinyl acetate	43	2.531	2.529	0.002	100	4170766	400.0	378.9	
29 1,1-Dichloroethane	63	2.541	2.539	0.002	99	1058141	200.0	190.6	
36 2-Butanone (MEK)	72	2.921	2.919	0.002	97	500856	1000.0	958.2	
34 cis-1,2-Dichloroethene	61	2.921	2.929	-0.008	89	1023822	200.0	178.8	
33 2,2-Dichloropropane	77	2.932	2.929	0.003	94	831693	200.0	193.7	
38 Tetrahydrofuran	42	3.100	3.098	0.002	93	789215	400.0	353.2	
39 Chlorobromomethane	130	3.100	3.098	0.002	97	343050	200.0	195.0	
41 Chloroform	83	3.153	3.161	-0.008	97	989757	200.0	189.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.269	3.267	0.002	96	508587	200.0	180.1	
43 1,1,1-Trichloroethane	97	3.280	3.278	0.002	98	886124	200.0	199.8	
42 Cyclohexane	84	3.322	3.330	-0.008	96	803338	200.0	208.7	
45 Carbon tetrachloride	117	3.385	3.383	0.002	94	749119	200.0	210.3	
46 1,1-Dichloropropene	75	3.385	3.394	-0.009	93	750027	200.0	204.2	
47 Isobutyl alcohol	43	3.522	3.457	0.065	96	1651901	5000.0	5291.6	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.512	3.510	0.002	96	722890	200.0	182.2	
50 Benzene	78	3.533	3.531	0.002	98	2183542	200.0	196.5	
53 1,2-Dichloroethane	62	3.564	3.573	-0.009	97	943545	200.0	199.1	
54 n-Heptane	43	3.733	3.742	-0.009	97	993983	200.0	201.1	
* 55 Fluorobenzene	96	3.744	3.742	0.002	97	517121	50.0	50.0	
57 Trichloroethene	132	4.008	4.005	0.003	97	558574	200.0	187.9	
59 Methylcyclohexane	83	4.176	4.174	0.002	89	860294	200.0	206.1	
60 1,2-Dichloropropane	63	4.197	4.195	0.002	91	645607	200.0	200.4	
62 1,4-Dioxane	88	4.282	4.248	0.034	98	250714	4000.0	4606.2	
63 Dibromomethane	93	4.261	4.259	0.002	97	388559	200.0	198.3	
64 Dichlorobromomethane	83	4.387	4.385	0.002	98	807897	200.0	196.5	
65 2-Chloroethyl vinyl ether	63	4.598	4.596	0.002	91	526477	200.0	204.4	
67 cis-1,3-Dichloropropene	75	4.714	4.712	0.002	97	988238	200.0	197.9	
68 4-Methyl-2-pentanone (MIBK	43	4.830	4.828	0.002	98	5837296	1000.0	1010.5	
$ 69 Toluene-d8 (Surr)	98	4.915	4.913	0.002	99	1902118	200.0	190.7	
70 Toluene	92	4.967	4.965	0.002	93	1379476	200.0	201.6	
71 trans-1,3-Dichloropropene	75	5.147	5.145	0.002	95	913132	200.0	197.5	
72 Ethyl methacrylate	69	5.200	5.197	0.003	95	921066	200.0	203.4	
73 1,1,2-Trichloroethane	83	5.305	5.303	0.002	92	446041	200.0	192.4	
74 Tetrachloroethene	164	5.358	5.356	0.002	96	409036	200.0	209.3	
75 1,3-Dichloropropane	76	5.421	5.419	0.002	94	926670	200.0	194.7	
76 2-Hexanone	43	5.474	5.472	0.002	98	4266107	1000.0	1041.1	
78 Chlorodibromomethane	129	5.590	5.588	0.002	97	596812	200.0	199.5	
79 Ethylene Dibromide	107	5.685	5.683	0.002	98	589499	200.0	202.7	
* 81 Chlorobenzene-d5	82	6.043	6.041	0.002	89	217232	50.0	50.0	
82 Chlorobenzene	112	6.064	6.062	0.002	92	1537843	200.0	198.1	
84 1,1,1,2-Tetrachloroethane	131	6.138	6.136	0.002	93	523739	200.0	187.7	
83 Ethylbenzene	91	6.149	6.147	0.002	99	2608155	200.0	196.6	
85 m-Xylene & p-Xylene	91	6.254	6.252	0.002	97	2137386	200.0	199.0	
87 o-Xylene	91	6.560	6.558	0.002	92	2151102	200.0	192.3	
88 Styrene	104	6.581	6.579	0.002	94	1660293	200.0	201.6	
89 Bromoform	173	6.718	6.716	0.002	96	494564	200.0	209.9	
90 Isopropylbenzene	105	6.856	6.864	-0.008	97	2535218	200.0	203.2	
$ 92 4-Bromofluorobenzene (Surr	95	7.003	7.001	0.002	88	819784	200.0	190.9	
93 Bromobenzene	156	7.109	7.107	0.002	95	643086	200.0	201.0	
94 1,1,2,2-Tetrachloroethane	83	7.119	7.117	0.002	98	833963	200.0	195.2	
97 trans-1,4-Dichloro-2-buten	53	7.151	7.149	0.002	87	399910	200.0	206.7	
96 1,2,3-Trichloropropane	110	7.162	7.159	0.003	94	263228	200.0	199.8	
95 N-Propylbenzene	91	7.204	7.202	0.002	99	3131016	200.0	204.9	
98 2-Chlorotoluene	91	7.267	7.265	0.002	97	1929626	200.0	197.4	
99 1,3,5-Trimethylbenzene	105	7.351	7.360	-0.009	92	2108045	200.0	194.0	
100 4-Chlorotoluene	91	7.373	7.370	0.002	99	2222204	200.0	197.2	
103 tert-Butylbenzene	119	7.605	7.613	-0.008	94	1792455	200.0	202.4	
105 1,2,4-Trimethylbenzene	105	7.657	7.655	0.002	98	2260726	200.0	197.1	
106 sec-Butylbenzene	105	7.794	7.792	0.002	98	2677361	200.0	203.0	
108 1,3-Dichlorobenzene	146	7.889	7.887	0.002	96	1203798	200.0	200.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.932	7.929	0.003	97	2280900	200.0	199.6	
* 109 1,4-Dichlorobenzene-d4	152	7.953	7.951	0.002	97	201342	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.974	7.972	0.002	95	1235407	200.0	195.7	
114 1,2-Dichlorobenzene	146	8.259	8.256	0.003	73	1109949	200.0	186.8	
113 n-Butylbenzene	91	8.259	8.256	0.003	98	2050569	200.0	199.1	
115 1,2-Dibromo-3-Chloropropan	157	8.923	8.921	0.002	94	238031	200.0	209.7	
117 1,2,4-Trichlorobenzene	180	9.598	9.596	0.002	94	835308	200.0	200.2	
118 Hexachlorobutadiene	225	9.725	9.723	0.002	93	362466	200.0	207.5	
119 Naphthalene	128	9.809	9.807	0.002	99	2278481	200.0	195.1	
120 1,2,3-Trichlorobenzene	180	9.999	9.997	0.002	96	802301	200.0	194.7	
S 122 1,2-Dichloroethene, Total	1				0		400.0	363.1	
S 123 Xylenes, Total	1				0		400.0	391.4	
S 124 1,3-Dichloropropene, Total	1				0		400.0	395.3	

Reagents:

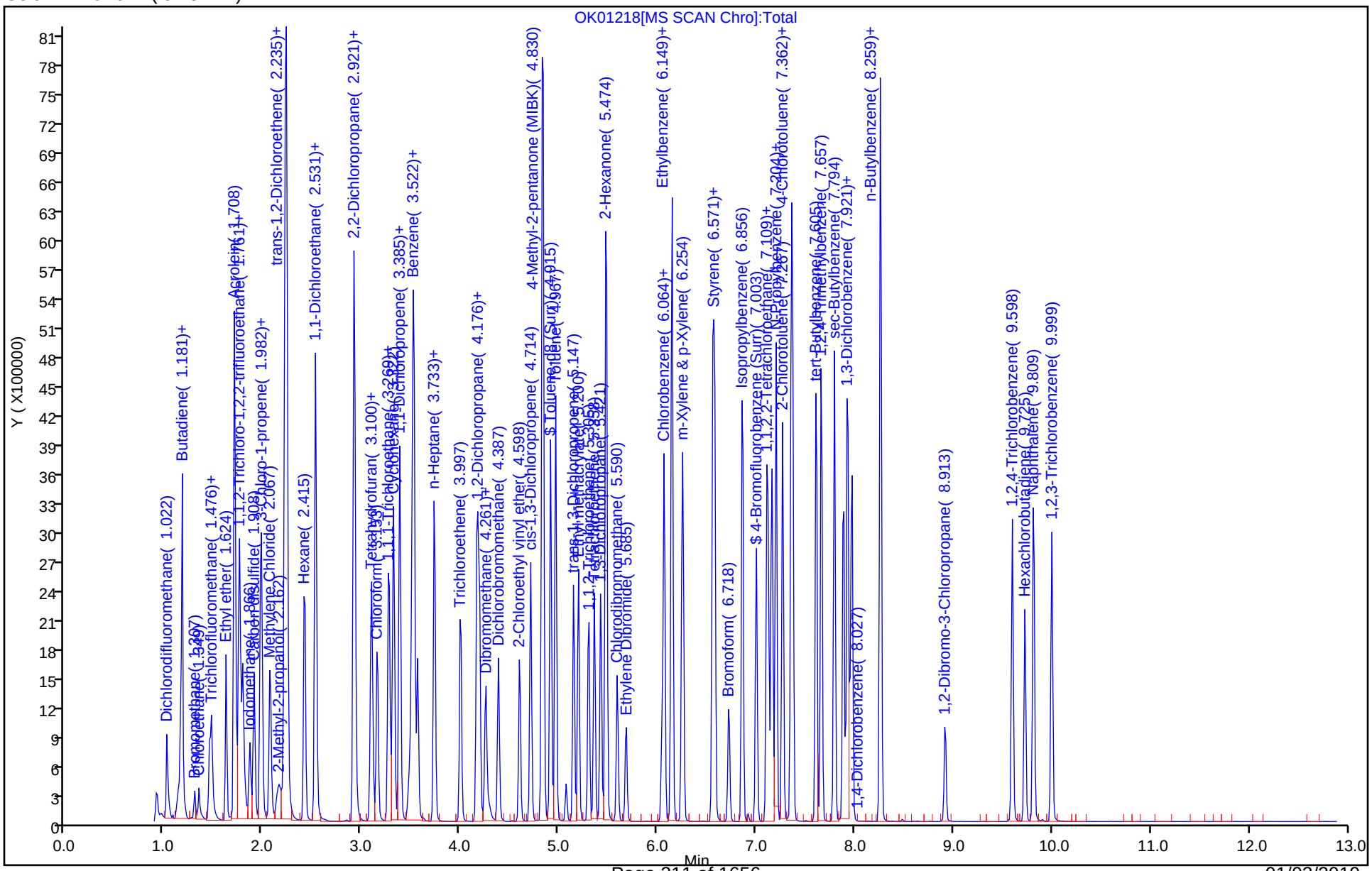
VM_MMIX_01936	Amount Added: 20.00	Units: uL
VM_Acrolein_00189	Amount Added: 20.00	Units: uL
DOD ISTD_00163	Amount Added: 5.00	Units: uL

Report Date: 13-Nov-2018 10:07:27 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D				
Injection Date:	12-Nov-2018 15:35:30	Instrument ID:	CMSO2	Operator ID:	MJY
Lims ID:	ic			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	2014_MSO2	Limit Group:	8260B		

Column: Rtx-624 (0.18 mm)



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-550348/7	2PL0607.D
Level 2	IC 680-550348/8	2PL0608.D
Level 3	IC 680-550348/9	2PL0609.D
Level 4	IC 680-550348/10	2PL0610.D
Level 5	IC 680-550348/11	2PL0611.D
Level 6	ICIS 680-550348/12	2PL0612.D
Level 7	IC 680-550348/13	2PL0613.D
Level 8	IC 680-550348/14	2PL0614.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3931 0.3918	0.4297 0.3983	0.4161 0.3810	0.3819	0.4017	Ave		0.3992				4.2		15.0			
Vinyl chloride	0.3280 0.3180	0.3394 0.3202	0.3336 0.3164	0.3154	0.3234	Ave		0.3243				2.7		15.0			
1,3-Butadiene	0.2620 0.2841	0.3220 0.2909	0.2855 0.2825	0.2706	0.2956	Ave		0.2867				6.2		15.0			
Chloromethane	0.6327 0.4910	0.7917 0.4780	0.6441 0.4518	0.5579	0.5410	QuaF		0.5102	-0.000294						1.0000		0.9900
Bromomethane	+++++ 0.2217	+++++ 0.1711	0.2601 +++++	0.2273	0.2208	Ave		0.2202				14.5		15.0			
Chloroethane	0.2102 0.1903	0.2280 0.2026	0.2137 0.1180	0.1972	0.2016	Qua2	-0.001	0.2161	-0.000429						0.9920		0.9900
Dichlorofluoromethane	0.8928 0.4575	0.8532 0.4611	0.5800 0.4484	0.5207	0.4891	Lin1	0.5865	0.4497							0.9990		0.9900
Trichlorofluoromethane	0.4256 0.3894	0.4465 0.4327	0.4525 0.4198	0.4126	0.4251	Ave		0.4255				4.6		15.0			
Ethyl ether	0.2065 0.2059	0.2377 0.2144	0.2130 0.2019	0.2070	0.2130	Ave		0.2124				5.2		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2170 0.2202	0.2416 0.2297	0.2349 0.2201	0.2231	0.2227	Ave		0.2262				3.8		15.0			
Acrolein	0.0684 0.0577	0.0695 0.0626	0.0613 0.0577	0.0693	0.0602	Ave		0.0633				7.9		15.0			
1,1-Dichloroethene	0.4755 0.2363	0.3454 0.2327	0.2827 0.2405	0.2486	0.2498	Qua2	0.2436	0.2294	0.0000426						0.9990		0.9900
Acetone	0.0419 0.0302	0.0394 0.0313	0.0323 0.0289	0.0307	0.0313	Ave		0.0333				14.2		15.0			
Iodomethane	0.2616 0.4098	0.2900 0.4216	0.3238 0.4079	0.3350	0.3806	Lin1	-0.244	0.4113							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	0.7911 0.7653	0.8537 0.7738	0.8128 0.7562	0.7624	0.7871	Ave		0.7878				4.1		15.0			
Allyl chloride	0.1612 0.1835	0.1890 0.1958	0.1783 0.1972	0.1840	0.1845	Ave		0.1842				6.1		15.0			
Methyl acetate	0.3238 0.2355	0.3021 0.2468	0.2507 0.2318	0.2313	0.2379	Ave		0.2575				13.7		15.0			
Methylene Chloride	0.4297 0.2666	0.3611 0.2739	0.3100 0.2642	0.2828	0.2808	Lin1	0.1803	0.2661							1.0000		0.9900
tert-Butyl alcohol	0.0377 0.0352	0.0382 0.0368	0.0365 0.0354	0.0335	0.0359	Ave		0.0362				4.1		15.0			
Methyl tert-butyl ether	0.8070 0.8054	0.8790 0.8330	0.8322 0.7920	0.7855	0.8100	Ave		0.8180				3.6		15.0			
trans-1,2-Dichloroethene	0.3746 0.2580	0.3076 0.2572	0.2849 0.2528	0.2483	0.2651	Qua2	0.1206	0.2521	0.0000114						0.9990		0.9900
Acrylonitrile	0.1365 0.1235	0.1360 0.1286	0.1294 0.1197	0.1222	0.1255	Ave		0.1277				4.8		15.0			
Hexane	0.4167 0.4083	0.4400 0.4202	0.4433 0.4071	0.4124	0.4143	Ave		0.4203				3.3		15.0			
1,1-Dichloroethane	0.4860 0.4584	0.5081 0.4723	0.4786 0.4640	0.4517	0.4685	Ave		0.4734			0.1000	3.7		15.0			
Vinyl acetate	0.6447 0.6208	0.6736 0.6346	0.6426 0.5878	0.6112	0.6313	Ave		0.6308				4.0		15.0			
2,2-Dichloropropane	0.5131 0.4130	0.4828 0.4174	0.4387 0.4100	0.4153	0.4248	Ave		0.4394				8.7		15.0			
cis-1,2-Dichloroethene	0.4230 0.4260	0.4547 0.4407	0.4340 0.4240	0.4252	0.4375	Ave		0.4331				2.5		15.0			
2-Butanone (MEK)	0.0380 0.0400	0.0414 0.0414	0.0411 0.0379	0.0378	0.0408	Ave		0.0398				4.1		15.0			
Bromochloromethane	0.1806 0.1876	0.2000 0.1954	0.1879 0.1853	0.1872	0.1935	Ave		0.1897				3.3		15.0			
Tetrahydrofuran	0.1693 0.0981	0.1427 0.1017	0.1096 0.0949	0.0984	0.1032	Qua2	0.1498	0.0973	-0.000002						0.9970		0.9900
Chloroform	0.5031 0.4509	0.4907 0.4713	0.4705 0.4510	0.4507	0.4679	Ave		0.4695				4.1		15.0			
Cyclohexane	0.5726 0.4144	0.4672 0.4262	0.4361 0.4195	0.4198	0.4120	Ave		0.4460				12.1		15.0			
1,1,1-Trichloroethane	0.6007 0.4185	0.4183 0.4231	0.4197 0.4198	0.4101	0.4303	Lin	0.0617	0.4200							1.0000		0.9900
Carbon tetrachloride	0.3519 0.3657	0.3966 0.3756	0.3850 0.3696	0.3681	0.3806	Ave		0.3741				3.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.3581 0.3618	0.3740 0.3667	0.3698 0.3630	0.3565	0.3647	Ave		0.3643				1.6		15.0			
Isobutanol	0.0143 0.0153	0.0181 0.0165	0.0166 0.0154	0.0147	0.0157	Ave		0.0158				7.6		15.0			
Benzene	1.0237 1.0653	1.1780 1.0887	1.1109 1.0774	1.0429	1.1004	Ave		1.0859				4.3		15.0			
1,2-Dichloroethane	0.3609 0.3708	0.3917 0.3887	0.3805 0.3686	0.3732	0.3812	Ave		0.3770				2.8		15.0			
n-Heptane	0.5730 0.4283	0.5096 0.4457	0.4733 0.4298	0.4442	0.4369	Ave		0.4676				10.8		15.0			
Trichloroethene	0.2800 0.2836	0.2979 0.2921	0.2940 0.2916	0.2771	0.2909	Ave		0.2884				2.5		15.0			
Methylcyclohexane	0.5858 0.5209	0.5461 0.5428	0.5465 0.5263	0.5187	0.5224	Ave		0.5387				4.1		15.0			
1,2-Dichloropropane	0.2641 0.2597	0.2903 0.2706	0.2675 0.2621	0.2615	0.2690	Ave		0.2681				3.6		15.0			
1,4-Dioxane	0.0045 0.0047	0.0044 0.0049	0.0045 0.0045	0.0044	0.0047	Ave		0.0046				4.0		15.0			
Dibromomethane	0.1896 0.1662	0.1892 0.1767	0.1725 0.1691	0.1635	0.1708	Ave		0.1747				5.7		15.0			
Bromodichloromethane	0.3706 0.3668	0.3772 0.3805	0.3743 0.3702	0.3508	0.3733	Ave		0.3704				2.4		15.0			
2-Chloroethyl vinyl ether	0.1903 0.1954	0.1959 0.2071	0.1954 0.1970	0.1902	0.1971	Ave		0.1960				2.7		15.0			
cis-1,3-Dichloropropene	0.4340 0.4240	0.4526 0.4476	0.4363 0.4341	0.4100	0.4355	Ave		0.4343				3.0		15.0			
Methyl isobutyl ketone (MIBK)	0.3257 0.3135	0.3312 0.3271	0.3191 0.3048	0.3063	0.3169	Ave		0.3181				3.0		15.0			
Toluene	0.7041 0.6894	0.7077 0.7021	0.6884 0.6938	0.6627	0.6899	Ave		0.6923				2.0		15.0			
trans-1,3-Dichloropropene	0.4466 0.4065	0.4483 0.4254	0.4107 0.4127	0.4003	0.4093	Ave		0.4200				4.4		15.0			
Ethyl methacrylate	0.3781 0.3614	0.3888 0.3844	0.3561 0.3671	0.3434	0.3664	Ave		0.3682				4.1		15.0			
1,1,2-Trichloroethane	0.2196 0.2012	0.2127 0.2132	0.2104 0.2045	0.1979	0.2133	Ave		0.2091				3.5		15.0			
Tetrachloroethene	0.2593 0.2685	0.2740 0.2742	0.2704 0.2727	0.2566	0.2689	Ave		0.2681				2.5		15.0			
1,3-Dichloropropane	0.3969 0.4019	0.4240 0.4230	0.4094 0.4092	0.3929	0.4073	Ave		0.4081				2.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.2314 0.2279	0.2471 0.2381	0.2255 0.2220	0.2215	0.2303	Ave		0.2305				3.7		15.0			
Dibromochloromethane	0.2909 0.2918	0.2984 0.3038	0.2825 0.2981	0.2747	0.2912	Ave		0.2914				3.2		15.0			
1,2-Dibromoethane	0.2644 0.2580	0.2765 0.2704	0.2454 0.2635	0.2506	0.2627	Ave		0.2614				3.8		15.0			
Chlorobenzene	1.9440 1.8161	2.0195 1.9045	1.8469 1.8443	1.8107	1.9309	Ave		1.8896			0.3000	3.9		15.0			
Ethylbenzene	3.3115 3.2400	3.5606 3.3216	3.3387 3.2302	3.1550	3.3563	Ave		3.3142				3.6		15.0			
1,1,1,2-Tetrachloroethane	0.6611 0.6823	0.7436 0.7025	0.6976 0.6804	0.6642	0.7138	Ave		0.6932				3.9		15.0			
m-Xylene & p-Xylene	2.5523 2.5059	2.7656 2.5695	2.5314 2.5163	2.4729	2.6259	Ave		2.5675				3.6		15.0			
o-Xylene	2.5677 2.5708	2.7462 2.6757	2.6411 2.5985	2.5114	2.6757	Ave		2.6234				2.9		15.0			
Styrene	2.0820 2.1059	2.1877 2.1785	2.1240 2.1325	2.0286	2.1717	Ave		2.1264				2.5		15.0			
Bromoform	0.5656 0.5430	0.5903 0.5850	0.5133 0.5710	0.5261	0.5568	Ave		0.5564			0.1000	4.9		15.0			
Isopropylbenzene	3.2486 3.3301	3.5727 3.4114	3.3638 3.3634	3.2275	3.4275	Ave		3.3681				3.2		15.0			
Bromobenzene	0.8684 0.8789	0.9128 0.9135	0.8707 0.8966	0.8473	0.9036	Ave		0.8865				2.7		15.0			
1,1,2,2-Tetrachloroethane	0.9205 0.7949	0.8902 0.8464	0.7753 0.8061	0.7614	0.8248	Ave		0.8274			0.3000	6.7		15.0			
N-Propylbenzene	3.9142 3.9577	4.3042 4.0862	3.9844 4.0030	3.8684	4.0908	Ave		4.0261				3.4		15.0			
1,2,3-Trichloropropane	0.2958 0.2578	0.2874 0.2715	0.2605 0.2606	0.2590	0.2679	Ave		0.2701				5.3		15.0			
trans-1,4-Dichloro-2-butene	0.4730 0.3011	0.3761 0.3079	0.3448 0.2885	0.2941	0.3161	Qua2	0.1708	0.2989	-0.000030						0.9980		0.9900
2-Chlorotoluene	2.3396 2.2174	2.3997 2.2908	2.2626 2.2372	2.1361	2.2816	Ave		2.2706				3.5		15.0			
1,3,5-Trimethylbenzene	2.7504 2.8415	2.9481 2.9251	2.8170 2.8728	2.7864	2.9140	Ave		2.8569				2.5		15.0			
4-Chlorotoluene	2.3916 2.3294	2.5002 2.4250	2.3314 2.3766	2.2470	2.3819	Ave		2.3729				3.1		15.0			
tert-Butylbenzene	2.6616 2.5247	2.7460 2.6436	2.5546 2.5843	2.4693	2.6269	Ave		2.6014				3.3		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.9276 2.9207	3.0249 3.0024	2.9426 2.9650	2.7926	2.9567	Ave		2.9416				2.4		15.0			
sec-Butylbenzene	3.8523 3.7851	3.9830 3.9342	3.8026 3.8670	3.6664	3.8748	Ave		3.8457				2.5		15.0			
p-Isopropyltoluene	3.3427 3.1631	3.3559 3.2253	3.2155 3.0969	3.0456	3.1686	Ave		3.2017				3.4		15.0			
1,3-Dichlorobenzene	1.6288 1.5750	1.7218 1.6086	1.6046 1.5638	1.5325	1.6103	Ave		1.6057				3.5		15.0			
1,4-Dichlorobenzene	1.6466 1.5664	1.7061 1.5949	1.6403 1.5635	1.5211	1.5868	Ave		1.6032				3.6		15.0			
n-Butylbenzene	3.0462 2.8594	3.1853 2.8986	2.9288 2.8100	2.7707	2.9009	Ave		2.9250				4.6		15.0			
1,2-Dichlorobenzene	1.5434 1.4578	1.5865 1.5080	1.4554 1.4355	1.4019	1.4809	Ave		1.4837				4.0		15.0			
1,2-Dibromo-3-Chloropropane	0.2098 0.2300	0.2692 0.2429	0.2278 0.2266	0.2206	0.2300	Ave		0.2321				7.6		15.0			
1,2,4-Trichlorobenzene	1.3256 1.1415	1.2573 1.1823	1.1658 1.1162	1.0969	1.1610	Ave		1.1808				6.4		15.0			
Hexachlorobutadiene	0.6166 0.6327	0.7205 0.6543	0.6692 0.6103	0.6556	0.6583	Ave		0.6522				5.3		15.0			
Naphthalene	3.1902 2.7161	3.0719 2.8455	2.7658 2.6167	2.6776	2.7801	Ave		2.8330				7.0		15.0			
1,2,3-Trichlorobenzene	1.2080 1.0182	1.1842 1.0596	1.0700 0.9984	0.9867	1.0486	Ave		1.0717				7.7		15.0			
Dibromofluoromethane (Surr)	0.2714 0.2455	0.2519 0.2536	0.2546 0.2442	0.2392	0.2490	Ave		0.2512				3.9		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3551 0.3073	0.3490 0.3165	0.3284 0.3025	0.3040	0.3152	Ave		0.3223				6.3		15.0			
Toluene-d8 (Surr)	2.6469 2.4014	2.6886 2.4284	2.4587 2.3110	2.3789	2.4953	Ave		2.4761				5.3		15.0			
4-Bromofluorobenzene (Surr)	1.1435 0.8379	1.0587 0.8586	0.8951 0.8251	0.8547	0.8687	Ave		0.9178				12.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 680-550348/7	2PL0607.D
Level 2	IC 680-550348/8	2PL0608.D
Level 3	IC 680-550348/9	2PL0609.D
Level 4	IC 680-550348/10	2PL0610.D
Level 5	IC 680-550348/11	2PL0611.D
Level 6	ICIS 680-550348/12	2PL0612.D
Level 7	IC 680-550348/13	2PL0613.D
Level 8	IC 680-550348/14	2PL0614.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	5876 301690	13024 582510	31447 1234520	56362	119203	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	4903 244902	10288 468216	25216 1025160	46539	95967	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Butadiene	FB	Ave	3916 218775	9760 425509	21575 915488	39925	87736	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Chloromethane	FB	QuaF	9456 378108	23998 699020	48685 1464057	82334	160544	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Ave	+++++ 170726	+++++ 250241	19658 +++++	33538	65526	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
Chloroethane	FB	Qua2	3142 146523	6910 296274	16148 382347	29097	59815	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dichlorofluoromethane	FB	Lin1	13344 352287	25863 674365	43836 1453068	76846	145158	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	6361 299825	13535 632834	34203 1360345	60882	126163	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl ether	FB	Ave	3086 158527	7204 313529	16096 654353	30549	63224	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	3243 169596	7323 335869	17756 713207	32927	66081	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrolein	FB	Ave	20440 888434	42111 1830185	92702 3736312	204463	357380	20.0 1000	40.0 2000	100 4000	200	400
1,1-Dichloroethene	FB	Qua2	7107 181955	10469 340314	21364 779149	36689	74133	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Ave	3130 116433	5974 228665	12202 467506	22680	46502	5.00 250	10.0 500	25.0 1000	50.0	100
Iodomethane	FB	Lin1	3910 315543	8791 616579	24476 1321661	49436	112956	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	11824 589292	25877 1131699	61433 2450249	112508	233581	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	2409 141315	5728 286383	13476 638864	27147	54757	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl acetate	FB	Ave	9679 362774	18314 721864	37894 1502552	68262	141191	2.00 100	4.00 200	10.0 400	20.0	40.0
Methylene Chloride	FB	Lin1	6422 205303	10946 400607	23430 856077	41728	83339	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butyl alcohol	FB	Ave	5631 271321	11586 538042	27559 1147990	49481	106644	10.0 500	20.0 1000	50.0 2000	100	200
Methyl tert-butyl ether	FB	Ave	12062 620231	26644 1218318	62898 2566264	115916	240367	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,2-Dichloroethene	FB	Qua2	5599 198694	9324 376103	21532 819144	36642	78665	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrylonitrile	FB	Ave	20409 951192	41227 1880797	97782 3878342	180264	372554	10.0 500	20.0 1000	50.0 2000	100	200
Hexane	FB	Ave	6228 314378	13337 614496	33506 1319074	60863	122944	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	7264 353023	15401 690704	36173 1503515	66651	139028	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Ave	19271 956062	40840 1856096	97141 3809612	180394	374716	2.00 100	4.00 200	10.0 400	20.0	40.0
2,2-Dichloropropane	FB	Ave	7669 318050	14635 610371	33154 1328703	61283	126051	1.00 50.0	2.00 100	5.00 200	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	6322 328013	13784 644480	32800 1374041	62739	129843	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Butanone (MEK)	FB	Ave	2840 153992	6280 302657	15535 614325	27878	60581	5.00 250	10.0 500	25.0 1000	50.0	100
Bromochloromethane	FB	Ave	2699 144479	6062 285753	14198 600404	27623	57428	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Qua2	5061 151122	8650 297449	16569 615219	29045	61244	2.00 100	4.00 200	10.0 400	20.0	40.0
Chloroform	FB	Ave	7520 347223	14875 689266	35558 1461296	66516	138842	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Ave	8559 319088	14162 623282	32962 1359406	61950	122271	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Lin	8979 322296	12680 618842	31725 1360198	60514	127699	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Ave	5259 281595	12021 549281	29101 1197632	54320	112958	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Ave	5352 278620	11337 536342	27949 1176368	52605	108237	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isobutanol	FB	Ave	5358 294352	13700 602637	31354 1250575	54279	116252	25.0 1250	50.0 2500	125 5000	250	500

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Benzene	FB	Ave	15301 820329	35710 1592182	83960 3491084	153899	326542	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane	FB	Ave	5394 285574	11875 568518	28761 1194480	55078	113121	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Heptane	FB	Ave	8565 329781	15446 651864	35776 1392753	65548	129643	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichloroethene	FB	Ave	4185 218420	9031 427155	22220 944802	40897	86342	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methylcyclohexane	FB	Ave	8756 401118	16554 793818	41306 1705259	76540	155034	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	3947 199993	8800 395740	20221 849209	38589	79823	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	1349 72044	2638 144735	6797 293943	13107	27637	20.0 1000	40.0 2000	100 4000	200	400
Dibromomethane	FB	Ave	2834 127963	5735 258395	13040 548036	24122	50687	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromodichloromethane	FB	Ave	5539 282440	11433 556464	28289 1199445	51763	110766	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	2844 150450	5937 302870	14767 638429	28070	58483	1.00 50.0	2.00 100	5.00 200	10.0	20.0
cis-1,3-Dichloropropene	FB	Ave	6487 326507	13720 654672	32979 1406557	60508	129236	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl isobutyl ketone (MIBK)	FB	Ave	24344 1206958	50191 2391716	120598 4938286	225965	470257	5.00 250	10.0 500	25.0 1000	50.0	100
Toluene	FB	Ave	10524 530896	21451 1026782	52029 2248110	97792	204739	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	FB	Ave	6675 313040	13590 622070	31042 1337224	59076	121478	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl methacrylate	FB	Ave	5652 278268	11786 562245	26911 1189589	50677	108728	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	FB	Ave	3282 154915	6448 311854	15900 662700	29202	63290	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	FB	Ave	3875 206756	8307 401070	20441 883644	37870	79803	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	FB	Ave	5933 309451	12853 618629	30941 1325983	57975	120860	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	FB	Ave	17290 877504	37449 1740890	85217 3597316	163463	341651	5.00 250	10.0 500	25.0 1000	50.0	100
Dibromochloromethane	FB	Ave	4348 224692	9045 444306	21348 966004	40531	86420	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromoethane	FB	Ave	3952 198701	8382 395385	18551 853793	36983	77964	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	11628 582230	24571 1166110	56602 2541617	109155	231556	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	19807 1038704	43321 2033723	102321 4451454	190198	402501	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3954 218733	9047 430114	21378 937666	40039	85603	1.00 50.0	2.00 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	15266 803378	33649 1573233	77581 3467626	149077	314904	1.00 50.0	2.00 100	5.00 200	10.0	20.0
o-Xylene	CBNZ d5	Ave	15358 824161	33413 1638259	80941 3580876	151398	320880	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Styrene	CBNZ d5	Ave	12453 675144	26617 1333838	65095 2938731	122292	260435	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBNZ d5	Ave	3383 174078	7182 358194	15732 786894	31713	66774	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	19431 1067601	43469 2088747	103091 4634994	194568	411040	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	CBNZ d5	Ave	5194 281772	11106 559295	26685 1235565	51077	108363	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	CBNZ d5	Ave	5506 254837	10831 518205	23762 1110914	45899	98906	1.00 50.0	2.00 100	5.00 200	10.0	20.0
N-Propylbenzene	CBNZ d5	Ave	23412 1268780	52368 2501927	122111 5516401	233202	490584	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	CBNZ d5	Ave	1769 82640	3497 166218	7984 359088	15616	32123	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	CBNZ d5	Qua2	2829 96543	4576 188537	10566 397577	17731	37911	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chlorotoluene	CBNZ d5	Ave	13994 710865	29197 1402619	69342 3082978	128776	273611	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	CBNZ d5	Ave	16451 910960	35869 1791006	86333 3958881	167975	349452	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Chlorotoluene	CBNZ d5	Ave	14305 746786	30419 1484764	71451 3275122	135459	285644	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butylbenzene	CBNZ d5	Ave	15920 809388	33410 1618597	78292 3561390	148861	315029	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	CBNZ d5	Ave	17511 936355	36804 1838279	90181 4086002	168351	354575	1.00 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butylbenzene	CBNZ d5	Ave	23042 1213467	48461 2408804	116539 5328942	221023	464674	1.00 50.0	2.00 100	5.00 200	10.0	20.0
p-Isopropyltoluene	DCBd 4	Ave	20410 1061667	41774 2136111	101233 4684718	190311	401025	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	9945 528647	21433 1065377	50516 2365660	95758	203804	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Savannah Job No.: 680-162184-1 Analy Batch No.: 550348

SDG No.:

Instrument ID: CMSP2 GC Column: Rxi-624 MS ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/06/2018 16:21 Calibration End Date: 12/06/2018 19:13 Calibration ID: 62101

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	10054 525749	21238 1056299	51641 2365220	95047	200832	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	18600 959739	39651 1919712	92208 4250789	173130	367142	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	9424 489290	19749 998730	45820 2171497	87599	187423	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1281 77184	3351 160877	7171 342757	13783	29110	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	8094 383149	15651 783045	36704 1688522	68539	146933	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	3765 212353	8969 433351	21067 923218	40969	83315	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCBd 4	Ave	19479 911626	38239 1884547	87076 3958381	167312	351856	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7376 341764	14741 701772	33686 1510374	61655	132713	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	4057 189073	7635 370858	19244 791194	35297	73879	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	5308 236661	10579 462891	24820 980142	44866	93550	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	15832 769864	32712 1486848	75352 3184722	143409	299242	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	6982 281246	13179 568646	28179 1248203	53409	109940	1.00 50.0	2.00 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Qua2 = Quadratic 1/conc^2 ISTD
QuaF = Quadratic ISTD forced zero

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Dec-2018 16:21:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-007
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:25:45 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 08:13:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.209	4.199	0.010	99	747330	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	89	299067	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	95	305295	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	46	4057	1.00	1.08	a
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	54	5308	1.00	1.10	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	83	15832	1.00	1.07	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	65	6982	1.00	1.25	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	70	5876	1.00	0.9848	a
10 Vinyl chloride	62	1.391	1.392	-0.001	53	4903	1.00	1.01	Ma
12 Chloromethane	50	1.402	1.402	0.000	38	9456	1.00	1.24	M
11 Butadiene	54	1.402	1.402	0.000	88	3916	1.00	0.9140	
13 Bromomethane	94	1.592	1.592	0.000	69	6442	1.00	1.96	M
14 Chloroethane	64	1.655	1.645	0.010	59	3142	1.00	0.9775	
15 Dichlorofluoromethane	67	1.771	1.771	0.000	74	13344	1.00	0.6811	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	84	6361	1.00	1.00	
19 Ethyl ether	59	1.972	1.961	0.011	58	3086	1.00	0.9720	
22 1,1,2-Trichloro-1,2,2-trif	151	2.109	2.099	0.010	24	3243	1.00	0.9594	M
20 Acrolein	56	2.109	2.109	0.000	98	20440	20.0	21.6	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	67	7107	1.00	1.01	
23 Acetone	58	2.215	2.204	0.011	69	3130	5.00	6.30	
25 Iodomethane	142	2.278	2.267	0.011	74	3910	1.00	1.23	a
26 Carbon disulfide	76	2.299	2.299	0.000	98	11824	1.00	1.00	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	63	2409	1.00	0.8751	
28 Methyl acetate	43	2.405	2.405	0.000	92	9679	2.00	2.51	a
30 Methylene Chloride	84	2.510	2.500	0.010	63	6422	1.00	0.9368	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	77	5631	10.0	10.4	
34 Methyl tert-butyl ether	73	2.637	2.626	0.011	84	12062	1.00	0.9865	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	69	5599	1.00	1.01	
32 Acrylonitrile	53	2.721	2.721	0.000	91	20409	10.0	10.7	
35 Hexane	57	2.784	2.785	-0.001	84	6228	1.00	0.99	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	36	7264	1.00	1.03	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	2.996	2.985	0.011	98	19271	2.00	2.04	
42 2,2-Dichloropropane	77	3.375	3.376	-0.001	59	7669	1.00	1.17	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	71	6322	1.00	0.9766	
41 2-Butanone (MEK)	72	3.418	3.407	0.011	92	2840	5.00	4.77	
48 Chlorobromomethane	130	3.576	3.576	0.000	68	2699	1.00	0.9520	Ma
47 Tetrahydrofuran	42	3.576	3.576	0.000	87	5061	2.00	1.94	
49 Chloroform	83	3.608	3.608	0.000	74	7520	1.00	1.07	
51 Cyclohexane	84	3.724	3.713	0.011	68	8559	1.00	1.28	
50 1,1,1-Trichloroethane	97	3.734	3.724	0.010	68	8979	1.00	1.28	
52 Carbon tetrachloride	117	3.819	3.819	0.000	86	5259	1.00	0.9405	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	63	5352	1.00	0.9828	
54 Isobutyl alcohol	43	3.914	3.914	0.000	81	5358	25.0	22.7	
55 Benzene	78	3.998	3.988	0.010	90	15301	1.00	0.9427	
57 1,2-Dichloroethane	62	4.061	4.051	0.010	64	5394	1.00	0.9573	
60 n-Heptane	43	4.104	4.104	0.000	80	8565	1.00	1.23	
62 Trichloroethene	132	4.462	4.462	0.000	71	4185	1.00	0.9708	
64 Methylcyclohexane	83	4.547	4.547	0.000	88	8756	1.00	1.09	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	64	3947	1.00	0.9850	
68 1,4-Dioxane	88	4.758	4.747	0.011	1	1349	20.0	19.7	a
67 Dibromomethane	93	4.758	4.758	0.000	76	2834	1.00	1.09	
69 Dichlorobromomethane	83	4.853	4.853	0.000	67	5539	1.00	1.00	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	62	2844	1.00	0.9706	a
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	70	6487	1.00	1.00	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	94	24344	5.00	5.12	
74 Toluene	92	5.423	5.423	0.000	80	10524	1.00	1.02	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	24	6675	1.00	1.06	a
76 Ethyl methacrylate	69	5.655	5.655	0.000	29	5652	1.00	1.03	
77 1,1,2-Trichloroethane	83	5.782	5.782	0.000	65	3282	1.00	1.05	
78 Tetrachloroethene	164	5.824	5.824	0.000	64	3875	1.00	0.9670	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	77	5933	1.00	0.9728	
80 2-Hexanone	43	5.950	5.950	0.000	90	17290	5.00	5.02	
82 Chlorodibromomethane	129	6.066	6.067	-0.001	60	4348	1.00	1.00	
83 Ethylene Dibromide	107	6.172	6.172	0.000	72	3952	1.00	1.01	Ma
85 Chlorobenzene	112	6.541	6.541	0.000	74	11628	1.00	1.03	
87 Ethylbenzene	91	6.594	6.594	0.000	82	19807	1.00	1.00	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	39	3954	1.00	0.9537	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	94	15266	1.00	0.99	
89 o-Xylene	91	7.016	7.016	0.000	84	15358	1.00	0.9788	
90 Styrene	104	7.037	7.037	0.000	90	12453	1.00	0.9791	
91 Bromoform	173	7.217	7.217	0.000	58	3383	1.00	1.02	
92 Isopropylbenzene	105	7.301	7.301	0.000	79	19431	1.00	0.9645	
94 Bromobenzene	156	7.586	7.586	0.000	80	5194	1.00	0.9796	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	51	5506	1.00	1.11	
98 N-Propylbenzene	91	7.639	7.639	0.000	88	23412	1.00	0.9722	
97 1,2,3-Trichloropropane	110	7.660	7.660	0.000	64	1769	1.00	1.10	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	49	2829	1.00	1.01	
99 2-Chlorotoluene	91	7.734	7.734	0.000	76	13994	1.00	1.03	a
101 1,3,5-Trimethylbenzene	105	7.787	7.797	-0.010	75	16451	1.00	0.9627	
102 4-Chlorotoluene	91	7.829	7.829	0.000	81	14305	1.00	1.01	
103 tert-Butylbenzene	119	8.050	8.050	0.000	84	15920	1.00	1.02	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	60	17511	1.00	1.00	
106 sec-Butylbenzene	105	8.230	8.230	0.000	86	23042	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	8.356	8.357	0.000	59	9945	1.00	1.01	
108 4-Isopropyltoluene	119	8.356	8.357	0.000	86	20410	1.00	1.04	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	44	10054	1.00	1.03	
112 n-Butylbenzene	91	8.694	8.694	0.000	89	18600	1.00	1.04	
113 1,2-Dichlorobenzene	146	8.757	8.758	-0.001	80	9424	1.00	1.04	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	30	1281	1.00	0.9039	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	54	8094	1.00	1.12	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	57	3765	1.00	0.9455	
118 Naphthalene	128	10.309	10.309	0.000	92	19479	1.00	1.13	
119 1,2,3-Trichlorobenzene	180	10.520	10.509	0.011	46	7376	1.00	1.13	
S 123 1,2-Dichloroethene, Total	1				0		2.00	1.98	
S 124 Xylenes, Total	1				0		2.00	1.97	
S 122 1,3-Dichloropropene, Total	1				0		2.00	2.06	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

DOD ISTD_00166	Amount Added:	5.00	Units: uL
VM_MMIX_01939	Amount Added:	0.10	Units: uL
VM_Acrolein_00191	Amount Added:	0.10	Units: uL

Report Date: 07-Dec-2018 09:25:45 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D

Injection Date: 06-Dec-2018 16:21:30 Instrument ID: CMSP2 Operator ID: ea

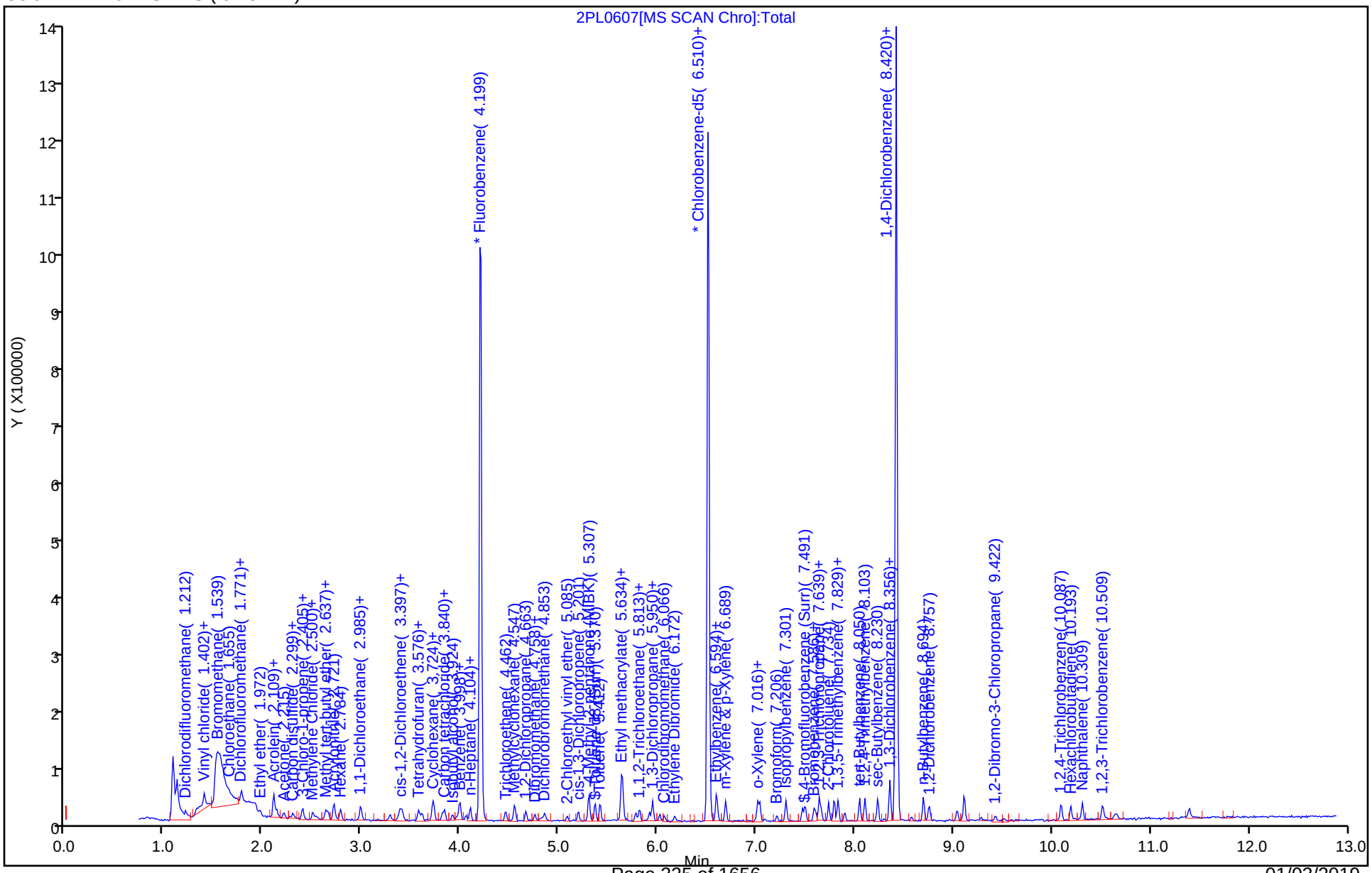
Lims ID: ic Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 6

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

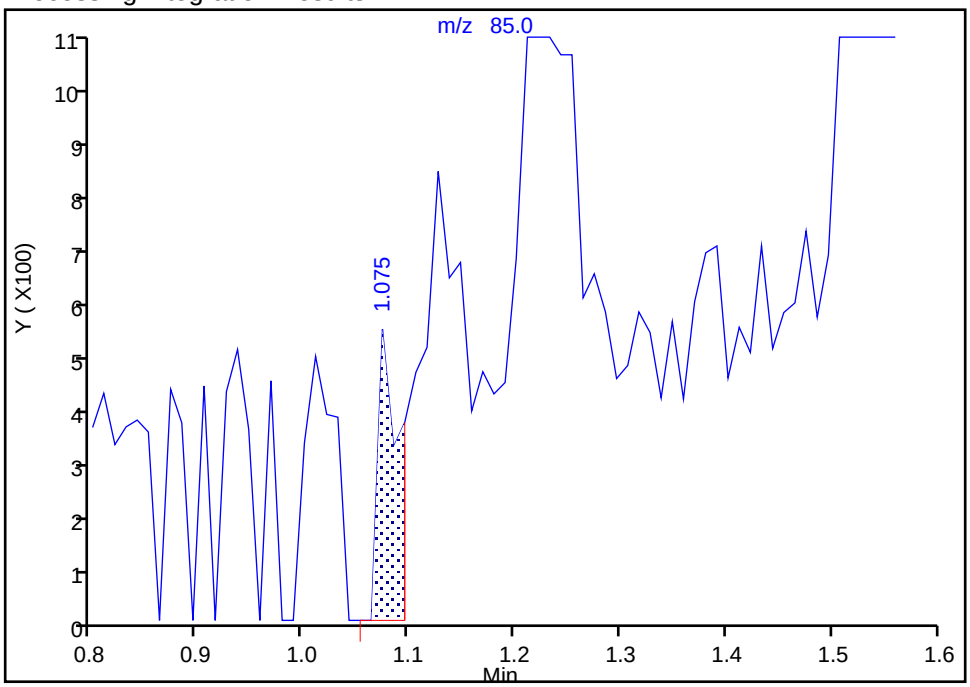
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

9 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

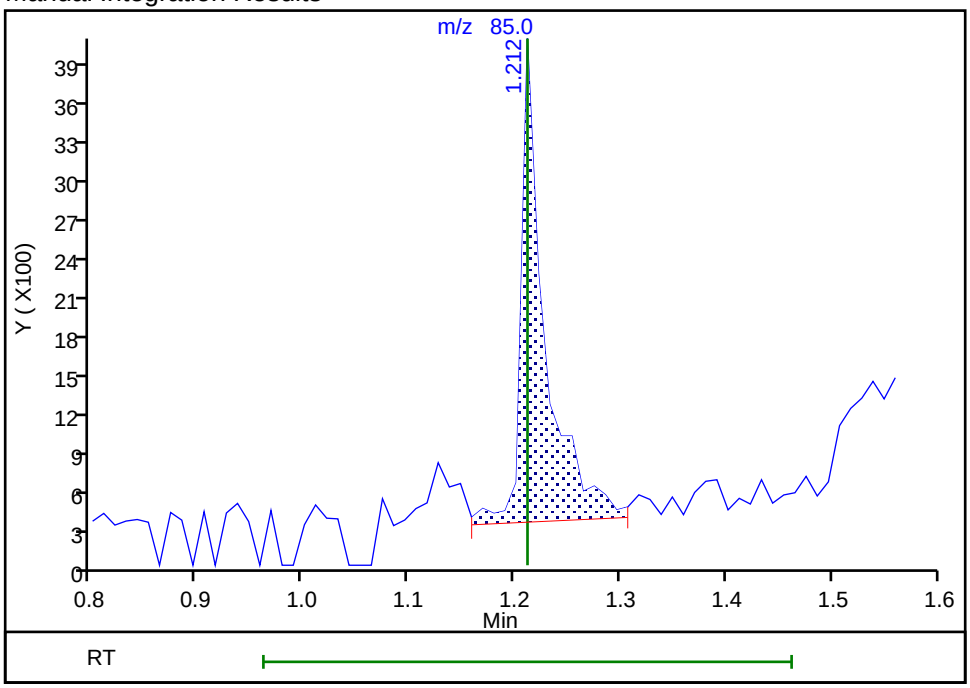
Processing Integration Results

RT: 1.07
Area: 737
Amount: 0.501816
Amount Units: ug/l



Manual Integration Results

RT: 1.21
Area: 5876
Amount: 0.984823
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:11:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

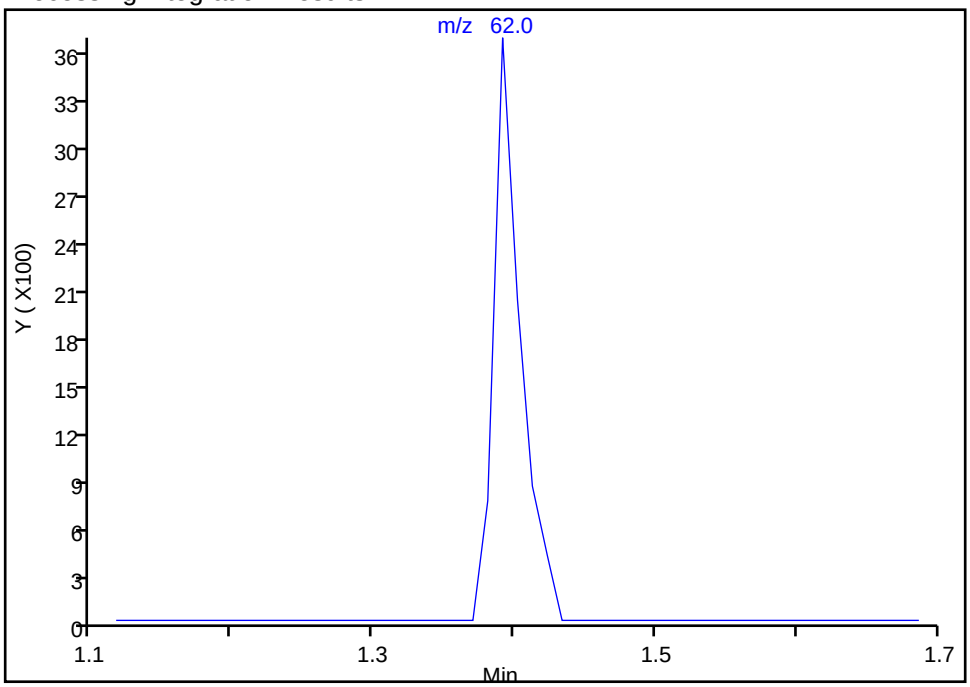
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

10 Vinyl chloride, CAS: 75-01-4

Signal: 1

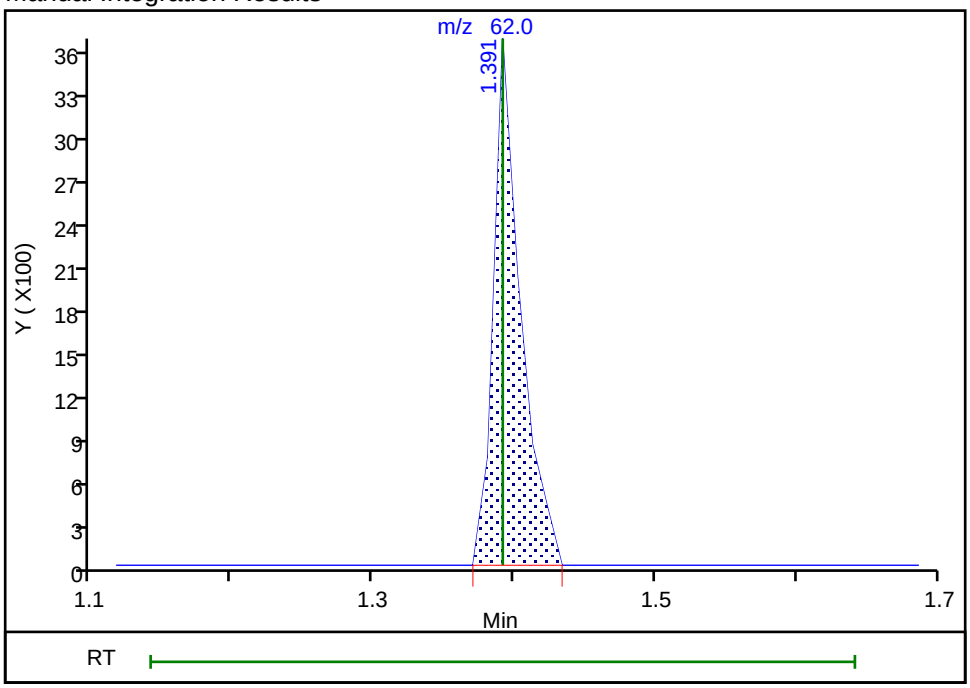
Processing Integration Results

Not Detected
Expected RT: 1.39



Manual Integration Results

RT: 1.39
Area: 4903
Amount: 1.011530
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:11:18
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

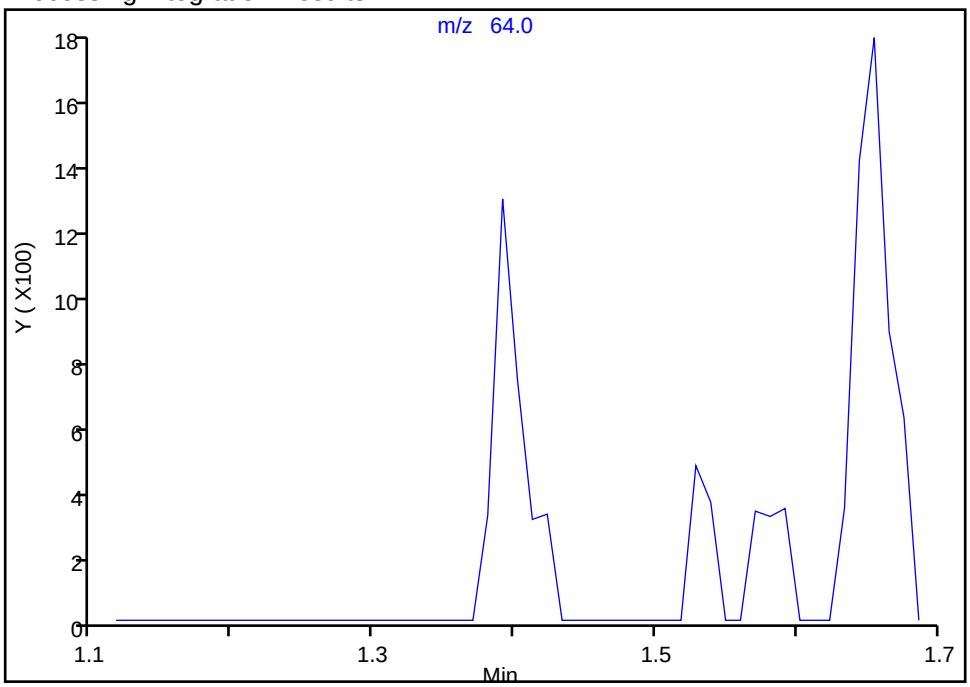
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

10 Vinyl chloride, CAS: 75-01-4

Signal: 2

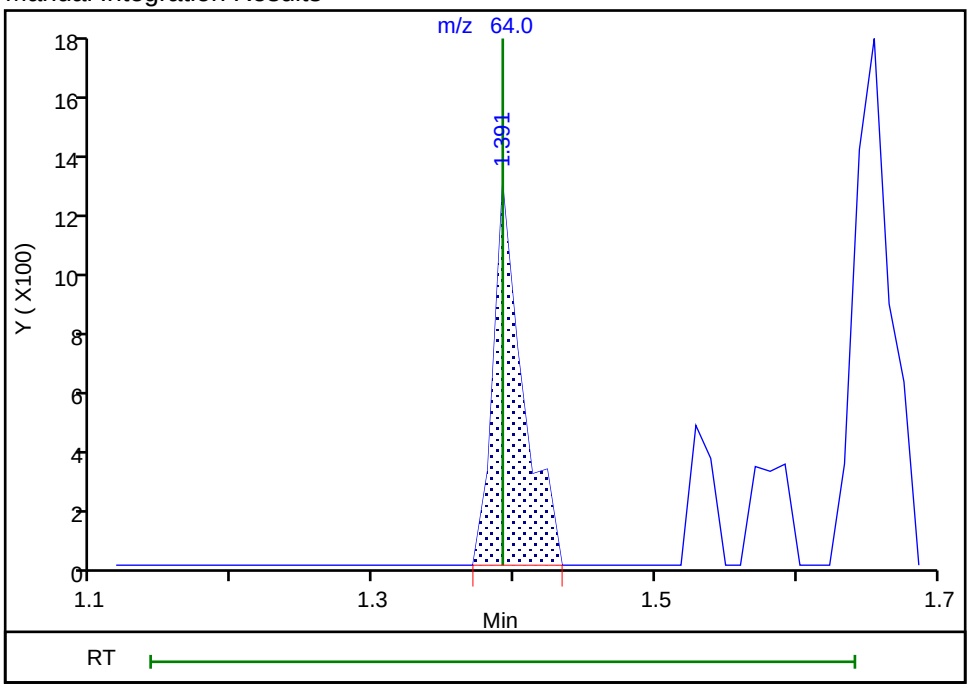
Processing Integration Results

Not Detected
Expected RT: 1.39



Manual Integration Results

RT: 1.39
Area: 1858
Amount: 1.011530
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:11:22
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

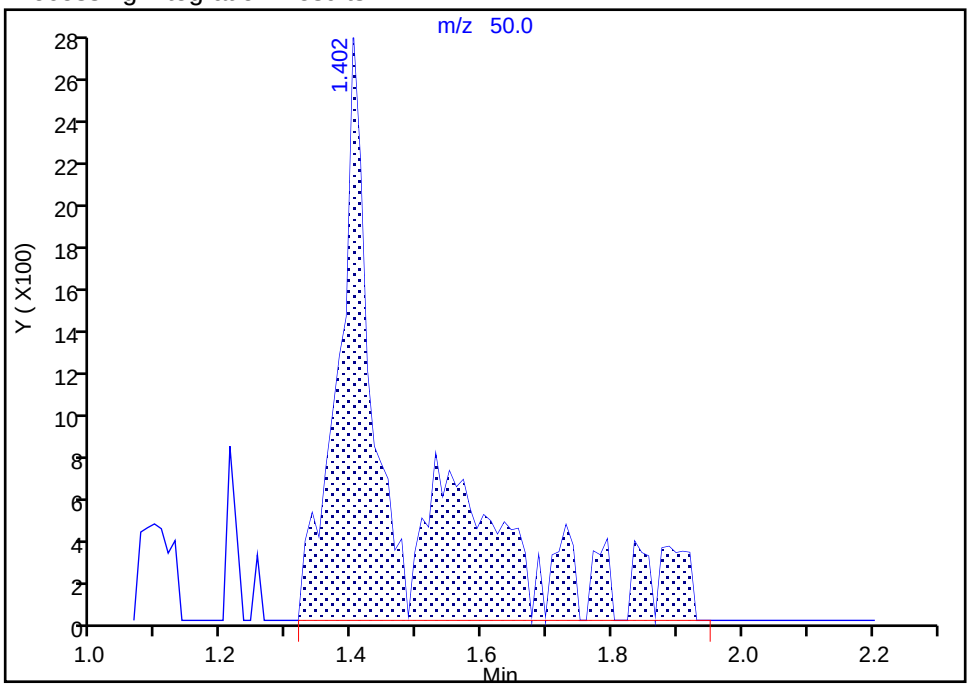
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

12 Chloromethane, CAS: 74-87-3

Signal: 1

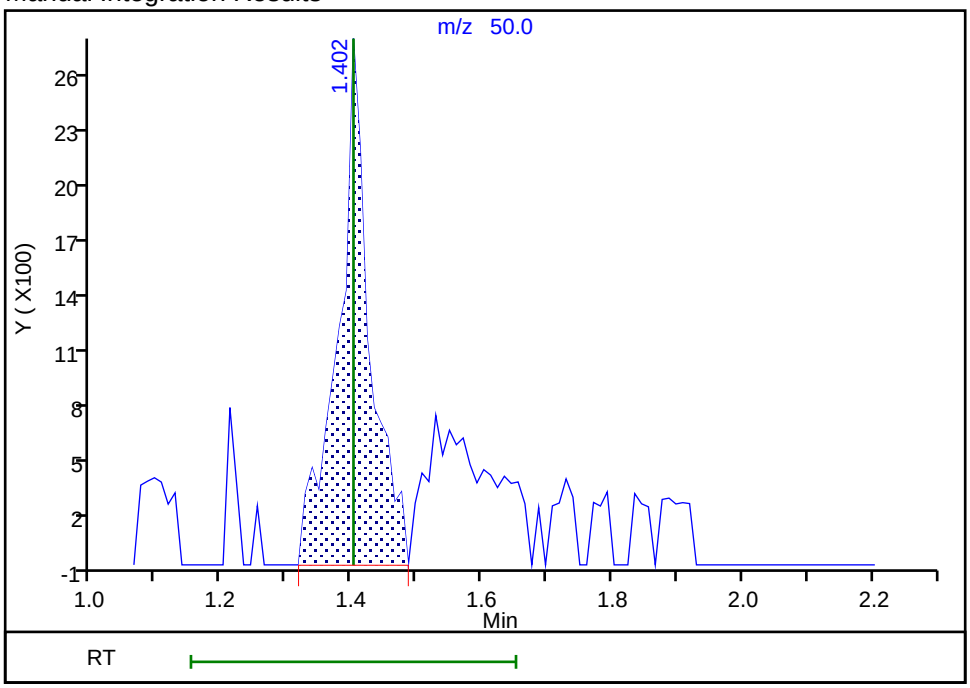
Processing Integration Results

RT: 1.40
Area: 18400
Amount: 1.898819
Amount Units: ug/l



Manual Integration Results

RT: 1.40
Area: 9456
Amount: 1.240978
Amount Units: ug/l



Reviewer: kitchingsj, 07-Dec-2018 08:51:55

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

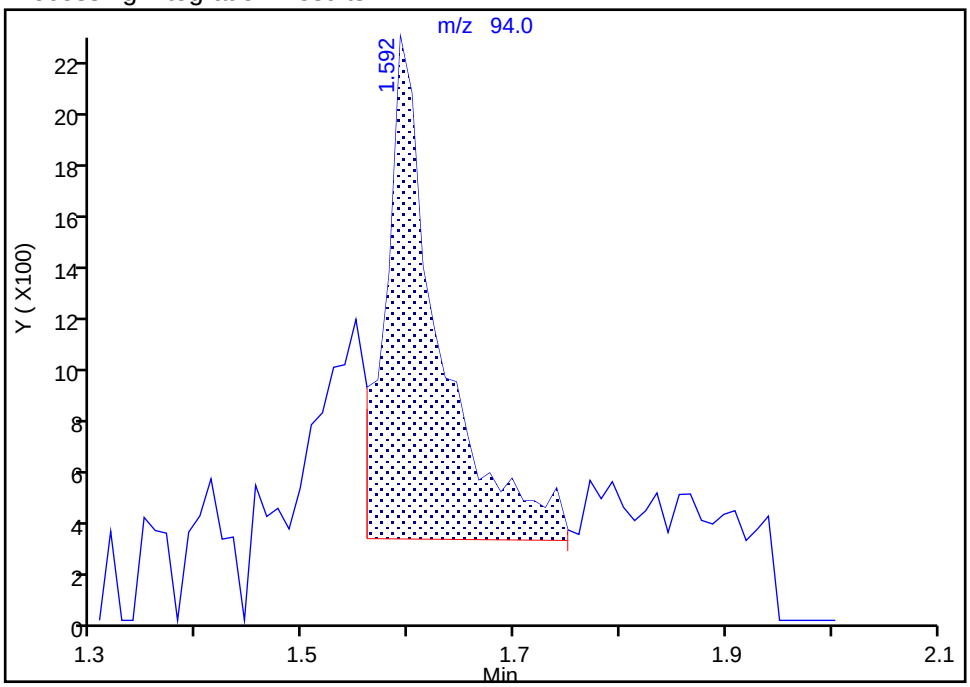
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

13 Bromomethane, CAS: 74-83-9

Signal: 1

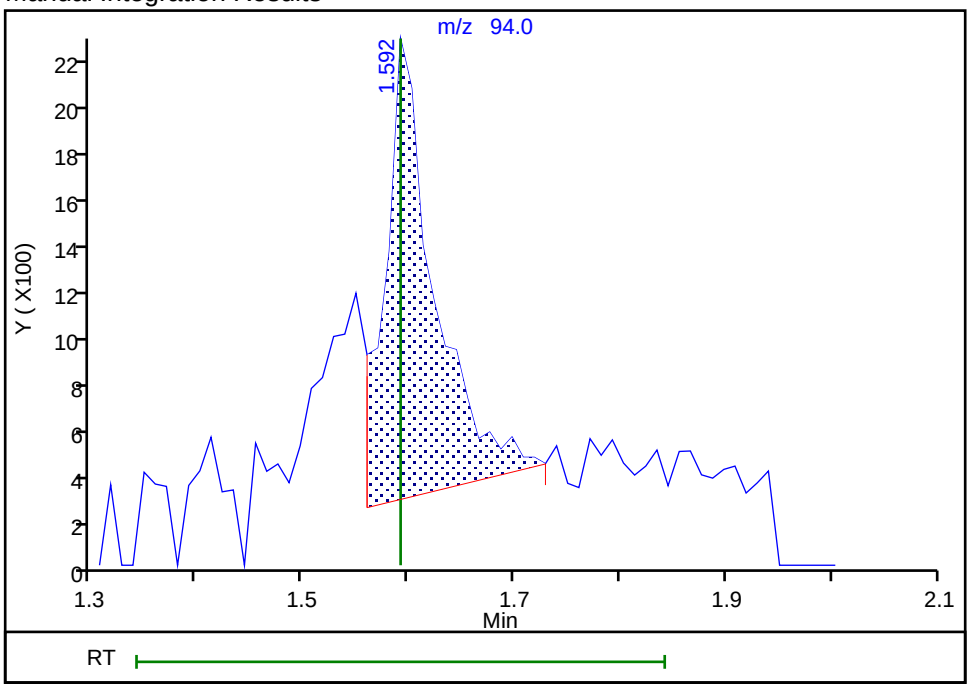
Processing Integration Results

RT: 1.59
Area: 6881
Amount: 1.708963
Amount Units: ug/l



Manual Integration Results

RT: 1.59
Area: 6442
Amount: 1.957356
Amount Units: ug/l



Reviewer: kitchingsj, 07-Dec-2018 08:57:28

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

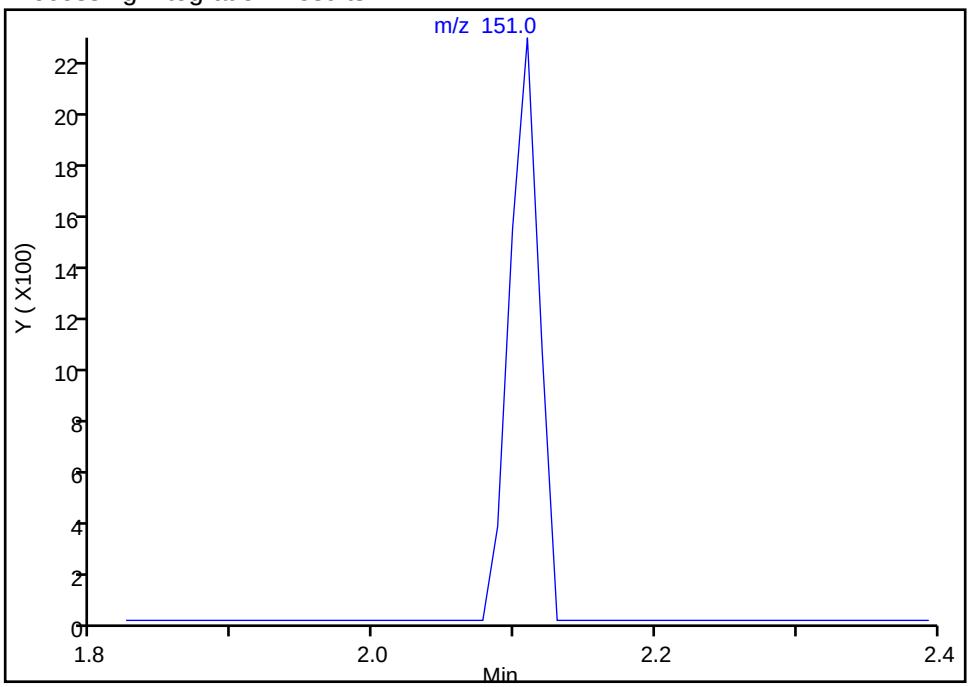
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

22 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 1

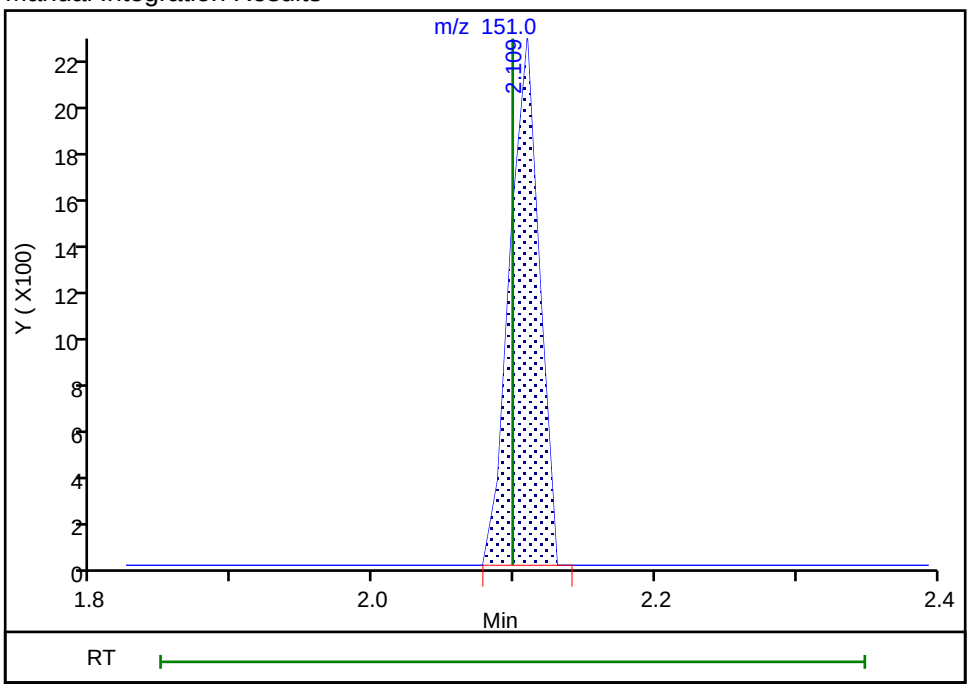
Not Detected
Expected RT: 2.10

Processing Integration Results



RT: 2.11
Area: 3243
Amount: 0.959377
Amount Units: ug/l

Manual Integration Results



Reviewer: soparaky, 07-Dec-2018 08:11:33
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

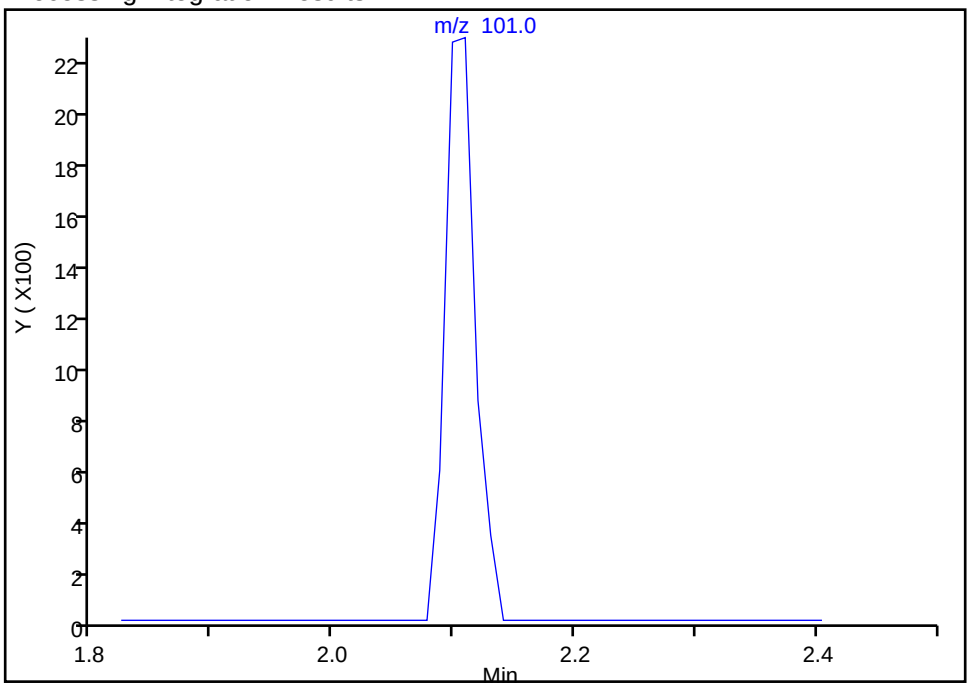
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

22 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 2

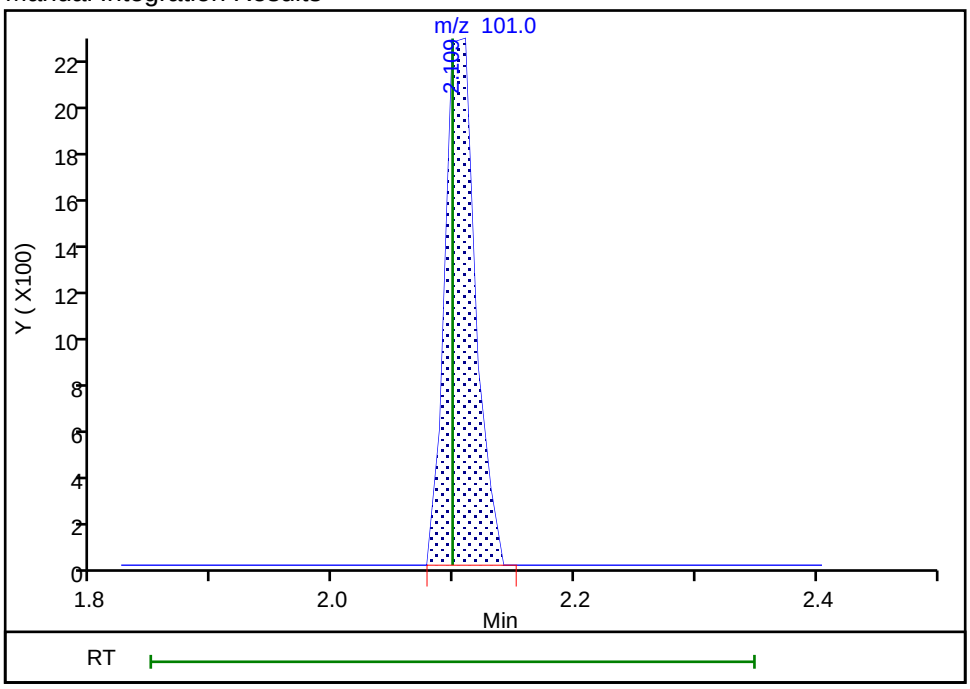
Processing Integration Results

Not Detected
Expected RT: 2.10



Manual Integration Results

RT: 2.11
Area: 3886
Amount: 0.959377
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:11:35
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

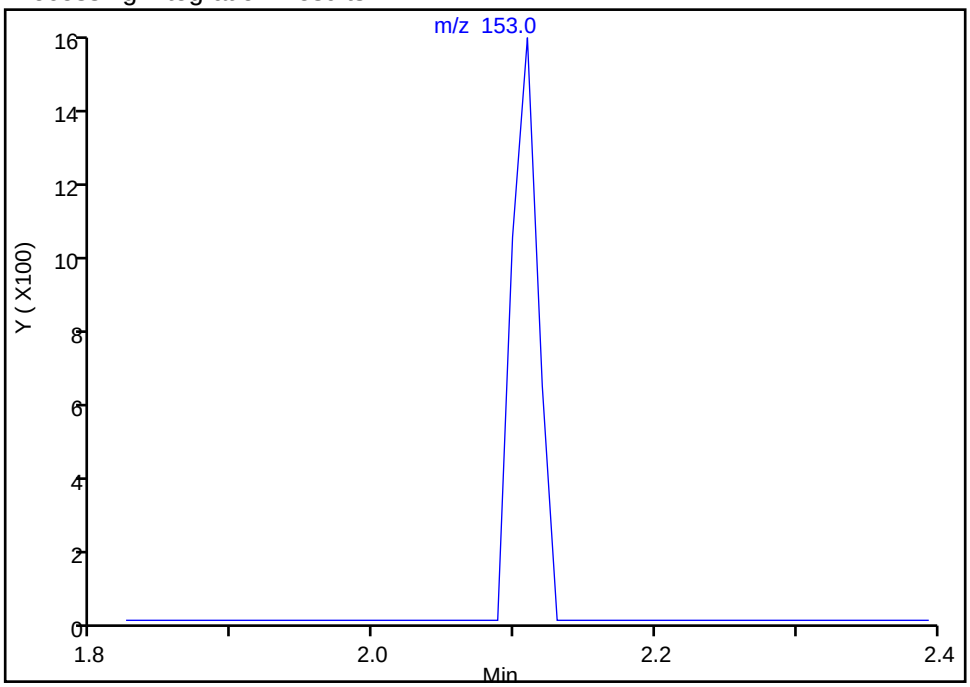
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

22 1,1,2-Trichloro-1,2,2-trifluoroethane, CAS: 76-13-1

Signal: 3

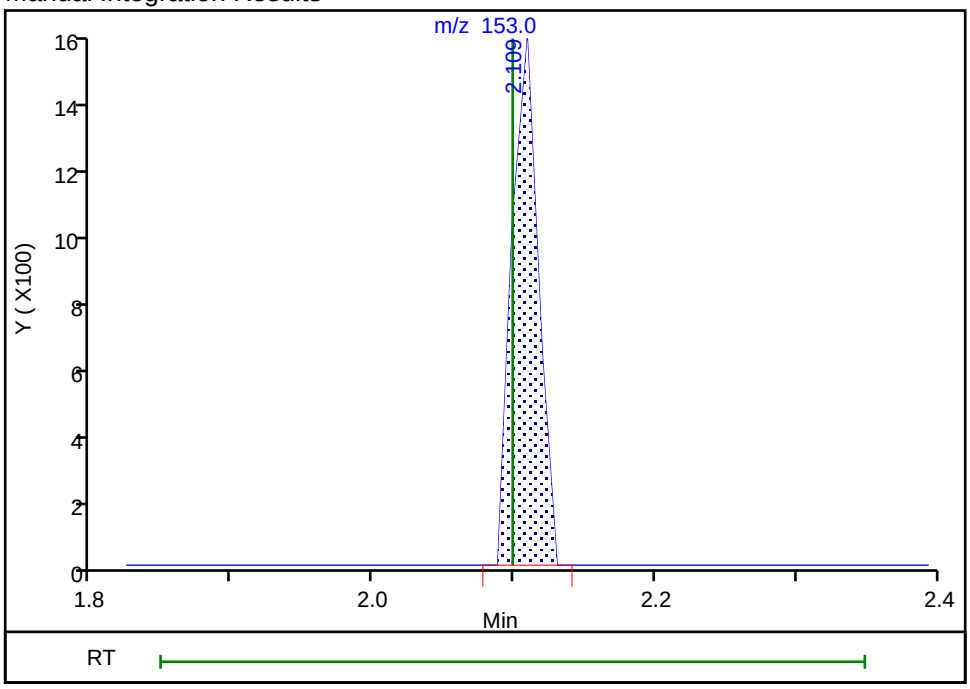
Processing Integration Results

Not Detected
Expected RT: 2.10



Manual Integration Results

RT: 2.11
Area: 1997
Amount: 0.959377
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:11:39
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

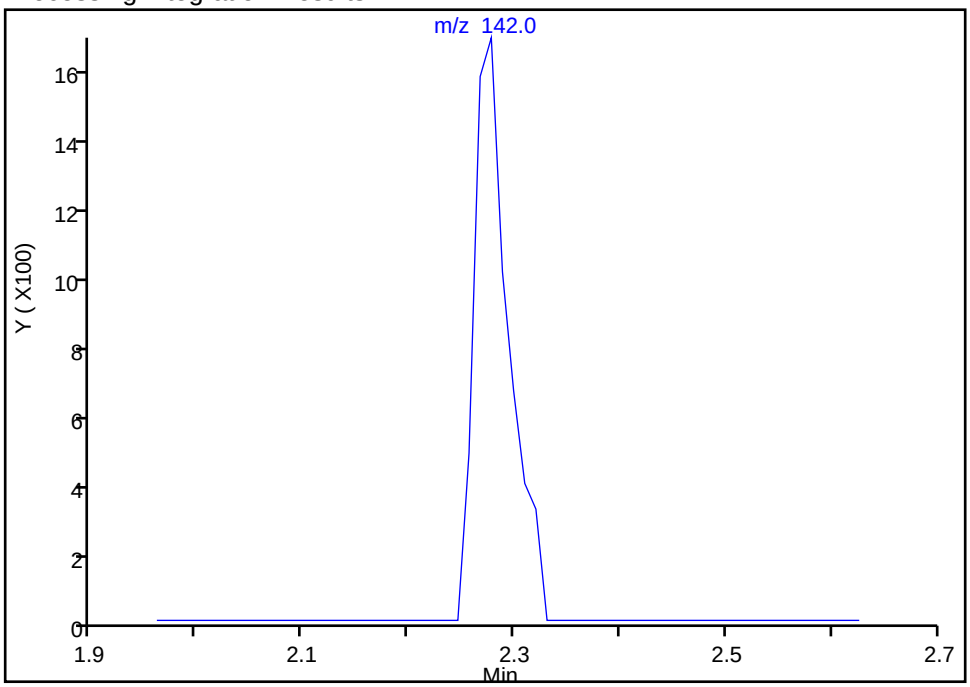
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

25 Iodomethane, CAS: 74-88-4

Signal: 1

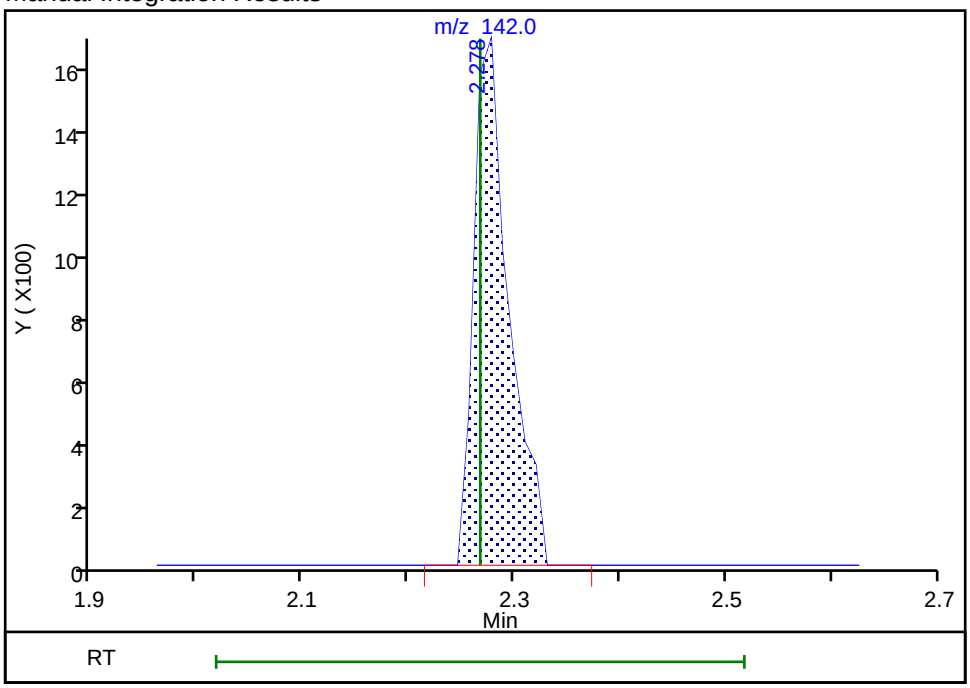
Processing Integration Results

Not Detected
Expected RT: 2.27



Manual Integration Results

RT: 2.28
Area: 3910
Amount: 1.229760
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:11:49
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

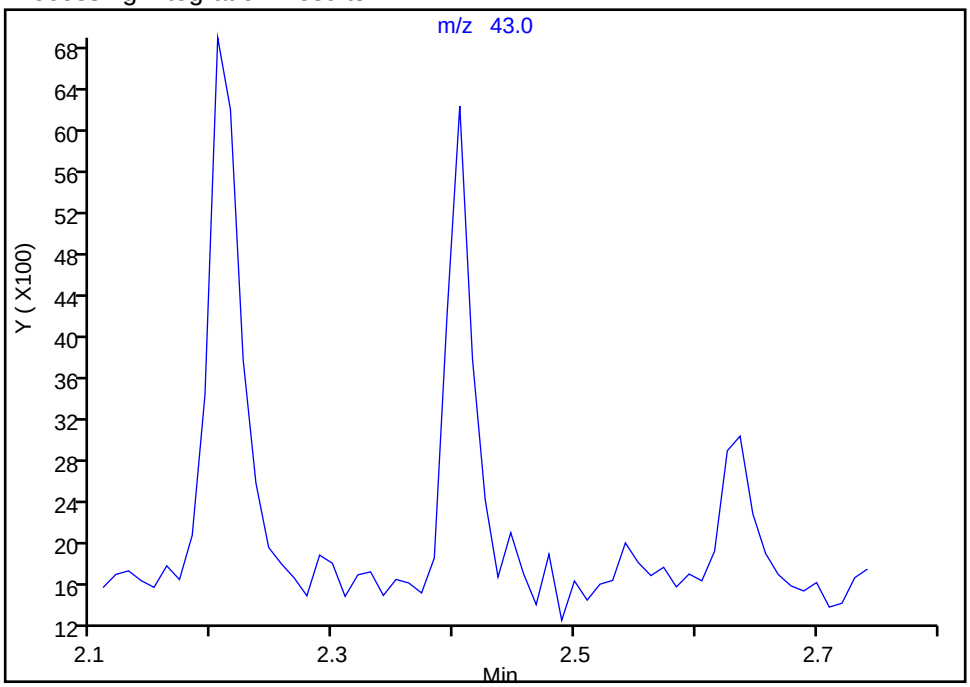
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

28 Methyl acetate, CAS: 79-20-9

Signal: 1

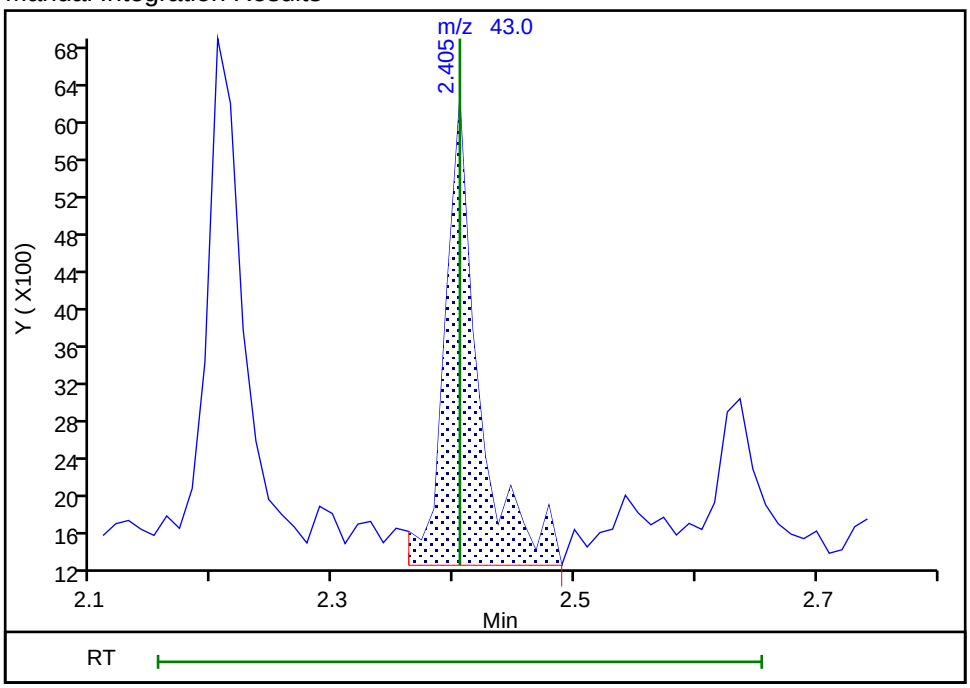
Not Detected
Expected RT: 2.40

Processing Integration Results



Manual Integration Results

RT: 2.40
Area: 9679
Amount: 2.514940
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:11:54
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

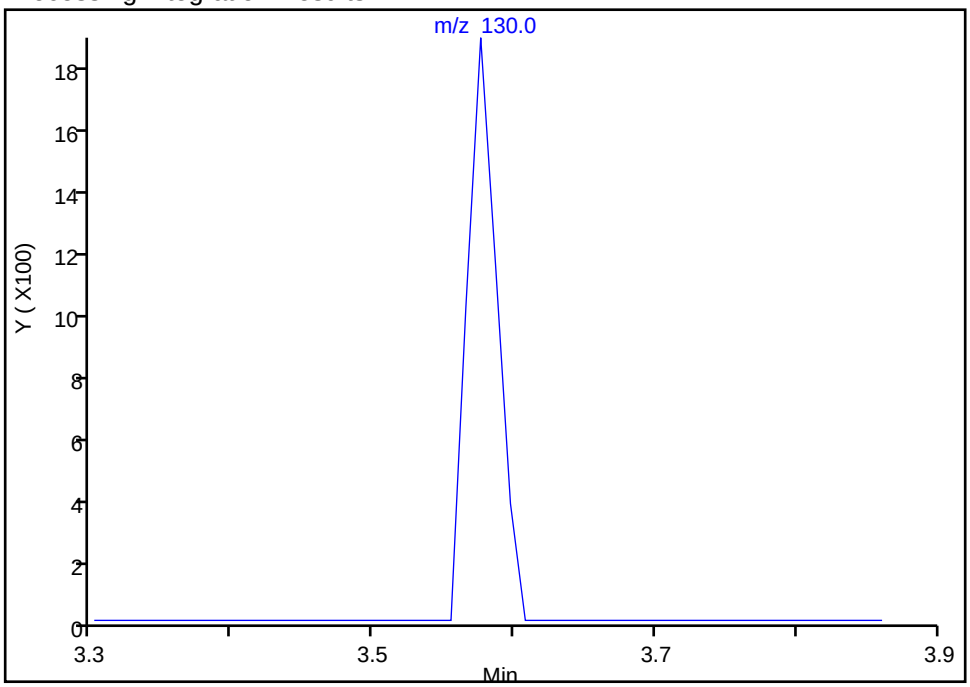
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

48 Chlorobromomethane, CAS: 74-97-5

Signal: 1

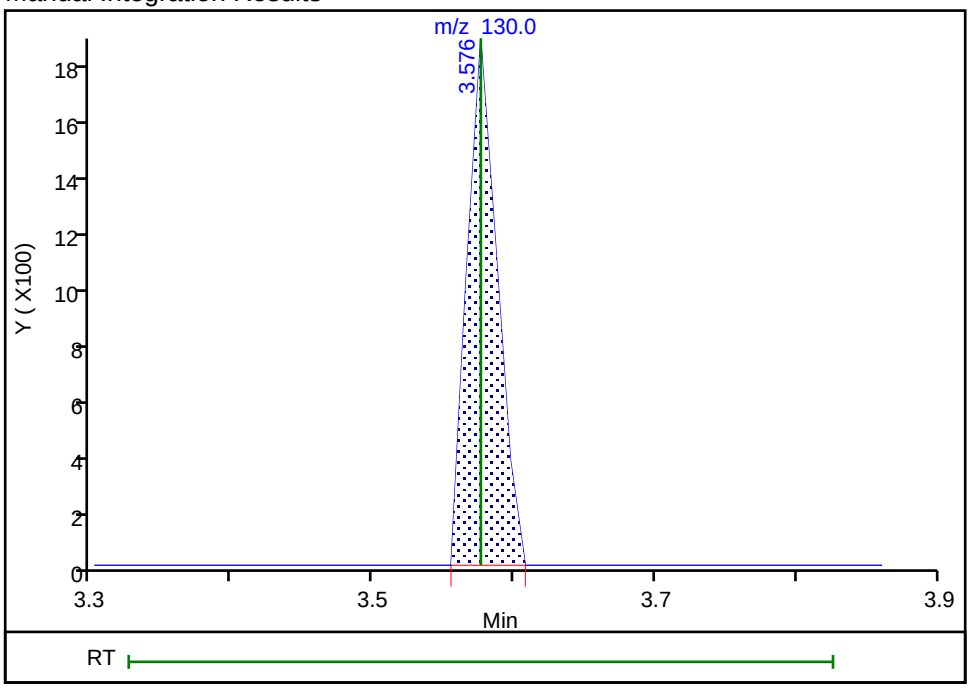
Processing Integration Results

RT: 3.58
Area: 0
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 2699
Amount: 0.952023
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:12:08

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

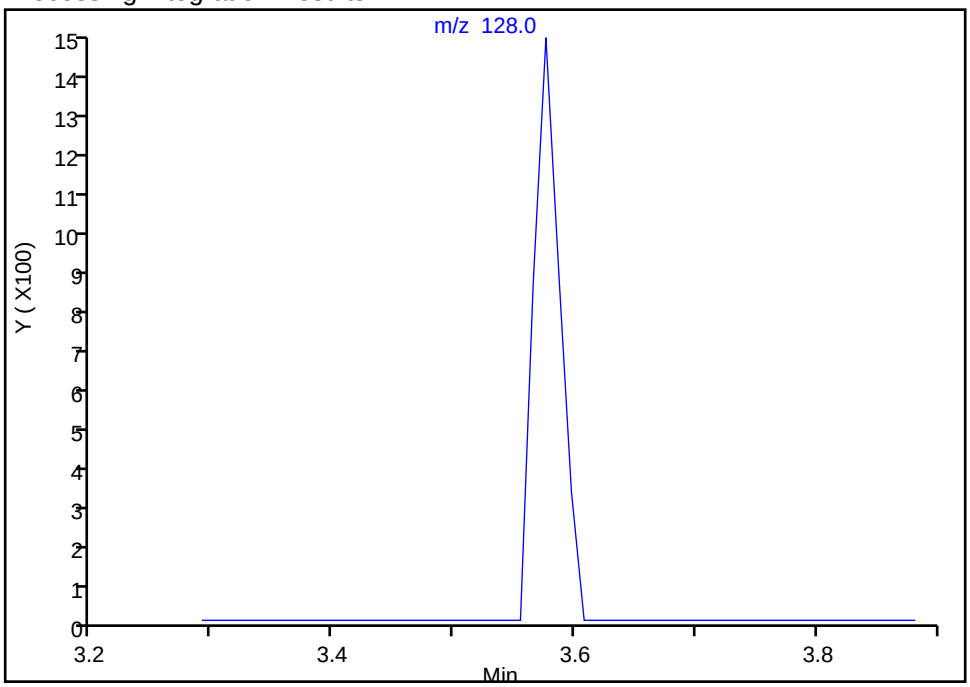
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

48 Chlorobromomethane, CAS: 74-97-5

Signal: 3

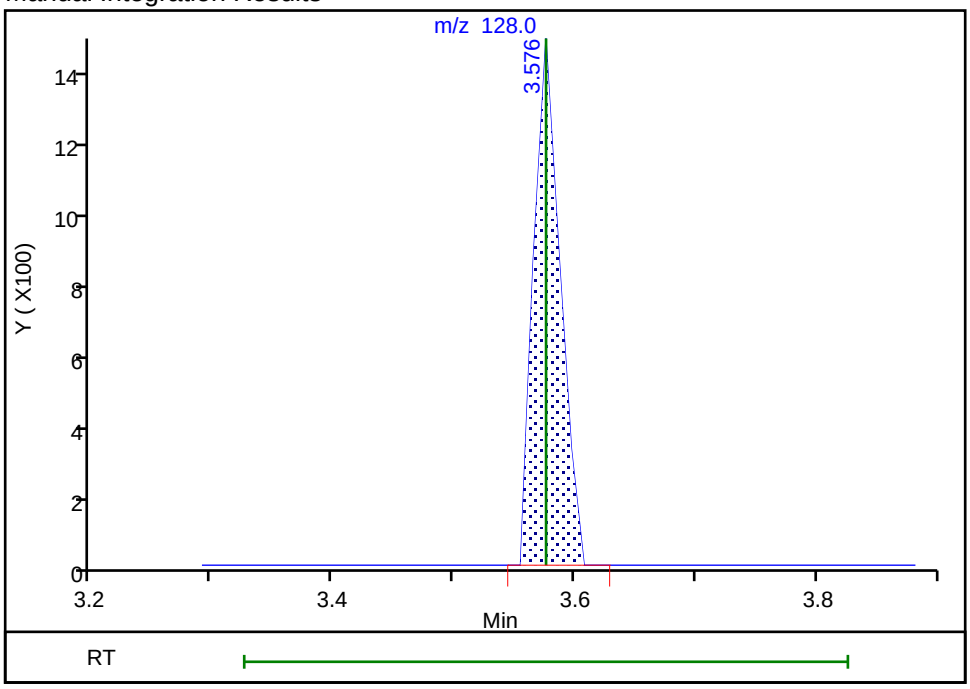
Processing Integration Results

RT: 3.58
Area: 0
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 2241
Amount: 0.952023
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:12:13
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

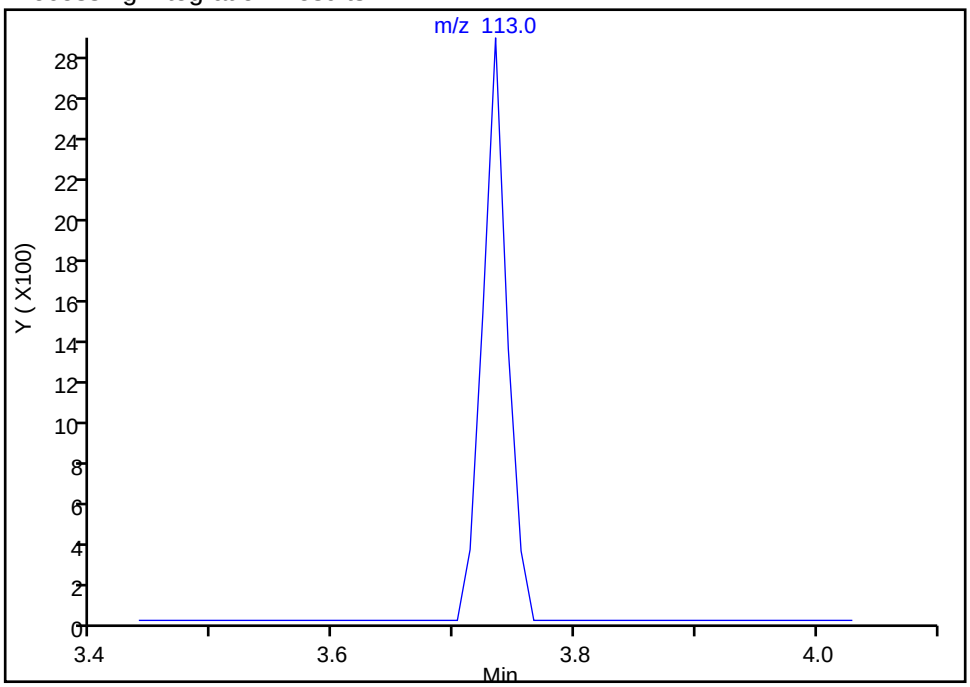
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

$ 4 Dibromofluoromethane (Surr), CAS: 1868-53-7

Signal: 1

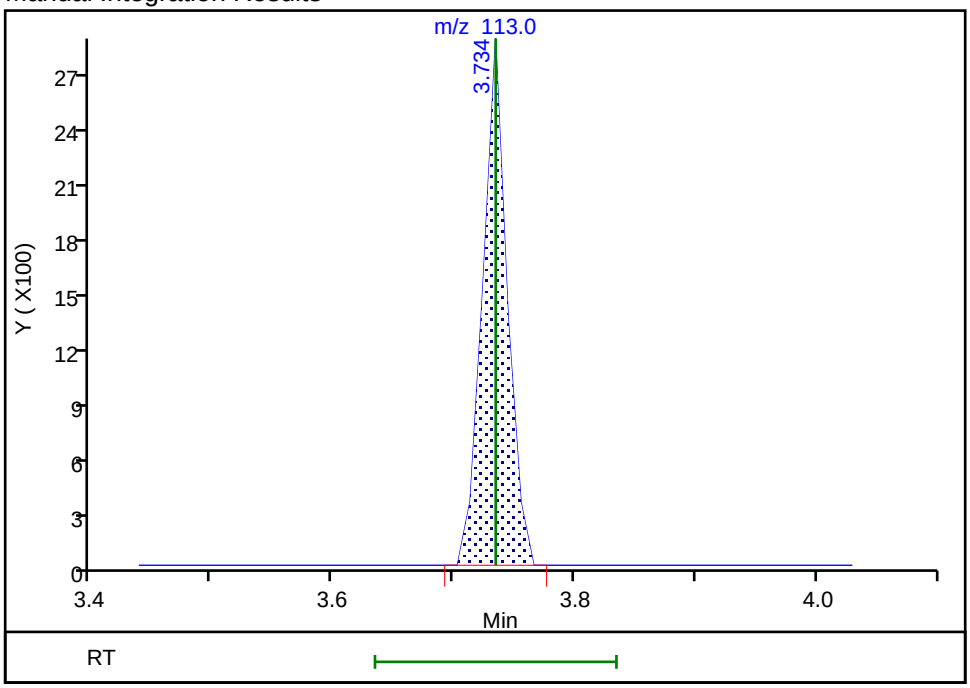
Processing Integration Results

Not Detected
Expected RT: 3.73



Manual Integration Results

RT: 3.73
Area: 4057
Amount: 1.080685
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:11:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

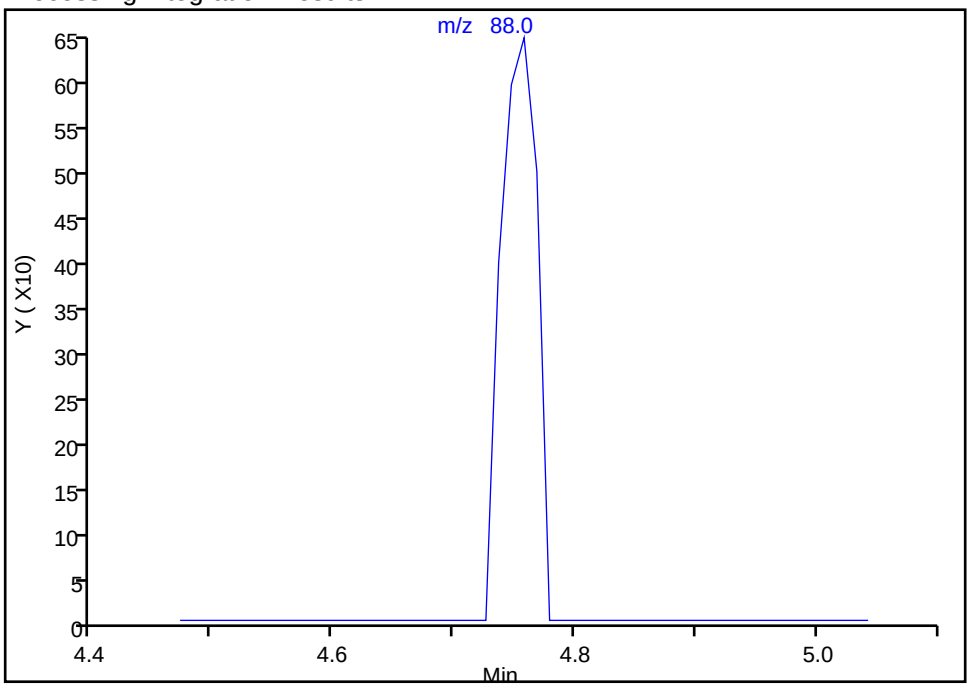
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

68 1,4-Dioxane, CAS: 123-91-1

Signal: 1

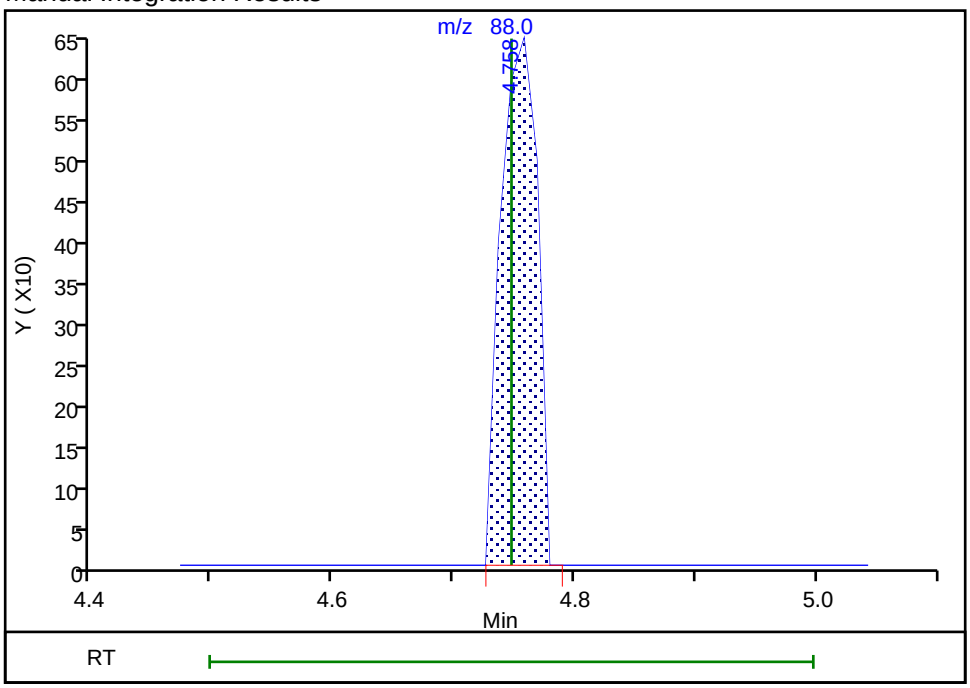
Not Detected
Expected RT: 4.75

Processing Integration Results



RT: 4.76
Area: 1349
Amount: 19.717199
Amount Units: ug/l

Manual Integration Results



Reviewer: soparaky, 07-Dec-2018 08:12:24
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

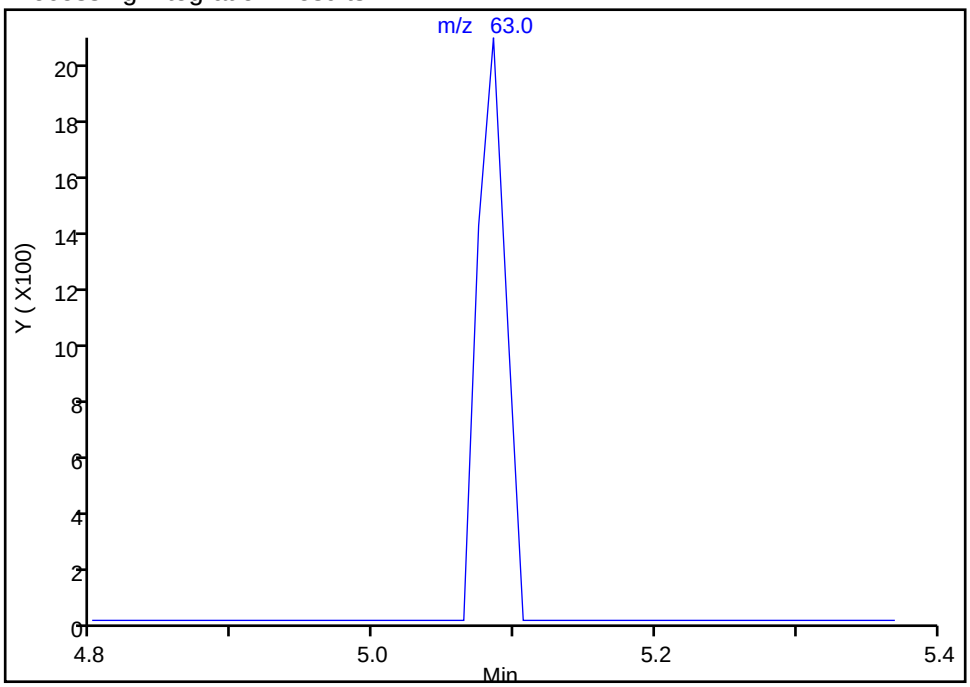
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

71 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

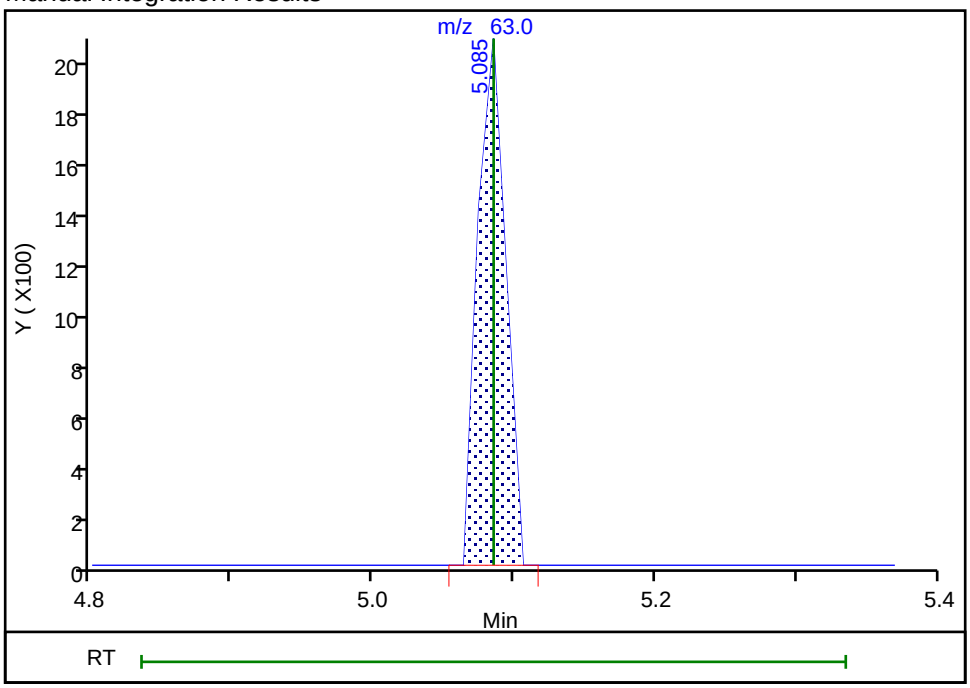
Processing Integration Results

Not Detected
Expected RT: 5.09



Manual Integration Results

RT: 5.09
Area: 2844
Amount: 0.970622
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:12:30
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

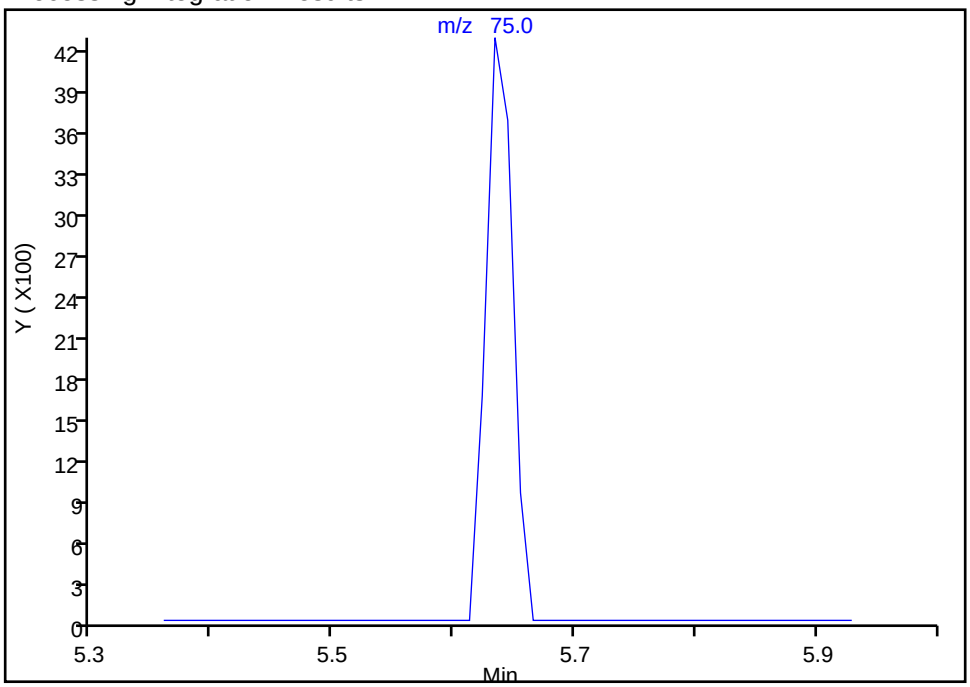
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

75 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

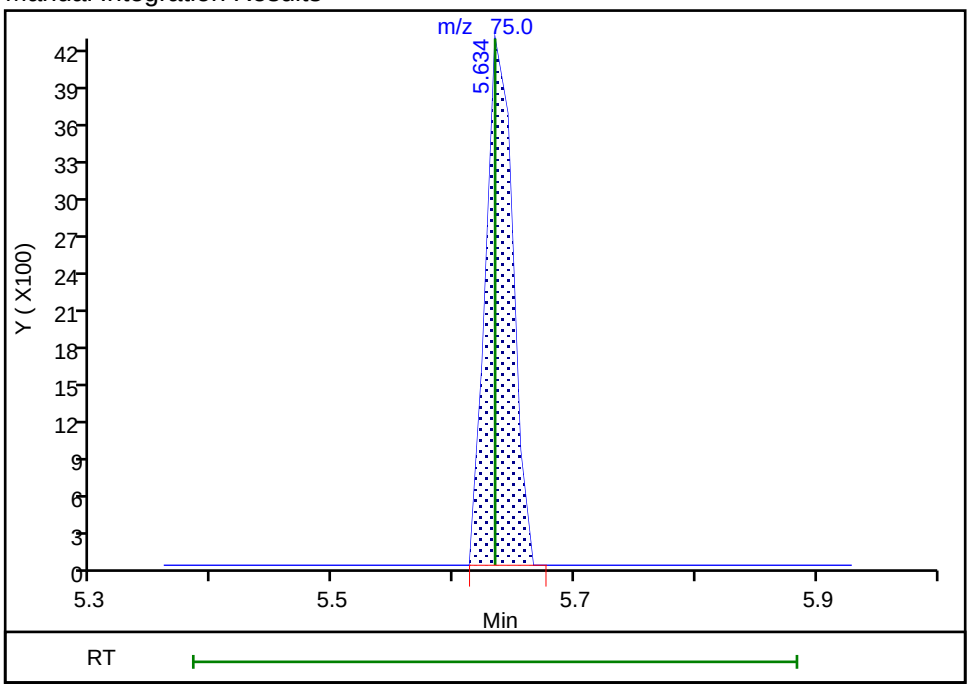
Processing Integration Results

Not Detected
Expected RT: 5.63



Manual Integration Results

RT: 5.63
Area: 6675
Amount: 1.063359
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:12:34
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

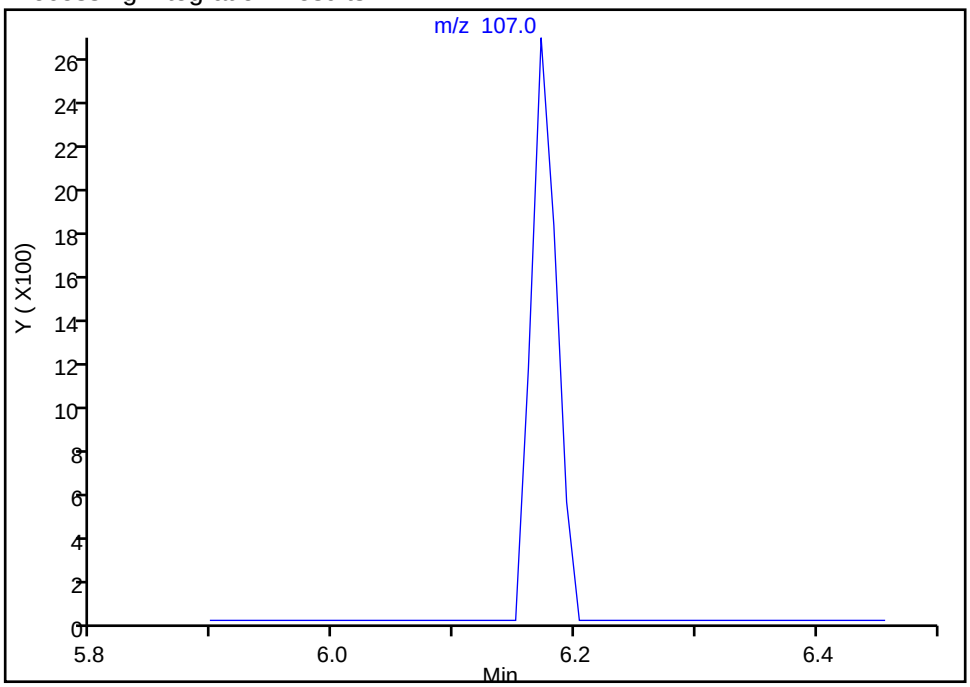
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

83 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

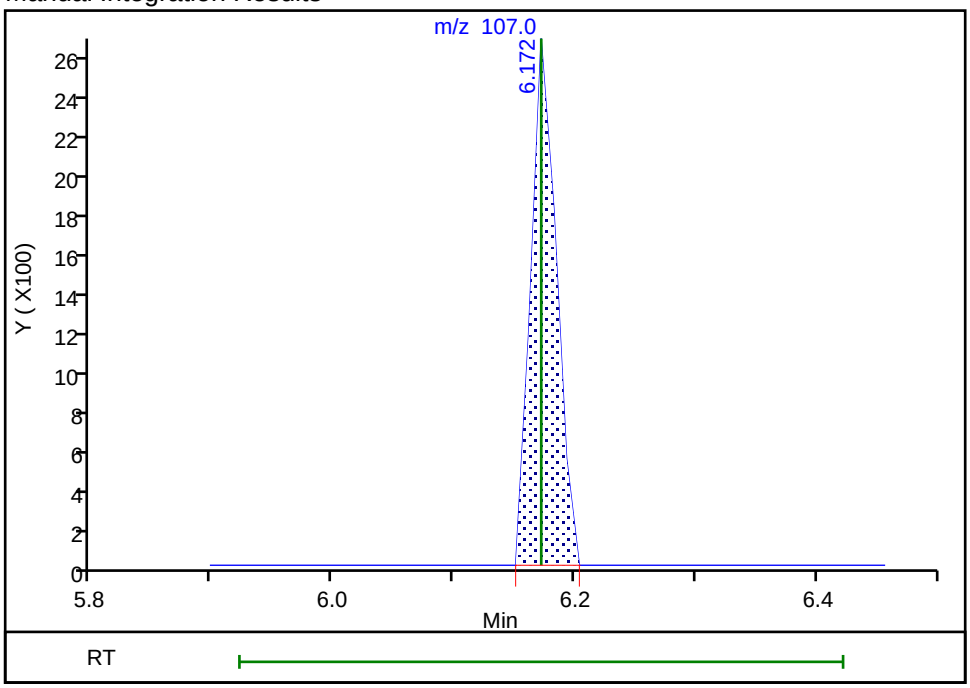
Processing Integration Results

RT: 6.18
Area: 0
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 6.17
Area: 3952
Amount: 1.011327
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:12:47

Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

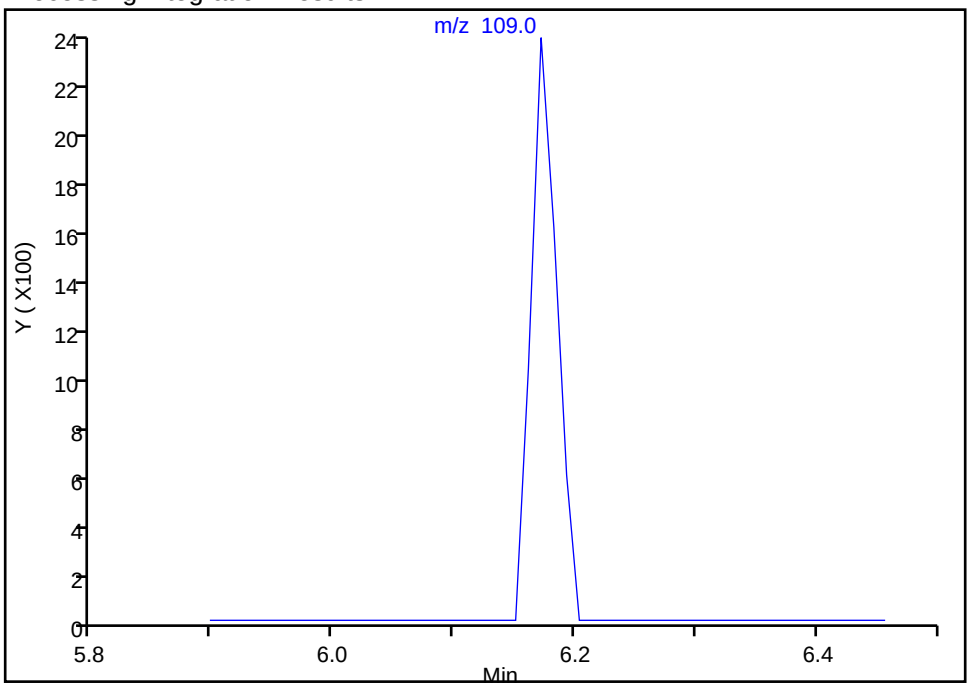
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

83 Ethylene Dibromide, CAS: 106-93-4

Signal: 2

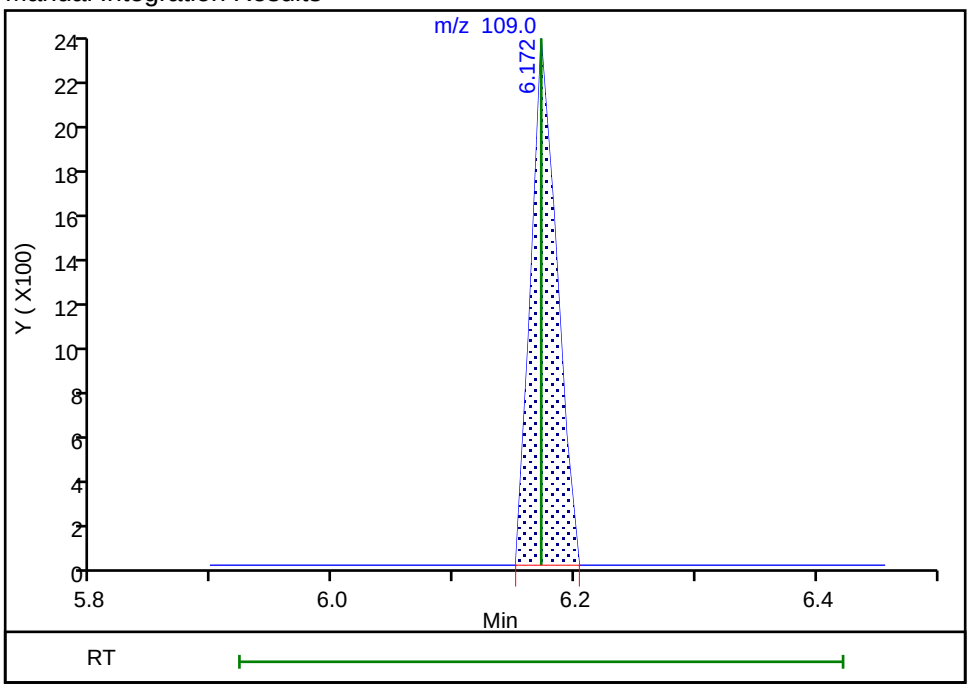
Processing Integration Results

RT: 6.18
Area: 0
Amount: 0
Amount Units: ug/l



Manual Integration Results

RT: 6.17
Area: 3564
Amount: 1.011327
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:12:51
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Savannah

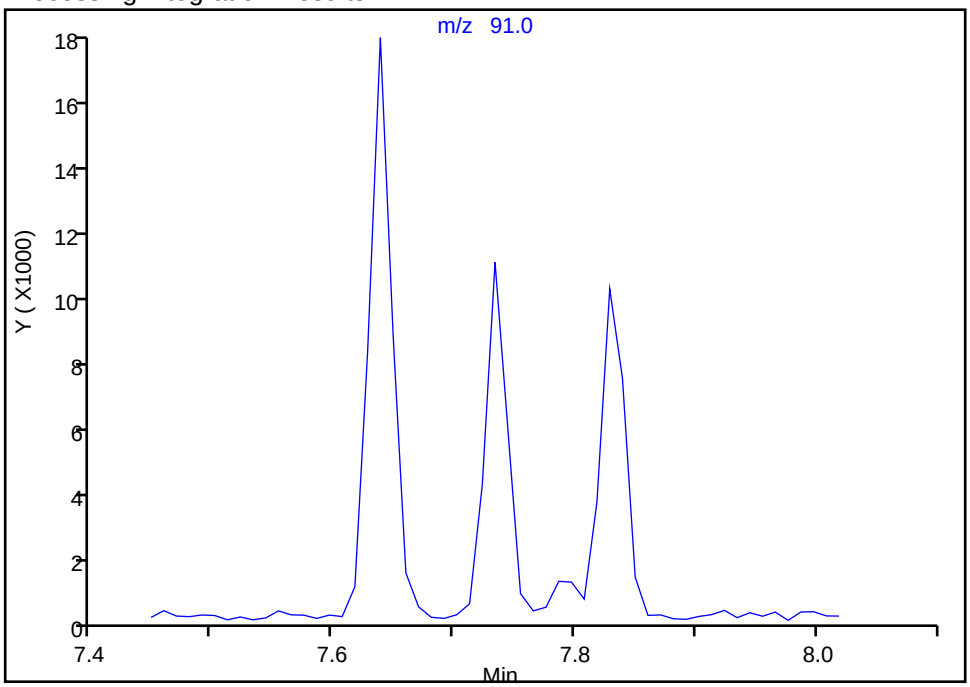
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0607.D				
Injection Date:	06-Dec-2018 16:21:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

99 2-Chlorotoluene, CAS: 95-49-8

Signal: 1

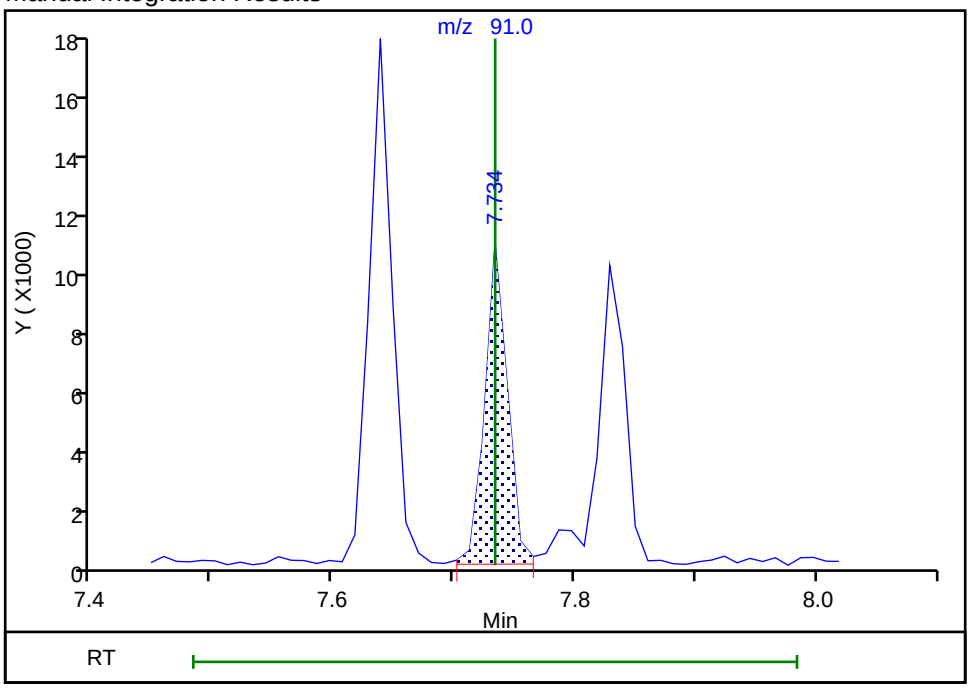
Not Detected
Expected RT: 7.73

Processing Integration Results



RT: 7.73
Area: 13994
Amount: 1.030382
Amount Units: ug/l

Manual Integration Results



Reviewer: soparaky, 07-Dec-2018 08:13:09
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0608.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Dec-2018 16:46:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-008
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:25:51 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 08:10:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	757825	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	88	304171	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	95	311202	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	75	7635	2.00	2.01	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	51	10579	2.00	2.17	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	89	32712	2.00	2.17	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	89	13179	2.00	2.31	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	84	13024	2.00	2.15	
10 Vinyl chloride	62	1.392	1.392	0.000	75	10288	2.00	2.09	a
11 Butadiene	54	1.402	1.402	0.000	92	9760	2.00	2.25	
12 Chloromethane	50	1.402	1.402	0.000	55	23998	2.00	3.11	
13 Bromomethane	94	1.592	1.592	0.000	53	12306	2.00	3.69	M
14 Chloroethane	64	1.645	1.645	0.000	69	6910	2.00	2.12	
15 Dichlorofluoromethane	67	1.772	1.771	0.001	74	25863	2.00	2.49	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	90	13535	2.00	2.10	
19 Ethyl ether	59	1.961	1.961	0.000	88	7204	2.00	2.24	
22 1,1,2-Trichloro-1,2,2-trif	151	2.109	2.099	0.010	32	7323	2.00	2.14	
20 Acrolein	56	2.109	2.109	0.000	97	42111	40.0	43.9	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	81	10469	2.00	1.95	
23 Acetone	58	2.204	2.204	0.000	81	5974	10.0	11.9	
25 Iodomethane	142	2.278	2.267	0.011	75	8791	2.00	2.00	a
26 Carbon disulfide	76	2.299	2.299	0.000	98	25877	2.00	2.17	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	78	5728	2.00	2.05	
28 Methyl acetate	43	2.405	2.405	0.000	92	18314	4.00	4.69	a
30 Methylene Chloride	84	2.500	2.500	0.000	89	10946	2.00	2.04	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	94	11586	20.0	21.1	
34 Methyl tert-butyl ether	73	2.637	2.626	0.011	94	26644	2.00	2.15	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	78	9324	2.00	1.96	
32 Acrylonitrile	53	2.711	2.721	-0.010	94	41227	20.0	21.3	
35 Hexane	57	2.785	2.785	0.000	87	13337	2.00	2.09	
36 Vinyl acetate	43	2.985	2.985	0.000	99	40840	4.00	4.27	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 1,1-Dichloroethane	63	2.985	2.985	0.000	44	15401	2.00	2.15	
42 2,2-Dichloropropane	77	3.376	3.376	0.000	76	14635	2.00	2.20	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	86	13784	2.00	2.10	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	94	6280	10.0	10.4	
47 Tetrahydrofuran	42	3.576	3.576	0.000	87	8650	4.00	4.33	
48 Chlorobromomethane	130	3.576	3.576	0.000	80	6062	2.00	2.11	
49 Chloroform	83	3.608	3.608	0.000	83	14875	2.00	2.09	
51 Cyclohexane	84	3.713	3.713	0.000	90	14162	2.00	2.10	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	85	12680	2.00	1.85	
52 Carbon tetrachloride	117	3.819	3.819	0.000	82	12021	2.00	2.12	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	80	11337	2.00	2.05	
54 Isobutyl alcohol	43	3.914	3.914	0.000	86	13700	50.0	57.1	
55 Benzene	78	3.988	3.988	0.000	95	35710	2.00	2.17	
57 1,2-Dichloroethane	62	4.061	4.051	0.010	78	11875	2.00	2.08	
60 n-Heptane	43	4.104	4.104	0.000	89	15446	2.00	2.18	
62 Trichloroethene	132	4.463	4.462	0.000	82	9031	2.00	2.07	
64 Methylcyclohexane	83	4.547	4.547	0.000	92	16554	2.00	2.03	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	75	8800	2.00	2.17	
68 1,4-Dioxane	88	4.758	4.747	0.011	14	2638	40.0	38.0	
67 Dibromomethane	93	4.758	4.758	0.000	85	5735	2.00	2.17	
69 Dichlorobromomethane	83	4.853	4.853	0.000	88	11433	2.00	2.04	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	82	5937	2.00	2.00	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	80	13720	2.00	2.08	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	95	50191	10.0	10.4	
74 Toluene	92	5.423	5.423	0.000	88	21451	2.00	2.04	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	55	13590	2.00	2.13	a
76 Ethyl methacrylate	69	5.655	5.655	0.000	66	11786	2.00	2.11	
77 1,1,2-Trichloroethane	83	5.782	5.782	0.000	81	6448	2.00	2.03	
78 Tetrachloroethene	164	5.824	5.824	0.000	69	8307	2.00	2.04	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	84	12853	2.00	2.08	
80 2-Hexanone	43	5.950	5.950	0.000	94	37449	10.0	10.7	
82 Chlorodibromomethane	129	6.067	6.067	0.000	76	9045	2.00	2.05	
83 Ethylene Dibromide	107	6.172	6.172	0.000	72	8382	2.00	2.12	a
85 Chlorobenzene	112	6.541	6.541	0.000	89	24571	2.00	2.14	
87 Ethylbenzene	91	6.594	6.594	0.000	95	43321	2.00	2.15	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	41	9047	2.00	2.15	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	33649	2.00	2.15	
89 o-Xylene	91	7.016	7.016	0.000	90	33413	2.00	2.09	
90 Styrene	104	7.037	7.037	0.000	91	26617	2.00	2.06	
91 Bromoform	173	7.217	7.217	0.000	77	7182	2.00	2.12	
92 Isopropylbenzene	105	7.301	7.301	0.000	92	43469	2.00	2.12	
94 Bromobenzene	156	7.586	7.586	0.000	93	11106	2.00	2.06	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	81	10831	2.00	2.15	
98 N-Propylbenzene	91	7.639	7.639	0.000	90	52368	2.00	2.14	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	68	4576	2.00	1.95	
97 1,2,3-Trichloropropane	110	7.649	7.660	-0.011	56	3497	2.00	2.13	
99 2-Chlorotoluene	91	7.734	7.734	0.000	89	29197	2.00	2.11	
101 1,3,5-Trimethylbenzene	105	7.787	7.797	-0.010	78	35869	2.00	2.06	
102 4-Chlorotoluene	91	7.829	7.829	0.000	86	30419	2.00	2.11	
103 tert-Butylbenzene	119	8.050	8.050	0.000	89	33410	2.00	2.11	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	67	36804	2.00	2.06	
106 sec-Butylbenzene	105	8.230	8.230	0.000	96	48461	2.00	2.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 4-Isopropyltoluene	119	8.357	8.357	0.001	89	41774	2.00	2.10	
107 1,3-Dichlorobenzene	146	8.357	8.357	0.001	67	21433	2.00	2.14	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	60	21238	2.00	2.13	
112 n-Butylbenzene	91	8.694	8.694	0.000	96	39651	2.00	2.18	
113 1,2-Dichlorobenzene	146	8.758	8.758	0.000	91	19749	2.00	2.14	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	54	3351	2.00	2.32	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	74	15651	2.00	2.13	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	73	8969	2.00	2.21	
118 Naphthalene	128	10.309	10.309	0.000	95	38239	2.00	2.17	
119 1,2,3-Trichlorobenzene	180	10.509	10.509	0.000	81	14741	2.00	2.21	
S 122 1,3-Dichloropropene, Total	1				0		4.00	4.22	
S 124 Xylenes, Total	1				0		4.00	4.25	
S 123 1,2-Dichloroethene, Total	1				0		4.00	4.06	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

DOD ISTD_00166	Amount Added:	5.00	Units: uL
VM_MMIX_01939	Amount Added:	0.20	Units: uL
VM_Acrolein_00191	Amount Added:	0.20	Units: uL

Report Date: 07-Dec-2018 09:25:52 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0608.D

Injection Date: 06-Dec-2018 16:46:30 Instrument ID: CMSP2 Operator ID: ea

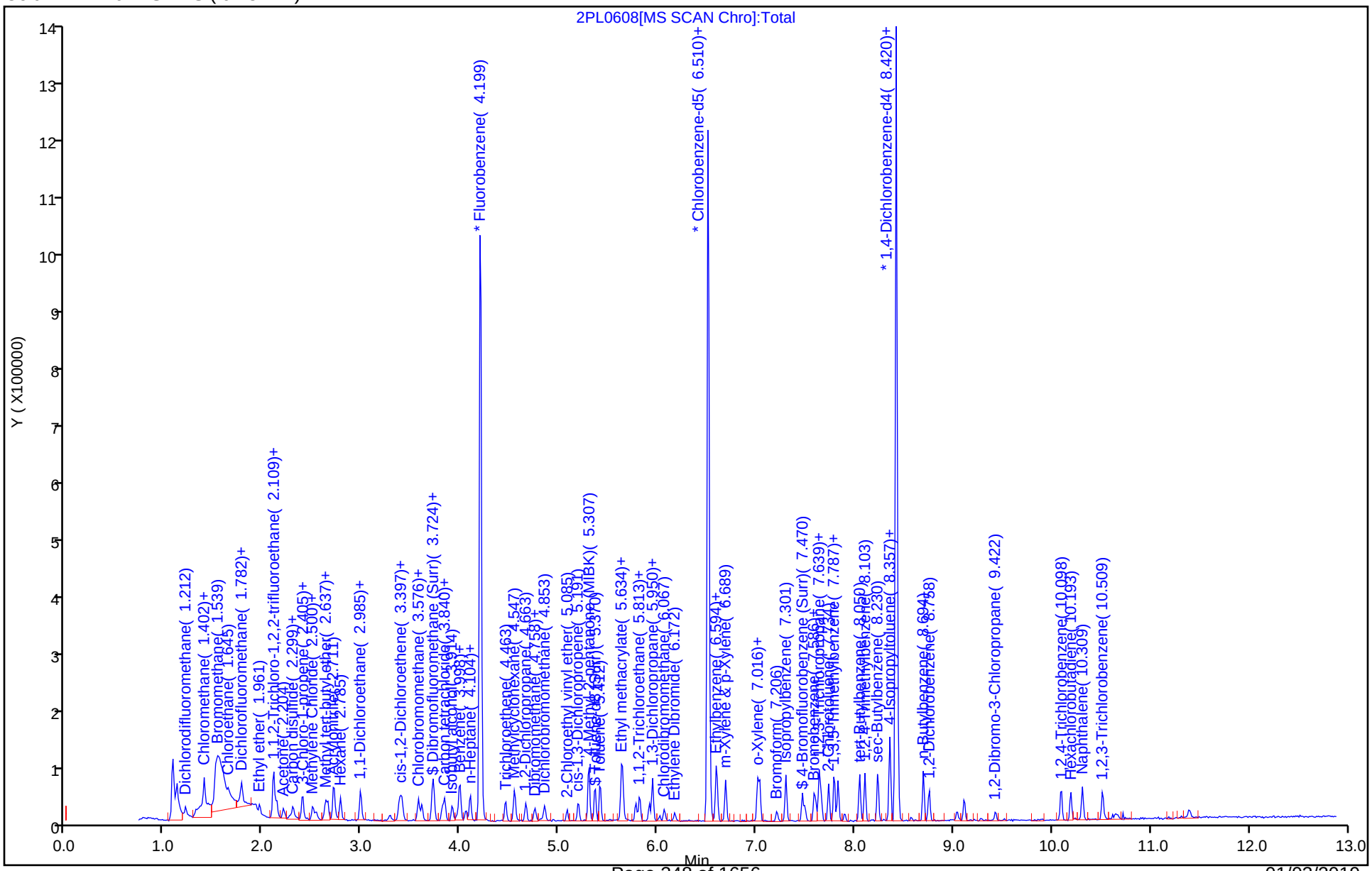
Lims ID: ic Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

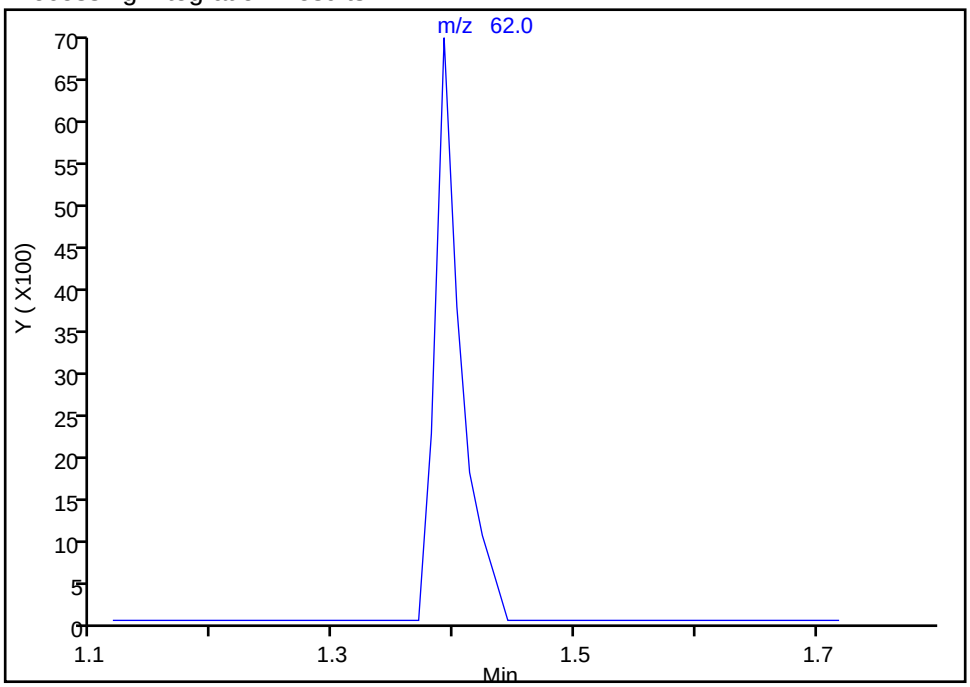
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0608.D				
Injection Date:	06-Dec-2018 16:46:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

10 Vinyl chloride, CAS: 75-01-4

Signal: 1

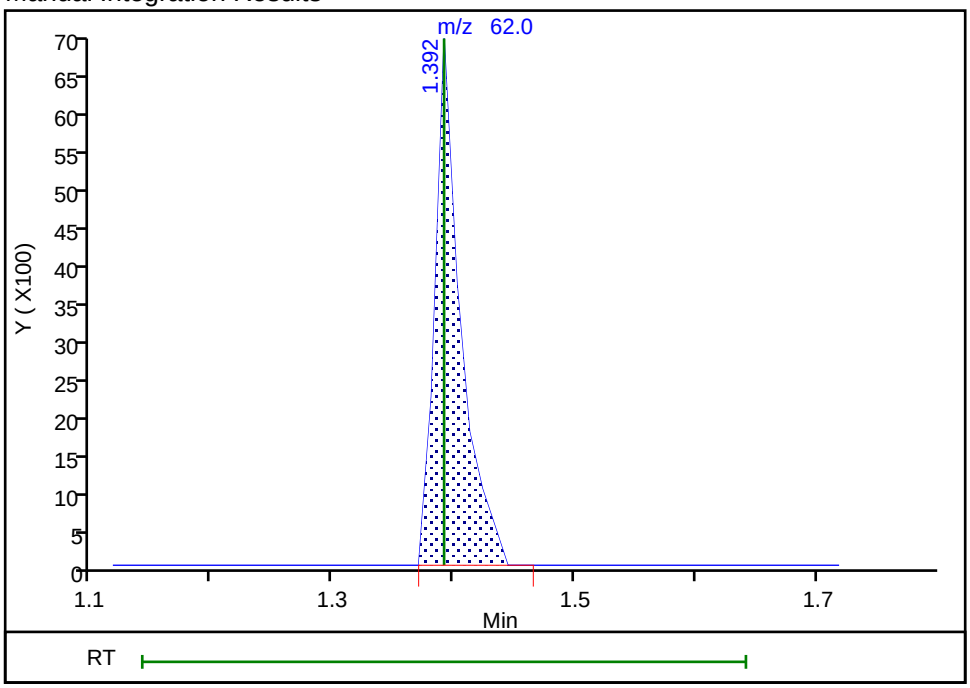
Not Detected
Expected RT: 1.39

Processing Integration Results



Manual Integration Results

RT: 1.39
Area: 10288
Amount: 2.093107
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:09:38
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

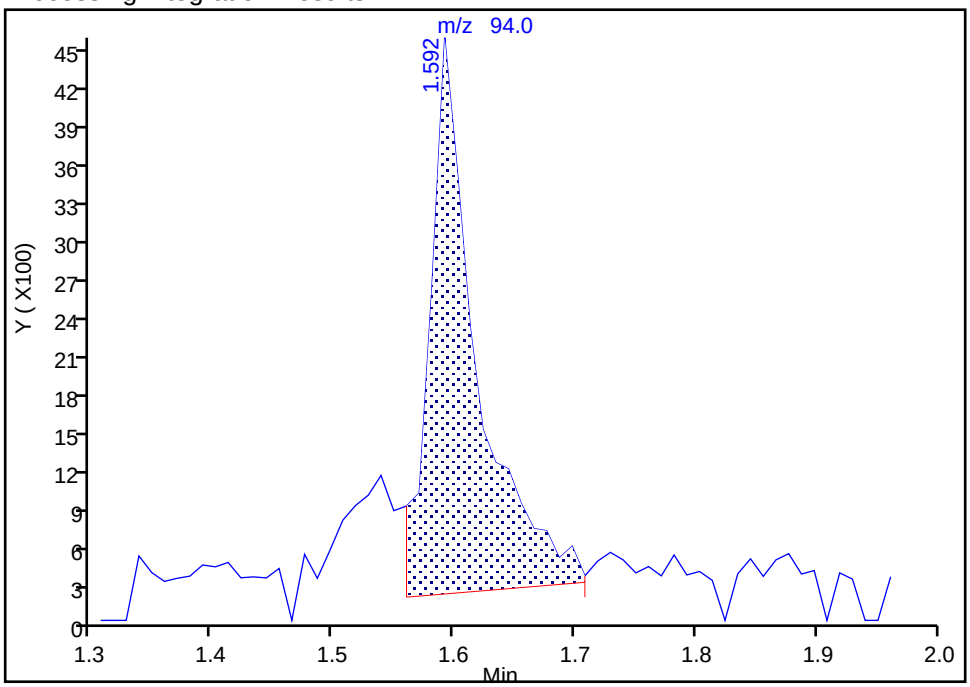
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0608.D				
Injection Date:	06-Dec-2018 16:46:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

13 Bromomethane, CAS: 74-83-9

Signal: 1

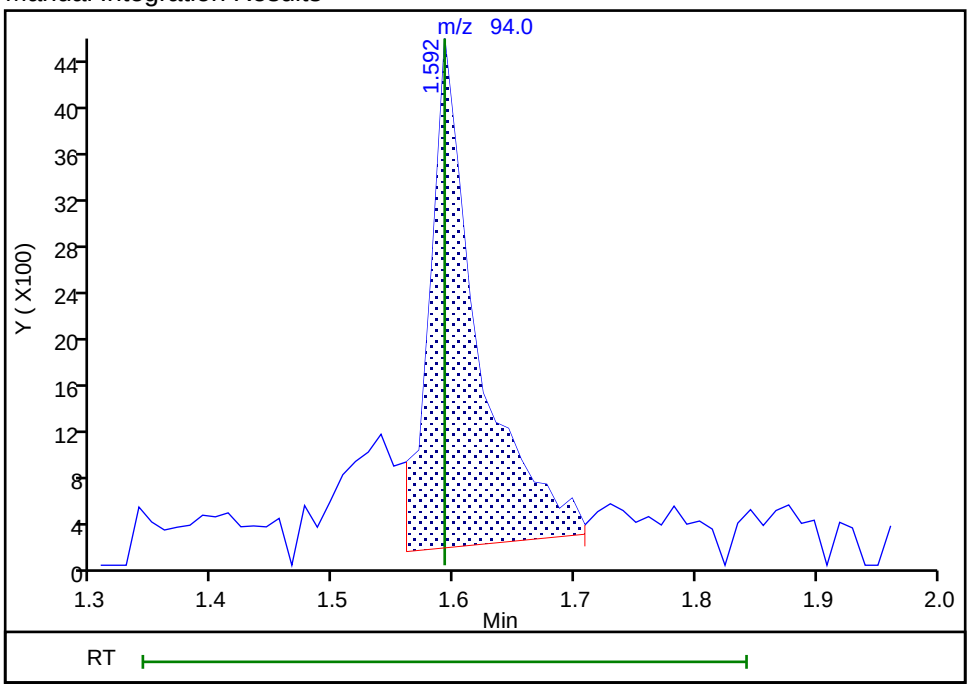
Processing Integration Results

RT: 1.59
Area: 11869
Amount: 2.983559
Amount Units: ug/l



Manual Integration Results

RT: 1.59
Area: 12306
Amount: 3.687309
Amount Units: ug/l



Reviewer: kitchingsj, 07-Dec-2018 08:57:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Savannah

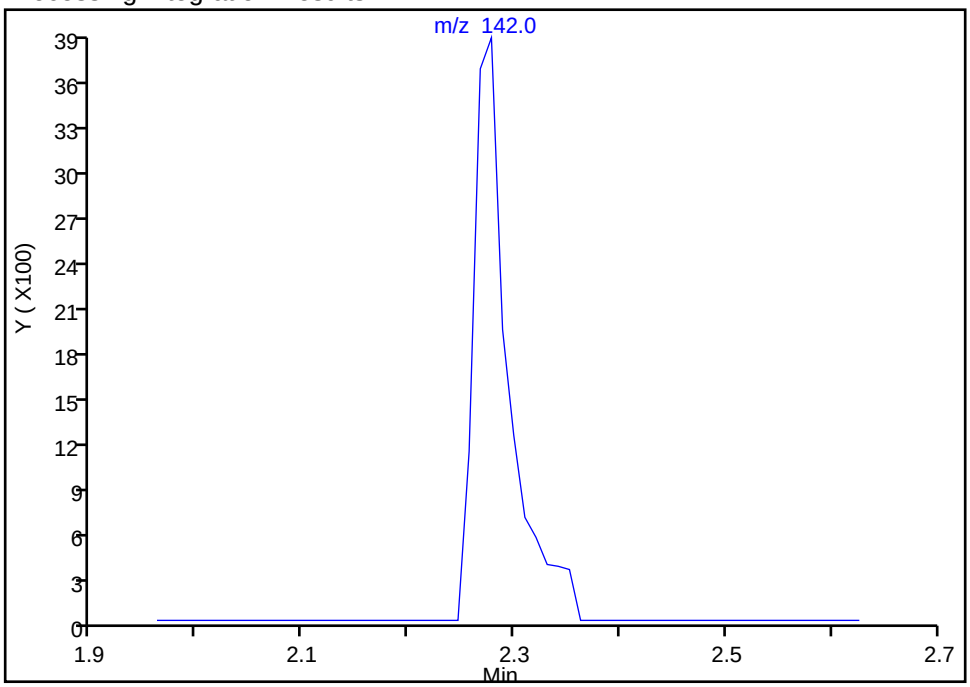
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0608.D				
Injection Date:	06-Dec-2018 16:46:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

25 Iodomethane, CAS: 74-88-4

Signal: 1

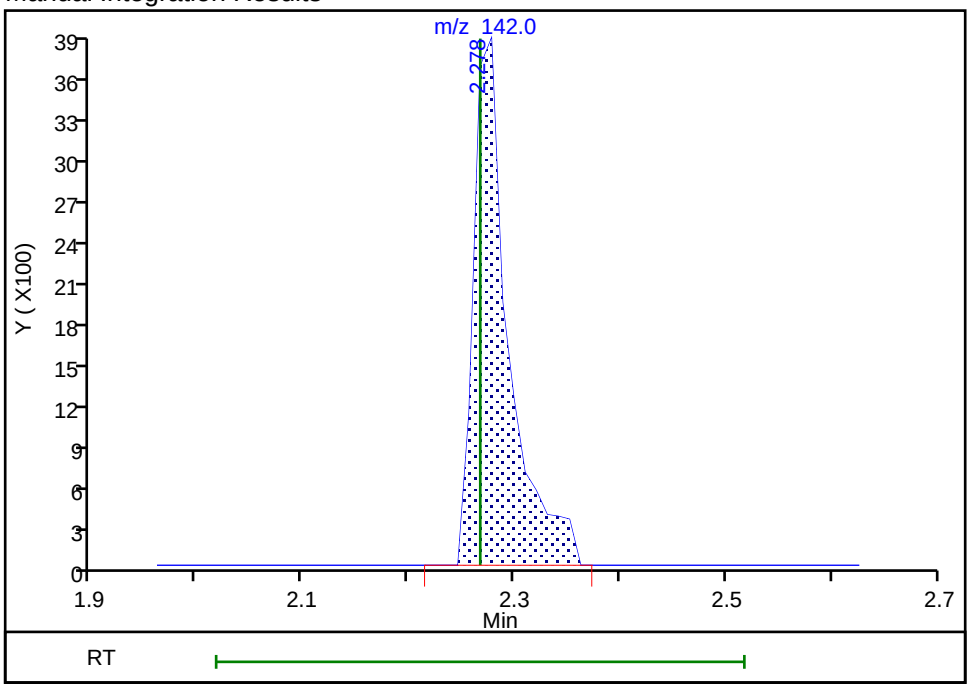
Processing Integration Results

Not Detected
Expected RT: 2.27



Manual Integration Results

RT: 2.28
Area: 8791
Amount: 2.003855
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:09:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

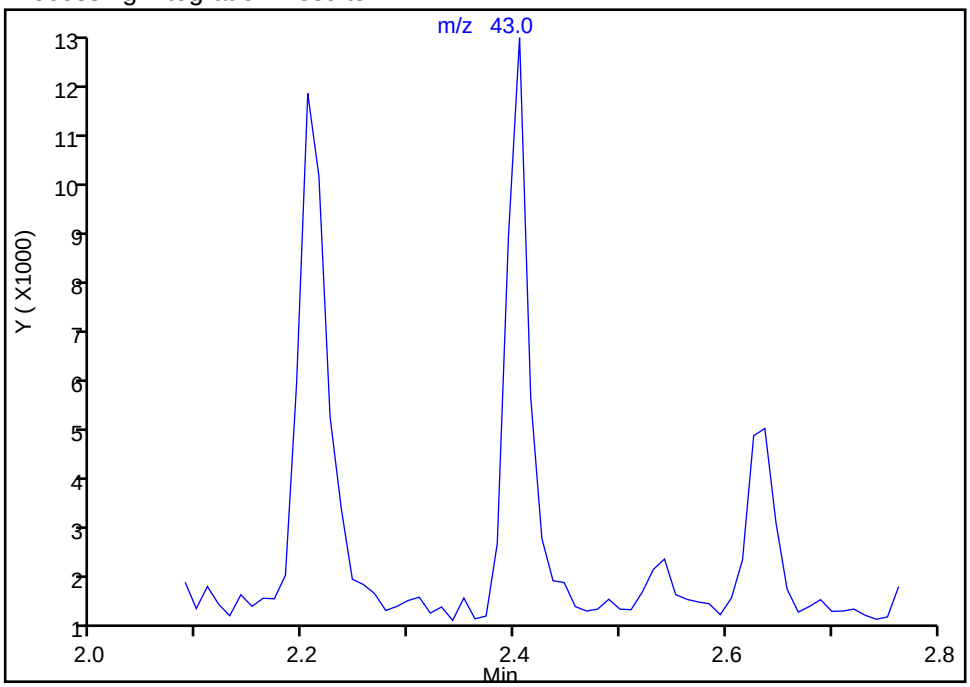
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0608.D				
Injection Date:	06-Dec-2018 16:46:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

28 Methyl acetate, CAS: 79-20-9

Signal: 1

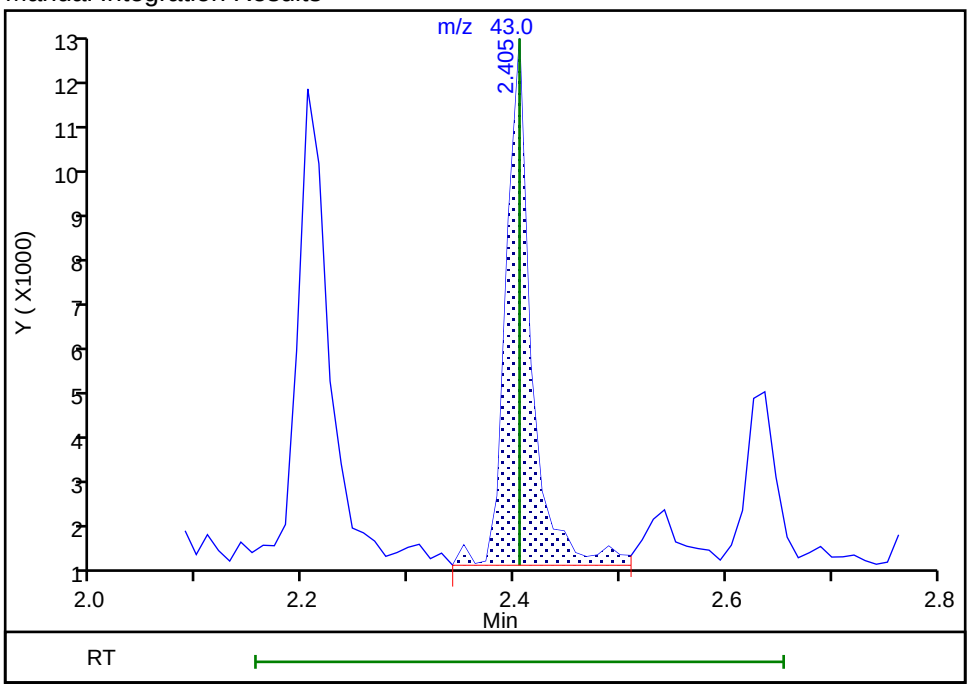
Processing Integration Results

Not Detected
Expected RT: 2.40



Manual Integration Results

RT: 2.40
Area: 18314
Amount: 4.692711
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:09:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

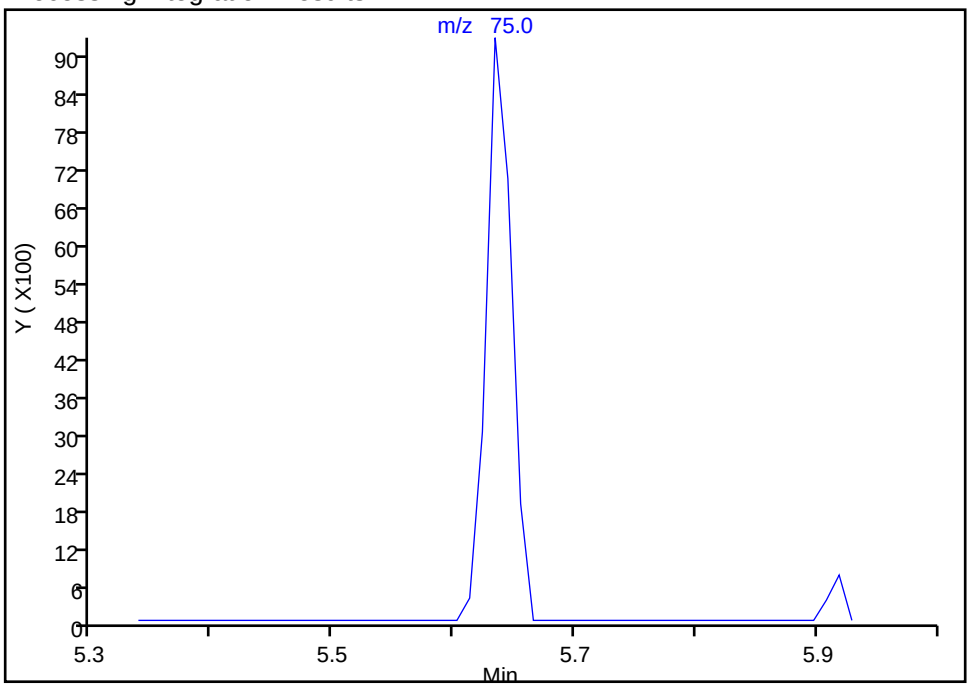
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0608.D				
Injection Date:	06-Dec-2018 16:46:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

75 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

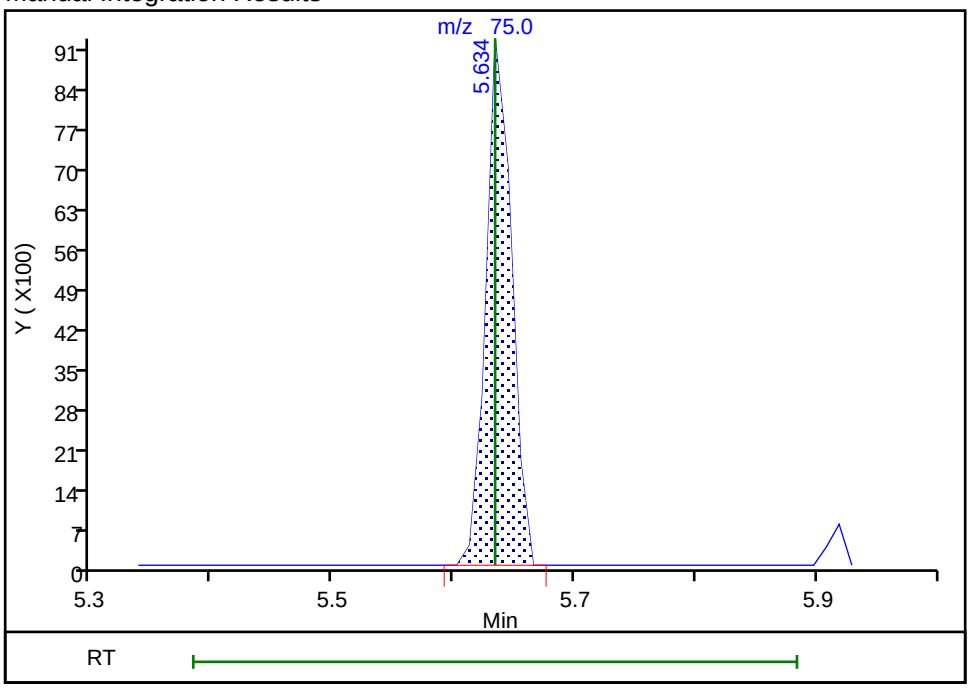
Processing Integration Results

Not Detected
Expected RT: 5.63



Manual Integration Results

RT: 5.63
Area: 13590
Amount: 2.134969
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:10:15
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

TestAmerica Savannah

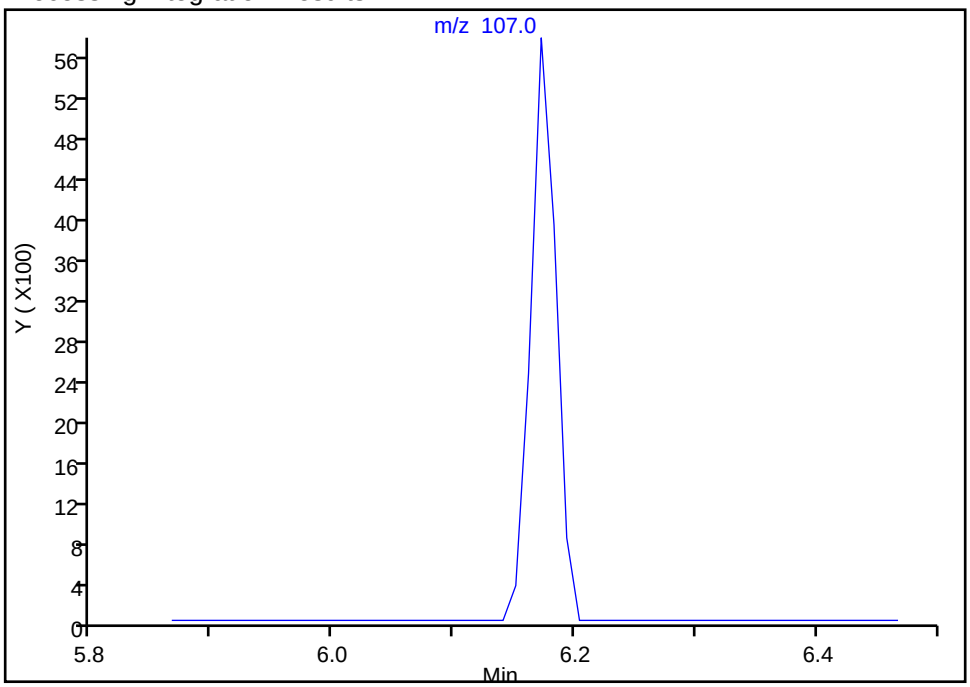
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0608.D				
Injection Date:	06-Dec-2018 16:46:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

83 Ethylene Dibromide, CAS: 106-93-4

Signal: 1

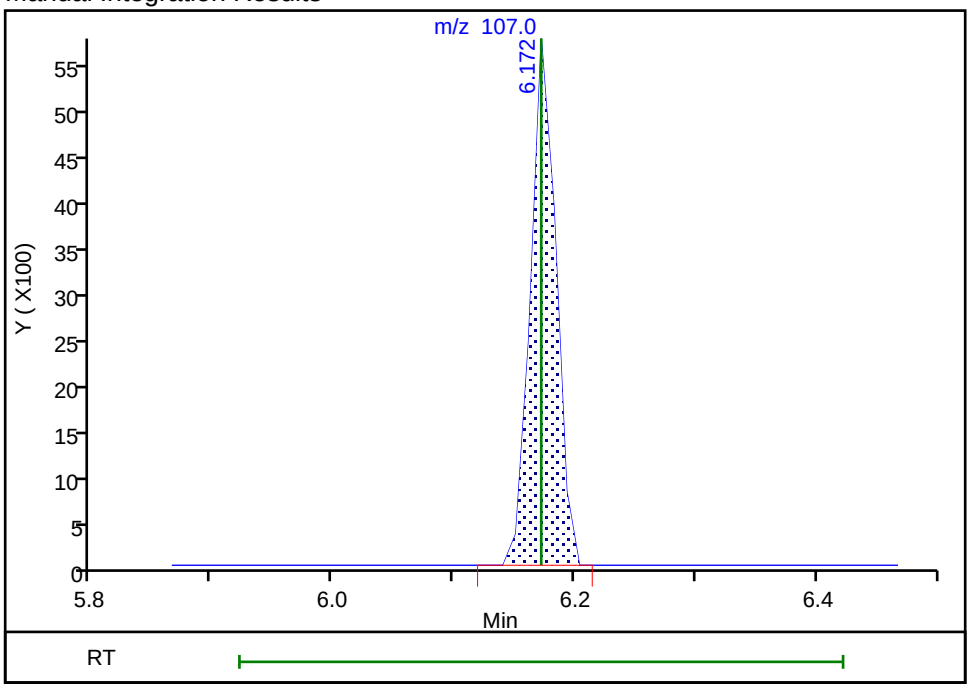
Processing Integration Results

Not Detected
Expected RT: 6.17



Manual Integration Results

RT: 6.17
Area: 8382
Amount: 2.115270
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:10:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0609.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Dec-2018 17:11:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-009
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:25:58 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 08:09:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	755815	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	89	306472	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	95	314829	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	77	19244	5.00	5.07	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	56	24820	5.00	5.10	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	75352	5.00	4.96	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	90	28179	5.00	4.88	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	87	31447	5.00	5.21	
10 Vinyl chloride	62	1.392	1.392	0.000	99	25216	5.00	5.14	
12 Chloromethane	50	1.402	1.402	0.000	68	48685	5.00	6.34	
11 Butadiene	54	1.402	1.402	0.000	93	21575	5.00	4.98	
13 Bromomethane	94	1.592	1.592	0.000	88	19658	5.00	5.91	
14 Chloroethane	64	1.656	1.645	0.011	94	16148	5.00	5.00	
15 Dichlorofluoromethane	67	1.772	1.771	0.001	90	43836	5.00	5.14	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	95	34203	5.00	5.32	
19 Ethyl ether	59	1.962	1.961	0.001	88	16096	5.00	5.01	
22 1,1,2-Trichloro-1,2,2-trif	151	2.109	2.099	0.010	40	17756	5.00	5.19	
20 Acrolein	56	2.109	2.109	0.000	97	92702	100.0	96.8	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	95	21364	5.00	5.09	
23 Acetone	58	2.204	2.204	0.000	80	12202	25.0	24.3	
25 Iodomethane	142	2.278	2.267	0.011	91	24476	5.00	4.53	
26 Carbon disulfide	76	2.299	2.299	0.000	99	61433	5.00	5.16	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	84	13476	5.00	4.84	
28 Methyl acetate	43	2.405	2.405	0.000	98	37894	10.0	9.74	a
30 Methylene Chloride	84	2.500	2.500	0.000	87	23430	5.00	5.15	
31 2-Methyl-2-propanol	59	2.531	2.542	-0.011	97	27559	50.0	50.4	
34 Methyl tert-butyl ether	73	2.637	2.626	0.011	95	62898	5.00	5.09	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	94	21532	5.00	5.17	
32 Acrylonitrile	53	2.711	2.721	-0.010	93	97782	50.0	50.7	
35 Hexane	57	2.785	2.785	0.000	90	33506	5.00	5.27	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	52	36173	5.00	5.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	2.985	2.985	0.000	100	97141	10.0	10.2	
42 2,2-Dichloropropane	77	3.376	3.376	0.000	89	33154	5.00	4.99	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	96	32800	5.00	5.01	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	98	15535	25.0	25.8	
48 Chlorobromomethane	130	3.576	3.576	0.000	84	14198	5.00	4.95	
47 Tetrahydrofuran	42	3.576	3.576	0.000	88	16569	10.0	9.73	
49 Chloroform	83	3.608	3.608	0.000	87	35558	5.00	5.01	
51 Cyclohexane	84	3.724	3.713	0.011	91	32962	5.00	4.89	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	92	31725	5.00	4.85	
52 Carbon tetrachloride	117	3.819	3.819	0.000	96	29101	5.00	5.15	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	86	27949	5.00	5.07	
54 Isobutyl alcohol	43	3.914	3.914	0.000	91	31354	125.0	131.1	
55 Benzene	78	3.988	3.988	0.000	98	83960	5.00	5.11	
57 1,2-Dichloroethane	62	4.062	4.051	0.011	80	28761	5.00	5.05	
60 n-Heptane	43	4.104	4.104	0.000	91	35776	5.00	5.06	
62 Trichloroethene	132	4.463	4.462	0.001	91	22220	5.00	5.10	
64 Methylcyclohexane	83	4.547	4.547	0.000	92	41306	5.00	5.07	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	82	20221	5.00	4.99	
68 1,4-Dioxane	88	4.748	4.747	0.001	45	6797	100.0	98.2	
67 Dibromomethane	93	4.758	4.758	0.000	87	13040	5.00	4.94	
69 Dichlorobromomethane	83	4.853	4.853	0.000	91	28289	5.00	5.05	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	87	14767	5.00	4.98	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	94	32979	5.00	5.02	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	96	120598	25.0	25.1	
74 Toluene	92	5.423	5.423	0.000	86	52029	5.00	4.97	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	85	31042	5.00	4.89	
76 Ethyl methacrylate	69	5.655	5.655	0.000	86	26911	5.00	4.83	
77 1,1,2-Trichloroethane	83	5.782	5.782	0.000	92	15900	5.00	5.03	
78 Tetrachloroethene	164	5.824	5.824	0.000	65	20441	5.00	5.04	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	92	30941	5.00	5.02	
80 2-Hexanone	43	5.951	5.950	0.001	97	85217	25.0	24.5	
82 Chlorodibromomethane	129	6.067	6.067	0.000	87	21348	5.00	4.85	
83 Ethylene Dibromide	107	6.172	6.172	0.000	92	18551	5.00	4.69	
85 Chlorobenzene	112	6.542	6.541	0.001	94	56602	5.00	4.89	
87 Ethylbenzene	91	6.594	6.594	0.000	96	102321	5.00	5.04	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	50	21378	5.00	5.03	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	77581	5.00	4.93	
89 o-Xylene	91	7.016	7.016	0.000	92	80941	5.00	5.03	
90 Styrene	104	7.038	7.037	0.001	94	65095	5.00	4.99	
91 Bromoform	173	7.206	7.217	-0.011	90	15732	5.00	4.61	
92 Isopropylbenzene	105	7.301	7.301	0.000	95	103091	5.00	4.99	
94 Bromobenzene	156	7.586	7.586	0.000	89	26685	5.00	4.91	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	88	23762	5.00	4.69	
98 N-Propylbenzene	91	7.639	7.639	0.000	92	122111	5.00	4.95	
97 1,2,3-Trichloropropane	110	7.650	7.660	-0.010	58	7984	5.00	4.82	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	67	10566	5.00	5.20	
99 2-Chlorotoluene	91	7.734	7.734	0.000	95	69342	5.00	4.98	
101 1,3,5-Trimethylbenzene	105	7.787	7.797	-0.010	79	86333	5.00	4.93	
102 4-Chlorotoluene	91	7.829	7.829	0.000	89	71451	5.00	4.91	
103 tert-Butylbenzene	119	8.051	8.050	0.001	92	78292	5.00	4.91	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	69	90181	5.00	5.00	
106 sec-Butylbenzene	105	8.230	8.230	0.000	97	116539	5.00	4.94	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	8.357	8.357	0.001	68	50516	5.00	5.00	
108 4-Isopropyltoluene	119	8.357	8.357	0.001	93	101233	5.00	5.02	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	84	51641	5.00	5.12	
112 n-Butylbenzene	91	8.694	8.694	0.000	97	92208	5.00	5.01	
113 1,2-Dichlorobenzene	146	8.758	8.758	0.000	95	45820	5.00	4.90	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	71	7171	5.00	4.91	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	88	36704	5.00	4.94	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	92	21067	5.00	5.13	
118 Naphthalene	128	10.309	10.309	0.000	99	87076	5.00	4.88	
119 1,2,3-Trichlorobenzene	180	10.509	10.509	0.000	92	33686	5.00	4.99	
S 123 1,2-Dichloroethene, Total	1				0		10.0	10.2	
S 124 Xylenes, Total	1				0		10.0	9.96	
S 122 1,3-Dichloropropene, Total	1				0		10.0	9.91	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

DOD ISTD_00166	Amount Added:	5.00	Units: uL
VM_MMIX_01939	Amount Added:	0.50	Units: uL
VM_Acrolein_00191	Amount Added:	0.50	Units: uL

Report Date: 07-Dec-2018 09:25:59 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0609.D

Injection Date: 06-Dec-2018 17:11:30 Instrument ID: CMSP2 Operator ID: ea

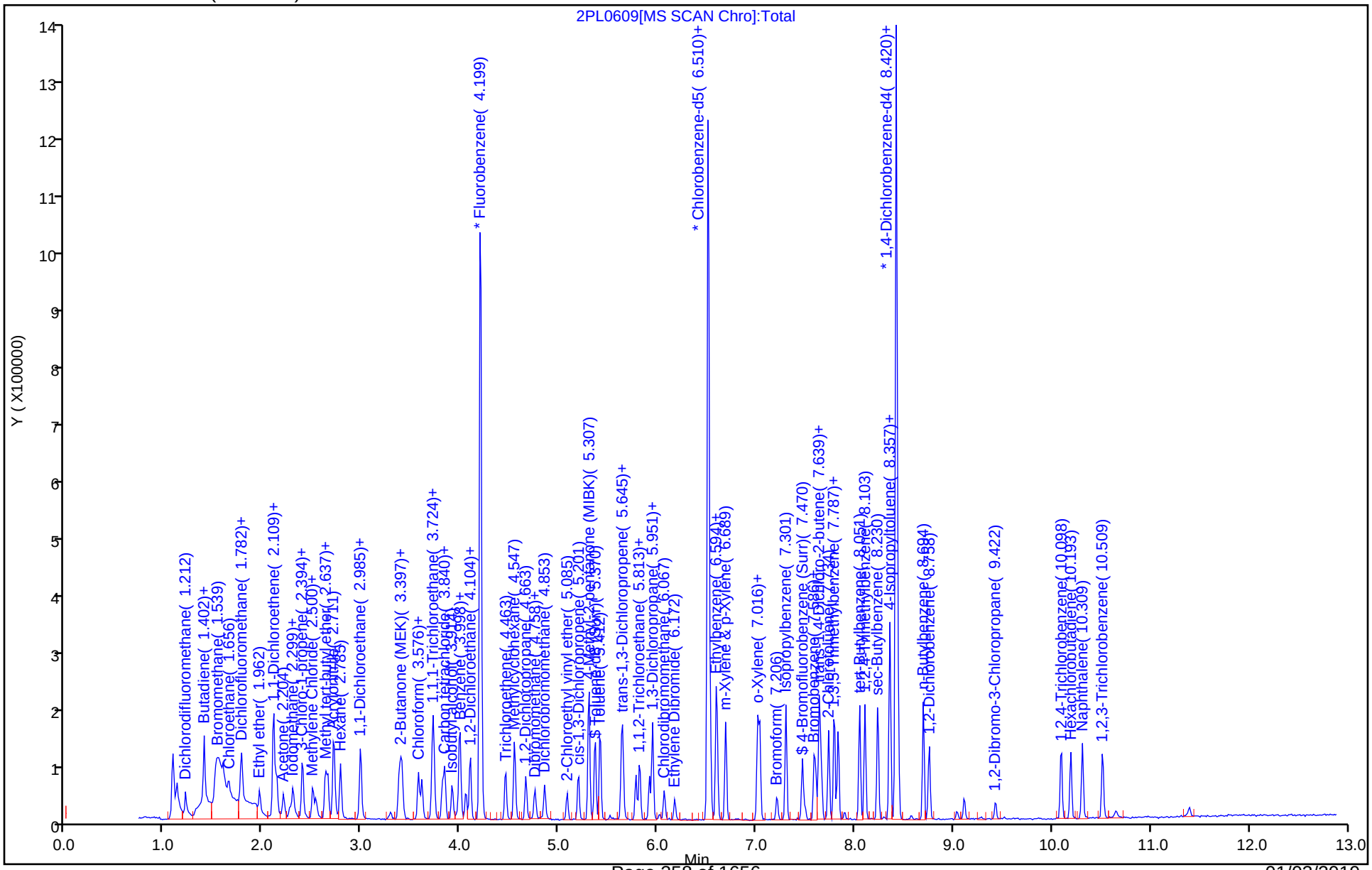
Lims ID: ic Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 8

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

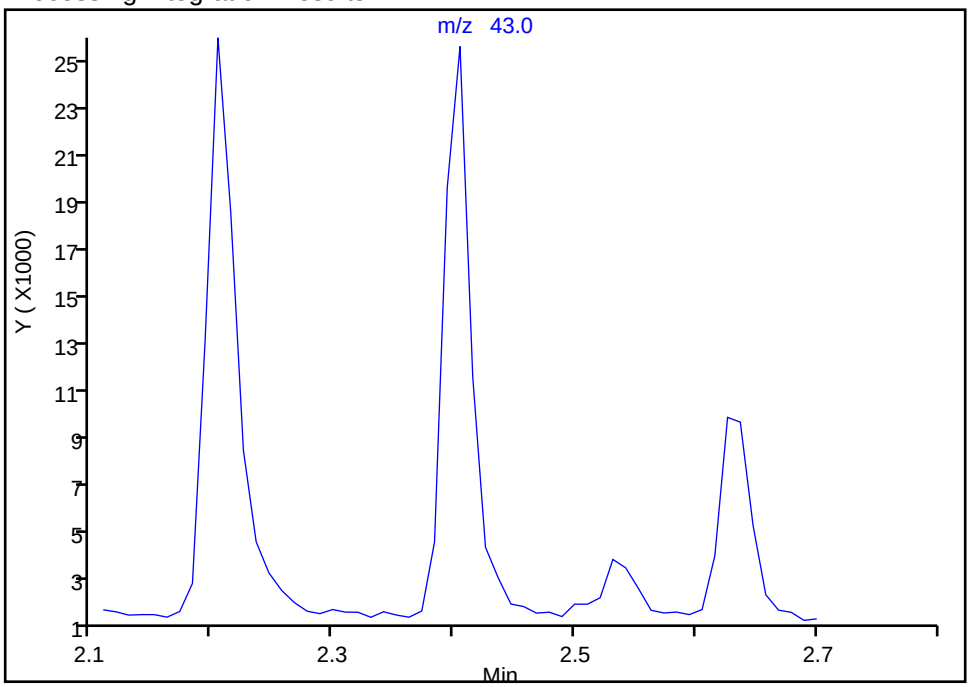
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0609.D				
Injection Date:	06-Dec-2018 17:11:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

28 Methyl acetate, CAS: 79-20-9

Signal: 1

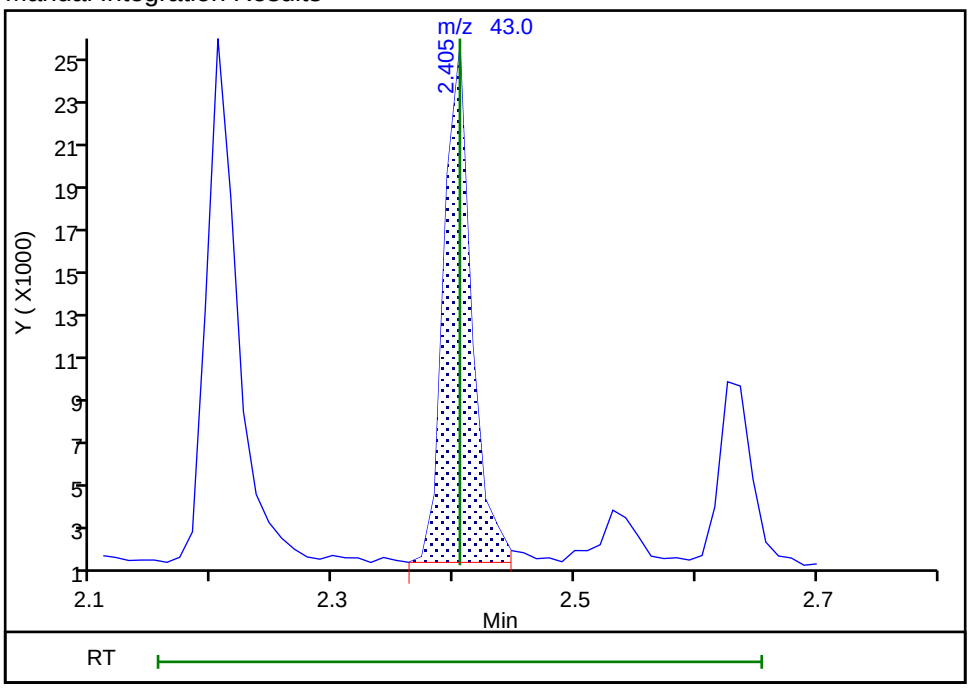
Not Detected
Expected RT: 2.40

Processing Integration Results



Manual Integration Results

RT: 2.40
Area: 37894
Amount: 9.735639
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:08:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0610.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Dec-2018 17:35:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-010
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:26:06 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 08:08:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.209	4.199	0.010	99	737840	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	88	301421	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	95	312432	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	73	35297	10.0	9.52	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	56	44866	10.0	9.43	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	143409	10.0	9.61	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	93	53409	10.0	9.31	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	98	56362	10.0	9.57	
10 Vinyl chloride	62	1.391	1.392	-0.001	99	46539	10.0	9.72	
11 Butadiene	54	1.402	1.402	0.000	92	39925	10.0	9.44	
12 Chloromethane	50	1.402	1.402	0.000	60	82334	10.0	11.0	
13 Bromomethane	94	1.592	1.592	0.000	91	33538	10.0	10.3	M
14 Chloroethane	64	1.655	1.645	0.010	97	29097	10.0	9.30	
15 Dichlorofluoromethane	67	1.771	1.771	0.000	96	76846	10.0	10.3	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	98	60882	10.0	9.70	
19 Ethyl ether	59	1.961	1.961	0.000	94	30549	10.0	9.75	
22 1,1,2-Trichloro-1,2,2-trif	151	2.109	2.099	0.010	38	32927	10.0	9.87	
20 Acrolein	56	2.109	2.109	0.000	97	204463	200.0	218.8	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	90	36689	10.0	9.76	
23 Acetone	58	2.204	2.204	0.000	82	22680	50.0	46.2	
25 Iodomethane	142	2.278	2.267	0.011	96	49436	10.0	8.74	
26 Carbon disulfide	76	2.299	2.299	0.000	100	112508	10.0	9.68	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	82	27147	10.0	9.99	
28 Methyl acetate	43	2.405	2.405	-0.001	98	68262	20.0	18.0	
30 Methylene Chloride	84	2.499	2.500	-0.001	94	41728	10.0	9.95	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	98	49481	100.0	92.7	
34 Methyl tert-butyl ether	73	2.637	2.626	0.011	96	115916	10.0	9.60	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	95	36642	10.0	9.37	
32 Acrylonitrile	53	2.721	2.721	0.000	93	180264	100.0	95.7	
35 Hexane	57	2.784	2.785	-0.001	90	60863	10.0	9.81	
36 Vinyl acetate	43	2.985	2.985	0.000	100	180394	20.0	19.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 1,1-Dichloroethane	63	2.985	2.985	0.000	61	66651	10.0	9.54	
42 2,2-Dichloropropane	77	3.375	3.376	-0.001	92	61283	10.0	9.45	
43 cis-1,2-Dichloroethene	61	3.396	3.397	-0.001	90	62739	10.0	9.82	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	99	27878	50.0	47.5	
47 Tetrahydrofuran	42	3.576	3.576	0.000	87	29045	20.0	18.7	
48 Chlorobromomethane	130	3.576	3.576	0.000	80	27623	10.0	9.87	
49 Chloroform	83	3.608	3.608	0.000	97	66516	10.0	9.60	
51 Cyclohexane	84	3.713	3.713	0.000	93	61950	10.0	9.41	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	93	60514	10.0	9.62	
52 Carbon tetrachloride	117	3.819	3.819	0.000	97	54320	10.0	9.84	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	92	52605	10.0	9.78	
54 Isobutyl alcohol	43	3.914	3.914	0.000	98	54279	250.0	232.4	
55 Benzene	78	3.987	3.988	-0.001	98	153899	10.0	9.60	
57 1,2-Dichloroethane	62	4.061	4.051	0.010	80	55078	10.0	9.90	
60 n-Heptane	43	4.104	4.104	0.000	90	65548	10.0	9.50	
62 Trichloroethene	132	4.462	4.462	0.000	94	40897	10.0	9.61	
64 Methylcyclohexane	83	4.547	4.547	0.000	94	76540	10.0	9.63	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	85	38589	10.0	9.75	
68 1,4-Dioxane	88	4.747	4.747	0.000	45	13107	200.0	194.0	
67 Dibromomethane	93	4.758	4.758	0.000	87	24122	10.0	9.36	
69 Dichlorobromomethane	83	4.853	4.853	0.000	93	51763	10.0	9.47	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	92	28070	10.0	9.70	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	89	60508	10.0	9.44	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	97	225965	50.0	48.1	
74 Toluene	92	5.423	5.423	0.000	84	97792	10.0	9.57	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	91	59076	10.0	9.53	
76 Ethyl methacrylate	69	5.655	5.655	0.000	86	50677	10.0	9.33	
77 1,1,2-Trichloroethane	83	5.781	5.782	-0.001	93	29202	10.0	9.46	
78 Tetrachloroethene	164	5.824	5.824	0.000	81	37870	10.0	9.57	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	94	57975	10.0	9.63	
80 2-Hexanone	43	5.950	5.950	0.000	97	163463	50.0	48.1	
82 Chlorodibromomethane	129	6.066	6.067	-0.001	93	40531	10.0	9.43	
83 Ethylene Dibromide	107	6.172	6.172	0.000	96	36983	10.0	9.59	
85 Chlorobenzene	112	6.541	6.541	0.000	94	109155	10.0	9.58	
87 Ethylbenzene	91	6.594	6.594	0.000	97	190198	10.0	9.52	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	54	40039	10.0	9.58	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	149077	10.0	9.63	
89 o-Xylene	91	7.016	7.016	0.000	93	151398	10.0	9.57	
90 Styrene	104	7.037	7.037	0.000	94	122292	10.0	9.54	
91 Bromoform	173	7.206	7.217	-0.011	95	31713	10.0	9.45	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	194568	10.0	9.58	
94 Bromobenzene	156	7.586	7.586	0.000	92	51077	10.0	9.56	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	87	45899	10.0	9.20	
98 N-Propylbenzene	91	7.639	7.639	0.000	92	233202	10.0	9.61	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	69	17731	10.0	9.28	
97 1,2,3-Trichloropropane	110	7.660	7.660	0.000	79	15616	10.0	9.59	
99 2-Chlorotoluene	91	7.734	7.734	0.000	96	128776	10.0	9.41	
101 1,3,5-Trimethylbenzene	105	7.786	7.797	-0.011	78	167975	10.0	9.75	
102 4-Chlorotoluene	91	7.829	7.829	0.000	89	135459	10.0	9.47	
103 tert-Butylbenzene	119	8.050	8.050	0.000	90	148861	10.0	9.49	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	70	168351	10.0	9.49	
106 sec-Butylbenzene	105	8.230	8.230	0.000	97	221023	10.0	9.53	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 4-Isopropyltoluene	119	8.356	8.357	0.000	97	190311	10.0	9.51	
107 1,3-Dichlorobenzene	146	8.356	8.357	0.000	68	95758	10.0	9.54	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	92	95047	10.0	9.49	
112 n-Butylbenzene	91	8.694	8.694	0.000	98	173130	10.0	9.47	
113 1,2-Dichlorobenzene	146	8.757	8.758	-0.001	97	87599	10.0	9.45	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	77	13783	10.0	9.50	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	93	68539	10.0	9.29	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	96	40969	10.0	10.1	
118 Naphthalene	128	10.309	10.309	0.000	99	167312	10.0	9.45	
119 1,2,3-Trichlorobenzene	180	10.520	10.509	0.011	94	61655	10.0	9.21	
S 122 1,3-Dichloropropene, Total	1				0		20.0	19.0	
S 124 Xylenes, Total	1				0		20.0	19.2	
S 123 1,2-Dichloroethene, Total	1				0		20.0	19.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

DOD ISTD_00166	Amount Added:	5.00	Units: uL
VM_MMIX_01939	Amount Added:	1.00	Units: uL
VM_Acrolein_00191	Amount Added:	1.00	Units: uL

Report Date: 07-Dec-2018 09:26:07 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0610.D

Injection Date: 06-Dec-2018 17:35:30 Instrument ID: CMSP2 Operator ID: ea

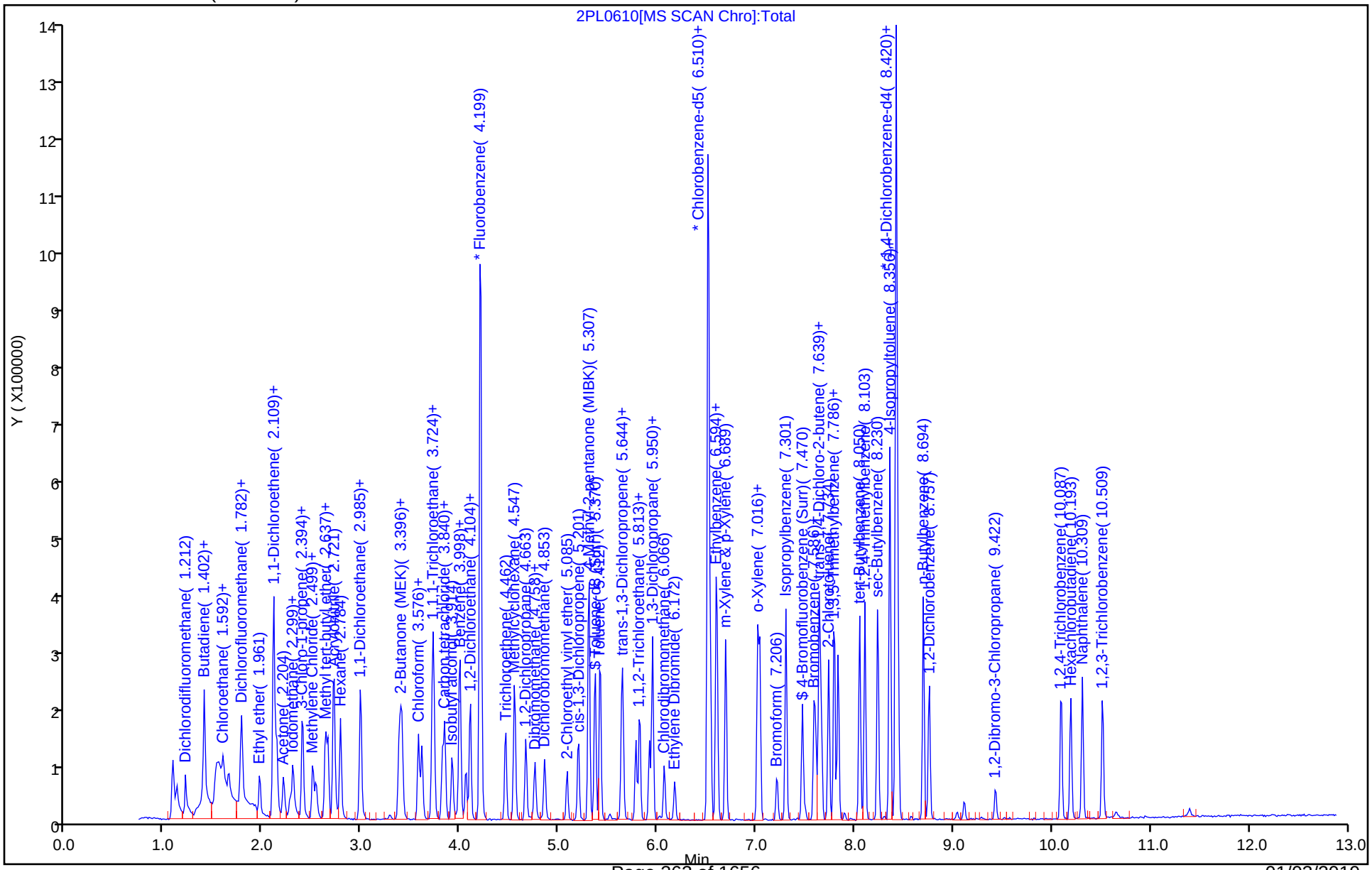
Lims ID: ic Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

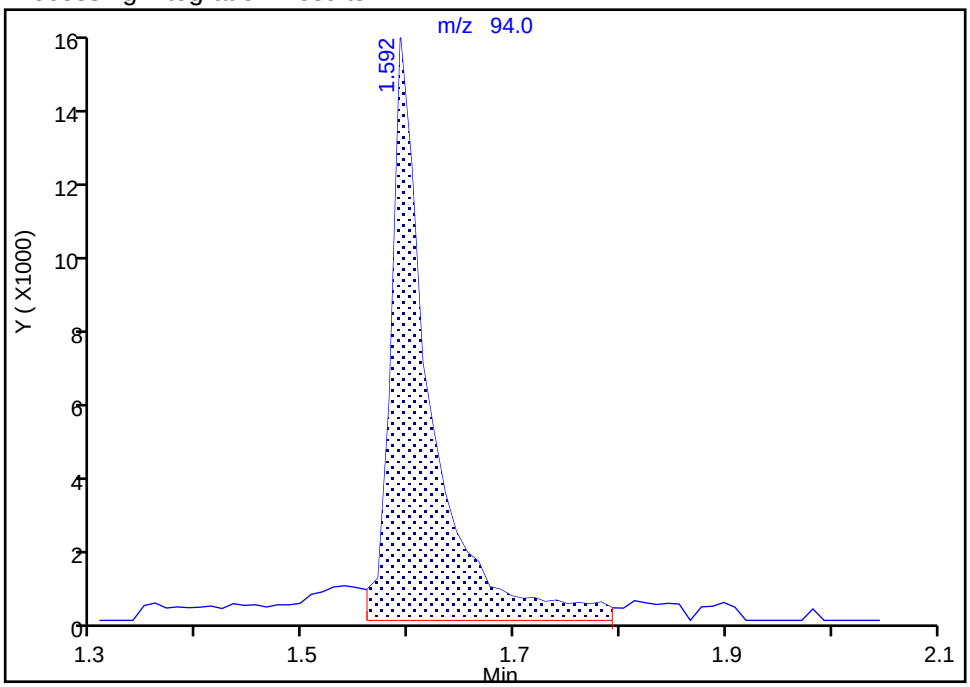
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0610.D				
Injection Date:	06-Dec-2018 17:35:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

13 Bromomethane, CAS: 74-83-9

Signal: 1

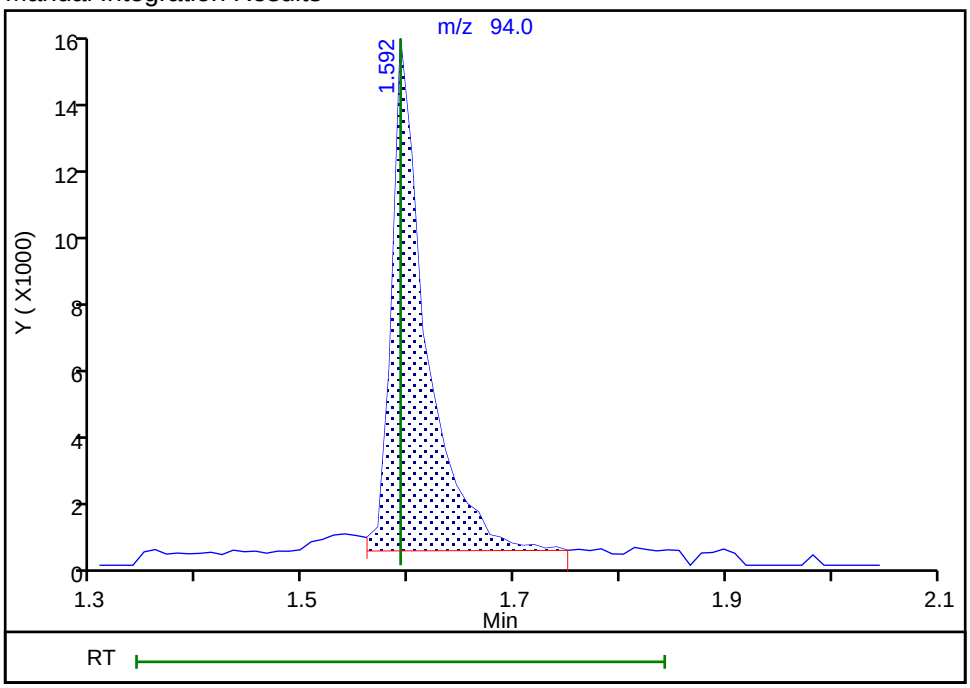
Processing Integration Results

RT: 1.59
Area: 39746
Amount: 9.597933
Amount Units: ug/l



Manual Integration Results

RT: 1.59
Area: 33538
Amount: 10.321349
Amount Units: ug/l



Reviewer: kitchingsj, 07-Dec-2018 08:58:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0611.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Dec-2018 18:00:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-011
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:26:13 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 08:07:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	741900	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	89	299806	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	95	316403	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	81	73879	20.0	19.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	56	93550	20.0	19.6	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	299242	20.0	20.2	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	94	109940	20.0	18.9	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	99	119203	20.0	20.1	
10 Vinyl chloride	62	1.392	1.392	0.000	99	95967	20.0	19.9	
12 Chloromethane	50	1.402	1.402	0.000	62	160544	20.0	21.5	
11 Butadiene	54	1.402	1.402	0.000	91	87736	20.0	20.6	
13 Bromomethane	94	1.592	1.592	0.000	94	65526	20.0	20.1	M
14 Chloroethane	64	1.655	1.645	0.010	98	59815	20.0	19.4	
15 Dichlorofluoromethane	67	1.772	1.771	0.001	97	145158	20.0	20.5	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	97	126163	20.0	20.0	
19 Ethyl ether	59	1.961	1.961	0.000	94	63224	20.0	20.1	
22 1,1,2-Trichloro-1,2,2-trif	151	2.109	2.099	0.010	42	66081	20.0	19.7	
20 Acrolein	56	2.109	2.109	0.000	97	357380	400.0	380.4	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	99	74133	20.0	20.6	
23 Acetone	58	2.204	2.204	0.000	85	46502	100.0	94.2	
25 Iodomethane	142	2.278	2.267	0.011	96	112956	20.0	19.1	
26 Carbon disulfide	76	2.299	2.299	0.000	100	233581	20.0	20.0	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	82	54757	20.0	20.0	
28 Methyl acetate	43	2.405	2.405	0.000	98	141191	40.0	37.0	
30 Methylene Chloride	84	2.500	2.500	0.000	93	83339	20.0	20.4	
31 2-Methyl-2-propanol	59	2.531	2.542	-0.011	98	106644	200.0	198.8	
34 Methyl tert-butyl ether	73	2.637	2.626	0.011	96	240367	20.0	19.8	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	95	78665	20.0	20.5	
32 Acrylonitrile	53	2.721	2.721	0.000	93	372554	200.0	196.6	
35 Hexane	57	2.785	2.785	0.000	90	122944	20.0	19.7	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	61	139028	20.0	19.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	2.985	2.985	0.000	100	374716	40.0	40.0	
42 2,2-Dichloropropane	77	3.376	3.376	0.000	90	126051	20.0	19.3	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	96	129843	20.0	20.2	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	100	60581	100.0	102.6	
48 Chlorobromomethane	130	3.576	3.576	0.000	82	57428	20.0	20.4	
47 Tetrahydrofuran	42	3.576	3.576	0.000	90	61244	40.0	40.9	
49 Chloroform	83	3.608	3.608	0.000	97	138842	20.0	19.9	
51 Cyclohexane	84	3.713	3.713	0.000	94	122271	20.0	18.5	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	93	127699	20.0	20.3	
52 Carbon tetrachloride	117	3.819	3.819	0.000	97	112958	20.0	20.3	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	92	108237	20.0	20.0	
54 Isobutyl alcohol	43	3.914	3.914	0.000	98	116252	500.0	495.1	
55 Benzene	78	3.988	3.988	0.000	98	326542	20.0	20.3	
57 1,2-Dichloroethane	62	4.061	4.051	0.010	80	113121	20.0	20.2	
60 n-Heptane	43	4.104	4.104	0.000	90	129643	20.0	18.7	
62 Trichloroethene	132	4.463	4.462	0.000	95	86342	20.0	20.2	
64 Methylcyclohexane	83	4.547	4.547	0.000	95	155034	20.0	19.4	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	83	79823	20.0	20.1	
68 1,4-Dioxane	88	4.747	4.747	0.000	54	27637	400.0	406.9	
67 Dibromomethane	93	4.758	4.758	0.000	88	50687	20.0	19.6	
69 Dichlorobromomethane	83	4.853	4.853	0.000	96	110766	20.0	20.2	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	94	58483	20.0	20.1	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	94	129236	20.0	20.1	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	97	470257	100.0	99.6	
74 Toluene	92	5.423	5.423	0.000	84	204739	20.0	19.9	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	92	121478	20.0	19.5	
76 Ethyl methacrylate	69	5.655	5.655	0.000	86	108728	20.0	19.9	
77 1,1,2-Trichloroethane	83	5.782	5.782	0.000	92	63290	20.0	20.4	
78 Tetrachloroethene	164	5.824	5.824	0.000	81	79803	20.0	20.1	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	96	120860	20.0	20.0	
80 2-Hexanone	43	5.950	5.950	0.000	97	341651	100.0	99.9	
82 Chlorodibromomethane	129	6.067	6.067	0.000	95	86420	20.0	20.0	
83 Ethylene Dibromide	107	6.172	6.172	0.000	97	77964	20.0	20.1	
85 Chlorobenzene	112	6.541	6.541	0.000	95	231556	20.0	20.4	
87 Ethylbenzene	91	6.594	6.594	0.000	97	402501	20.0	20.3	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	55	85603	20.0	20.6	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	314904	20.0	20.5	
89 o-Xylene	91	7.016	7.016	0.000	93	320880	20.0	20.4	
90 Styrene	104	7.037	7.037	0.000	95	260435	20.0	20.4	
91 Bromoform	173	7.217	7.217	0.000	96	66774	20.0	20.0	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	411040	20.0	20.4	
94 Bromobenzene	156	7.586	7.586	0.000	94	108363	20.0	20.4	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	93	98906	20.0	19.9	
98 N-Propylbenzene	91	7.639	7.639	0.000	91	490584	20.0	20.3	
97 1,2,3-Trichloropropane	110	7.660	7.660	0.000	78	32123	20.0	19.8	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	42	37911	20.0	20.6	
99 2-Chlorotoluene	91	7.734	7.734	0.000	96	273611	20.0	20.1	
101 1,3,5-Trimethylbenzene	105	7.787	7.797	-0.010	78	349452	20.0	20.4	
102 4-Chlorotoluene	91	7.829	7.829	0.000	89	285644	20.0	20.1	
103 tert-Butylbenzene	119	8.050	8.050	0.000	91	315029	20.0	20.2	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	70	354575	20.0	20.1	
106 sec-Butylbenzene	105	8.230	8.230	0.000	98	464674	20.0	20.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	8.357	8.357	0.001	67	203804	20.0	20.1	
108 4-Isopropyltoluene	119	8.357	8.357	0.001	94	401025	20.0	19.8	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	94	200832	20.0	19.8	
112 n-Butylbenzene	91	8.694	8.694	0.000	98	367142	20.0	19.8	
113 1,2-Dichlorobenzene	146	8.758	8.758	0.000	93	187423	20.0	20.0	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	86	29110	20.0	19.8	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	93	146933	20.0	19.7	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	96	83315	20.0	20.2	
118 Naphthalene	128	10.309	10.309	0.000	99	351856	20.0	19.6	
119 1,2,3-Trichlorobenzene	180	10.520	10.509	0.011	94	132713	20.0	19.6	
S 123 1,2-Dichloroethene, Total	1				0		40.0	40.7	
S 124 Xylenes, Total	1				0		40.0	40.9	
S 122 1,3-Dichloropropene, Total	1				0		40.0	39.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

DOD ISTD_00166	Amount Added:	5.00	Units: uL
VM_MMIX_01939	Amount Added:	2.00	Units: uL
VM_Acrolein_00191	Amount Added:	2.00	Units: uL

Report Date: 07-Dec-2018 09:26:14 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0611.D

Injection Date: 06-Dec-2018 18:00:30 Instrument ID: CMSP2 Operator ID: ea

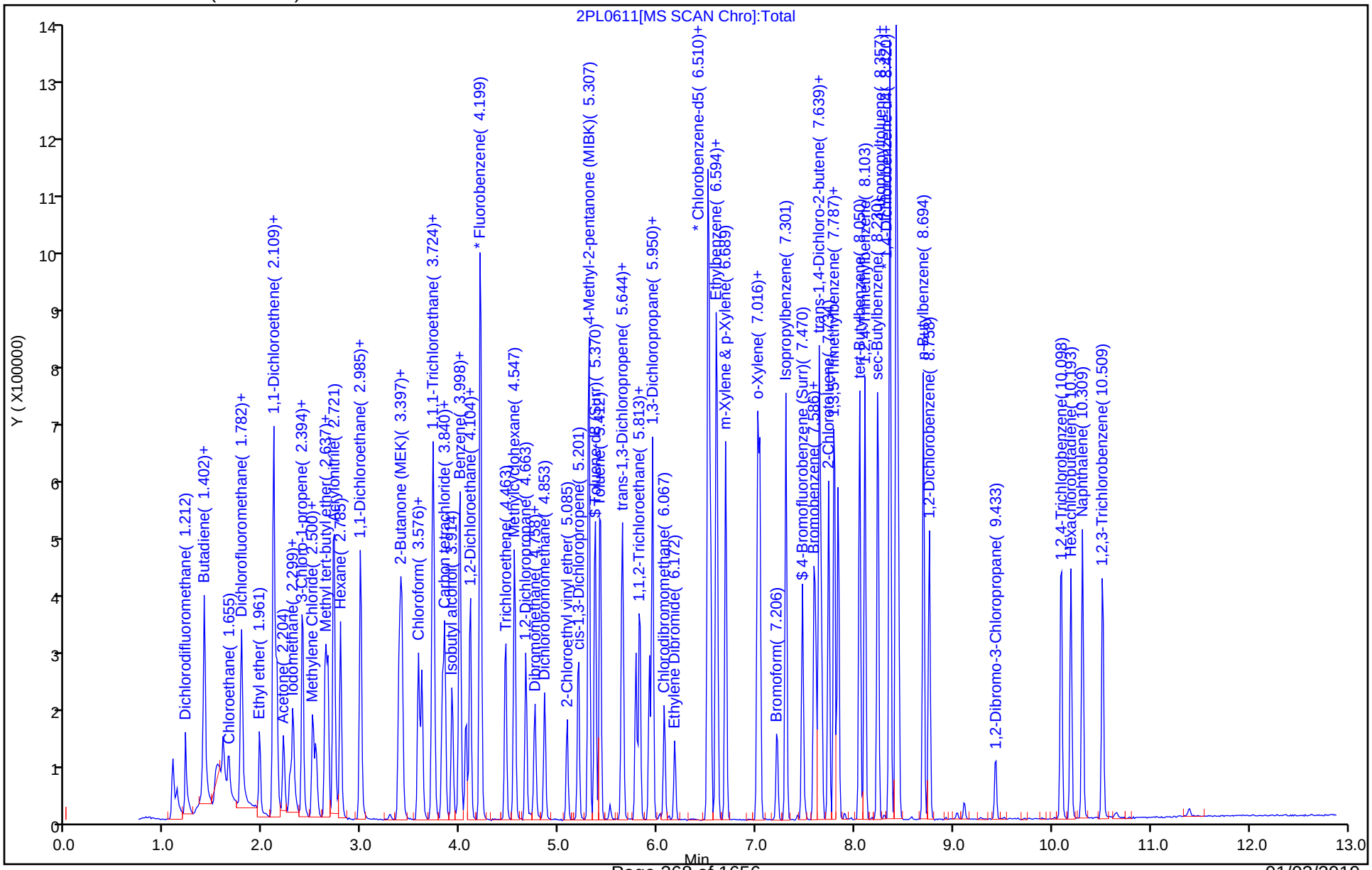
Lims ID: ic Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 10

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

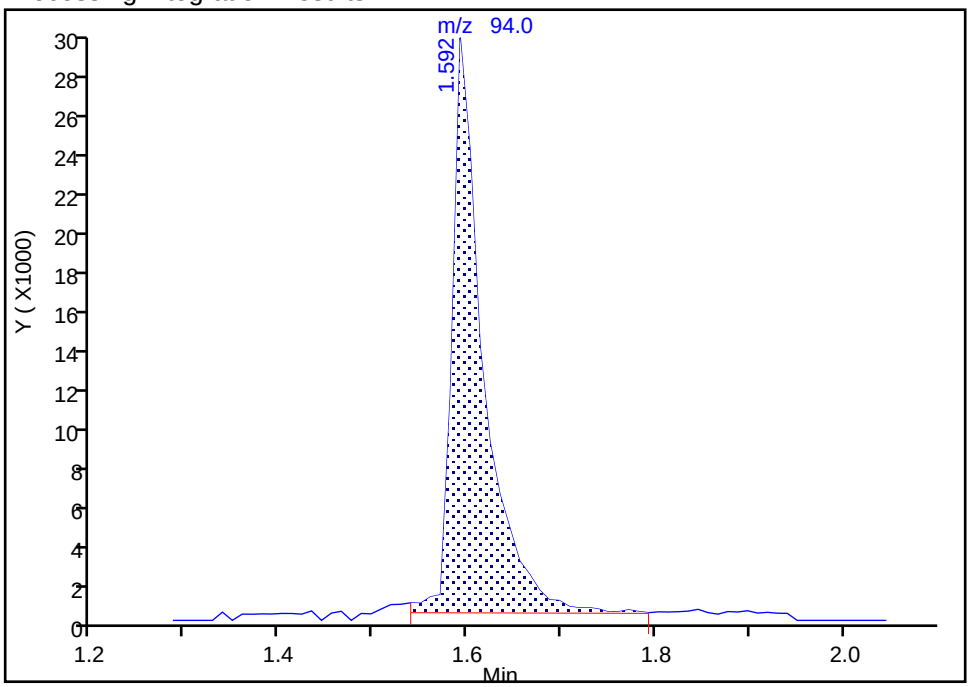
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0611.D				
Injection Date:	06-Dec-2018 18:00:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	10	Worklist Smp#:	11
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

13 Bromomethane, CAS: 74-83-9

Signal: 1

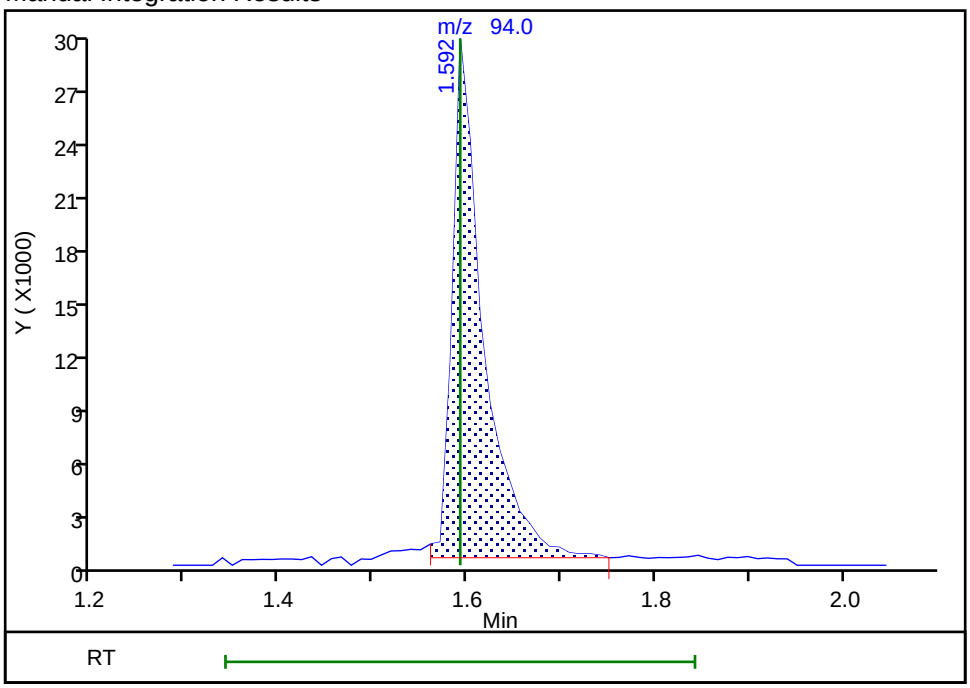
Processing Integration Results

RT: 1.59
Area: 66925
Amount: 16.174668
Amount Units: ug/l



Manual Integration Results

RT: 1.59
Area: 65526
Amount: 20.055328
Amount Units: ug/l



Reviewer: kitchingsj, 07-Dec-2018 08:59:24

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0612.D
Lims ID: icis
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 06-Dec-2018 18:24:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-012
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:26:20 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 08:03:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	770060	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	89	320589	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	95	335642	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	79	189073	50.0	48.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	57	236661	50.0	47.7	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	769864	50.0	48.5	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	95	281246	50.0	45.6	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	100	301690	50.0	49.1	
10 Vinyl chloride	62	1.392	1.392	0.000	100	244902	50.0	49.0	
11 Butadiene	54	1.402	1.402	0.000	92	218775	50.0	49.6	
12 Chloromethane	50	1.402	1.402	0.000	74	378108	50.0	49.5	
13 Bromomethane	94	1.592	1.592	0.000	96	170726	50.0	50.3	
14 Chloroethane	64	1.645	1.645	0.000	99	146523	50.0	48.7	
15 Dichlorofluoromethane	67	1.771	1.771	0.000	96	352287	50.0	49.6	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	98	299825	50.0	45.7	
19 Ethyl ether	59	1.961	1.961	0.000	94	158527	50.0	48.5	
22 1,1,2-Trichloro-1,2,2-trif	151	2.099	2.099	0.000	52	169596	50.0	48.7	
20 Acrolein	56	2.109	2.109	0.000	97	888434	1000.0	911.0	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	98	181955	50.0	50.0	
23 Acetone	58	2.204	2.204	0.000	85	116433	250.0	227.3	
25 Iodomethane	142	2.267	2.267	0.000	98	315543	50.0	50.4	
26 Carbon disulfide	76	2.299	2.299	0.000	99	589292	50.0	48.6	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	83	141315	50.0	49.8	
28 Methyl acetate	43	2.405	2.405	0.000	97	362774	100.0	91.5	
30 Methylene Chloride	84	2.500	2.500	0.000	93	205303	50.0	49.4	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	98	271321	500.0	487.2	
34 Methyl tert-butyl ether	73	2.626	2.626	0.000	95	620231	50.0	49.2	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	94	198694	50.0	50.6	
32 Acrylonitrile	53	2.721	2.721	0.000	93	951192	500.0	483.7	
35 Hexane	57	2.785	2.785	0.000	90	314378	50.0	48.6	
36 Vinyl acetate	43	2.985	2.985	0.000	100	956062	100.0	98.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 1,1-Dichloroethane	63	2.985	2.985	0.000	59	353023	50.0	48.4	
42 2,2-Dichloropropane	77	3.376	3.376	0.000	92	318050	50.0	47.0	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	93	328013	50.0	49.2	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	98	153992	250.0	251.2	
47 Tetrahydrofuran	42	3.576	3.576	0.000	90	151122	100.0	99.5	
48 Chlorobromomethane	130	3.576	3.576	0.000	86	144479	50.0	49.5	
49 Chloroform	83	3.608	3.608	0.000	97	347223	50.0	48.0	
51 Cyclohexane	84	3.713	3.713	0.000	93	319088	50.0	46.5	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	94	322296	50.0	49.7	
52 Carbon tetrachloride	117	3.819	3.819	0.000	97	281595	50.0	48.9	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	93	278620	50.0	49.7	
54 Isobutyl alcohol	43	3.914	3.914	0.000	99	294352	1250.0	1207.7	
55 Benzene	78	3.988	3.988	0.000	98	820329	50.0	49.1	
57 1,2-Dichloroethane	62	4.051	4.051	0.000	80	285574	50.0	49.2	
60 n-Heptane	43	4.104	4.104	0.000	90	329781	50.0	45.8	
62 Trichloroethene	132	4.462	4.462	0.000	95	218420	50.0	49.2	
64 Methylcyclohexane	83	4.547	4.547	0.000	95	401118	50.0	48.3	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	85	199993	50.0	48.4	
68 1,4-Dioxane	88	4.747	4.747	0.000	53	72044	1000.0	1021.9	
67 Dibromomethane	93	4.758	4.758	0.000	89	127963	50.0	47.6	
69 Dichlorobromomethane	83	4.853	4.853	0.000	97	282440	50.0	49.5	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	95	150450	50.0	49.8	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	95	326507	50.0	48.8	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	97	1206958	250.0	246.4	
74 Toluene	92	5.423	5.423	0.000	85	530896	50.0	49.8	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	92	313040	50.0	48.4	
76 Ethyl methacrylate	69	5.655	5.655	0.000	87	278268	50.0	49.1	
77 1,1,2-Trichloroethane	83	5.782	5.782	0.000	93	154915	50.0	48.1	
78 Tetrachloroethene	164	5.824	5.824	0.000	82	206756	50.0	50.1	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	95	309451	50.0	49.2	
80 2-Hexanone	43	5.950	5.950	0.000	97	877504	250.0	247.2	
82 Chlorodibromomethane	129	6.067	6.067	0.000	96	224692	50.0	50.1	
83 Ethylene Dibromide	107	6.172	6.172	0.000	97	198701	50.0	49.3	
85 Chlorobenzene	112	6.541	6.541	0.000	96	582230	50.0	48.1	
87 Ethylbenzene	91	6.594	6.594	0.000	97	1038704	50.0	48.9	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	54	218733	50.0	49.2	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	803378	50.0	48.8	
89 o-Xylene	91	7.016	7.016	0.000	93	824161	50.0	49.0	
90 Styrene	104	7.037	7.037	0.000	94	675144	50.0	49.5	
91 Bromoform	173	7.217	7.217	0.000	96	174078	50.0	48.8	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	1067601	50.0	49.4	
94 Bromobenzene	156	7.586	7.586	0.000	95	281772	50.0	49.6	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	96	254837	50.0	48.0	
98 N-Propylbenzene	91	7.639	7.639	0.000	92	1268780	50.0	49.1	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	44	96543	50.0	50.1	
97 1,2,3-Trichloropropane	110	7.660	7.660	0.000	78	82640	50.0	47.7	
99 2-Chlorotoluene	91	7.734	7.734	0.000	96	710865	50.0	48.8	
101 1,3,5-Trimethylbenzene	105	7.797	7.797	0.000	75	910960	50.0	49.7	
102 4-Chlorotoluene	91	7.829	7.829	0.000	89	746786	50.0	49.1	
103 tert-Butylbenzene	119	8.050	8.050	0.000	90	809388	50.0	48.5	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	70	936355	50.0	49.6	
106 sec-Butylbenzene	105	8.230	8.230	0.000	98	1213467	50.0	49.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 4-Isopropyltoluene	119	8.357	8.357	0.000	95	1061667	50.0	49.4	
107 1,3-Dichlorobenzene	146	8.357	8.357	0.000	67	528647	50.0	49.0	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	94	525749	50.0	48.9	
112 n-Butylbenzene	91	8.694	8.694	0.000	98	959739	50.0	48.9	
113 1,2-Dichlorobenzene	146	8.758	8.758	0.000	93	489290	50.0	49.1	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	89	77184	50.0	49.5	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	93	383149	50.0	48.3	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	98	212353	50.0	48.5	
118 Naphthalene	128	10.309	10.309	0.000	99	911626	50.0	47.9	
119 1,2,3-Trichlorobenzene	180	10.509	10.509	0.000	96	341764	50.0	47.5	
S 122 1,3-Dichloropropene, Total	1				0		100.0	97.2	
S 124 Xylenes, Total	1				0		100.0	97.8	
S 123 1,2-Dichloroethene, Total	1				0		100.0	99.8	

Reagents:

DOD ISTD_00166	Amount Added:	5.00	Units: uL
VM_MMIX_01939	Amount Added:	5.00	Units: uL
VM_Acrolein_00191	Amount Added:	5.00	Units: uL

Report Date: 07-Dec-2018 09:26:21 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0612.D

Injection Date: 06-Dec-2018 18:24:30 Instrument ID: CMSP2 Operator ID: ea

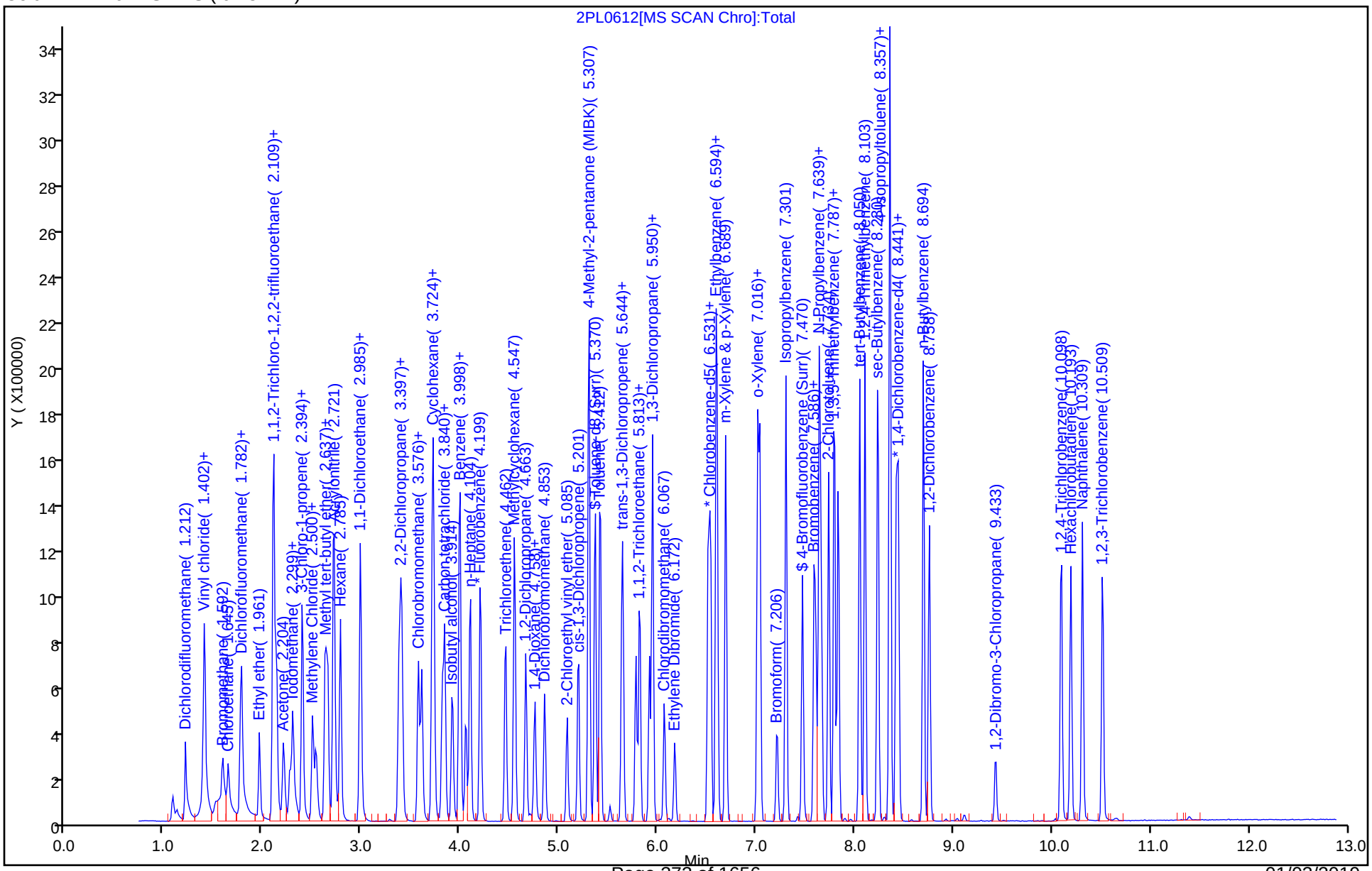
Lims ID: icis Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 11

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0613.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Dec-2018 18:49:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-013
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:26:27 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 08:04:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	731243	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	88	306140	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	93	331146	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	87	370858	100.0	101.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	58	462891	100.0	98.2	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	1486848	100.0	98.1	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	94	568646	100.0	93.6	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	100	582510	100.0	99.8	
10 Vinyl chloride	62	1.392	1.392	0.000	99	468216	100.0	98.7	
12 Chloromethane	50	1.402	1.402	0.000	78	699020	100.0	99.4	
11 Butadiene	54	1.402	1.402	0.000	92	425509	100.0	101.5	
13 Bromomethane	94	1.582	1.592	-0.010	99	250241	100.0	77.7	
14 Chloroethane	64	1.634	1.645	-0.011	100	296274	100.0	124.5	
15 Dichlorofluoromethane	67	1.761	1.771	-0.010	98	674365	100.0	101.2	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	99	632834	100.0	101.7	
19 Ethyl ether	59	1.961	1.961	0.000	94	313529	100.0	100.9	
22 1,1,2-Trichloro-1,2,2-trif	151	2.099	2.099	0.000	51	335869	100.0	101.5	
20 Acrolein	56	2.109	2.109	0.000	97	1830185	2000.0	1976.3	
21 1,1-Dichloroethene	96	2.130	2.141	-0.011	97	340314	100.0	98.5	
23 Acetone	58	2.204	2.204	0.000	84	228665	500.0	470.2	
25 Iodomethane	142	2.268	2.267	0.001	97	616579	100.0	103.1	
26 Carbon disulfide	76	2.299	2.299	0.000	99	1131699	100.0	98.2	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	82	286383	100.0	106.3	
28 Methyl acetate	43	2.405	2.405	0.000	98	721864	200.0	191.7	
30 Methylene Chloride	84	2.500	2.500	0.000	88	400607	100.0	102.2	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	98	538042	1000.0	1017.4	
34 Methyl tert-butyl ether	73	2.626	2.626	0.000	95	1218318	100.0	101.8	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	91	376103	100.0	101.1	
32 Acrylonitrile	53	2.721	2.721	0.000	94	1880797	1000.0	1007.2	
35 Hexane	57	2.785	2.785	0.000	90	614496	100.0	100.0	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	57	690704	100.0	99.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	2.985	2.985	0.000	100	1856096	200.0	201.2	
42 2,2-Dichloropropane	77	3.376	3.376	0.000	92	610371	100.0	95.0	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	94	644480	100.0	101.7	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	98	302657	500.0	519.9	
48 Chlorobromomethane	130	3.576	3.576	0.000	85	285753	100.0	103.0	
47 Tetrahydrofuran	42	3.576	3.576	0.000	89	297449	200.0	208.5	
49 Chloroform	83	3.608	3.608	0.000	97	689266	100.0	100.4	
51 Cyclohexane	84	3.713	3.713	0.000	92	623282	100.0	95.6	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	96	618842	100.0	100.6	
52 Carbon tetrachloride	117	3.819	3.819	0.000	98	549281	100.0	100.4	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	93	536342	100.0	100.7	
54 Isobutyl alcohol	43	3.924	3.914	0.010	98	602637	2500.0	2603.8	
55 Benzene	78	3.988	3.988	0.000	97	1592182	100.0	100.3	
57 1,2-Dichloroethane	62	4.051	4.051	0.000	81	568518	100.0	103.1	
60 n-Heptane	43	4.104	4.104	0.000	89	651864	100.0	95.3	
62 Trichloroethene	132	4.463	4.462	0.000	95	427155	100.0	101.3	
64 Methylcyclohexane	83	4.547	4.547	0.000	95	793818	100.0	100.8	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	86	395740	100.0	100.9	
68 1,4-Dioxane	88	4.758	4.747	0.011	39	144735	2000.0	2162.0	
67 Dibromomethane	93	4.758	4.758	0.000	88	258395	100.0	101.1	
69 Dichlorobromomethane	83	4.853	4.853	0.000	99	556464	100.0	102.7	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	95	302870	100.0	105.6	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	94	654672	100.0	103.1	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	97	2391716	500.0	514.2	
74 Toluene	92	5.423	5.423	0.000	90	1026782	100.0	101.4	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	93	622070	100.0	101.3	
76 Ethyl methacrylate	69	5.655	5.655	0.000	87	562245	100.0	104.4	
77 1,1,2-Trichloroethane	83	5.782	5.782	0.000	94	311854	100.0	102.0	
78 Tetrachloroethene	164	5.824	5.824	0.000	82	401070	100.0	102.3	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	95	618629	100.0	103.7	
80 2-Hexanone	43	5.950	5.950	0.000	95	1740890	500.0	516.5	
82 Chlorodibromomethane	129	6.067	6.067	0.000	97	444306	100.0	104.3	
83 Ethylene Dibromide	107	6.172	6.172	0.000	99	395385	100.0	103.4	
85 Chlorobenzene	112	6.541	6.541	0.000	96	1166110	100.0	100.8	
87 Ethylbenzene	91	6.594	6.594	0.000	97	2033723	100.0	100.2	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	52	430114	100.0	101.3	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	1573233	100.0	100.1	
89 o-Xylene	91	7.016	7.016	0.000	93	1638259	100.0	102.0	
90 Styrene	104	7.037	7.037	0.000	94	1333838	100.0	102.5	
91 Bromoform	173	7.217	7.217	0.000	96	358194	100.0	105.1	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	2088747	100.0	101.3	
94 Bromobenzene	156	7.586	7.586	0.000	95	559295	100.0	103.0	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	97	518205	100.0	102.3	
98 N-Propylbenzene	91	7.639	7.639	0.000	86	2501927	100.0	101.5	
97 1,2,3-Trichloropropane	110	7.660	7.660	0.000	78	166218	100.0	100.5	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	41	188537	100.0	103.5	
99 2-Chlorotoluene	91	7.734	7.734	0.000	96	1402619	100.0	100.9	
101 1,3,5-Trimethylbenzene	105	7.797	7.797	0.000	73	1791006	100.0	102.4	
102 4-Chlorotoluene	91	7.829	7.829	0.000	89	1484764	100.0	102.2	
103 tert-Butylbenzene	119	8.050	8.050	0.000	91	1618597	100.0	101.6	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	70	1838279	100.0	102.1	
106 sec-Butylbenzene	105	8.230	8.230	0.000	99	2408804	100.0	102.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	8.357	8.357	0.001	65	1065377	100.0	100.2	
108 4-Isopropyltoluene	119	8.357	8.357	0.001	95	2136111	100.0	100.7	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	94	1056299	100.0	99.5	
112 n-Butylbenzene	91	8.694	8.694	0.000	98	1919712	100.0	99.1	
113 1,2-Dichlorobenzene	146	8.758	8.758	0.000	93	998730	100.0	101.6	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	90	160877	100.0	104.7	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	93	783045	100.0	100.1	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	99	433351	100.0	100.3	
118 Naphthalene	128	10.309	10.309	0.000	99	1884547	100.0	100.4	
119 1,2,3-Trichlorobenzene	180	10.520	10.509	0.011	93	701772	100.0	98.9	
S 123 1,2-Dichloroethene, Total	1				0		200.0	202.8	
S 124 Xylenes, Total	1				0		200.0	202.1	
S 122 1,3-Dichloropropene, Total	1				0		200.0	204.4	

Reagents:

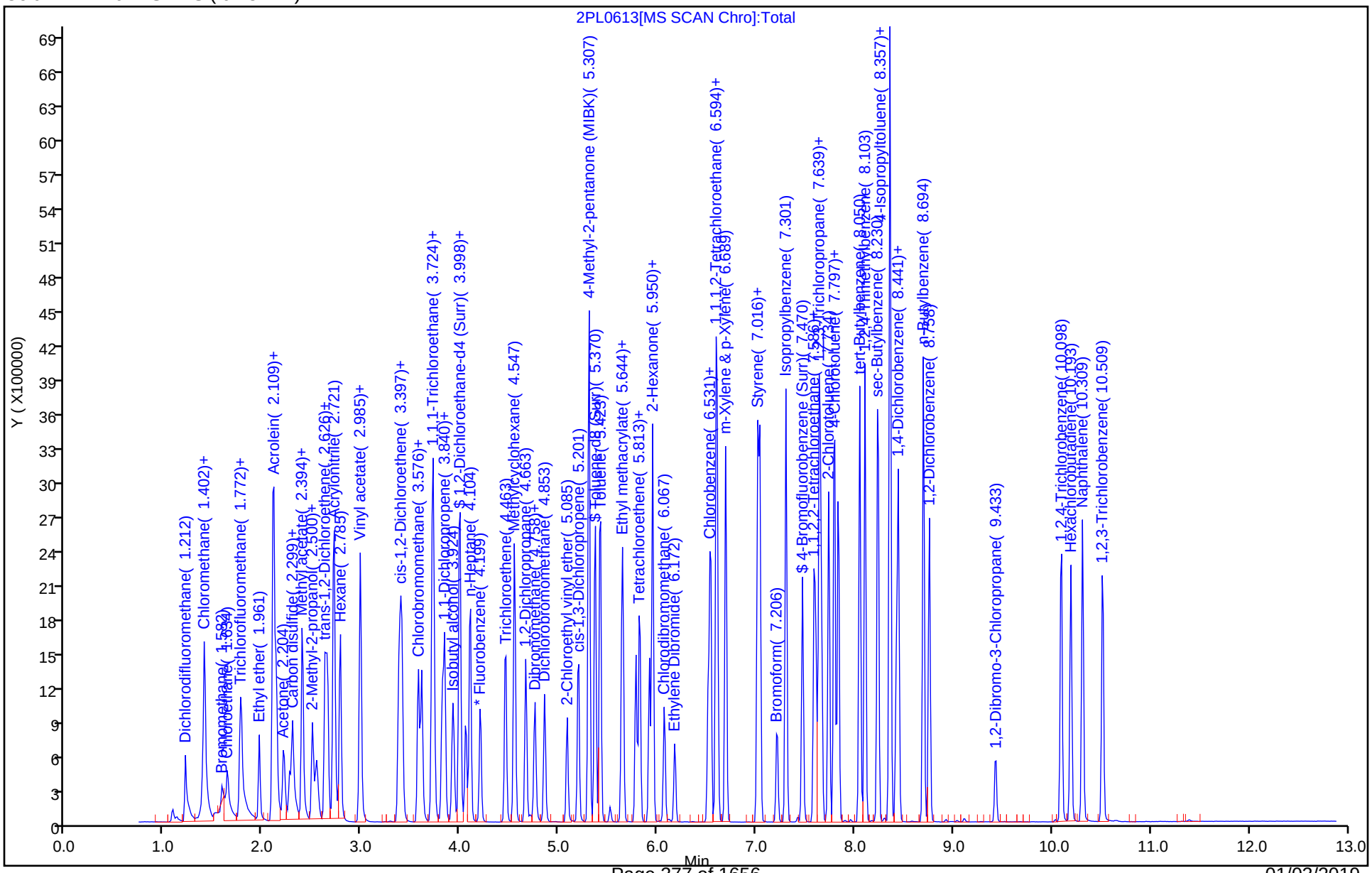
DOD ISTD_00166	Amount Added: 5.00	Units: uL
VM_MMIX_01939	Amount Added: 10.00	Units: uL
VM_Acrolein_00191	Amount Added: 10.00	Units: uL

Report Date: 07-Dec-2018 09:26:28 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0613.D				
Injection Date:	06-Dec-2018 18:49:30	Instrument ID:	CMSP2	Operator ID:	ea
Lims ID:	ic			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	2014_MSP2	Limit Group:	8260B		

Column: Rxi-624 Sil MS (0.18 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 06-Dec-2018 19:13:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-014
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:26:34 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 08:05:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	810089	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	82	344518	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	82	378184	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	95	791194	200.0	194.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	59	980142	200.0	187.7	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	89	3184722	200.0	186.7	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	92	1248203	200.0	179.8	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	100	1234520	200.0	190.9	
10 Vinyl chloride	62	1.392	1.392	0.000	99	1025160	200.0	195.1	
11 Butadiene	54	1.402	1.402	0.000	92	915488	200.0	197.1	
12 Chloromethane	50	1.402	1.402	0.000	82	1464057	200.0	200.2	
13 Bromomethane	94	1.582	1.592	-0.010	99	329762	200.0	92.4	
14 Chloroethane	64	1.634	1.645	-0.011	99	382347	200.0	160.0	
15 Dichlorofluoromethane	67	1.761	1.771	-0.010	95	1453068	200.0	198.1	
16 Trichlorofluoromethane	101	1.772	1.782	-0.010	98	1360345	200.0	197.3	
19 Ethyl ether	59	1.951	1.961	-0.010	93	654353	200.0	190.1	
22 1,1,2-Trichloro-1,2,2-trif	151	2.088	2.099	-0.011	95	713207	200.0	194.6	
20 Acrolein	56	2.109	2.109	0.000	97	3736312	4000.0	3642.0	
21 1,1-Dichloroethene	96	2.130	2.141	-0.011	99	779149	200.0	201.0	
23 Acetone	58	2.215	2.204	0.011	84	467506	1000.0	867.7	
25 Iodomethane	142	2.268	2.267	0.001	97	1321661	200.0	198.9	
26 Carbon disulfide	76	2.289	2.299	-0.010	99	2450249	200.0	192.0	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	79	638864	200.0	214.1	
28 Methyl acetate	43	2.394	2.405	-0.011	98	1502552	400.0	360.2	
30 Methylene Chloride	84	2.500	2.500	0.000	86	856077	200.0	197.9	
31 2-Methyl-2-propanol	59	2.552	2.542	0.010	95	1147990	2000.0	1959.5	
34 Methyl tert-butyl ether	73	2.626	2.626	0.000	95	2566264	200.0	193.6	
33 trans-1,2-Dichloroethene	96	2.647	2.658	-0.011	93	819144	200.0	198.3	
32 Acrylonitrile	53	2.721	2.721	0.000	94	3878342	2000.0	1874.8	
35 Hexane	57	2.774	2.785	-0.011	90	1319074	200.0	193.7	
36 Vinyl acetate	43	2.985	2.985	0.000	100	3809612	400.0	372.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 1,1-Dichloroethane	63	2.975	2.985	-0.010	85	1503515	200.0	196.0	
42 2,2-Dichloropropane	77	3.376	3.376	0.000	91	1328703	200.0	186.7	
43 cis-1,2-Dichloroethene	61	3.386	3.397	-0.011	91	1374041	200.0	195.8	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	95	614325	1000.0	952.5	
47 Tetrahydrofuran	42	3.576	3.576	0.000	89	615219	400.0	392.3	
48 Chlorobromomethane	130	3.576	3.576	0.000	84	600404	200.0	195.4	
49 Chloroform	83	3.608	3.608	0.000	98	1461296	200.0	192.1	
51 Cyclohexane	84	3.713	3.713	0.000	91	1359406	200.0	188.1	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	94	1360198	200.0	199.8	
52 Carbon tetrachloride	117	3.819	3.819	0.000	97	1197632	200.0	197.6	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	94	1176368	200.0	199.3	
54 Isobutyl alcohol	43	3.956	3.914	0.042	98	1250575	5000.0	4877.5	
55 Benzene	78	3.988	3.988	0.000	96	3491084	200.0	198.4	
57 1,2-Dichloroethane	62	4.051	4.051	0.000	81	1194480	200.0	195.6	
60 n-Heptane	43	4.093	4.104	-0.011	92	1392753	200.0	183.8	
62 Trichloroethene	132	4.463	4.462	0.001	94	944802	200.0	202.2	
64 Methylcyclohexane	83	4.547	4.547	0.000	95	1705259	200.0	195.4	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	86	849209	200.0	195.5	
68 1,4-Dioxane	88	4.769	4.747	0.022	51	293943	4000.0	3963.5	
67 Dibromomethane	93	4.758	4.758	0.000	86	548036	200.0	193.6	
69 Dichlorobromomethane	83	4.853	4.853	0.000	99	1199445	200.0	199.9	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	95	638429	200.0	201.0	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	93	1406557	200.0	199.9	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	97	4938286	1000.0	958.3	
74 Toluene	92	5.423	5.423	0.000	85	2248110	200.0	200.4	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	93	1337224	200.0	196.5	
76 Ethyl methacrylate	69	5.655	5.655	0.000	87	1189589	200.0	199.4	
77 1,1,2-Trichloroethane	83	5.782	5.782	0.000	94	662700	200.0	195.6	
78 Tetrachloroethene	164	5.824	5.824	0.000	82	883644	200.0	203.4	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	95	1325983	200.0	200.6	
80 2-Hexanone	43	5.950	5.950	0.000	95	3597316	1000.0	963.4	
82 Chlorodibromomethane	129	6.067	6.067	0.000	96	966004	200.0	204.6	
83 Ethylene Dibromide	107	6.172	6.172	0.000	98	853793	200.0	201.6	
85 Chlorobenzene	112	6.541	6.541	0.000	96	2541617	200.0	195.2	
87 Ethylbenzene	91	6.594	6.594	0.000	97	4451454	200.0	194.9	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	50	937666	200.0	196.3	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	3467626	200.0	196.0	
89 o-Xylene	91	7.016	7.016	0.000	93	3580876	200.0	198.1	
90 Styrene	104	7.037	7.037	0.000	93	2938731	200.0	200.6	
91 Bromoform	173	7.217	7.217	0.000	97	786894	200.0	205.3	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	4634994	200.0	199.7	
94 Bromobenzene	156	7.597	7.586	0.011	81	1235565	200.0	202.3	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	97	1110914	200.0	194.8	
98 N-Propylbenzene	91	7.639	7.639	0.000	85	5516401	200.0	198.9	
96 trans-1,4-Dichloro-2-buten	53	7.671	7.660	0.011	49	397577	200.0	196.3	a
97 1,2,3-Trichloropropane	110	7.660	7.660	0.000	79	359088	200.0	193.0	
99 2-Chlorotoluene	91	7.734	7.734	0.000	96	3082978	200.0	197.1	
101 1,3,5-Trimethylbenzene	105	7.797	7.797	0.000	73	3958881	200.0	201.1	
102 4-Chlorotoluene	91	7.839	7.829	0.010	78	3275122	200.0	200.3	
103 tert-Butylbenzene	119	8.051	8.050	0.001	90	3561390	200.0	198.7	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	69	4086002	200.0	201.6	
106 sec-Butylbenzene	105	8.240	8.230	0.010	98	5328942	200.0	201.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 4-Isopropyltoluene	119	8.357	8.357	0.001	95	4684718	200.0	193.5	
107 1,3-Dichlorobenzene	146	8.367	8.357	0.011	95	2365660	200.0	194.8	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	95	2365220	200.0	195.0	
112 n-Butylbenzene	91	8.694	8.694	0.000	98	4250789	200.0	192.1	
113 1,2-Dichlorobenzene	146	8.758	8.758	0.000	93	2171497	200.0	193.5	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	91	342757	200.0	195.2	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	93	1688522	200.0	189.1	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	98	923218	200.0	187.2	
118 Naphthalene	128	10.309	10.309	0.000	99	3958381	200.0	184.7	
119 1,2,3-Trichlorobenzene	180	10.520	10.509	0.011	93	1510374	200.0	186.3	
S 122 1,3-Dichloropropene, Total	1				0		400.0	396.4	
S 124 Xylenes, Total	1				0		400.0	394.1	
S 123 1,2-Dichloroethene, Total	1				0		400.0	394.1	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

DOD ISTD_00166	Amount Added: 5.00	Units: uL
VM_MMIX_01939	Amount Added: 20.00	Units: uL
VM_Acrolein_00191	Amount Added: 20.00	Units: uL

Report Date: 07-Dec-2018 09:26:36 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Injection Date: 06-Dec-2018 19:13:30 Instrument ID: CMSP2 Operator ID: ea

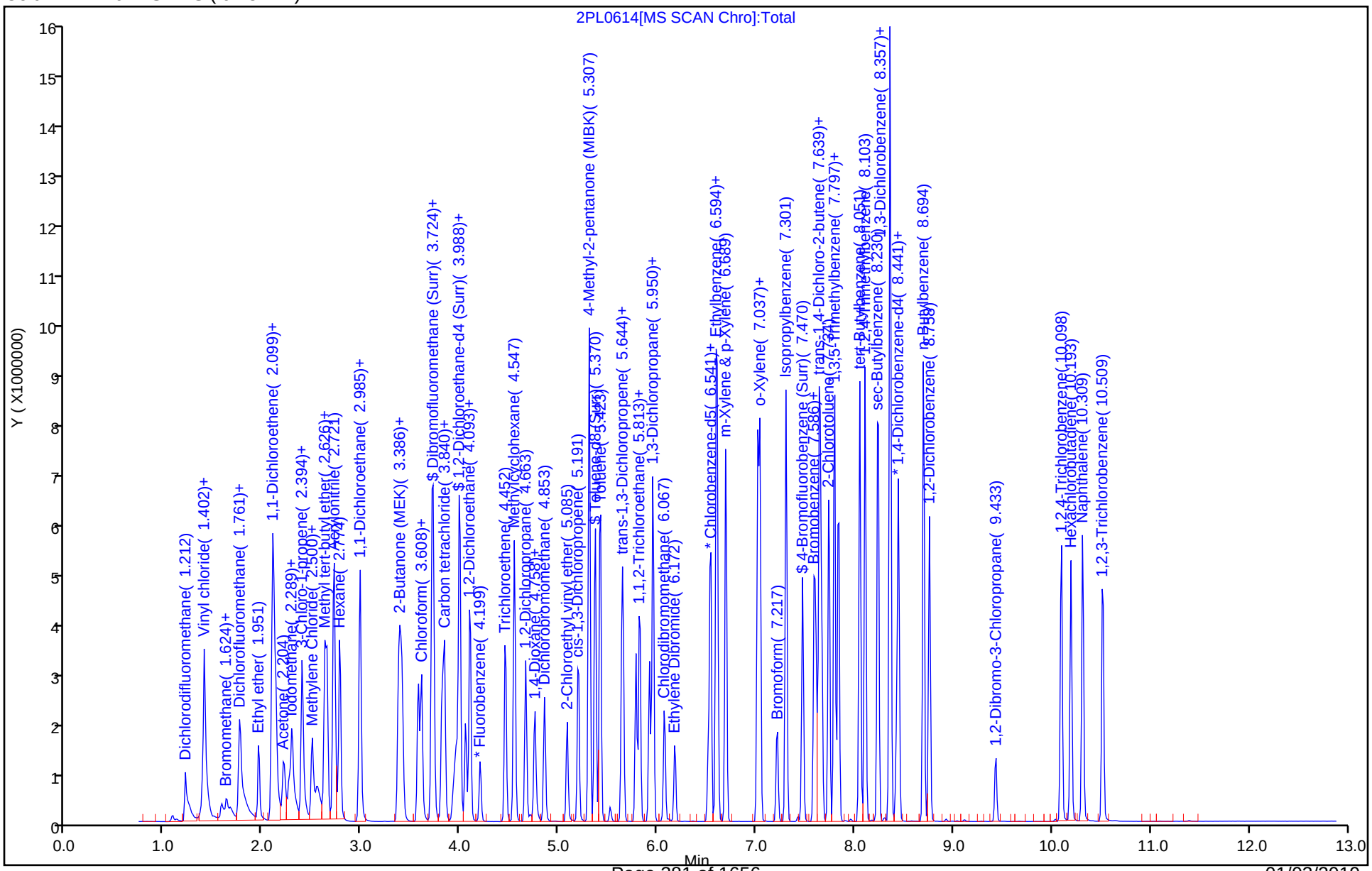
Lims ID: ic Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

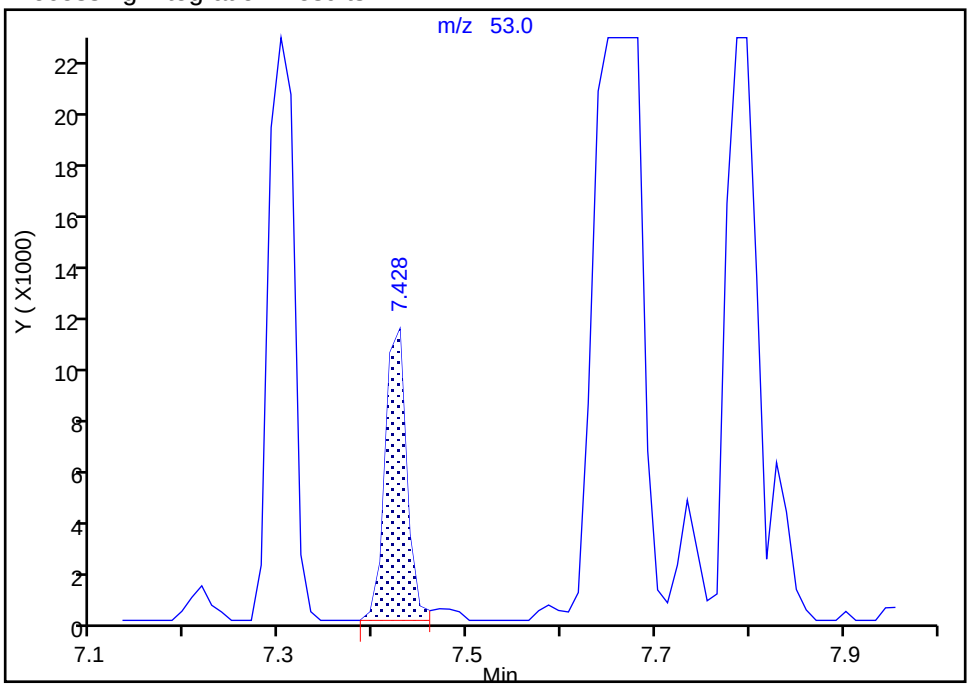
Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D				
Injection Date:	06-Dec-2018 19:13:30	Instrument ID:	CMSP2		
Lims ID:	ic				
Client ID:					
Operator ID:	ea	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

96 trans-1,4-Dichloro-2-butene, CAS: 110-57-6

Signal: 1

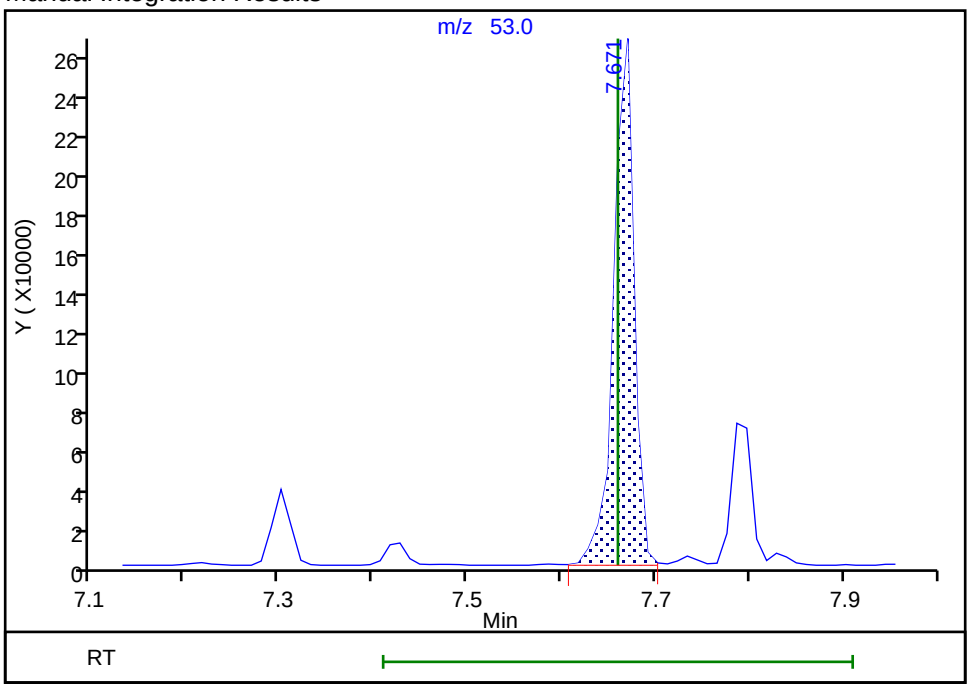
Processing Integration Results

RT: 7.43
Area: 17808
Amount: 8.522320
Amount Units: ug/l



Manual Integration Results

RT: 7.67
Area: 397577
Amount: 196.3091
Amount Units: ug/l



Reviewer: soparaky, 07-Dec-2018 08:05:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-552203/14 Calibration Date: 12/18/2018 13:30

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL1813.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3092	0.2623		42.4	50.0	-15.2	60.0
Vinyl chloride	Ave	0.2945	0.2681		45.5	50.0	-9.0	20.0
1,3-Butadiene	Ave	0.2690	0.2252		41.9	50.0	-16.3	30.0
Chloromethane	Ave	0.4007	0.3532	0.1000	44.1	50.0	-11.9	60.0
Bromomethane	Ave	0.2045	0.1809		44.2	50.0	-11.5	60.0
Chloroethane	Ave	0.1706	0.1561		45.7	50.0	-8.5	60.0
Dichlorofluoromethane	Ave	0.3749	0.3538		47.2	50.0	-5.6	60.0
Trichlorofluoromethane	Ave	0.3289	0.3094		47.0	50.0	-6.0	30.0
Ethyl ether	Ave	0.1919	0.1952		50.9	50.0	1.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2255	0.2185		48.5	50.0	-3.1	60.0
Acrolein	Ave	0.0617	0.0329		745	1400	-46.8	60.0
1,1-Dichloroethene	Ave	0.2466	0.2345		47.5	50.0	-4.9	20.0
Acetone	Ave	0.0224	0.0221		247	250	-1.3	60.0
Iodomethane	Ave	0.4327	0.4628		53.5	50.0	7.0	60.0
Carbon disulfide	Ave	0.7705	0.7401		48.0	50.0	-4.0	60.0
Allyl chloride	Ave	0.1646	0.1660		50.4	50.0	0.8	60.0
Methyl acetate	Ave	0.1438	0.1475		103	100	2.6	60.0
Methylene Chloride	Ave	0.3020	0.2824		46.8	50.0	-6.5	30.0
tert-Butyl alcohol	Ave	0.0225	0.0252		559	500	11.8	60.0
Methyl tert-butyl ether	Ave	0.6727	0.6810		50.6	50.0	1.2	30.0
trans-1,2-Dichloroethene	Ave	0.2746	0.2824		51.4	50.0	2.8	30.0
Acrylonitrile	Ave	0.0896	0.0955		533	500	6.5	60.0
Hexane	Ave	0.3078	0.3107		50.5	50.0	1.0	30.0
1,1-Dichloroethane	Ave	0.4240	0.4277	0.1000	50.4	50.0	0.9	30.0
Vinyl acetate	Ave	0.4012	0.4085		102	100	1.8	60.0
2,2-Dichloropropane	Ave	0.3434	0.3342		48.7	50.0	-2.7	30.0
cis-1,2-Dichloroethene	Ave	0.3066	0.3221		52.5	50.0	5.1	30.0
Methyl Ethyl Ketone	Ave	0.0970	0.1003		258	250	3.4	60.0
Bromochloromethane	Ave	0.1928	0.1843		47.8	50.0	-4.4	30.0
Tetrahydrofuran	Ave	0.0687	0.0665		96.8	100	-3.2	30.0
Chloroform	Ave	0.4246	0.4343		51.1	50.0	2.3	20.0
Cyclohexane	Ave	0.4035	0.4014		49.7	50.0	-0.5	30.0
1,1,1-Trichloroethane	Ave	0.3566	0.3599		50.5	50.0	0.9	30.0
Carbon tetrachloride	Ave	0.2964	0.3058		51.6	50.0	3.2	30.0
1,1-Dichloropropene	Ave	0.3229	0.3298		51.1	50.0	2.1	30.0
Isobutanol	Lin2		0.0100		1320	1250	5.8	60.0
Benzene	Ave	1.047	1.092		52.2	50.0	4.3	30.0
1,2-Dichloroethane	Ave	0.2837	0.2912		51.3	50.0	2.6	30.0
n-Heptane	Ave	0.2669	0.2499		46.8	50.0	-6.4	30.0
Trichloroethene	Ave	0.2951	0.3129		53.0	50.0	6.0	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-552203/14 Calibration Date: 12/18/2018 13:30

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL1813.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4276	0.4528		52.9	50.0	5.9	60.0
1,2-Dichloropropane	Ave	0.2538	0.2585		50.9	50.0	1.8	20.0
1,4-Dioxane	Qua2		0.0035		1080	1000	7.9	60.0
Dibromomethane	Ave	0.1600	0.1755		54.8	50.0	9.7	30.0
Bromodichloromethane	Ave	0.3132	0.3321		53.0	50.0	6.0	30.0
2-Chloroethyl vinyl ether	LinF		0.1447		62.5	50.0	25.0	60.0
cis-1,3-Dichloropropene	Ave	0.4220	0.4345		51.5	50.0	3.0	30.0
methyl isobutyl ketone	Ave	0.1998	0.2283		286	250	14.3	60.0
Toluene	Ave	0.6856	0.7079		51.6	50.0	3.3	20.0
trans-1,3-Dichloropropene	Ave	0.3813	0.4047		53.1	50.0	6.1	30.0
Ethyl methacrylate	Lin		0.3731		55.5	50.0	11.0	60.0
1,1,2-Trichloroethane	Ave	0.2098	0.2234		53.2	50.0	6.5	30.0
Tetrachloroethene	Ave	0.2570	0.2651		51.6	50.0	3.2	30.0
1,3-Dichloropropane	Ave	0.4085	0.4397		53.8	50.0	7.6	30.0
2-Hexanone	Qua2		0.1522		265	250	6.0	60.0
Dibromochloromethane	Ave	0.2686	0.2953		55.0	50.0	9.9	30.0
1,2-Dibromoethane	Ave	0.2642	0.2919		55.2	50.0	10.5	30.0
Chlorobenzene	Ave	2.112	2.167	0.3000	51.3	50.0	2.6	30.0
Ethylbenzene	Ave	3.235	3.352		51.8	50.0	3.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6863	0.7388		53.8	50.0	7.6	30.0
m-Xylene & p-Xylene	Ave	1.397	1.448		51.8	50.0	3.7	30.0
o-Xylene	Ave	1.345	1.422		52.9	50.0	5.7	30.0
Styrene	Ave	2.156	2.505		58.1	50.0	16.2	30.0
Bromoform	Ave	0.5015	0.5701	0.1000	56.8	50.0	13.7	60.0
Isopropylbenzene	Ave	3.314	3.462		52.2	50.0	4.5	30.0
Bromobenzene	Ave	1.007	1.078		53.6	50.0	7.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8847	0.9519	0.3000	53.8	50.0	7.6	30.0
N-Propylbenzene	Ave	1.025	1.068		52.1	50.0	4.2	30.0
1,2,3-Trichloropropane	Ave	0.2833	0.3073		54.2	50.0	8.5	30.0
trans-1,4-Dichloro-2-butene	LinF		0.2133		43.8	50.0	-12.3	60.0
2-Chlorotoluene	Ave	0.9105	0.9424		51.8	50.0	3.5	30.0
1,3,5-Trimethylbenzene	Ave	2.869	3.023		52.7	50.0	5.4	30.0
4-Chlorotoluene	Ave	0.9577	1.002		52.3	50.0	4.7	30.0
tert-Butylbenzene	Ave	2.587	2.670		51.6	50.0	3.2	30.0
1,2,4-Trimethylbenzene	Ave	2.949	3.167		53.7	50.0	7.4	30.0
sec-Butylbenzene	Ave	3.718	3.785		50.9	50.0	1.8	30.0
p-Isopropyltoluene	Ave	2.589	2.638		50.9	50.0	1.9	30.0
1,3-Dichlorobenzene	Ave	1.515	1.556		51.4	50.0	2.7	30.0
1,4-Dichlorobenzene	Ave	1.608	1.585		49.3	50.0	-1.4	30.0
n-Butylbenzene	Ave	2.106	2.133		50.6	50.0	1.3	30.0
1,2-Dichlorobenzene	Ave	1.425	1.481		52.0	50.0	3.9	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-552203/14 Calibration Date: 12/18/2018 13:30

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL1813.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	LinF		0.1498		45.1	50.0	-9.7	60.0
1,2,4-Trichlorobenzene	LinF		0.7246		48.0	50.0	-4.0	30.0
Hexachlorobutadiene	Ave	0.3868	0.4055		52.4	50.0	4.8	30.0
Naphthalene	QuaF		1.109		47.7	50.0	-4.7	60.0
1,2,3-Trichlorobenzene	QuaF		0.3114		46.1	50.0	-7.8	60.0
Dibromofluoromethane (Surr)	Ave	0.2458	0.2639		53.7	50.0	7.3	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2368	0.2416		51.0	50.0	2.0	30.0
Toluene-d8 (Surr)	Ave	0.996	1.023		51.3	50.0	2.7	30.0
4-Bromofluorobenzene (Surr)	Ave	0.7672	0.7692		50.1	50.0	0.3	30.0

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1813.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 18-Dec-2018 13:30:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052682-014
Operator ID: jk Instrument ID: CMSAA
Sublist:

Method: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m
Limit Group: 8260B
Last Update: 18-Dec-2018 14:20:35 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX1017

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	500819	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	82	194636	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	91	257894	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.446	0.005	100	132173	50.0	53.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	96	120975	50.0	51.0	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	512120	50.0	51.3	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	198371	50.0	50.1	
9 Dichlorodifluoromethane	85	1.089	1.089	0.000	99	131387	50.0	42.4	
10 Vinyl chloride	62	1.252	1.252	0.000	98	134283	50.0	45.5	
12 Butadiene	54	1.257	1.257	0.000	90	112788	50.0	41.9	
11 Chloromethane	50	1.257	1.257	0.000	66	176871	50.0	44.1	
14 Bromomethane	96	1.432	1.432	0.000	99	90601	50.0	44.2	
15 Chloroethane	64	1.481	1.475	0.005	98	78160	50.0	45.7	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	99	177165	50.0	47.2	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	99	154929	50.0	47.0	
20 Ethyl ether	59	1.747	1.747	0.000	93	97781	50.0	50.9	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.867	0.000	96	109447	50.0	48.5	
23 Acrolein	56	1.878	1.878	0.000	95	460593	1400.0	745.2	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	117454	50.0	47.5	
25 Acetone	58	1.970	1.970	0.000	90	55287	250.0	246.8	
26 Iodomethane	142	2.036	2.036	0.000	95	231796	50.0	53.5	
27 Carbon disulfide	76	2.063	2.063	0.000	98	370633	50.0	48.0	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	94	83120	50.0	50.4	
29 Methyl acetate	43	2.156	2.156	0.000	97	147781	100.0	102.6	
32 Methylene Chloride	84	2.259	2.259	0.000	84	141451	50.0	46.8	
33 2-Methyl-2-propanol	59	2.286	2.281	0.005	98	126285	500.0	559.2	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	341044	50.0	50.6	
36 trans-1,2-Dichloroethene	96	2.395	2.395	0.000	88	141405	50.0	51.4	
37 Acrylonitrile	53	2.460	2.460	0.000	96	478164	500.0	532.7	
38 Hexane	57	2.520	2.520	0.000	88	155609	50.0	50.5	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	214210	50.0	50.4	
43 Vinyl acetate	43	2.722	2.722	0.000	99	409118	100.0	101.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 2,2-Dichloropropane	77	3.097	3.097	0.000	92	167387	50.0	48.7	a
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	96	161333	50.0	52.5	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	251108	250.0	258.4	
50 Tetrahydrofuran	42	3.293	3.293	0.000	80	66556	100.0	96.8	
51 Chlorobromomethane	49	3.293	3.293	0.000	79	92289	50.0	47.8	
52 Chloroform	83	3.331	3.331	0.000	99	217522	50.0	51.1	
54 Cyclohexane	56	3.429	3.429	0.000	84	201029	50.0	49.7	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	180255	50.0	50.5	
57 Carbon tetrachloride	117	3.527	3.527	0.000	96	153148	50.0	51.6	
58 1,1-Dichloropropene	75	3.555	3.555	-0.001	96	165188	50.0	51.1	
60 Isobutyl alcohol	43	3.647	3.647	0.000	95	124743	1250.0	1323.1	
61 Benzene	78	3.701	3.702	-0.001	95	547023	50.0	52.2	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	145820	50.0	51.3	
63 n-Heptane	43	3.816	3.816	0.000	85	125128	50.0	46.8	
65 Trichloroethene	132	4.164	4.164	0.000	93	156703	50.0	53.0	
66 Methylcyclohexane	83	4.251	4.251	0.000	91	226744	50.0	52.9	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	129472	50.0	50.9	
69 1,4-Dioxane	88	4.447	4.447	0.000	89	34644	1000.0	1078.8	
68 Dibromomethane	93	4.458	4.458	0.000	93	87914	50.0	54.8	
70 Dichlorobromomethane	83	4.556	4.562	-0.006	98	166298	50.0	53.0	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	94	72483	50.0	62.5	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	87	217580	50.0	51.5	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	92	571778	250.0	285.7	
76 Toluene	92	5.117	5.117	0.000	93	354547	50.0	51.6	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	97	202659	50.0	53.1	
78 Ethyl methacrylate	69	5.356	5.356	0.000	86	186866	50.0	55.5	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	111895	50.0	53.2	
80 Tetrachloroethene	164	5.514	5.509	0.005	93	132786	50.0	51.6	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	88	220186	50.0	53.8	
82 2-Hexanone	43	5.650	5.650	0.000	91	381154	250.0	264.9	
85 Chlorodibromomethane	129	5.765	5.759	0.006	98	147866	50.0	55.0	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	146162	50.0	55.2	
88 Chlorobenzene	112	6.227	6.227	0.000	98	421776	50.0	51.3	
89 Ethylbenzene	91	6.287	6.287	0.000	96	652410	50.0	51.8	
90 1,1,1,2-Tetrachloroethane	131	6.293	6.293	0.000	95	143803	50.0	53.8	
92 m-Xylene & p-Xylene	106	6.380	6.380	0.000	98	281888	50.0	51.8	
95 o-Xylene	106	6.701	6.701	0.000	95	276793	50.0	52.9	
96 Styrene	104	6.728	6.728	0.000	98	487496	50.0	58.1	
97 Bromoform	173	6.897	6.897	0.000	99	110962	50.0	56.8	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	673812	50.0	52.2	
100 Bromobenzene	156	7.272	7.273	0.000	89	209851	50.0	53.6	
101 1,1,2,2-Tetrachloroethane	83	7.294	7.300	-0.006	98	185265	50.0	53.8	
102 N-Propylbenzene	120	7.327	7.321	0.006	100	207831	50.0	52.1	
103 1,2,3-Trichloropropane	110	7.343	7.338	0.005	96	59807	50.0	54.2	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.354	0.000	89	41518	50.0	43.8	
105 2-Chlorotoluene	126	7.419	7.419	0.000	95	183428	50.0	51.8	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	94	588451	50.0	52.7	
107 4-Chlorotoluene	126	7.512	7.512	0.000	94	195111	50.0	52.3	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	519641	50.0	51.6	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	616430	50.0	53.7	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	736712	50.0	50.9	
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	680241	50.0	50.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	99	401396	50.0	51.4	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	408817	50.0	49.3	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	550055	50.0	50.6	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	381956	50.0	52.0	
117 1,2-Dibromo-3-Chloropropan	157	9.107	9.102	0.005	88	38626	50.0	45.1	
118 1,2,4-Trichlorobenzene	180	9.766	9.760	0.006	92	186875	50.0	48.0	
119 Hexachlorobutadiene	225	9.858	9.858	0.000	99	104570	50.0	52.4	
120 Naphthalene	128	9.972	9.973	0.000	99	285938	50.0	47.7	
121 1,2,3-Trichlorobenzene	180	10.179	10.179	0.000	95	80302	50.0	46.1	
S 125 1,2-Dichloroethene, Total	1				0		100.0	103.9	
S 126 Xylenes, Total	1				0		100.0	104.7	
S 127 1,3-Dichloropropene, Total	1				0		100.0	104.5	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_MMIX SEC_00083	Amount Added:	5.00	Units: uL
VM_ACROLEIN2_00111	Amount Added:	5.00	Units: uL

Report Date: 18-Dec-2018 14:20:37 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1813.D

Injection Date: 18-Dec-2018 13:30:30 Instrument ID: CMSAA Operator ID: jk

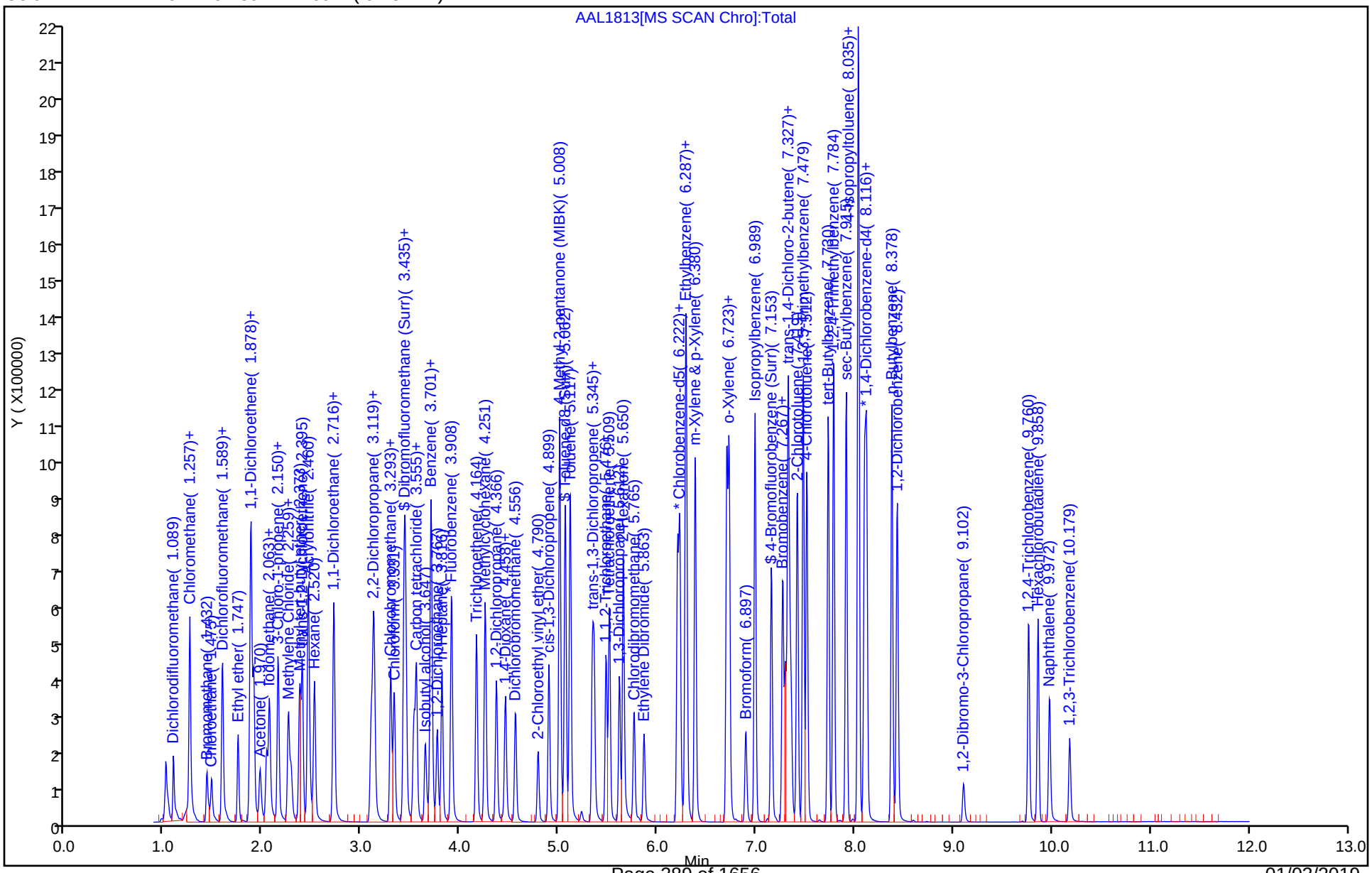
Lims ID: icv Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

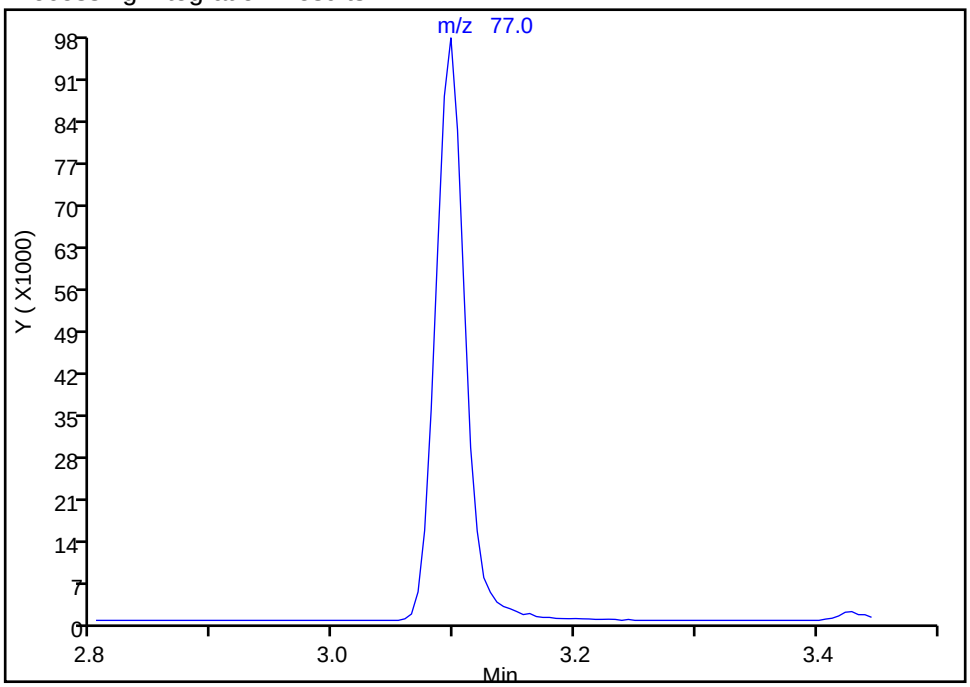
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1813.D				
Injection Date:	18-Dec-2018 13:30:30	Instrument ID:	CMSAA		
Lims ID:	icv				
Client ID:					
Operator ID:	jk	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

47 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

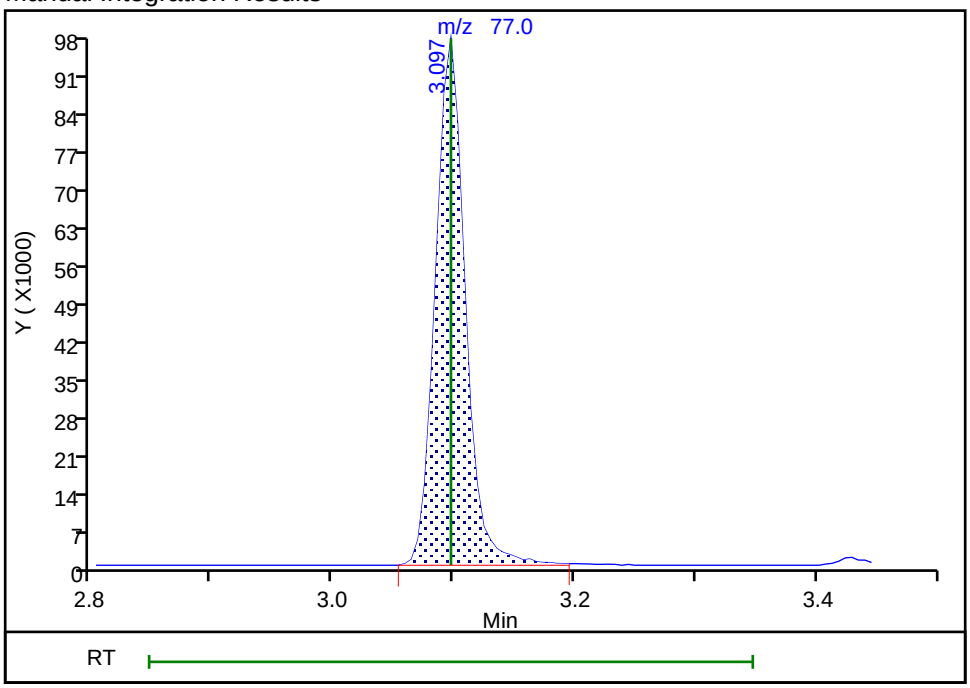
Not Detected
Expected RT: 3.10

Processing Integration Results



RT: 3.10
Area: 167387
Amount: 48.661061
Amount Units: ug/l

Manual Integration Results



Reviewer: kitchingsj, 18-Dec-2018 13:57:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552552/2 Calibration Date: 12/20/2018 09:29

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL2055.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3092	0.2595		42.0	50.0	-16.1	60.0
Vinyl chloride	Ave	0.2945	0.2699		45.8	50.0	-8.4	20.0
1,3-Butadiene	Ave	0.2690	0.2486		46.2	50.0	-7.6	60.0
Chloromethane	Ave	0.4007	0.3374	0.1000	42.1	50.0	-15.8	60.0
Bromomethane	Ave	0.2045	0.1212		29.6	50.0	-40.7	60.0
Chloroethane	Ave	0.1706	0.1539		45.1	50.0	-9.8	60.0
Dichlorofluoromethane	Ave	0.3749	0.3469		46.3	50.0	-7.5	60.0
Trichlorofluoromethane	Ave	0.3289	0.3090		47.0	50.0	-6.1	60.0
Ethyl ether	Ave	0.1919	0.2009		52.3	50.0	4.7	60.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2255	0.2345		52.0	50.0	4.0	60.0
Acrolein	Ave	0.0617	0.0555		900	1000	-10.0	60.0
1,1-Dichloroethene	Ave	0.2466	0.2367		48.0	50.0	-4.0	20.0
Acetone	Ave	0.0224	0.0235		262	250	4.9	60.0
Iodomethane	Ave	0.4327	0.3062		35.4	50.0	-29.2	60.0
Carbon disulfide	Ave	0.7705	0.7452		48.4	50.0	-3.3	60.0
Allyl chloride	Ave	0.1646	0.1624		49.3	50.0	-1.4	60.0
Methyl acetate	Ave	0.1438	0.1416		98.4	100	-1.6	60.0
Methylene Chloride	Ave	0.3020	0.2574		42.6	50.0	-14.7	60.0
tert-Butyl alcohol	Ave	0.0225	0.0204		452	500	-9.7	60.0
Methyl tert-butyl ether	Ave	0.6727	0.6780		50.4	50.0	0.8	60.0
trans-1,2-Dichloroethene	Ave	0.2746	0.2780		50.6	50.0	1.2	60.0
Acrylonitrile	Ave	0.0896	0.0860		480	500	-4.1	60.0
Hexane	Ave	0.3078	0.3269		53.1	50.0	6.2	60.0
1,1-Dichloroethane	Ave	0.4240	0.4101	0.1000	48.4	50.0	-3.3	60.0
Vinyl acetate	Ave	0.4012	0.4113		103	100	2.5	60.0
2,2-Dichloropropane	Ave	0.3434	0.3480		50.7	50.0	1.3	60.0
cis-1,2-Dichloroethene	Ave	0.3066	0.3014		49.2	50.0	-1.7	60.0
Methyl Ethyl Ketone	Ave	0.0970	0.0980		252	250	1.0	60.0
Bromochloromethane	Ave	0.1928	0.1786		46.3	50.0	-7.4	60.0
Tetrahydrofuran	Ave	0.0687	0.1022		149	100	48.8	60.0
Chloroform	Ave	0.4246	0.4109		48.4	50.0	-3.2	20.0
Cyclohexane	Ave	0.4035	0.4172		51.7	50.0	3.4	60.0
1,1,1-Trichloroethane	Ave	0.3566	0.3597		50.4	50.0	0.9	60.0
Carbon tetrachloride	Ave	0.2964	0.3104		52.3	50.0	4.7	60.0
1,1-Dichloropropene	Ave	0.3229	0.3305		51.2	50.0	2.4	60.0
Isobutanol	Lin2		0.0079		1050	1250	-16.3	60.0
Benzene	Ave	1.047	1.045		49.9	50.0	-0.2	60.0
1,2-Dichloroethane	Ave	0.2837	0.2699		47.6	50.0	-4.9	60.0
n-Heptane	Ave	0.2669	0.2534		47.5	50.0	-5.0	60.0
Trichloroethene	Ave	0.2951	0.2945		49.9	50.0	-0.2	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552552/2 Calibration Date: 12/20/2018 09:29

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL2055.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4276	0.4552		53.2	50.0	6.5	60.0
1,2-Dichloropropane	Ave	0.2538	0.2537		50.0	50.0	-0.0	20.0
1,4-Dioxane	Qua2		0.0026		826	1000	-17.4	60.0
Dibromomethane	Ave	0.1600	0.1545		48.3	50.0	-3.5	60.0
Bromodichloromethane	Ave	0.3132	0.3145		50.2	50.0	0.4	60.0
2-Chloroethyl vinyl ether	LinF		0.1104		47.7	50.0	-4.7	60.0
cis-1,3-Dichloropropene	Ave	0.4220	0.4176		49.5	50.0	-1.0	60.0
methyl isobutyl ketone	Ave	0.1998	0.1903		238	250	-4.7	60.0
Toluene	Ave	0.6856	0.6768		49.4	50.0	-1.3	20.0
trans-1,3-Dichloropropene	Ave	0.3813	0.3618		47.4	50.0	-5.1	60.0
Ethyl methacrylate	Lin		0.3102		46.1	50.0	-7.7	60.0
1,1,2-Trichloroethane	Ave	0.2098	0.2033		48.4	50.0	-3.1	60.0
Tetrachloroethene	Ave	0.2570	0.2543		49.5	50.0	-1.1	60.0
1,3-Dichloropropane	Ave	0.4085	0.3960		48.5	50.0	-3.0	60.0
2-Hexanone	Qua2		0.1235		216	250	-13.7	60.0
Dibromochloromethane	Ave	0.2686	0.2713		50.5	50.0	1.0	60.0
1,2-Dibromoethane	Ave	0.2642	0.2552		48.3	50.0	-3.4	60.0
Chlorobenzene	Ave	2.112	2.068	0.3000	49.0	50.0	-2.1	60.0
Ethylbenzene	Ave	3.235	3.248		50.2	50.0	0.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6863	0.7065		51.5	50.0	2.9	60.0
m-Xylene & p-Xylene	Ave	1.397	1.411		50.5	50.0	1.0	60.0
o-Xylene	Ave	1.345	1.372		51.0	50.0	2.0	60.0
Styrene	Ave	2.156	2.214		51.3	50.0	2.7	60.0
Bromoform	Ave	0.5015	0.5194	0.1000	51.8	50.0	3.6	60.0
Isopropylbenzene	Ave	3.314	3.402		51.3	50.0	2.7	60.0
Bromobenzene	Ave	1.007	0.9892		49.1	50.0	-1.7	60.0
1,1,2,2-Tetrachloroethane	Ave	0.8847	0.8465	0.3000	47.8	50.0	-4.3	60.0
N-Propylbenzene	Ave	1.025	1.038		50.6	50.0	1.3	60.0
1,2,3-Trichloropropane	Ave	0.2833	0.2744		48.4	50.0	-3.1	60.0
trans-1,4-Dichloro-2-butene	LinF		0.1874		38.5	50.0	-23.0	60.0
2-Chlorotoluene	Ave	0.9105	0.8924		49.0	50.0	-2.0	60.0
1,3,5-Trimethylbenzene	Ave	2.869	2.866		49.9	50.0	-0.1	60.0
4-Chlorotoluene	Ave	0.9577	0.9501		49.6	50.0	-0.8	60.0
tert-Butylbenzene	Ave	2.587	2.563		49.5	50.0	-0.9	60.0
1,2,4-Trimethylbenzene	Ave	2.949	2.972		50.4	50.0	0.8	60.0
sec-Butylbenzene	Ave	3.718	3.681		49.5	50.0	-1.0	60.0
p-Isopropyltoluene	Ave	2.589	2.647		51.1	50.0	2.2	60.0
1,3-Dichlorobenzene	Ave	1.515	1.500		49.5	50.0	-1.0	60.0
1,4-Dichlorobenzene	Ave	1.608	1.564		48.6	50.0	-2.7	60.0
n-Butylbenzene	Ave	2.106	2.115		50.2	50.0	0.4	60.0
1,2-Dichlorobenzene	Ave	1.425	1.405		49.3	50.0	-1.4	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552552/2 Calibration Date: 12/20/2018 09:29

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL2055.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	LinF		0.1268		38.2	50.0	-23.5	60.0
1,2,4-Trichlorobenzene	LinF		0.5910		39.1	50.0	-21.7	60.0
Hexachlorobutadiene	Ave	0.3868	0.3838		49.6	50.0	-0.8	60.0
Naphthalene	QuaF		0.7494		32.5	50.0	-34.9	60.0
1,2,3-Trichlorobenzene	QuaF		0.2087		31.1	50.0	-37.8	60.0
Dibromofluoromethane (Surr)	Ave	0.2458	0.2411		49.0	50.0	-1.9	60.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2368	0.2249		47.5	50.0	-5.0	60.0
Toluene-d8 (Surr)	Ave	0.996	0.9552		48.0	50.0	-4.1	60.0
4-Bromofluorobenzene (Surr)	Ave	0.7672	0.7597		49.5	50.0	-1.0	60.0

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2055.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Dec-2018 09:29:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052743-002
Operator ID: ea Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\8260AQ.m
Limit Group: 8260B
Last Update: 20-Dec-2018 09:50:57 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: manniona Date: 20-Dec-2018 09:50:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	530578	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	82	199941	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	251992	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	127934	50.0	49.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	96	119312	50.0	47.5	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	506811	50.0	48.0	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	191430	50.0	49.5	
9 Dichlorodifluoromethane	85	1.094	1.094	0.000	99	137665	50.0	42.0	
10 Vinyl chloride	62	1.252	1.252	0.000	98	143200	50.0	45.8	
12 Butadiene	54	1.257	1.257	0.000	92	131901	50.0	46.2	
11 Chloromethane	50	1.257	1.257	0.000	92	179022	50.0	42.1	
14 Bromomethane	96	1.432	1.432	0.000	99	64290	50.0	29.6	M
15 Chloroethane	64	1.481	1.481	0.000	98	81628	50.0	45.1	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	98	184030	50.0	46.3	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	99	163950	50.0	47.0	
20 Ethyl ether	59	1.747	1.747	0.000	95	106585	50.0	52.3	
22 1,1,2-Trichloro-1,2,2-trif	101	1.872	1.872	0.000	96	124442	50.0	52.0	
23 Acrolein	56	1.878	1.878	0.000	94	589155	1000.0	899.7	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	125563	50.0	48.0	
25 Acetone	58	1.970	1.970	0.000	90	62224	250.0	262.1	
26 Iodomethane	142	2.036	2.036	0.000	95	162443	50.0	35.4	
27 Carbon disulfide	76	2.063	2.063	0.000	98	395372	50.0	48.4	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	95	86150	50.0	49.3	
29 Methyl acetate	43	2.156	2.156	0.000	97	150233	100.0	98.4	
32 Methylene Chloride	84	2.259	2.259	0.000	84	136586	50.0	42.6	
33 2-Methyl-2-propanol	59	2.286	2.286	0.000	99	108031	500.0	451.6	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	359751	50.0	50.4	
36 trans-1,2-Dichloroethene	96	2.401	2.401	0.000	89	147509	50.0	50.6	
37 Acrylonitrile	53	2.460	2.460	0.000	96	456017	500.0	479.5	
38 Hexane	57	2.520	2.520	0.000	88	173443	50.0	53.1	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	217612	50.0	48.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.722	2.722	0.000	99	436431	100.0	102.5	
47 2,2-Dichloropropane	77	3.097	3.097	0.000	93	184612	50.0	50.7	
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	95	159940	50.0	49.2	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	98	259887	250.0	252.4	
51 Chlorobromomethane	49	3.293	3.293	0.000	79	94753	50.0	46.3	
50 Tetrahydrofuran	42	3.293	3.293	0.000	90	108429	100.0	148.8	
52 Chloroform	83	3.331	3.331	0.000	99	218001	50.0	48.4	
54 Cyclohexane	56	3.429	3.429	0.000	85	221370	50.0	51.7	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	190859	50.0	50.4	
57 Carbon tetrachloride	117	3.533	3.533	0.000	97	164664	50.0	52.3	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	97	175374	50.0	51.2	
60 Isobutyl alcohol	43	3.647	3.647	0.000	95	104348	1250.0	1046.5	
61 Benzene	78	3.702	3.702	0.000	95	554342	50.0	49.9	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	143178	50.0	47.6	
63 n-Heptane	43	3.816	3.816	0.000	86	134458	50.0	47.5	
65 Trichloroethene	132	4.164	4.164	0.000	94	156254	50.0	49.9	
66 Methylcyclohexane	83	4.251	4.251	0.000	92	241511	50.0	53.2	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	134602	50.0	50.0	
69 1,4-Dioxane	88	4.447	4.447	0.000	89	27898	1000.0	825.6	
68 Dibromomethane	93	4.458	4.458	0.000	90	81977	50.0	48.3	
70 Dichlorobromomethane	83	4.562	4.562	0.000	99	166845	50.0	50.2	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	95	58577	50.0	47.7	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	221551	50.0	49.5	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	92	504909	250.0	238.2	
76 Toluene	92	5.117	5.117	0.000	93	359095	50.0	49.4	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	97	191949	50.0	47.4	
78 Ethyl methacrylate	69	5.356	5.356	0.000	86	164588	50.0	46.1	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	95	107865	50.0	48.4	
80 Tetrachloroethene	164	5.514	5.514	0.000	94	134918	50.0	49.5	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	210125	50.0	48.5	
82 2-Hexanone	43	5.656	5.656	0.000	92	327558	250.0	215.8	
85 Chlorodibromomethane	129	5.765	5.765	0.000	98	143951	50.0	50.5	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	135417	50.0	48.3	
88 Chlorobenzene	112	6.227	6.227	0.000	98	413523	50.0	49.0	
89 Ethylbenzene	91	6.287	6.287	0.000	97	649425	50.0	50.2	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.298	0.000	95	141265	50.0	51.5	
92 m-Xylene & p-Xylene	106	6.385	6.385	0.000	98	282143	50.0	50.5	
95 o-Xylene	106	6.706	6.701	0.005	95	274367	50.0	51.0	
96 Styrene	104	6.728	6.728	0.000	98	442650	50.0	51.3	
97 Bromoform	173	6.897	6.897	0.000	99	103846	50.0	51.8	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	680230	50.0	51.3	
100 Bromobenzene	156	7.272	7.272	0.000	90	197781	50.0	49.1	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	99	169242	50.0	47.8	
102 N-Propylbenzene	120	7.327	7.327	0.000	100	207590	50.0	50.6	
103 1,2,3-Trichloropropane	110	7.343	7.343	0.000	97	54861	50.0	48.4	
104 trans-1,4-Dichloro-2-buten	53	7.360	7.360	0.000	70	37464	50.0	38.5	
105 2-Chlorotoluene	126	7.419	7.419	0.000	95	178419	50.0	49.0	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	95	573056	50.0	49.9	
107 4-Chlorotoluene	126	7.517	7.517	0.000	95	189961	50.0	49.6	
108 tert-Butylbenzene	119	7.735	7.735	0.000	98	512478	50.0	49.5	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	594246	50.0	50.4	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	736067	50.0	49.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	666941	50.0	51.1	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	99	378074	50.0	49.5	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	394145	50.0	48.6	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	532943	50.0	50.2	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	353999	50.0	49.3	
117 1,2-Dibromo-3-Chloropropan	157	9.107	9.107	0.000	88	31957	50.0	38.2	
118 1,2,4-Trichlorobenzene	180	9.766	9.766	0.000	93	148916	50.0	39.1	
119 Hexachlorobutadiene	225	9.864	9.864	0.000	99	96722	50.0	49.6	
120 Naphthalene	128	9.978	9.978	0.000	99	188835	50.0	32.5	
121 1,2,3-Trichlorobenzene	180	10.185	10.185	0.000	95	52592	50.0	31.1	
S 127 1,3-Dichloropropene, Total	1				0		100.0	96.9	
S 126 Xylenes, Total	1				0		100.0	101.5	
S 125 1,2-Dichloroethene, Total	1				0		100.0	99.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL
VM_MMIX_01940	Amount Added:	5.00	Units: uL

Report Date: 20-Dec-2018 09:50:59 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2055.D

Injection Date: 20-Dec-2018 09:29:30 Instrument ID: CMSAA Operator ID: ea

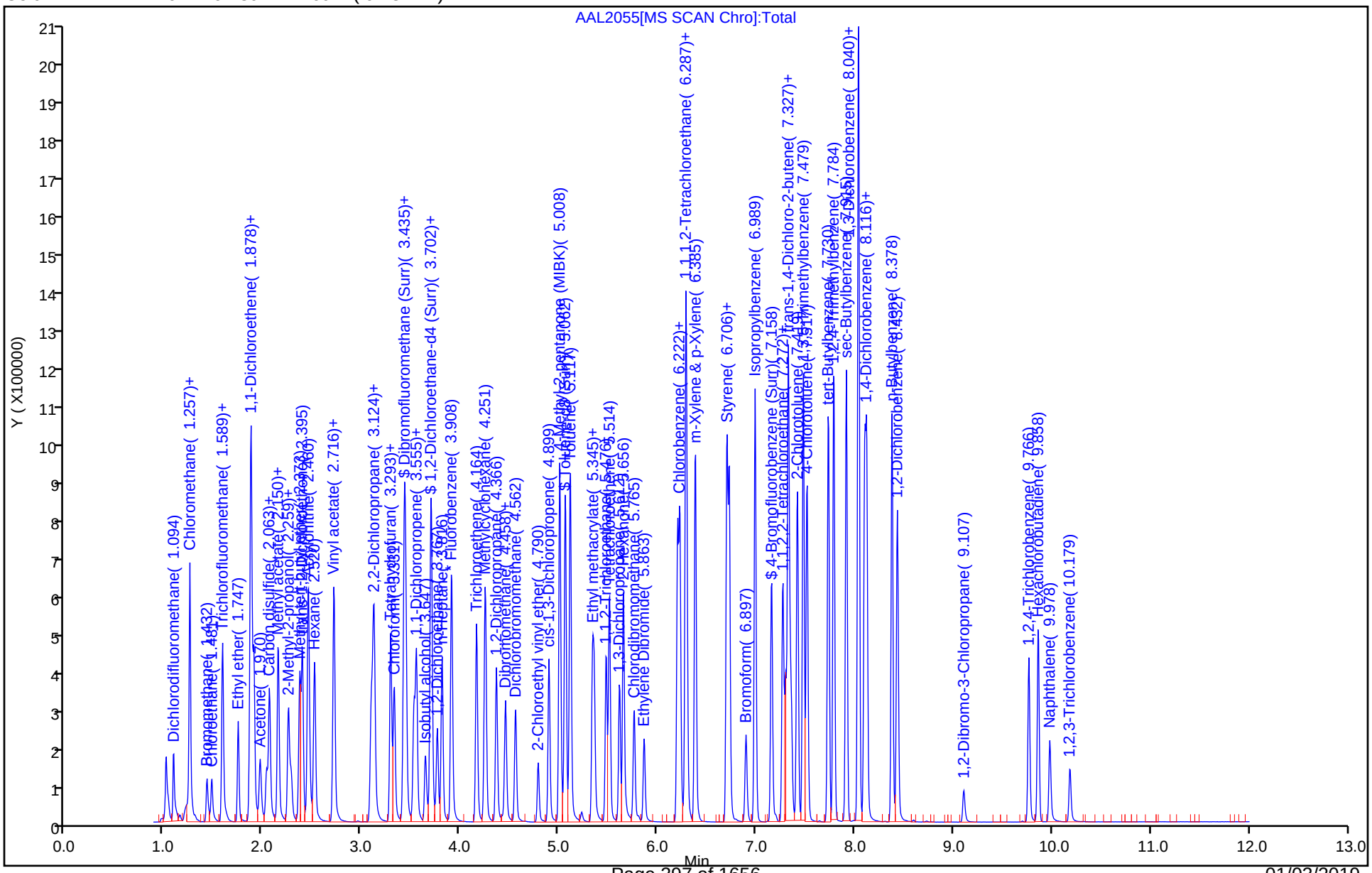
Lims ID: ccvis Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

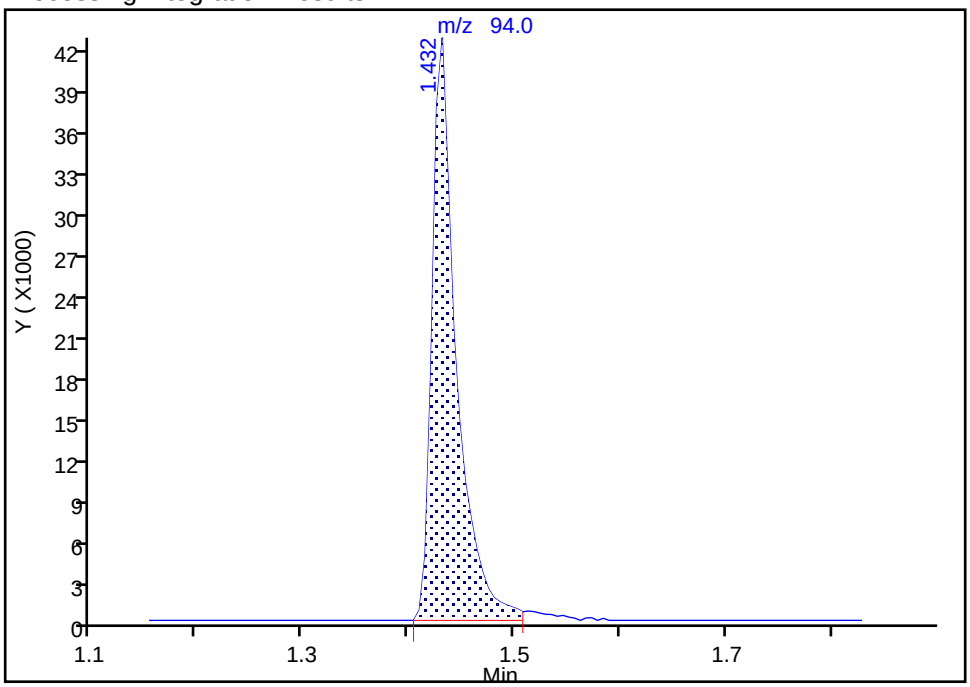
Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2055.D				
Injection Date:	20-Dec-2018 09:29:30	Instrument ID:	CMSAA		
Lims ID:	ccvis				
Client ID:					
Operator ID:	ea	ALS Bottle#:	1	Worklist Smp#:	2
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

14 Bromomethane, CAS: 74-83-9

Signal: 1

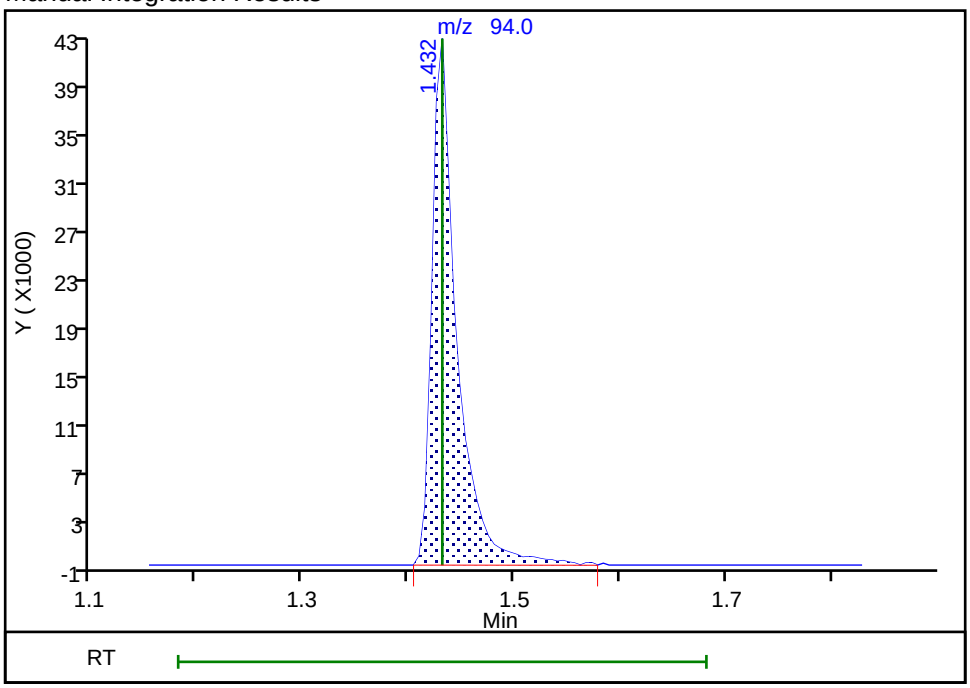
Processing Integration Results

RT: 1.43
Area: 67415
Amount: 29.627833
Amount Units: ug/l



Manual Integration Results

RT: 1.43
Area: 68865
Amount: 29.627833
Amount Units: ug/l



Reviewer: manniona, 20-Dec-2018 09:48:03

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552754/2 Calibration Date: 12/21/2018 09:19

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL2155.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3092	0.2690		43.5	50.0	-13.0	60.0
Vinyl chloride	Ave	0.2945	0.2793		47.4	50.0	-5.1	20.0
1,3-Butadiene	Ave	0.2690	0.2576		47.9	50.0	-4.3	60.0
Chloromethane	Ave	0.4007	0.3563	0.1000	44.5	50.0	-11.1	60.0
Bromomethane	Ave	0.2045	0.1623		39.7	50.0	-20.7	60.0
Chloroethane	Ave	0.1706	0.1568		45.9	50.0	-8.1	60.0
Dichlorofluoromethane	Ave	0.3749	0.3567		47.6	50.0	-4.9	60.0
Trichlorofluoromethane	Ave	0.3289	0.3136		47.7	50.0	-4.7	60.0
Ethyl ether	Ave	0.1919	0.2011		52.4	50.0	4.8	60.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2255	0.2345		52.0	50.0	4.0	60.0
Acrolein	Ave	0.0617	0.0576		933	1000	-6.7	60.0
1,1-Dichloroethene	Ave	0.2466	0.2442		49.5	50.0	-1.0	20.0
Acetone	Ave	0.0224	0.0207		232	250	-7.3	60.0
Iodomethane	Ave	0.4327	0.3962		45.8	50.0	-8.4	60.0
Carbon disulfide	Ave	0.7705	0.7621		49.4	50.0	-1.1	60.0
Allyl chloride	Ave	0.1646	0.1662		50.5	50.0	1.0	60.0
Methyl acetate	Ave	0.1438	0.1381		96.0	100	-4.0	60.0
Methylene Chloride	Ave	0.3020	0.2622		43.4	50.0	-13.2	60.0
tert-Butyl alcohol	Ave	0.0225	0.0195		432	500	-13.7	60.0
Methyl tert-butyl ether	Ave	0.6727	0.6518		48.4	50.0	-3.1	60.0
trans-1,2-Dichloroethene	Ave	0.2746	0.2883		52.5	50.0	5.0	60.0
Acrylonitrile	Ave	0.0896	0.0861		481	500	-3.9	60.0
Hexane	Ave	0.3078	0.3192		51.9	50.0	3.7	60.0
1,1-Dichloroethane	Ave	0.4240	0.4223	0.1000	49.8	50.0	-0.4	60.0
Vinyl acetate	Ave	0.4012	0.4071		101	100	1.5	60.0
2,2-Dichloropropane	Ave	0.3434	0.3553		51.7	50.0	3.5	60.0
cis-1,2-Dichloroethene	Ave	0.3066	0.3103		50.6	50.0	1.2	60.0
Methyl Ethyl Ketone	Ave	0.0970	0.0898		231	250	-7.5	60.0
Bromochloromethane	Ave	0.1928	0.1803		46.8	50.0	-6.5	60.0
Tetrahydrofuran	Ave	0.0687	0.0646		94.1	100	-5.9	60.0
Chloroform	Ave	0.4246	0.4172		49.1	50.0	-1.7	20.0
Cyclohexane	Ave	0.4035	0.4229		52.4	50.0	4.8	60.0
1,1,1-Trichloroethane	Ave	0.3566	0.3663		51.4	50.0	2.7	60.0
Carbon tetrachloride	Ave	0.2964	0.3062		51.7	50.0	3.3	60.0
1,1-Dichloropropene	Ave	0.3229	0.3371		52.2	50.0	4.4	60.0
Isobutanol	Lin2		0.0077		1020	1250	-18.0	60.0
Benzene	Ave	1.047	1.069		51.0	50.0	2.1	60.0
1,2-Dichloroethane	Ave	0.2837	0.2731		48.1	50.0	-3.7	60.0
n-Heptane	Ave	0.2669	0.2531		47.4	50.0	-5.2	60.0
Trichloroethene	Ave	0.2951	0.3004		50.9	50.0	1.8	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552754/2 Calibration Date: 12/21/2018 09:19

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL2155.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4276	0.4549		53.2	50.0	6.4	60.0
1,2-Dichloropropane	Ave	0.2538	0.2575		50.7	50.0	1.4	20.0
1,4-Dioxane	Qua2		0.0025		789	1000	-21.1	60.0
Dibromomethane	Ave	0.1600	0.1552		48.5	50.0	-3.0	60.0
Bromodichloromethane	Ave	0.3132	0.3114		49.7	50.0	-0.6	60.0
2-Chloroethyl vinyl ether	LinF		0.1160		50.1	50.0	0.1	60.0
cis-1,3-Dichloropropene	Ave	0.4220	0.4256		50.4	50.0	0.9	60.0
methyl isobutyl ketone	Ave	0.1998	0.1908		239	250	-4.5	60.0
Toluene	Ave	0.6856	0.6867		50.1	50.0	0.2	20.0
trans-1,3-Dichloropropene	Ave	0.3813	0.3628		47.6	50.0	-4.9	60.0
Ethyl methacrylate	Lin		0.3116		46.3	50.0	-7.3	60.0
1,1,2-Trichloroethane	Ave	0.2098	0.2056		49.0	50.0	-2.0	60.0
Tetrachloroethene	Ave	0.2570	0.2549		49.6	50.0	-0.8	60.0
1,3-Dichloropropane	Ave	0.4085	0.4008		49.1	50.0	-1.9	60.0
2-Hexanone	Qua2		0.1229		215	250	-14.1	60.0
Dibromochloromethane	Ave	0.2686	0.2614		48.6	50.0	-2.7	60.0
1,2-Dibromoethane	Ave	0.2642	0.2553		48.3	50.0	-3.4	60.0
Chlorobenzene	Ave	2.112	2.103	0.3000	49.8	50.0	-0.5	60.0
Ethylbenzene	Ave	3.235	3.309		51.1	50.0	2.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6863	0.7023		51.2	50.0	2.3	60.0
m-Xylene & p-Xylene	Ave	1.397	1.408		50.4	50.0	0.8	60.0
o-Xylene	Ave	1.345	1.379		51.2	50.0	2.5	60.0
Styrene	Ave	2.156	2.248		52.1	50.0	4.3	60.0
Bromoform	Ave	0.5015	0.4967	0.1000	49.5	50.0	-0.9	60.0
Isopropylbenzene	Ave	3.314	3.412		51.5	50.0	3.0	60.0
Bromobenzene	Ave	1.007	1.007		50.0	50.0	0.0	60.0
1,1,2,2-Tetrachloroethane	Ave	0.8847	0.8452	0.3000	47.8	50.0	-4.5	60.0
N-Propylbenzene	Ave	1.025	1.055		51.5	50.0	2.9	60.0
1,2,3-Trichloropropane	Ave	0.2833	0.2679		47.3	50.0	-5.5	60.0
trans-1,4-Dichloro-2-butene	LinF		0.2032		41.8	50.0	-16.5	60.0
2-Chlorotoluene	Ave	0.9105	0.9043		49.7	50.0	-0.7	60.0
1,3,5-Trimethylbenzene	Ave	2.869	2.892		50.4	50.0	0.8	60.0
4-Chlorotoluene	Ave	0.9577	0.9680		50.5	50.0	1.1	60.0
tert-Butylbenzene	Ave	2.587	2.612		50.5	50.0	1.0	60.0
1,2,4-Trimethylbenzene	Ave	2.949	3.037		51.5	50.0	3.0	60.0
sec-Butylbenzene	Ave	3.718	3.776		50.8	50.0	1.6	60.0
p-Isopropyltoluene	Ave	2.589	2.732		52.8	50.0	5.5	60.0
1,3-Dichlorobenzene	Ave	1.515	1.543		50.9	50.0	1.9	60.0
1,4-Dichlorobenzene	Ave	1.608	1.630		50.7	50.0	1.4	60.0
n-Butylbenzene	Ave	2.106	2.189		52.0	50.0	4.0	60.0
1,2-Dichlorobenzene	Ave	1.425	1.463		51.3	50.0	2.7	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552754/2 Calibration Date: 12/21/2018 09:19

Instrument ID: CMSAA Calib Start Date: 12/18/2018 10:06

GC Column: DB-VRX (20m) ID: 0.18(mm) Calib End Date: 12/18/2018 12:45

Lab File ID: AAL2155.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	LinF		0.1263		38.1	50.0	-23.9	60.0
1,2,4-Trichlorobenzene	LinF		0.6627		43.9	50.0	-12.2	60.0
Hexachlorobutadiene	Ave	0.3868	0.4088		52.8	50.0	5.7	60.0
Naphthalene	QuaF		0.9406		40.6	50.0	-18.8	60.0
1,2,3-Trichlorobenzene	QuaF		0.2790		41.4	50.0	-17.2	60.0
Dibromofluoromethane (Surr)	Ave	0.2458	0.2429		49.4	50.0	-1.2	60.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2368	0.2261		47.7	50.0	-4.5	60.0
Toluene-d8 (Surr)	Ave	0.996	0.9691		48.7	50.0	-2.7	60.0
4-Bromofluorobenzene (Surr)	Ave	0.7672	0.7589		49.5	50.0	-1.1	60.0

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2155.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Dec-2018 09:19:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052778-002
Operator ID: ea Instrument ID: CMSAA
Sublist: chrom-8260AQ*sub1

Method: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\8260AQ.m
Limit Group: 8260B
Last Update: 24-Dec-2018 09:24:04 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0330

First Level Reviewer: manniona Date: 21-Dec-2018 09:40:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	511455	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	82	192498	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	239862	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	124232	50.0	49.4	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	97	115623	50.0	47.7	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	495661	50.0	48.7	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	182020	50.0	49.5	
9 Dichlorodifluoromethane	85	1.094	1.094	0.000	99	137558	50.0	43.5	
10 Vinyl chloride	62	1.252	1.252	0.000	98	142869	50.0	47.4	
12 Butadiene	54	1.257	1.257	0.000	91	131739	50.0	47.9	
11 Chloromethane	50	1.257	1.257	0.000	66	182234	50.0	44.5	
14 Bromomethane	96	1.432	1.432	0.000	99	82983	50.0	39.7	
15 Chloroethane	64	1.481	1.481	0.000	98	80174	50.0	45.9	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	99	182412	50.0	47.6	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	100	160372	50.0	47.7	
20 Ethyl ether	59	1.747	1.747	0.000	94	102835	50.0	52.4	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.873	-0.006	96	119959	50.0	52.0	
23 Acrolein	56	1.878	1.878	0.000	94	588696	1000.0	932.7	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	124913	50.0	49.5	
25 Acetone	58	1.971	1.971	0.000	90	53012	250.0	231.7	
26 Iodomethane	142	2.036	2.036	0.000	95	202656	50.0	45.8	
27 Carbon disulfide	76	2.063	2.063	0.000	98	389753	50.0	49.4	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	95	85002	50.0	50.5	
29 Methyl acetate	43	2.156	2.156	0.000	97	141293	100.0	96.0	
32 Methylene Chloride	84	2.259	2.259	0.000	84	134124	50.0	43.4	
33 2-Methyl-2-propanol	59	2.281	2.281	0.000	99	99535	500.0	431.6	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	333368	50.0	48.4	
36 trans-1,2-Dichloroethene	96	2.401	2.401	0.000	89	147435	50.0	52.5	
37 Acrylonitrile	53	2.460	2.460	0.000	96	440509	500.0	480.6	
38 Hexane	57	2.520	2.520	0.000	88	163260	50.0	51.9	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	215995	50.0	49.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 Vinyl acetate	43	2.722	2.722	0.000	99	416423	100.0	101.5	
47 2,2-Dichloropropane	77	3.097	3.097	0.000	92	181712	50.0	51.7	
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	95	158680	50.0	50.6	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	229601	250.0	231.3	
50 Tetrahydrofuran	42	3.293	3.293	0.000	80	66105	100.0	94.1	
51 Chlorobromomethane	49	3.293	3.293	0.000	79	92210	50.0	46.8	
52 Chloroform	83	3.331	3.331	0.000	99	213387	50.0	49.1	
54 Cyclohexane	56	3.429	3.429	0.000	85	216316	50.0	52.4	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	187319	50.0	51.4	
57 Carbon tetrachloride	117	3.527	3.527	0.000	97	156614	50.0	51.7	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	97	172433	50.0	52.2	
60 Isobutyl alcohol	43	3.647	3.647	0.000	95	98448	1250.0	1024.5	
61 Benzene	78	3.702	3.702	0.000	95	546624	50.0	51.0	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	96	139686	50.0	48.1	
63 n-Heptane	43	3.816	3.816	0.000	86	129431	50.0	47.4	
65 Trichloroethene	132	4.164	4.164	0.000	93	153634	50.0	50.9	
66 Methylcyclohexane	83	4.251	4.251	0.000	92	232661	50.0	53.2	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	131683	50.0	50.7	
69 1,4-Dioxane	88	4.447	4.447	0.000	89	25665	1000.0	788.9	
68 Dibromomethane	93	4.458	4.458	0.000	90	79361	50.0	48.5	
70 Dichlorobromomethane	83	4.562	4.562	0.000	99	159267	50.0	49.7	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	95	59301	50.0	50.1	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	217698	50.0	50.4	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	92	487827	250.0	238.7	
76 Toluene	92	5.117	5.117	0.000	93	351235	50.0	50.1	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	97	185530	50.0	47.6	
78 Ethyl methacrylate	69	5.356	5.356	0.000	86	159382	50.0	46.3	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	105173	50.0	49.0	
80 Tetrachloroethene	164	5.514	5.514	0.000	94	130381	50.0	49.6	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	204975	50.0	49.1	
82 2-Hexanone	43	5.650	5.650	0.000	92	314232	250.0	214.8	
85 Chlorodibromomethane	129	5.759	5.759	0.000	98	133678	50.0	48.6	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	130585	50.0	48.3	
88 Chlorobenzene	112	6.227	6.227	0.000	99	404769	50.0	49.8	
89 Ethylbenzene	91	6.287	6.287	0.000	96	636975	50.0	51.1	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.298	0.000	95	135184	50.0	51.2	
92 m-Xylene & p-Xylene	106	6.380	6.380	0.000	98	271023	50.0	50.4	
95 o-Xylene	106	6.706	6.701	0.005	95	265395	50.0	51.2	
96 Styrene	104	6.728	6.728	0.000	98	432663	50.0	52.1	
97 Bromoform	173	6.897	6.897	0.000	99	95622	50.0	49.5	
98 Isopropylbenzene	105	6.990	6.990	0.000	94	656891	50.0	51.5	
100 Bromobenzene	156	7.273	7.273	0.000	90	193899	50.0	50.0	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	99	162702	50.0	47.8	
102 N-Propylbenzene	120	7.327	7.327	0.000	100	203056	50.0	51.5	
103 1,2,3-Trichloropropane	110	7.343	7.343	0.000	96	51560	50.0	47.3	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.354	0.000	88	39112	50.0	41.8	
105 2-Chlorotoluene	126	7.420	7.420	0.000	95	174081	50.0	49.7	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	94	556645	50.0	50.4	
107 4-Chlorotoluene	126	7.518	7.518	0.000	95	186340	50.0	50.5	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	502775	50.0	50.5	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	584671	50.0	51.5	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	726962	50.0	50.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	655351	50.0	52.8	
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	99	370074	50.0	50.9	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	390958	50.0	50.7	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	525147	50.0	52.0	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	351011	50.0	51.3	
117 1,2-Dibromo-3-Chloropropan	157	9.107	9.107	0.000	89	30291	50.0	38.1	
118 1,2,4-Trichlorobenzene	180	9.766	9.766	0.000	93	158967	50.0	43.9	
119 Hexachlorobutadiene	225	9.864	9.864	0.000	98	98057	50.0	52.8	
120 Naphthalene	128	9.978	9.978	0.000	99	225619	50.0	40.6	
121 1,2,3-Trichlorobenzene	180	10.185	10.185	0.000	95	66928	50.0	41.4	
S 127 1,3-Dichloropropene, Total	1				0		100.0	98.0	
S 126 Xylenes, Total	1				0		100.0	101.6	
S 125 1,2-Dichloroethene, Total	1				0		100.0	103.1	

Reagents:

DOD ISTD_00167	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL
VM_MMIX_01940	Amount Added:	5.00	Units: uL

Report Date: 24-Dec-2018 09:24:09 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2155.D

Injection Date: 21-Dec-2018 09:19:30 Instrument ID: CMSAA Operator ID: ea

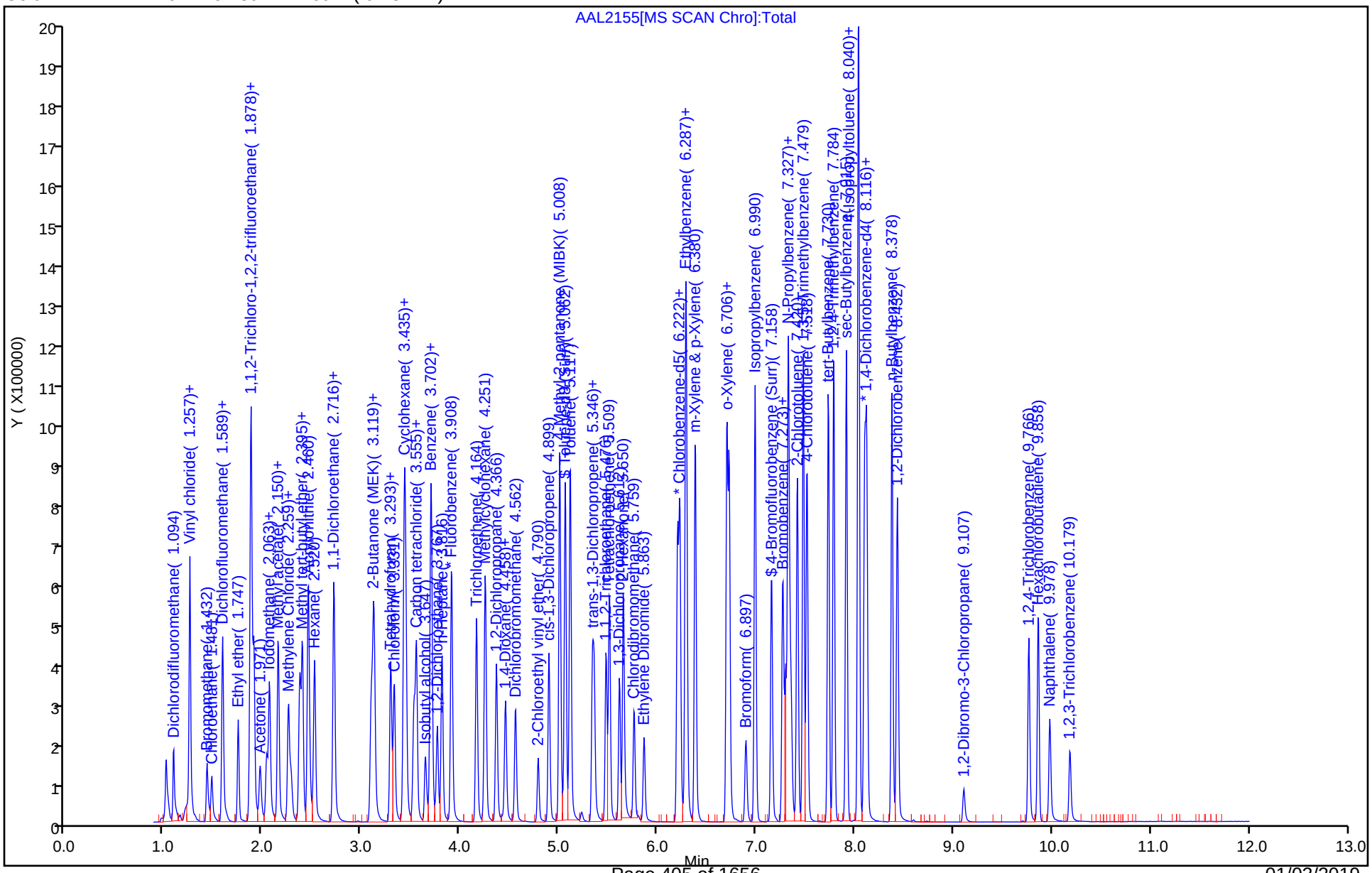
Lims ID: ccvis Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-547166/14 Calibration Date: 11/12/2018 16:21

Instrument ID: CMSO2 Calib Start Date: 11/12/2018 12:50

GC Column: Rtx-624 ID: 0.18(mm) Calib End Date: 11/12/2018 15:35

Lab File ID: OK01220.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2734	0.2823		51.6	50.0	3.3	60.0
Vinyl chloride	Ave	0.2681	0.2848		53.1	50.0	6.2	20.0
1,3-Butadiene	Ave	0.3113	0.3103		49.8	50.0	-0.3	30.0
Chloromethane	Ave	0.5332	0.5139	0.1000	48.2	50.0	-3.6	60.0
Bromomethane	Ave	0.1402	0.1076		38.4	50.0	-23.2	60.0
Chloroethane	Qua		0.1388		54.4	50.0	8.9	60.0
Dichlorofluoromethane	Ave	0.3747	0.3560		47.5	50.0	-5.0	60.0
Trichlorofluoromethane	Ave	0.3141	0.3310		52.7	50.0	5.4	30.0
Ethyl ether	Ave	0.2868	0.3003		52.3	50.0	4.7	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1854	0.1930		52.0	50.0	4.1	60.0
1,1-Dichloroethene	Ave	0.2353	0.2393		50.8	50.0	1.7	20.0
Acetone	Ave	0.0447	0.0440		246	250	-1.5	60.0
Iodomethane	Ave	0.3621	0.3819		52.7	50.0	5.5	60.0
Carbon disulfide	Ave	0.7381	0.7884		53.4	50.0	6.8	60.0
Methyl acetate	Ave	0.4240	0.4328		102	100	2.1	60.0
Allyl chloride	Ave	0.1703	0.1734		50.9	50.0	1.8	60.0
Methylene Chloride	Ave	0.2880	0.2641		45.9	50.0	-8.3	30.0
tert-Butyl alcohol	Ave	0.0557	0.0556		500	500	-0.1	60.0
Acrylonitrile	Ave	0.2055	0.2147		522	500	4.5	60.0
Methyl tert-butyl ether	Ave	0.9685	0.9673		49.9	50.0	-0.1	30.0
trans-1,2-Dichloroethene	Ave	0.2776	0.2882		51.9	50.0	3.8	30.0
Hexane	Ave	0.4205	0.4197		49.9	50.0	-0.2	30.0
Vinyl acetate	Ave	1.064	1.076		101	100	1.1	60.0
1,1-Dichloroethane	Ave	0.5367	0.5431	0.1000	50.6	50.0	1.2	30.0
Methyl Ethyl Ketone	Ave	0.0505	0.0519		257	250	2.6	60.0
2,2-Dichloropropane	Ave	0.4151	0.4105		49.5	50.0	-1.1	30.0
cis-1,2-Dichloroethene	Ave	0.5538	0.5253		47.4	50.0	-5.1	30.0
Bromochloromethane	Ave	0.1701	0.1707		50.2	50.0	0.4	30.0
Tetrahydrofuran	Ave	0.2160	0.1969		91.1	100	-8.9	30.0
Chloroform	Ave	0.5045	0.4920		48.8	50.0	-2.5	20.0
1,1,1-Trichloroethane	Ave	0.4289	0.4301		50.1	50.0	0.3	30.0
Cyclohexane	Ave	0.3722	0.3861		51.9	50.0	3.7	30.0
Carbon tetrachloride	Ave	0.3444	0.3644		52.9	50.0	5.8	30.0
1,1-Dichloropropene	Ave	0.3551	0.3693		52.0	50.0	4.0	30.0
Isobutanol	Ave	0.0302	0.0298		1230	1250	-1.2	60.0
Benzene	Ave	1.075	1.070		49.8	50.0	-0.4	30.0
1,2-Dichloroethane	Ave	0.4581	0.4679		51.1	50.0	2.1	30.0
n-Heptane	Ave	0.4780	0.4609		48.2	50.0	-3.6	30.0
Trichloroethene	Ave	0.2874	0.2670		46.4	50.0	-7.1	30.0
Methylcyclohexane	Ave	0.4037	0.4202		52.0	50.0	4.1	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-547166/14 Calibration Date: 11/12/2018 16:21

Instrument ID: CMSO2 Calib Start Date: 11/12/2018 12:50

GC Column: Rtx-624 ID: 0.18(mm) Calib End Date: 11/12/2018 15:35

Lab File ID: OK01220.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3115	0.3101		49.8	50.0	-0.4	20.0
1,4-Dioxane	Ave	0.0053	0.0056		1070	1000	7.2	60.0
Dibromomethane	Ave	0.1894	0.1956		51.6	50.0	3.2	30.0
Bromodichloromethane	Ave	0.3976	0.3976		50.0	50.0	0.0	30.0
2-Chloroethyl vinyl ether	Ave	0.2491	0.2540		51.0	50.0	2.0	60.0
cis-1,3-Dichloropropene	Ave	0.4829	0.4792		49.6	50.0	-0.8	30.0
methyl isobutyl ketone	Ave	0.5586	0.5513		247	250	-1.3	60.0
Toluene	Ave	0.6616	0.6564		49.6	50.0	-0.8	20.0
trans-1,3-Dichloropropene	Ave	0.4471	0.4514		50.5	50.0	1.0	30.0
Ethyl methacrylate	Ave	0.4379	0.4258		48.6	50.0	-2.8	60.0
1,1,2-Trichloroethane	Ave	0.2241	0.2203		49.1	50.0	-1.7	30.0
Tetrachloroethene	Ave	0.1889	0.1996		52.8	50.0	5.6	30.0
1,3-Dichloropropane	Ave	0.4601	0.4498		48.9	50.0	-2.3	30.0
2-Hexanone	Ave	0.3962	0.3995		252	250	0.8	60.0
Dibromochloromethane	Ave	0.2892	0.2906		50.2	50.0	0.5	30.0
1,2-Dibromoethane	Ave	0.2813	0.2761		49.1	50.0	-1.8	30.0
Chlorobenzene	Ave	1.787	1.796	0.3000	50.3	50.0	0.5	30.0
1,1,1,2-Tetrachloroethane	Ave	0.6424	0.6499		50.6	50.0	1.2	30.0
Ethylbenzene	Ave	3.054	3.158		51.7	50.0	3.4	20.0
m-Xylene & p-Xylene	Ave	2.472	2.521		51.0	50.0	2.0	30.0
o-Xylene	Ave	2.574	2.587		50.2	50.0	0.5	30.0
Styrene	Ave	1.896	1.942		51.2	50.0	2.5	30.0
Bromoform	Ave	0.5424	0.5635	0.1000	51.9	50.0	3.9	60.0
Isopropylbenzene	Ave	2.872	2.979		51.9	50.0	3.7	30.0
Bromobenzene	Ave	0.7365	0.7503		50.9	50.0	1.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.9832	0.9763	0.3000	49.6	50.0	-0.7	30.0
trans-1,4-Dichloro-2-butene	Ave	0.4454	0.4612		51.8	50.0	3.6	60.0
1,2,3-Trichloropropane	Ave	0.3032	0.3227		53.2	50.0	6.4	30.0
N-Propylbenzene	Ave	3.517	3.654		51.9	50.0	3.9	30.0
2-Chlorotoluene	Ave	2.250	2.280		50.7	50.0	1.3	30.0
1,3,5-Trimethylbenzene	Ave	2.502	2.594		51.9	50.0	3.7	30.0
4-Chlorotoluene	Ave	2.594	2.655		51.2	50.0	2.3	30.0
tert-Butylbenzene	Ave	2.039	2.098		51.4	50.0	2.9	30.0
1,2,4-Trimethylbenzene	Ave	2.641	2.713		51.4	50.0	2.8	30.0
sec-Butylbenzene	Ave	3.035	3.129		51.5	50.0	3.1	30.0
1,3-Dichlorobenzene	Ave	1.490	1.563		52.4	50.0	4.9	30.0
p-Isopropyltoluene	Ave	2.837	2.971		52.4	50.0	4.7	30.0
1,4-Dichlorobenzene	Ave	1.568	1.582		50.5	50.0	0.9	30.0
1,2-Dichlorobenzene	Ave	1.475	1.514		51.3	50.0	2.6	30.0
n-Butylbenzene	Ave	2.558	2.716		53.1	50.0	6.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2819	0.3155		56.0	50.0	11.9	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-547166/14 Calibration Date: 11/12/2018 16:21

Instrument ID: CMSO2 Calib Start Date: 11/12/2018 12:50

GC Column: Rtx-624 ID: 0.18(mm) Calib End Date: 11/12/2018 15:35

Lab File ID: OK01220.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Ave	1.036	1.142		55.1	50.0	10.2	30.0
Hexachlorobutadiene	Ave	0.4338	0.4893		56.4	50.0	12.8	30.0
Naphthalene	Ave	2.900	3.115		53.7	50.0	7.4	60.0
1,2,3-Trichlorobenzene	Ave	1.023	1.116		54.5	50.0	9.0	60.0
Dibromofluoromethane (Surr)	Ave	0.2730	0.2596		47.5	50.0	-4.9	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3836	0.3636		47.4	50.0	-5.2	30.0
Toluene-d8 (Surr)	Ave	0.9646	0.9050		46.9	50.0	-6.2	30.0
4-Bromofluorobenzene (Surr)	Ave	1.066	1.020		47.8	50.0	-4.3	30.0

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01220.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 12-Nov-2018 16:21:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0051771-014
Operator ID: MJY Instrument ID: CMSO2
Sublist:

Method: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 13-Nov-2018 10:07:30 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1008

First Level Reviewer: intarachau Date: 13-Nov-2018 10:24:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.031	1.031	0.000	99	147588	50.0	51.6	
2 Vinyl chloride	62	1.168	1.168	0.000	99	148890	50.0	53.1	
4 Chloromethane	50	1.179	1.178	0.001	63	268620	50.0	48.2	
3 Butadiene	54	1.179	1.178	0.001	93	162213	50.0	49.8	
5 Bromomethane	94	1.316	1.315	0.001	98	56247	50.0	38.4	E
6 Chloroethane	64	1.369	1.368	0.001	96	72548	50.0	54.4	
7 Dichlorofluoromethane	67	1.474	1.474	0.000	98	186075	50.0	47.5	
8 Trichlorofluoromethane	101	1.495	1.495	0.000	99	173036	50.0	52.7	
11 Ethyl ether	59	1.632	1.632	0.000	90	156981	50.0	52.3	
14 1,1-Dichloroethene	96	1.769	1.769	0.000	96	125107	50.0	50.8	
12 1,1,2-Trichloro-1,2,2-trif	151	1.769	1.769	0.000	93	100888	50.0	52.0	
15 Acetone	58	1.791	1.790	0.001	85	114996	250.0	246.1	
17 Iodomethane	142	1.875	1.875	0.000	98	199606	50.0	52.7	
18 Carbon disulfide	76	1.917	1.917	0.000	100	412124	50.0	53.4	
20 Methyl acetate	43	1.970	1.970	0.000	98	452524	100.0	102.1	
19 3-Chloro-1-propene	76	1.991	1.991	0.000	89	90655	50.0	50.9	
22 Methylene Chloride	84	2.075	2.075	0.000	95	138074	50.0	45.9	
23 2-Methyl-2-propanol	59	2.128	2.128	0.000	98	290709	500.0	499.5	
26 Acrylonitrile	53	2.223	2.223	0.000	95	1122216	500.0	522.4	
24 Methyl tert-butyl ether	73	2.244	2.244	0.000	96	505649	50.0	49.9	
25 trans-1,2-Dichloroethene	96	2.244	2.244	0.000	99	150656	50.0	51.9	
27 Hexane	57	2.434	2.434	0.000	94	219403	50.0	49.9	
30 Vinyl acetate	43	2.529	2.529	0.000	100	1125107	100.0	101.1	
29 1,1-Dichloroethane	63	2.540	2.539	0.001	99	283921	50.0	50.6	
36 2-Butanone (MEK)	72	2.919	2.919	0.000	97	135564	250.0	256.6	
33 2,2-Dichloropropane	77	2.930	2.929	0.001	97	214606	50.0	49.5	
34 cis-1,2-Dichloroethene	61	2.930	2.929	0.001	90	274595	50.0	47.4	
39 Chlorobromomethane	130	3.099	3.098	0.001	96	89228	50.0	50.2	
38 Tetrahydrofuran	42	3.099	3.098	0.001	92	205798	100.0	91.1	
41 Chloroform	83	3.162	3.161	0.001	97	257190	50.0	48.8	
$ 44 Dibromofluoromethane (Surr	113	3.267	3.267	0.000	96	135698	50.0	47.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 1,1,1-Trichloroethane	97	3.278	3.278	0.000	98	224825	50.0	50.1	
42 Cyclohexane	84	3.331	3.330	0.001	96	201848	50.0	51.9	
45 Carbon tetrachloride	117	3.383	3.383	0.000	95	190459	50.0	52.9	
46 1,1-Dichloropropene	75	3.394	3.394	0.000	92	193035	50.0	52.0	
47 Isobutyl alcohol	43	3.457	3.457	0.000	97	389632	1250.0	1234.7	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.510	0.000	97	190042	50.0	47.4	
50 Benzene	78	3.531	3.531	0.000	98	559560	50.0	49.8	
53 1,2-Dichloroethane	62	3.573	3.573	0.000	97	244586	50.0	51.1	
* 55 Fluorobenzene	96	3.742	3.742	0.000	98	522738	50.0	50.0	
54 n-Heptane	43	3.742	3.742	0.000	96	240915	50.0	48.2	
57 Trichloroethene	132	4.006	4.005	0.001	97	139558	50.0	46.4	
59 Methylcyclohexane	83	4.175	4.174	0.001	91	219641	50.0	52.0	
60 1,2-Dichloropropane	63	4.196	4.195	0.001	92	162104	50.0	49.8	
62 1,4-Dioxane	88	4.259	4.248	0.011	81	58955	1000.0	1071.5	
63 Dibromomethane	93	4.259	4.259	0.000	97	102244	50.0	51.6	
64 Dichlorobromomethane	83	4.386	4.385	0.001	98	207854	50.0	50.0	
65 2-Chloroethyl vinyl ether	63	4.596	4.596	0.000	91	132755	50.0	51.0	
67 cis-1,3-Dichloropropene	75	4.713	4.712	0.000	97	250470	50.0	49.6	
68 4-Methyl-2-pentanone (MIBK	43	4.829	4.828	0.001	99	1440951	250.0	246.8	
$ 69 Toluene-d8 (Surr)	98	4.913	4.913	0.000	99	473080	50.0	46.9	
70 Toluene	92	4.966	4.965	0.001	93	343146	50.0	49.6	
71 trans-1,3-Dichloropropene	75	5.145	5.145	0.000	95	235946	50.0	50.5	
72 Ethyl methacrylate	69	5.198	5.197	0.001	95	222594	50.0	48.6	
73 1,1,2-Trichloroethane	83	5.303	5.303	0.000	93	115170	50.0	49.1	
74 Tetrachloroethene	164	5.356	5.356	0.000	94	104328	50.0	52.8	
75 1,3-Dichloropropane	76	5.419	5.419	0.000	94	235103	50.0	48.9	
76 2-Hexanone	43	5.472	5.472	0.000	99	1044079	250.0	252.0	
78 Chlorodibromomethane	129	5.588	5.588	0.000	98	151907	50.0	50.2	
79 Ethylene Dibromide	107	5.683	5.683	0.000	99	144332	50.0	49.1	
* 81 Chlorobenzene-d5	82	6.042	6.041	0.001	90	204553	50.0	50.0	
82 Chlorobenzene	112	6.063	6.062	0.001	92	367396	50.0	50.3	
84 1,1,1,2-Tetrachloroethane	131	6.137	6.136	0.001	93	132932	50.0	50.6	
83 Ethylbenzene	91	6.147	6.147	0.000	99	645915	50.0	51.7	
85 m-Xylene & p-Xylene	91	6.253	6.252	0.001	98	515712	50.0	51.0	
87 o-Xylene	91	6.559	6.558	0.000	93	529145	50.0	50.2	
88 Styrene	104	6.580	6.579	0.001	93	397336	50.0	51.2	
89 Bromoform	173	6.717	6.716	0.001	96	115267	50.0	51.9	
90 Isopropylbenzene	105	6.864	6.864	0.000	97	609357	50.0	51.9	
$ 92 4-Bromofluorobenzene (Surr	95	7.002	7.001	0.001	86	191540	50.0	47.8	
93 Bromobenzene	156	7.107	7.107	0.000	95	153484	50.0	50.9	
94 1,1,2,2-Tetrachloroethane	83	7.118	7.117	0.001	98	199702	50.0	49.6	
97 trans-1,4-Dichloro-2-buten	53	7.149	7.149	0.000	86	94344	50.0	51.8	
96 1,2,3-Trichloropropane	110	7.160	7.159	0.001	96	66002	50.0	53.2	
95 N-Propylbenzene	91	7.202	7.202	0.000	99	747351	50.0	51.9	
98 2-Chlorotoluene	91	7.265	7.265	0.000	97	466405	50.0	50.7	
99 1,3,5-Trimethylbenzene	105	7.360	7.360	0.000	92	530700	50.0	51.9	
100 4-Chlorotoluene	91	7.371	7.370	0.001	99	543010	50.0	51.2	
103 tert-Butylbenzene	119	7.613	7.613	0.000	94	429108	50.0	51.4	
105 1,2,4-Trimethylbenzene	105	7.656	7.655	0.001	98	554985	50.0	51.4	
106 sec-Butylbenzene	105	7.793	7.792	0.001	98	640007	50.0	51.5	
108 1,3-Dichlorobenzene	146	7.888	7.887	0.001	97	293337	50.0	52.4	
107 4-Isopropyltoluene	119	7.930	7.929	0.001	98	557693	50.0	52.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.951	0.000	97	187721	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.972	7.972	0.000	94	297023	50.0	50.5	
113 n-Butylbenzene	91	8.257	8.256	0.001	98	509931	50.0	53.1	
114 1,2-Dichlorobenzene	146	8.257	8.256	0.001	75	284282	50.0	51.3	
115 1,2-Dibromo-3-Chloropropan	157	8.921	8.921	0.000	93	59228	50.0	56.0	
117 1,2,4-Trichlorobenzene	180	9.596	9.596	0.000	94	214450	50.0	55.1	
118 Hexachlorobutadiene	225	9.723	9.723	0.000	93	91856	50.0	56.4	
119 Naphthalene	128	9.807	9.807	0.000	99	584704	50.0	53.7	
120 1,2,3-Trichlorobenzene	180	9.997	9.997	0.000	95	209402	50.0	54.5	
S 122 1,2-Dichloroethene, Total	1				0		100.0	99.3	
S 123 Xylenes, Total	1				0		100.0	101.2	
S 124 1,3-Dichloropropene, Total	1				0		100.0	100.1	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

DOD ISTD_00163 Amount Added: 5.00 Units: uL

VM_MMIX SEC_00080 Amount Added: 5.00 Units: uL

Report Date: 13-Nov-2018 10:07:33 Chrom Revision: 2.3 12-Oct-2018 08:24:38

TestAmerica Savannah

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01220.D

Injection Date: 12-Nov-2018 16:21:30 Instrument ID: CMSO2 Operator ID: MJY

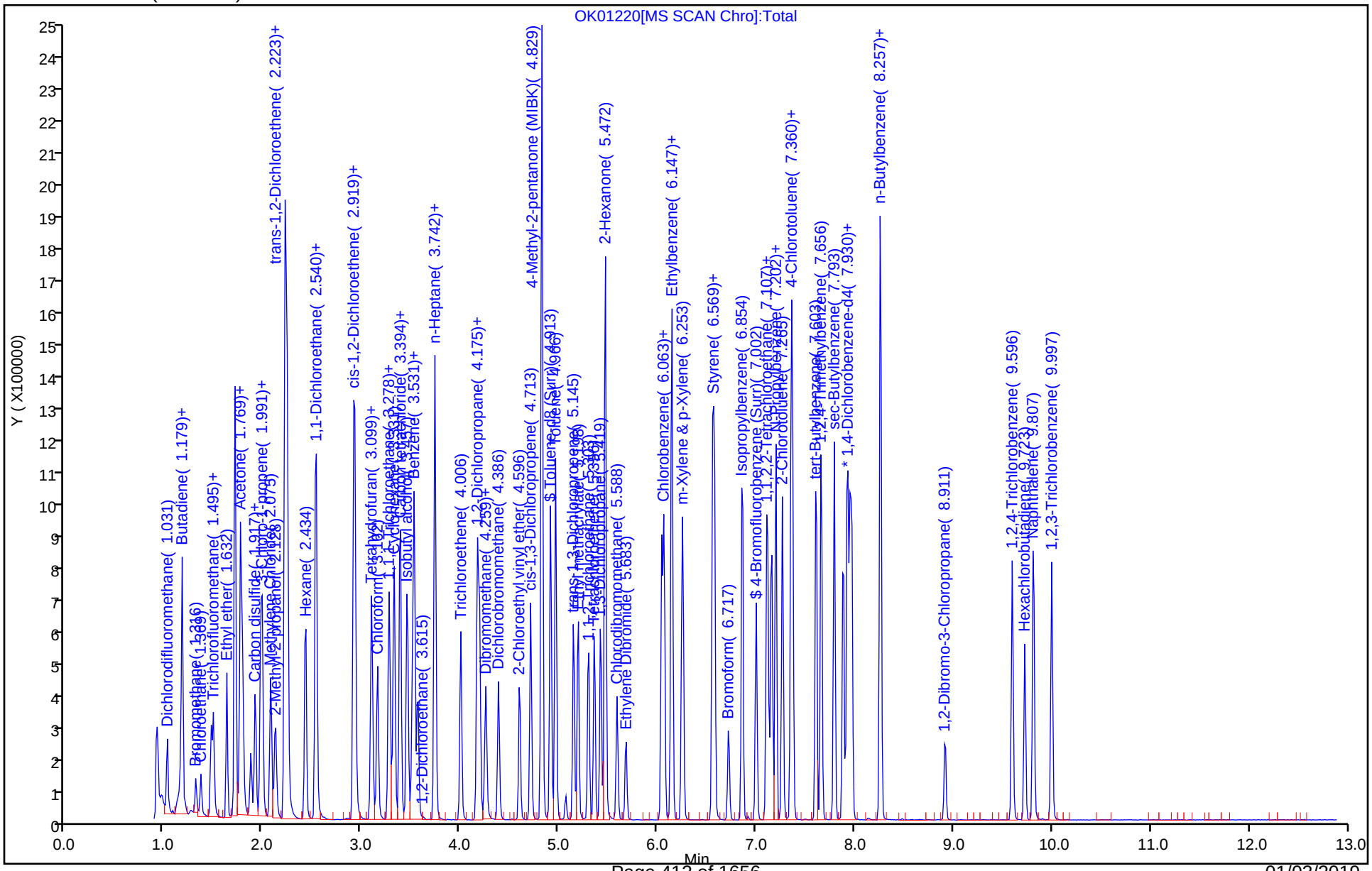
Lims ID: icv Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552557/2 Calibration Date: 12/20/2018 09:32

Instrument ID: CMSO2 Calib Start Date: 11/12/2018 12:50

GC Column: Rtx-624 ID: 0.18(mm) Calib End Date: 11/12/2018 15:35

Lab File ID: O2Lo2055.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2734	0.2979		54.5	50.0	9.0	60.0
Vinyl chloride	Ave	0.2681	0.2798		52.2	50.0	4.4	20.0
1,3-Butadiene	Ave	0.3113	0.3594		57.7	50.0	15.4	60.0
Chloromethane	Ave	0.5332	0.5202	0.1000	48.8	50.0	-2.4	60.0
Bromomethane	Ave	0.1402	0.0712		25.4	50.0	-49.2	60.0
Chloroethane	Qua		0.1451		57.4	50.0	14.8	60.0
Dichlorofluoromethane	Ave	0.3747	0.3861		51.5	50.0	3.0	60.0
Trichlorofluoromethane	Ave	0.3141	0.3839		61.1	50.0	22.2	60.0
Ethyl ether	Ave	0.2868	0.2673		46.6	50.0	-6.8	60.0
Acrolein	LinF		0.1252		1460	1000	45.9	60.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1854	0.2139		57.7	50.0	15.4	60.0
1,1-Dichloroethene	Ave	0.2353	0.2392		50.8	50.0	1.6	20.0
Acetone	Ave	0.0447	0.0541		302	250	21.0	60.0
Iodomethane	Ave	0.3621	0.2476		34.2	50.0	-31.6	60.0
Carbon disulfide	Ave	0.7381	0.7451		50.5	50.0	0.9	60.0
Methyl acetate	Ave	0.4240	0.4183		98.7	100	-1.3	60.0
Allyl chloride	Ave	0.1703	0.1720		50.5	50.0	1.0	60.0
Methylene Chloride	Ave	0.2880	0.2528		43.9	50.0	-12.2	60.0
tert-Butyl alcohol	Ave	0.0557	0.0548		492	500	-1.5	60.0
Acrylonitrile	Ave	0.2055	0.2002		487	500	-2.6	60.0
Methyl tert-butyl ether	Ave	0.9685	0.8887		45.9	50.0	-8.2	60.0
trans-1,2-Dichloroethene	Ave	0.2776	0.2755		49.6	50.0	-0.7	60.0
Hexane	Ave	0.4205	0.4086		48.6	50.0	-2.8	60.0
Vinyl acetate	Ave	1.064	1.000		94.0	100	-6.0	60.0
1,1-Dichloroethane	Ave	0.5367	0.5022	0.1000	46.8	50.0	-6.4	60.0
Methyl Ethyl Ketone	Ave	0.0505	0.0558		276	250	10.3	60.0
cis-1,2-Dichloroethene	Ave	0.5538	0.4890		44.2	50.0	-11.7	60.0
2,2-Dichloropropane	Ave	0.4151	0.4319		52.0	50.0	4.0	60.0
Bromochloromethane	Ave	0.1701	0.1629		47.9	50.0	-4.2	60.0
Tetrahydrofuran	Ave	0.2160	0.3753		174	100	73.7*	60.0
Chloroform	Ave	0.5045	0.4658		46.2	50.0	-7.7	20.0
1,1,1-Trichloroethane	Ave	0.4289	0.4370		50.9	50.0	1.9	60.0
Cyclohexane	Ave	0.3722	0.3925		52.7	50.0	5.4	60.0
1,1-Dichloropropene	Ave	0.3551	0.3618		50.9	50.0	1.9	60.0
Carbon tetrachloride	Ave	0.3444	0.3651		53.0	50.0	6.0	60.0
Isobutanol	Ave	0.0302	0.0247		1020	1250	-18.3	60.0
Benzene	Ave	1.075	1.025		47.7	50.0	-4.6	60.0
1,2-Dichloroethane	Ave	0.4581	0.4332		47.3	50.0	-5.4	60.0
n-Heptane	Ave	0.4780	0.4269		44.7	50.0	-10.7	60.0
Trichloroethene	Ave	0.2874	0.2680		46.6	50.0	-6.8	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552557/2 Calibration Date: 12/20/2018 09:32

Instrument ID: CMSO2 Calib Start Date: 11/12/2018 12:50

GC Column: Rtx-624 ID: 0.18(mm) Calib End Date: 11/12/2018 15:35

Lab File ID: O2Lo2055.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4037	0.4114		51.0	50.0	1.9	60.0
1,2-Dichloropropane	Ave	0.3115	0.2938		47.2	50.0	-5.7	20.0
1,4-Dioxane	Ave	0.0053	0.0058		1110	1000	11.0	60.0
Dibromomethane	Ave	0.1894	0.1823		48.1	50.0	-3.8	60.0
Bromodichloromethane	Ave	0.3976	0.3789		47.6	50.0	-4.7	60.0
2-Chloroethyl vinyl ether	Ave	0.2491	0.2255		45.3	50.0	-9.5	60.0
cis-1,3-Dichloropropene	Ave	0.4829	0.4521		46.8	50.0	-6.4	60.0
methyl isobutyl ketone	Ave	0.5586	0.5188		232	250	-7.1	60.0
Toluene	Ave	0.6616	0.6358		48.1	50.0	-3.9	20.0
trans-1,3-Dichloropropene	Ave	0.4471	0.4112		46.0	50.0	-8.0	60.0
Ethyl methacrylate	Ave	0.4379	0.4087		46.7	50.0	-6.7	60.0
1,1,2-Trichloroethane	Ave	0.2241	0.2081		46.4	50.0	-7.1	60.0
Tetrachloroethene	Ave	0.1889	0.2156		57.0	50.0	14.1	60.0
1,3-Dichloropropane	Ave	0.4601	0.4313		46.9	50.0	-6.3	60.0
2-Hexanone	Ave	0.3962	0.3810		240	250	-3.8	60.0
Dibromochloromethane	Ave	0.2892	0.2777		48.0	50.0	-4.0	60.0
1,2-Dibromoethane	Ave	0.2813	0.2700		48.0	50.0	-4.0	60.0
Chlorobenzene	Ave	1.787	1.781	0.3000	49.8	50.0	-0.3	60.0
1,1,1,2-Tetrachloroethane	Ave	0.6424	0.6381		49.7	50.0	-0.7	60.0
Ethylbenzene	Ave	3.054	3.136		51.3	50.0	2.7	20.0
m-Xylene & p-Xylene	Ave	2.472	2.496		50.5	50.0	1.0	60.0
o-Xylene	Ave	2.574	2.540		49.3	50.0	-1.3	60.0
Styrene	Ave	1.896	1.884		49.7	50.0	-0.6	60.0
Bromoform	Ave	0.5424	0.5609	0.1000	51.7	50.0	3.4	60.0
Isopropylbenzene	Ave	2.872	2.943		51.2	50.0	2.5	60.0
Bromobenzene	Ave	0.7365	0.7689		52.2	50.0	4.4	60.0
1,1,2,2-Tetrachloroethane	Ave	0.9832	0.9560	0.3000	48.6	50.0	-2.8	60.0
trans-1,4-Dichloro-2-butene	Ave	0.4454	0.3595		40.4	50.0	-19.3	60.0
1,2,3-Trichloropropane	Ave	0.3032	0.3142		51.8	50.0	3.6	60.0
N-Propylbenzene	Ave	3.517	3.600		51.2	50.0	2.4	60.0
2-Chlorotoluene	Ave	2.250	2.168		48.2	50.0	-3.6	60.0
1,3,5-Trimethylbenzene	Ave	2.502	2.454		49.1	50.0	-1.9	60.0
4-Chlorotoluene	Ave	2.594	2.491		48.0	50.0	-4.0	60.0
tert-Butylbenzene	Ave	2.039	2.048		50.2	50.0	0.5	60.0
1,2,4-Trimethylbenzene	Ave	2.641	2.535		48.0	50.0	-4.0	60.0
sec-Butylbenzene	Ave	3.035	2.959		48.7	50.0	-2.5	60.0
1,3-Dichlorobenzene	Ave	1.490	1.501		50.4	50.0	0.7	60.0
p-Isopropyltoluene	Ave	2.837	2.711		47.8	50.0	-4.5	60.0
1,4-Dichlorobenzene	Ave	1.568	1.555		49.6	50.0	-0.8	60.0
1,2-Dichlorobenzene	Ave	1.475	1.460		49.5	50.0	-1.0	60.0
n-Butylbenzene	Ave	2.558	2.257		44.1	50.0	-11.8	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-552557/2 Calibration Date: 12/20/2018 09:32

Instrument ID: CMSO2 Calib Start Date: 11/12/2018 12:50

GC Column: Rtx-624 ID: 0.18(mm) Calib End Date: 11/12/2018 15:35

Lab File ID: O2Lo2055.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2819	0.3023		53.6	50.0	7.2	60.0
1,2,4-Trichlorobenzene	Ave	1.036	0.9415		45.4	50.0	-9.1	60.0
Hexachlorobutadiene	Ave	0.4338	0.4062		46.8	50.0	-6.4	60.0
Naphthalene	Ave	2.900	2.619		45.2	50.0	-9.7	60.0
1,2,3-Trichlorobenzene	Ave	1.023	0.8940		43.7	50.0	-12.6	60.0
Dibromofluoromethane (Surr)	Ave	0.2730	0.2612		47.8	50.0	-4.3	60.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3836	0.3450		45.0	50.0	-10.0	60.0
Toluene-d8 (Surr)	Ave	0.9646	0.9314		48.3	50.0	-3.4	60.0
4-Bromofluorobenzene (Surr)	Ave	1.066	1.013		47.5	50.0	-5.0	60.0

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2055.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Dec-2018 09:32:30 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052745-002
Operator ID: EA Instrument ID: CMSO2
Sublist: chrom-2014_MSO2*sub9

Method: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 21-Dec-2018 09:46:41 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: manniona Date: 20-Dec-2018 09:58:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.022	1.022	0.000	99	172395	50.0	54.5	
2 Vinyl chloride	62	1.170	1.170	0.000	99	161909	50.0	52.2	
4 Chloromethane	50	1.180	1.180	0.000	59	301021	50.0	48.8	
3 Butadiene	54	1.180	1.180	0.000	95	207952	50.0	57.7	
5 Bromomethane	94	1.317	1.317	0.000	97	41212	50.0	25.4	E
6 Chloroethane	64	1.370	1.370	0.000	97	83963	50.0	57.4	
7 Dichlorofluoromethane	67	1.476	1.476	0.000	98	223434	50.0	51.5	
8 Trichlorofluoromethane	101	1.497	1.497	0.000	98	222148	50.0	61.1	
11 Ethyl ether	59	1.634	1.634	0.000	92	154649	50.0	46.6	
13 Acrolein	56	1.718	1.718	0.000	96	1448498	1000.0	1458.6	
12 1,1,2-Trichloro-1,2,2-trif	151	1.771	1.771	0.000	66	123769	50.0	57.7	
14 1,1-Dichloroethene	96	1.771	1.771	0.000	96	138422	50.0	50.8	
15 Acetone	58	1.792	1.792	0.000	84	156429	250.0	302.4	
17 Iodomethane	142	1.876	1.876	0.000	98	143283	50.0	34.2	
18 Carbon disulfide	76	1.919	1.919	0.000	100	431138	50.0	50.5	
20 Methyl acetate	43	1.971	1.971	0.000	98	484093	100.0	98.7	
19 3-Chloro-1-propene	76	1.992	1.992	0.000	88	99502	50.0	50.5	
22 Methylene Chloride	84	2.077	2.077	0.000	98	146275	50.0	43.9	
23 2-Methyl-2-propanol	59	2.119	2.119	0.000	99	317169	500.0	492.3	
26 Acrylonitrile	53	2.224	2.224	0.000	94	1158345	500.0	487.1	
24 Methyl tert-butyl ether	73	2.235	2.235	0.000	97	514252	50.0	45.9	
25 trans-1,2-Dichloroethene	96	2.246	2.246	0.000	98	159432	50.0	49.6	
27 Hexane	57	2.425	2.425	0.000	93	236446	50.0	48.6	
30 Vinyl acetate	43	2.530	2.530	0.000	100	1157755	100.0	94.0	
29 1,1-Dichloroethane	63	2.541	2.541	0.000	100	290626	50.0	46.8	
36 2-Butanone (MEK)	72	2.910	2.910	0.000	98	161340	250.0	275.8	
34 cis-1,2-Dichloroethene	61	2.921	2.921	0.000	92	282970	50.0	44.2	
33 2,2-Dichloropropane	77	2.931	2.931	0.000	96	249913	50.0	52.0	
39 Chlorobromomethane	130	3.100	3.100	0.000	98	94254	50.0	47.9	
38 Tetrahydrofuran	42	3.100	3.100	0.000	93	434333	100.0	173.7	
41 Chloroform	83	3.163	3.163	0.000	96	269535	50.0	46.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 44 Dibromofluoromethane (Surr	113	3.269	3.269	0.000	97	151150	50.0	47.8	
43 1,1,1-Trichloroethane	97	3.279	3.279	0.000	98	252893	50.0	50.9	
42 Cyclohexane	84	3.332	3.332	0.000	98	227125	50.0	52.7	
45 Carbon tetrachloride	117	3.385	3.385	0.000	95	211247	50.0	53.0	
46 1,1-Dichloropropene	75	3.385	3.385	0.000	95	209360	50.0	50.9	
47 Isobutyl alcohol	43	3.459	3.459	0.000	96	356742	1250.0	1021.2	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.511	3.511	0.000	97	199657	50.0	45.0	
50 Benzene	78	3.532	3.532	0.000	98	593178	50.0	47.7	
53 1,2-Dichloroethane	62	3.564	3.564	0.000	97	250688	50.0	47.3	
54 n-Heptane	43	3.733	3.733	0.000	98	247015	50.0	44.7	
* 55 Fluorobenzene	96	3.743	3.743	0.000	98	578670	50.0	50.0	
57 Trichloroethene	132	4.007	4.007	0.000	97	155054	50.0	46.6	
59 Methylcyclohexane	83	4.176	4.176	0.000	88	238075	50.0	51.0	
60 1,2-Dichloropropane	63	4.197	4.197	0.000	89	170033	50.0	47.2	
62 1,4-Dioxane	88	4.250	4.250	0.000	95	67613	1000.0	1110.1	
63 Dibromomethane	93	4.260	4.260	0.000	97	105473	50.0	48.1	
64 Dichlorobromomethane	83	4.387	4.387	0.000	98	219253	50.0	47.6	
65 2-Chloroethyl vinyl ether	63	4.598	4.598	0.000	93	130470	50.0	45.3	
67 cis-1,3-Dichloropropene	75	4.714	4.714	0.000	97	261595	50.0	46.8	
68 4-Methyl-2-pentanone (MIBK	43	4.819	4.819	0.000	99	1501113	250.0	232.2	
$ 69 Toluene-d8 (Surr)	98	4.914	4.914	0.000	99	538961	50.0	48.3	
70 Toluene	92	4.967	4.967	0.000	93	367933	50.0	48.1	
71 trans-1,3-Dichloropropene	75	5.146	5.146	0.000	96	237959	50.0	46.0	
72 Ethyl methacrylate	69	5.189	5.189	0.000	95	236497	50.0	46.7	
73 1,1,2-Trichloroethane	83	5.294	5.294	0.000	92	120440	50.0	46.4	
74 Tetrachloroethene	164	5.357	5.357	0.000	99	124736	50.0	57.0	
75 1,3-Dichloropropane	76	5.421	5.421	0.000	95	249551	50.0	46.9	
76 2-Hexanone	43	5.463	5.463	0.000	99	1102361	250.0	240.4	
78 Chlorodibromomethane	129	5.589	5.589	0.000	97	160697	50.0	48.0	
79 Ethylene Dibromide	107	5.674	5.674	0.000	99	156263	50.0	48.0	
* 81 Chlorobenzene-d5	82	6.043	6.043	0.000	87	228232	50.0	50.0	
82 Chlorobenzene	112	6.064	6.064	0.000	94	406502	50.0	49.8	
84 1,1,1,2-Tetrachloroethane	131	6.138	6.138	0.000	93	145644	50.0	49.7	
83 Ethylbenzene	91	6.149	6.149	0.000	99	715715	50.0	51.3	
85 m-Xylene & p-Xylene	91	6.254	6.254	0.000	98	569717	50.0	50.5	
87 o-Xylene	91	6.560	6.560	0.000	91	579781	50.0	49.3	
88 Styrene	104	6.581	6.581	0.000	95	430002	50.0	49.7	
89 Bromoform	173	6.718	6.718	0.000	96	128007	50.0	51.7	
90 Isopropylbenzene	105	6.855	6.855	0.000	97	671654	50.0	51.2	
$ 92 4-Bromofluorobenzene (Surr	95	7.003	7.003	0.000	93	217122	50.0	47.5	
93 Bromobenzene	156	7.108	7.108	0.000	94	175494	50.0	52.2	
94 1,1,2,2-Tetrachloroethane	83	7.119	7.119	0.000	98	218179	50.0	48.6	
97 trans-1,4-Dichloro-2-buten	53	7.151	7.151	0.000	88	82051	50.0	40.4	
96 1,2,3-Trichloropropane	110	7.161	7.161	0.000	96	71708	50.0	51.8	
95 N-Propylbenzene	91	7.203	7.203	0.000	99	821578	50.0	51.2	
98 2-Chlorotoluene	91	7.267	7.267	0.000	97	494900	50.0	48.2	
99 1,3,5-Trimethylbenzene	105	7.351	7.351	0.000	92	560179	50.0	49.1	
100 4-Chlorotoluene	91	7.372	7.372	0.000	99	568537	50.0	48.0	
103 tert-Butylbenzene	119	7.604	7.604	0.000	93	467469	50.0	50.2	
105 1,2,4-Trimethylbenzene	105	7.657	7.657	0.000	98	578664	50.0	48.0	
106 sec-Butylbenzene	105	7.794	7.794	0.000	99	675300	50.0	48.7	
108 1,3-Dichlorobenzene	146	7.878	7.878	0.000	95	321885	50.0	50.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	7.921	7.921	0.000	98	581357	50.0	47.8	
* 109 1,4-Dichlorobenzene-d4	152	7.952	7.952	0.000	94	214440	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.973	7.973	0.000	94	333390	50.0	49.6	
113 n-Butylbenzene	91	8.258	8.258	0.000	98	484021	50.0	44.1	
114 1,2-Dichlorobenzene	146	8.258	8.258	0.000	76	313184	50.0	49.5	
115 1,2-Dibromo-3-Chloropropan	157	8.912	8.912	0.000	94	64834	50.0	53.6	
117 1,2,4-Trichlorobenzene	180	9.598	9.598	0.000	94	201895	50.0	45.4	
118 Hexachlorobutadiene	225	9.724	9.724	0.000	95	87111	50.0	46.8	
119 Naphthalene	128	9.809	9.809	0.000	99	561547	50.0	45.2	
120 1,2,3-Trichlorobenzene	180	9.999	9.999	0.000	96	191705	50.0	43.7	
S 122 1,2-Dichloroethene, Total	1				0		100.0	93.8	
S 123 Xylenes, Total	1				0		100.0	99.8	
S 124 1,3-Dichloropropene, Total	1				0		100.0	92.8	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VM_MMIX_01940	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL
DOD ISTD_00167	Amount Added:	5.00	Units: uL

Report Date: 21-Dec-2018 09:46:44 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2055.D

Injection Date: 20-Dec-2018 09:32:30 Instrument ID: CMSO2 Operator ID: EA

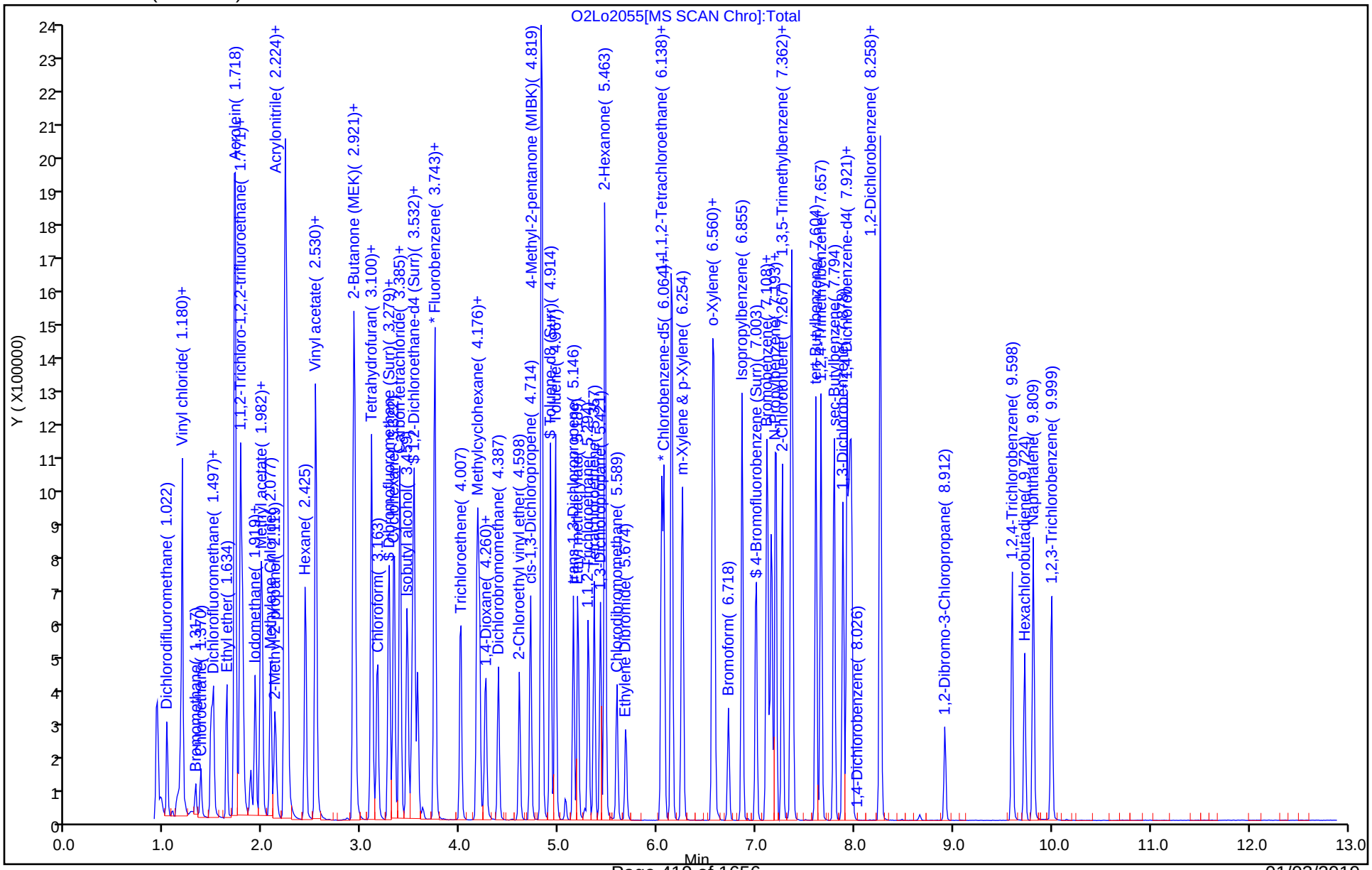
Lims ID: ccvis Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 1

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-550348/16 Calibration Date: 12/06/2018 20:02

Instrument ID: CMSP2 Calib Start Date: 12/06/2018 16:21

GC Column: Rxi-624 MS ID: 0.18(mm) Calib End Date: 12/06/2018 19:13

Lab File ID: 2PL0616.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3992	0.3719		46.6	50.0	-6.8	60.0
Vinyl chloride	Ave	0.3243	0.3183		49.1	50.0	-1.9	20.0
1,3-Butadiene	Ave	0.2867	0.2957		51.6	50.0	3.1	30.0
Chloromethane	QuaF		0.4843	0.1000	48.8	50.0	-2.3	60.0
Bromomethane	Ave	0.2202	0.2285		51.9	50.0	3.8	60.0
Chloroethane	Qua2		0.1907		48.9	50.0	-2.3	60.0
Dichlorofluoromethane	Lin1		0.4622		50.1	50.0	0.2	60.0
Trichlorofluoromethane	Ave	0.4255	0.4026		47.3	50.0	-5.4	30.0
Ethyl ether	Ave	0.2124	0.2184		51.4	50.0	2.8	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2262	0.2337		51.7	50.0	3.3	60.0
Acrolein	Ave	0.0633	0.0607		958	1000	-4.2	60.0
1,1-Dichloroethene	Qua2		0.2471		52.3	50.0	4.5	20.0
Acetone	Ave	0.0333	0.0293		220	250	-12.0	60.0
Iodomethane	Lin1		0.4119		50.7	50.0	1.3	60.0
Carbon disulfide	Ave	0.7878	0.7856		49.9	50.0	-0.3	60.0
Allyl chloride	Ave	0.1842	0.1935		52.5	50.0	5.1	60.0
Methyl acetate	Ave	0.2575	0.2531		98.3	100	-1.7	60.0
Methylene Chloride	Lin1		0.2705		50.1	50.0	0.3	30.0
tert-Butyl alcohol	Ave	0.0362	0.0350		484	500	-3.3	60.0
Methyl tert-butyl ether	Ave	0.8180	0.7933		48.5	50.0	-3.0	30.0
trans-1,2-Dichloroethene	Qua2		0.2688		52.7	50.0	5.4	30.0
Acrylonitrile	Ave	0.1277	0.1229		481	500	-3.8	60.0
Hexane	Ave	0.4203	0.4106		48.8	50.0	-2.3	30.0
1,1-Dichloroethane	Ave	0.4734	0.4682	0.1000	49.4	50.0	-1.1	30.0
Vinyl acetate	Ave	0.6308	0.5458		86.5	100	-13.5	60.0
2,2-Dichloropropane	Ave	0.4394	0.4086		46.5	50.0	-7.0	30.0
cis-1,2-Dichloroethene	Ave	0.4331	0.4298		49.6	50.0	-0.8	30.0
2-Butanone (MEK)	Ave	0.0398	0.0394		247	250	-1.0	60.0
Bromochloromethane	Ave	0.1897	0.1877		49.5	50.0	-1.0	30.0
Tetrahydrofuran	Qua2		0.0980		99.4	100	-0.6	30.0
Chloroform	Ave	0.4695	0.4663		49.7	50.0	-0.7	20.0
Cyclohexane	Ave	0.4460	0.4220		47.3	50.0	-5.4	30.0
1,1,1-Trichloroethane	Lin		0.4253		50.5	50.0	1.0	30.0
Carbon tetrachloride	Ave	0.3741	0.3711		49.6	50.0	-0.8	30.0
1,1-Dichloropropene	Ave	0.3643	0.3624		49.7	50.0	-0.5	30.0
Isobutanol	Ave	0.0158	0.0152		1200	1250	-4.0	60.0
Benzene	Ave	1.086	1.085		50.0	50.0	-0.0	30.0
1,2-Dichloroethane	Ave	0.3770	0.3739		49.6	50.0	-0.8	30.0
n-Heptane	Ave	0.4676	0.4243		45.4	50.0	-9.3	30.0
Trichloroethene	Ave	0.2884	0.2873		49.8	50.0	-0.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-550348/16 Calibration Date: 12/06/2018 20:02

Instrument ID: CMSP2 Calib Start Date: 12/06/2018 16:21

GC Column: Rxi-624 MS ID: 0.18(mm) Calib End Date: 12/06/2018 19:13

Lab File ID: 2PL0616.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5387	0.5160		47.9	50.0	-4.2	60.0
1,2-Dichloropropane	Ave	0.2681	0.2720		50.7	50.0	1.5	20.0
1,4-Dioxane	Ave	0.0046	0.0048		1040	1000	4.2	60.0
Dibromomethane	Ave	0.1747	0.1685		48.2	50.0	-3.6	30.0
Bromodichloromethane	Ave	0.3704	0.3729		50.3	50.0	0.7	30.0
2-Chloroethyl vinyl ether	Ave	0.1960	0.1888		48.1	50.0	-3.7	60.0
cis-1,3-Dichloropropene	Ave	0.4343	0.4587		52.8	50.0	5.6	30.0
Methyl isobutyl ketone (MIBK)	Ave	0.3181	0.3080		242	250	-3.2	60.0
Toluene	Ave	0.6923	0.7008		50.6	50.0	1.2	20.0
trans-1,3-Dichloropropene	Ave	0.4200	0.4092		48.7	50.0	-2.6	30.0
Ethyl methacrylate	Ave	0.3682	0.3637		49.4	50.0	-1.2	60.0
1,1,2-Trichloroethane	Ave	0.2091	0.2126		50.8	50.0	1.7	30.0
Tetrachloroethene	Ave	0.2681	0.2722		50.8	50.0	1.5	30.0
1,3-Dichloropropane	Ave	0.4081	0.4078		50.0	50.0	-0.0	30.0
2-Hexanone	Ave	0.2305	0.2239		243	250	-2.8	60.0
Dibromochloromethane	Ave	0.2914	0.2972		51.0	50.0	2.0	30.0
1,2-Dibromoethane	Ave	0.2614	0.2605		49.8	50.0	-0.4	30.0
Chlorobenzene	Ave	1.890	1.865	0.3000	49.3	50.0	-1.3	30.0
Ethylbenzene	Ave	3.314	3.271		49.3	50.0	-1.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6932	0.6978		50.3	50.0	0.7	30.0
m-Xylene & p-Xylene	Ave	2.567	2.556		49.8	50.0	-0.5	30.0
o-Xylene	Ave	2.623	2.629		50.1	50.0	0.2	30.0
Styrene	Ave	2.126	2.017		47.4	50.0	-5.1	30.0
Bromoform	Ave	0.5564	0.5583	0.1000	50.2	50.0	0.3	60.0
Isopropylbenzene	Ave	3.368	3.362		49.9	50.0	-0.2	30.0
Bromobenzene	Ave	0.8865	0.8977		50.6	50.0	1.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.8274	0.8163	0.3000	49.3	50.0	-1.3	30.0
N-Propylbenzene	Ave	4.026	4.071		50.6	50.0	1.1	30.0
1,2,3-Trichloropropane	Ave	0.2701	0.2580		47.8	50.0	-4.5	30.0
trans-1,4-Dichloro-2-butene	Qua2		0.3110		51.7	50.0	3.4	60.0
2-Chlorotoluene	Ave	2.271	2.248		49.5	50.0	-1.0	30.0
1,3,5-Trimethylbenzene	Ave	2.857	2.882		50.4	50.0	0.9	30.0
4-Chlorotoluene	Ave	2.373	2.361		49.7	50.0	-0.5	30.0
tert-Butylbenzene	Ave	2.601	2.563		49.3	50.0	-1.5	30.0
1,2,4-Trimethylbenzene	Ave	2.942	2.919		49.6	50.0	-0.8	30.0
sec-Butylbenzene	Ave	3.846	3.852		50.1	50.0	0.2	30.0
1,3-Dichlorobenzene	Ave	1.606	1.638		51.0	50.0	2.0	30.0
p-Isopropyltoluene	Ave	3.202	3.253		50.8	50.0	1.6	30.0
1,4-Dichlorobenzene	Ave	1.603	1.619		50.5	50.0	1.0	30.0
n-Butylbenzene	Ave	2.925	2.912		49.8	50.0	-0.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICV 680-550348/16 Calibration Date: 12/06/2018 20:02

Instrument ID: CMSP2 Calib Start Date: 12/06/2018 16:21

GC Column: Rxi-624 MS ID: 0.18(mm) Calib End Date: 12/06/2018 19:13

Lab File ID: 2PL0616.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichlorobenzene	Ave	1.484	1.511		50.9	50.0	1.9	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.2321	0.2348		50.6	50.0	1.2	60.0
1,2,4-Trichlorobenzene	Ave	1.181	1.205		51.0	50.0	2.0	30.0
Hexachlorobutadiene	Ave	0.6522	0.6616		50.7	50.0	1.4	30.0
Naphthalene	Ave	2.833	2.866		50.6	50.0	1.2	60.0
1,2,3-Trichlorobenzene	Ave	1.072	1.107		51.7	50.0	3.3	60.0
Dibromofluoromethane (Surr)	Ave	0.2512	0.2508		49.9	50.0	-0.2	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3223	0.3117		48.4	50.0	-3.3	30.0
Toluene-d8 (Surr)	Ave	2.476	2.437		49.2	50.0	-1.6	30.0
4-Bromofluorobenzene (Surr)	Ave	0.9178	0.8725		47.5	50.0	-4.9	30.0

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0616.D
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 06-Dec-2018 20:02:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052384-016
Operator ID: ea Instrument ID: CMSP2
Sublist:

Method: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 07-Dec-2018 09:28:12 Calib Date: 06-Dec-2018 19:13:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX1018

First Level Reviewer: soparaky Date: 07-Dec-2018 10:56:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	762777	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	89	318013	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	95	331310	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	83	191294	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	56	237740	50.0	48.4	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	775100	50.0	49.2	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	95	289065	50.0	47.5	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	100	283663	50.0	46.6	
10 Vinyl chloride	62	1.392	1.392	0.000	99	242765	50.0	49.1	
12 Chloromethane	50	1.402	1.402	0.000	75	369437	50.0	48.8	
11 Butadiene	54	1.402	1.402	0.000	92	225519	50.0	51.6	
13 Bromomethane	94	1.592	1.592	0.000	98	174273	50.0	51.9	
14 Chloroethane	64	1.645	1.645	0.000	99	145447	50.0	48.9	
15 Dichlorofluoromethane	67	1.771	1.771	0.000	96	352527	50.0	50.1	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	98	307108	50.0	47.3	
19 Ethyl ether	59	1.961	1.961	0.000	94	166562	50.0	51.4	
22 1,1,2-Trichloro-1,2,2-trif	151	2.099	2.099	0.000	53	178270	50.0	51.7	
20 Acrolein	56	2.109	2.109	0.000	97	925754	1000.0	958.3	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	98	188451	50.0	52.3	
23 Acetone	58	2.204	2.204	0.000	84	111664	250.0	220.1	
25 Iodomethane	142	2.267	2.267	0.000	98	314175	50.0	50.7	
26 Carbon disulfide	76	2.299	2.299	0.000	100	599199	50.0	49.9	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	83	147621	50.0	52.5	
28 Methyl acetate	43	2.405	2.405	0.000	98	386068	100.0	98.3	
30 Methylene Chloride	84	2.500	2.500	0.000	94	206341	50.0	50.1	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	98	266845	500.0	483.7	
34 Methyl tert-butyl ether	73	2.626	2.626	0.000	96	605112	50.0	48.5	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	94	205050	50.0	52.7	
32 Acrylonitrile	53	2.721	2.721	0.000	93	937253	500.0	481.2	
35 Hexane	57	2.785	2.785	0.000	90	313184	50.0	48.8	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	63	357128	50.0	49.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	2.985	2.985	0.000	100	832600	100.0	86.5	
42 2,2-Dichloropropane	77	3.376	3.376	0.000	94	311640	50.0	46.5	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	97	327852	50.0	49.6	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	100	150296	250.0	247.5	
48 Chlorobromomethane	130	3.576	3.576	0.000	86	143194	50.0	49.5	
47 Tetrahydrofuran	42	3.576	3.576	0.000	90	149445	100.0	99.4	
49 Chloroform	83	3.608	3.608	0.000	98	355684	50.0	49.7	
51 Cyclohexane	84	3.713	3.713	0.000	93	321873	50.0	47.3	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	94	324388	50.0	50.5	
52 Carbon tetrachloride	117	3.819	3.819	0.000	98	283083	50.0	49.6	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	93	276460	50.0	49.7	
54 Isobutyl alcohol	43	3.914	3.914	0.000	98	289792	1250.0	1200.3	
55 Benzene	78	3.988	3.988	0.000	98	827797	50.0	50.0	
57 1,2-Dichloroethane	62	4.051	4.051	0.000	80	285206	50.0	49.6	
60 n-Heptane	43	4.104	4.104	0.000	90	323655	50.0	45.4	
62 Trichloroethene	132	4.462	4.462	0.000	95	219106	50.0	49.8	
64 Methylcyclohexane	83	4.547	4.547	0.000	95	393624	50.0	47.9	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	85	207486	50.0	50.7	
68 1,4-Dioxane	88	4.747	4.747	0.000	55	72758	1000.0	1041.9	
67 Dibromomethane	93	4.758	4.758	0.000	88	128493	50.0	48.2	
69 Dichlorobromomethane	83	4.853	4.853	0.000	99	284461	50.0	50.3	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	95	143973	50.0	48.1	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	94	349882	50.0	52.8	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	97	1174797	250.0	242.1	
74 Toluene	92	5.423	5.423	0.000	85	534531	50.0	50.6	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	93	312094	50.0	48.7	
76 Ethyl methacrylate	69	5.655	5.655	0.000	87	277405	50.0	49.4	
77 1,1,2-Trichloroethane	83	5.782	5.782	0.000	94	162190	50.0	50.8	
78 Tetrachloroethene	164	5.824	5.824	0.000	82	207638	50.0	50.8	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	95	311082	50.0	50.0	
80 2-Hexanone	43	5.950	5.950	0.000	97	854053	250.0	242.9	
82 Chlorodibromomethane	129	6.067	6.067	0.000	95	226719	50.0	51.0	
83 Ethylene Dibromide	107	6.172	6.172	0.000	98	198682	50.0	49.8	
85 Chlorobenzene	112	6.541	6.541	0.000	96	592985	50.0	49.3	
87 Ethylbenzene	91	6.594	6.594	0.000	97	1040176	50.0	49.3	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	53	221893	50.0	50.3	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	812759	50.0	49.8	
89 o-Xylene	91	7.016	7.016	0.000	93	836104	50.0	50.1	
90 Styrene	104	7.037	7.037	0.000	94	641455	50.0	47.4	
91 Bromoform	173	7.217	7.217	0.000	96	177531	50.0	50.2	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	1069034	50.0	49.9	
94 Bromobenzene	156	7.586	7.586	0.000	95	285478	50.0	50.6	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	96	259600	50.0	49.3	
98 N-Propylbenzene	91	7.639	7.639	0.000	91	1294643	50.0	50.6	
97 1,2,3-Trichloropropane	110	7.660	7.660	0.000	78	82053	50.0	47.8	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	44	98895	50.0	51.7	
99 2-Chlorotoluene	91	7.734	7.734	0.000	96	714758	50.0	49.5	
101 1,3,5-Trimethylbenzene	105	7.797	7.797	0.000	74	916583	50.0	50.4	
102 4-Chlorotoluene	91	7.829	7.829	0.000	88	750746	50.0	49.7	
103 tert-Butylbenzene	119	8.050	8.050	0.000	91	815091	50.0	49.3	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	70	928278	50.0	49.6	
106 sec-Butylbenzene	105	8.230	8.230	0.000	98	1225136	50.0	50.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	8.357	8.357	0.000	68	542792	50.0	51.0	
108 4-Isopropyltoluene	119	8.357	8.357	0.000	95	1077856	50.0	50.8	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	95	536415	50.0	50.5	
112 n-Butylbenzene	91	8.694	8.694	0.000	98	964917	50.0	49.8	
113 1,2-Dichlorobenzene	146	8.758	8.758	0.000	93	500708	50.0	50.9	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	90	77799	50.0	50.6	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	93	399133	50.0	51.0	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	98	219206	50.0	50.7	
118 Naphthalene	128	10.309	10.309	0.000	99	949618	50.0	50.6	
119 1,2,3-Trichlorobenzene	180	10.509	10.509	0.000	95	366795	50.0	51.7	
S 123 1,2-Dichloroethene, Total	1				0		100.0	102.3	
S 124 Xylenes, Total	1				0		100.0	99.9	
S 122 1,3-Dichloropropene, Total	1				0		100.0	101.5	

Reagents:

DOD ISTD_00166	Amount Added:	5.00	Units: uL
VM_MMIX SEC_00082	Amount Added:	5.00	Units: uL
VM_ACROLEIN2_00110	Amount Added:	5.00	Units: uL

Report Date: 07-Dec-2018 09:28:16 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0616.D

Injection Date: 06-Dec-2018 20:02:30 Instrument ID: CMSP2 Operator ID: ea

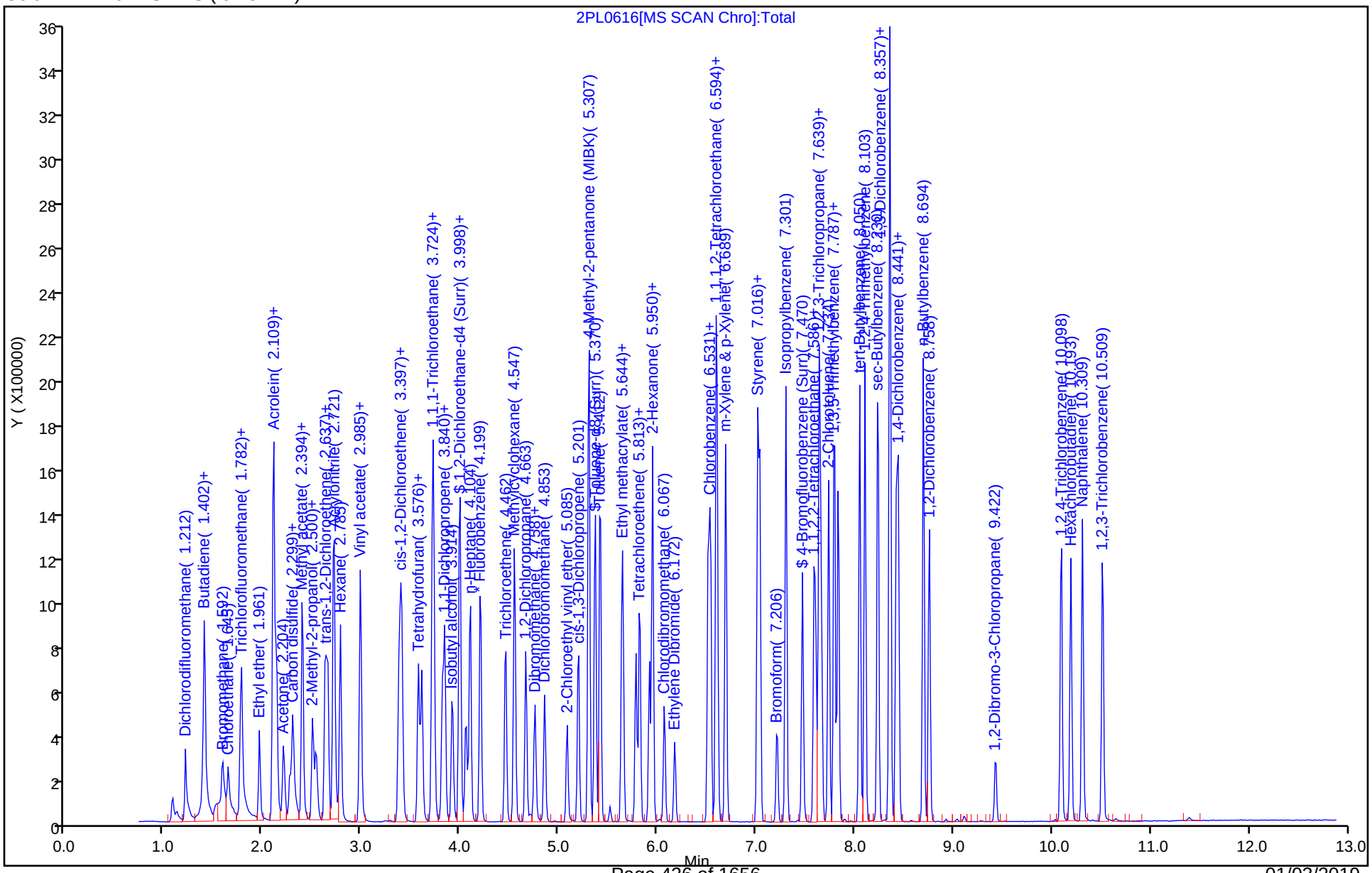
Lims ID: icv Worklist Smp#: 16

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 15

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-553025/3 Calibration Date: 12/24/2018 11:31

Instrument ID: CMSP2 Calib Start Date: 12/06/2018 16:21

GC Column: Rxi-624 MS ID: 0.18(mm) Calib End Date: 12/06/2018 19:13

Lab File ID: 1PL2456.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3992	0.3121		39.1	50.0	-21.8	60.0
Vinyl chloride	Ave	0.3243	0.2891		44.6	50.0	-10.9	20.0
1,3-Butadiene	Ave	0.2867	0.2675		46.7	50.0	-6.7	60.0
Chloromethane	QuaF		0.3808	0.1000	38.2	50.0	-23.7	60.0
Bromomethane	Ave	0.2202	0.1717		39.0	50.0	-22.0	60.0
Chloroethane	Qua2		0.1918		49.2	50.0	-1.6	60.0
Dichlorofluoromethane	Lin1		0.4660		50.5	50.0	1.0	60.0
Trichlorofluoromethane	Ave	0.4255	0.4283		50.3	50.0	0.7	60.0
Ethyl ether	Ave	0.2124	0.2233		52.6	50.0	5.1	60.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2262	0.2392		52.9	50.0	5.8	60.0
Acrolein	Ave	0.0633	0.0913		1440	1000	44.2	60.0
1,1-Dichloroethene	Qua2		0.2518		53.3	50.0	6.6	20.0
Acetone	Ave	0.0333	0.0315		237	250	-5.3	60.0
Iodomethane	Lin1		0.3125		38.6	50.0	-22.8	60.0
Carbon disulfide	Ave	0.7878	0.7614		48.3	50.0	-3.3	60.0
Allyl chloride	Ave	0.1842	0.1957		53.1	50.0	6.3	60.0
Methyl acetate	Ave	0.2575	0.2274		88.3	100	-11.7	60.0
Methylene Chloride	Lin1		0.2732		50.6	50.0	1.3	60.0
tert-Butyl alcohol	Ave	0.0362	0.0333		461	500	-7.9	60.0
Methyl tert-butyl ether	Ave	0.8180	0.8086		49.4	50.0	-1.2	60.0
trans-1,2-Dichloroethene	Qua2		0.2727		53.5	50.0	7.0	60.0
Acrylonitrile	Ave	0.1277	0.1236		484	500	-3.2	60.0
Hexane	Ave	0.4203	0.4139		49.2	50.0	-1.5	60.0
1,1-Dichloroethane	Ave	0.4734	0.4598	0.1000	48.6	50.0	-2.9	60.0
Vinyl acetate	Ave	0.6308	0.5970		94.6	100	-5.4	60.0
2,2-Dichloropropane	Ave	0.4394	0.4222		48.0	50.0	-3.9	60.0
cis-1,2-Dichloroethene	Ave	0.4331	0.4268		49.3	50.0	-1.5	60.0
2-Butanone (MEK)	Ave	0.0398	0.0419		263	250	5.2	60.0
Bromochloromethane	Ave	0.1897	0.1919		50.6	50.0	1.2	60.0
Tetrahydrofuran	Qua2		0.0986		100	100	0.0	60.0
Chloroform	Ave	0.4695	0.4718		50.2	50.0	0.5	20.0
Cyclohexane	Ave	0.4460	0.4256		47.7	50.0	-4.6	60.0
1,1,1-Trichloroethane	Lin		0.4154		49.3	50.0	-1.4	60.0
Carbon tetrachloride	Ave	0.3741	0.3346		44.7	50.0	-10.6	60.0
1,1-Dichloropropene	Ave	0.3643	0.3656		50.2	50.0	0.3	60.0
Isobutanol	Ave	0.0158	0.0136		1070	1250	-14.3	60.0
Benzene	Ave	1.086	1.088		50.1	50.0	0.2	60.0
1,2-Dichloroethane	Ave	0.3770	0.3747		49.7	50.0	-0.6	60.0
n-Heptane	Ave	0.4676	0.4344		46.5	50.0	-7.1	60.0
Trichloroethene	Ave	0.2884	0.2974		51.6	50.0	3.1	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-553025/3 Calibration Date: 12/24/2018 11:31

Instrument ID: CMSP2 Calib Start Date: 12/06/2018 16:21

GC Column: Rxi-624 MS ID: 0.18(mm) Calib End Date: 12/06/2018 19:13

Lab File ID: 1PL2456.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5387	0.5267		48.9	50.0	-2.2	60.0
1,2-Dichloropropane	Ave	0.2681	0.2648		49.4	50.0	-1.2	20.0
1,4-Dioxane	Ave	0.0046	0.0049		1060	1000	6.0	60.0
Dibromomethane	Ave	0.1747	0.1732		49.6	50.0	-0.9	60.0
Bromodichloromethane	Ave	0.3704	0.3602		48.6	50.0	-2.8	60.0
2-Chloroethyl vinyl ether	Ave	0.1960	0.1919		48.9	50.0	-2.1	60.0
cis-1,3-Dichloropropene	Ave	0.4343	0.4476		51.5	50.0	3.1	60.0
Methyl isobutyl ketone (MIBK)	Ave	0.3181	0.3023		238	250	-4.9	60.0
Toluene	Ave	0.6923	0.7120		51.4	50.0	2.8	20.0
trans-1,3-Dichloropropene	Ave	0.4200	0.3999		47.6	50.0	-4.8	60.0
Ethyl methacrylate	Ave	0.3682	0.3539		48.1	50.0	-3.9	60.0
1,1,2-Trichloroethane	Ave	0.2091	0.2166		51.8	50.0	3.6	60.0
Tetrachloroethene	Ave	0.2681	0.2872		53.6	50.0	7.1	60.0
1,3-Dichloropropane	Ave	0.4081	0.4155		50.9	50.0	1.8	60.0
2-Hexanone	Ave	0.2305	0.2197		238	250	-4.7	60.0
Dibromochloromethane	Ave	0.2914	0.2876		49.3	50.0	-1.3	60.0
1,2-Dibromoethane	Ave	0.2614	0.2722		52.0	50.0	4.1	60.0
Chlorobenzene	Ave	1.890	1.915	0.3000	50.7	50.0	1.3	60.0
Ethylbenzene	Ave	3.314	3.303		49.8	50.0	-0.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6932	0.6697		48.3	50.0	-3.4	60.0
m-Xylene & p-Xylene	Ave	2.567	2.587		50.4	50.0	0.8	60.0
o-Xylene	Ave	2.623	2.675		51.0	50.0	2.0	60.0
Styrene	Ave	2.126	2.049		48.2	50.0	-3.6	60.0
Bromoform	Ave	0.5564	0.4999	0.1000	44.9	50.0	-10.2	60.0
Isopropylbenzene	Ave	3.368	3.436		51.0	50.0	2.0	60.0
Bromobenzene	Ave	0.8865	0.9208		51.9	50.0	3.9	60.0
1,1,2,2-Tetrachloroethane	Ave	0.8274	0.8365	0.3000	50.5	50.0	1.1	60.0
N-Propylbenzene	Ave	4.026	4.084		50.7	50.0	1.4	60.0
1,2,3-Trichloropropane	Ave	0.2701	0.2790		51.7	50.0	3.3	60.0
trans-1,4-Dichloro-2-butene	Qua2		0.2862		47.5	50.0	-4.9	60.0
2-Chlorotoluene	Ave	2.271	2.278		50.2	50.0	0.3	60.0
1,3,5-Trimethylbenzene	Ave	2.857	2.918		51.1	50.0	2.1	60.0
4-Chlorotoluene	Ave	2.373	2.426		51.1	50.0	2.2	60.0
tert-Butylbenzene	Ave	2.601	2.609		50.1	50.0	0.3	60.0
1,2,4-Trimethylbenzene	Ave	2.942	2.987		50.8	50.0	1.5	60.0
sec-Butylbenzene	Ave	3.846	3.919		51.0	50.0	1.9	60.0
1,3-Dichlorobenzene	Ave	1.606	1.617		50.3	50.0	0.7	60.0
p-Isopropyltoluene	Ave	3.202	3.216		50.2	50.0	0.5	60.0
1,4-Dichlorobenzene	Ave	1.603	1.617		50.4	50.0	0.8	60.0
n-Butylbenzene	Ave	2.925	2.834		48.4	50.0	-3.1	60.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 680-553025/3 Calibration Date: 12/24/2018 11:31

Instrument ID: CMSP2 Calib Start Date: 12/06/2018 16:21

GC Column: Rxi-624 MS ID: 0.18(mm) Calib End Date: 12/06/2018 19:13

Lab File ID: 1PL2456.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichlorobenzene	Ave	1.484	1.516		51.1	50.0	2.2	60.0
1,2-Dibromo-3-Chloropropane	Ave	0.2321	0.2225		47.9	50.0	-4.2	60.0
1,2,4-Trichlorobenzene	Ave	1.181	1.174		49.7	50.0	-0.6	60.0
Hexachlorobutadiene	Ave	0.6522	0.6666		51.1	50.0	2.2	60.0
Naphthalene	Ave	2.833	2.856		50.4	50.0	0.8	60.0
1,2,3-Trichlorobenzene	Ave	1.072	1.082		50.5	50.0	1.0	60.0
Dibromofluoromethane (Surr)	Ave	0.2512	0.2619		52.1	50.0	4.3	60.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3223	0.3178		49.3	50.0	-1.4	60.0
Toluene-d8 (Surr)	Ave	2.476	2.501		50.5	50.0	1.0	60.0
4-Bromofluorobenzene (Surr)	Ave	0.9178	0.8667		47.2	50.0	-5.6	60.0

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2456.D
Lims ID: ccvis
Client ID:
Sample Type: CCVIS
Inject. Date: 24-Dec-2018 11:31:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052833-003
Operator ID: ea Instrument ID: CMSP2
Sublist: chrom-2014_MSP2*sub5

Method: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 25-Dec-2018 11:12:49 Calib Date: 07-Dec-2018 12:54:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181207-52418.b\1PL0709.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: soparaky Date: 25-Dec-2018 11:12:49

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	747101	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	87	312697	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	94	339283	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	85	195654	50.0	52.1	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	56	237406	50.0	49.3	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	782018	50.0	50.5	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	97	294063	50.0	47.2	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	100	233144	50.0	39.1	
10 Vinyl chloride	62	1.391	1.391	0.000	99	215962	50.0	44.6	
12 Chloromethane	50	1.413	1.413	0.000	75	284462	50.0	38.2	
11 Butadiene	54	1.413	1.413	0.000	92	199824	50.0	46.7	
13 Bromomethane	94	1.592	1.592	0.000	99	128300	50.0	39.0	
14 Chloroethane	64	1.645	1.645	0.000	99	143314	50.0	49.2	
15 Dichlorofluoromethane	67	1.771	1.771	0.000	98	348152	50.0	50.5	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	99	320003	50.0	50.3	
19 Ethyl ether	59	1.961	1.961	0.000	94	166813	50.0	52.6	
22 1,1,2-Trichloro-1,2,2-trif	151	2.109	2.109	0.000	37	178686	50.0	52.9	
20 Acrolein	56	2.109	2.109	0.000	96	1364128	1000.0	1441.8	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	97	188115	50.0	53.3	
23 Acetone	58	2.215	2.215	0.000	85	117647	250.0	236.8	
25 Iodomethane	142	2.278	2.278	0.000	96	233462	50.0	38.6	
26 Carbon disulfide	76	2.299	2.299	0.000	99	568841	50.0	48.3	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	83	146230	50.0	53.1	
28 Methyl acetate	43	2.405	2.405	0.000	97	339704	100.0	88.3	
30 Methylene Chloride	84	2.500	2.500	0.000	91	204112	50.0	50.6	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	98	248875	500.0	460.6	
34 Methyl tert-butyl ether	73	2.637	2.637	0.000	95	604080	50.0	49.4	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	93	203736	50.0	53.5	
32 Acrylonitrile	53	2.721	2.721	0.000	93	923638	500.0	484.1	
35 Hexane	57	2.784	2.784	0.000	90	309202	50.0	49.2	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	63	343486	50.0	48.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	2.985	2.985	0.000	100	892061	100.0	94.6	
42 2,2-Dichloropropane	77	3.375	3.375	0.000	95	315404	50.0	48.0	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	98	318856	50.0	49.3	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	100	156366	250.0	262.9	
47 Tetrahydrofuran	42	3.576	3.576	0.000	88	147295	100.0	100.0	
48 Chlorobromomethane	130	3.576	3.576	0.000	83	143371	50.0	50.6	
49 Chloroform	83	3.608	3.608	0.000	98	352470	50.0	50.2	
51 Cyclohexane	84	3.713	3.713	0.000	92	317965	50.0	47.7	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	96	310333	50.0	49.3	
52 Carbon tetrachloride	117	3.819	3.819	0.000	98	249988	50.0	44.7	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	95	273143	50.0	50.2	
54 Isobutyl alcohol	43	3.914	3.914	0.000	98	253165	1250.0	1070.6	
55 Benzene	78	3.987	3.987	0.000	97	812616	50.0	50.1	
57 1,2-Dichloroethane	62	4.051	4.051	0.000	80	279920	50.0	49.7	
60 n-Heptane	43	4.104	4.104	0.000	88	324567	50.0	46.5	
62 Trichloroethene	132	4.462	4.462	0.000	94	222171	50.0	51.6	
64 Methylcyclohexane	83	4.547	4.547	0.000	96	393468	50.0	48.9	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	87	197865	50.0	49.4	
68 1,4-Dioxane	88	4.747	4.747	0.000	52	72482	1000.0	1059.7	
67 Dibromomethane	93	4.758	4.758	0.000	89	129380	50.0	49.6	
69 Dichlorobromomethane	83	4.853	4.853	0.000	99	269114	50.0	48.6	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	95	143367	50.0	48.9	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	92	334426	50.0	51.5	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	95	1129391	250.0	237.6	
74 Toluene	92	5.423	5.423	0.000	84	531899	50.0	51.4	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	95	298774	50.0	47.6	
76 Ethyl methacrylate	69	5.655	5.655	0.000	86	264374	50.0	48.1	
77 1,1,2-Trichloroethane	83	5.781	5.781	0.000	94	161840	50.0	51.8	
78 Tetrachloroethene	164	5.813	5.813	0.000	91	214589	50.0	53.6	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	94	310387	50.0	50.9	
80 2-Hexanone	43	5.950	5.950	0.000	96	820607	250.0	238.3	
82 Chlorodibromomethane	129	6.066	6.066	0.000	95	214867	50.0	49.3	
83 Ethylene Dibromide	107	6.172	6.172	0.000	98	203334	50.0	52.0	
85 Chlorobenzene	112	6.541	6.541	0.000	97	598750	50.0	50.7	
87 Ethylbenzene	91	6.594	6.594	0.000	97	1032745	50.0	49.8	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	54	209425	50.0	48.3	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	808932	50.0	50.4	
89 o-Xylene	91	7.016	7.016	0.000	93	836588	50.0	51.0	
90 Styrene	104	7.037	7.037	0.000	95	640745	50.0	48.2	
91 Bromoform	173	7.206	7.206	0.000	95	156315	50.0	44.9	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	1074484	50.0	51.0	
94 Bromobenzene	156	7.586	7.586	0.000	93	287934	50.0	51.9	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	95	261580	50.0	50.5	
98 N-Propylbenzene	91	7.639	7.639	0.000	92	1277078	50.0	50.7	
97 1,2,3-Trichloropropane	110	7.649	7.649	0.000	54	87246	50.0	51.7	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	45	89498	50.0	47.5	
99 2-Chlorotoluene	91	7.734	7.734	0.000	97	712407	50.0	50.2	
101 1,3,5-Trimethylbenzene	105	7.787	7.787	0.000	78	912482	50.0	51.1	
102 4-Chlorotoluene	91	7.829	7.829	0.000	88	758523	50.0	51.1	
103 tert-Butylbenzene	119	8.050	8.050	0.000	91	815864	50.0	50.1	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	70	933912	50.0	50.8	
106 sec-Butylbenzene	105	8.230	8.230	0.000	99	1225558	50.0	51.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
108 4-Isopropyltoluene	119	8.356	8.356	0.000	94	1091294	50.0	50.2	
107 1,3-Dichlorobenzene	146	8.356	8.356	0.000	69	548528	50.0	50.3	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	96	548460	50.0	50.4	
112 n-Butylbenzene	91	8.694	8.694	0.000	98	961395	50.0	48.4	
113 1,2-Dichlorobenzene	146	8.757	8.757	0.000	94	514328	50.0	51.1	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	86	75476	50.0	47.9	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	90	398392	50.0	49.7	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	98	226159	50.0	51.1	
118 Naphthalene	128	10.309	10.309	0.000	99	969011	50.0	50.4	
119 1,2,3-Trichlorobenzene	180	10.509	10.509	0.000	93	367231	50.0	50.5	
S 122 1,3-Dichloropropene, Total	1				0		100.0	99.1	
S 123 1,2-Dichloroethene, Total	1				0		100.0	102.8	
S 124 Xylenes, Total	1				0		100.0	101.4	

Reagents:

VM_MMIX_01940	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL
DOD ISTD_00167	Amount Added:	5.00	Units: uL

Report Date: 25-Dec-2018 11:12:51 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2456.D

Injection Date: 24-Dec-2018 11:31:30 Instrument ID: CMSP2 Operator ID: ea

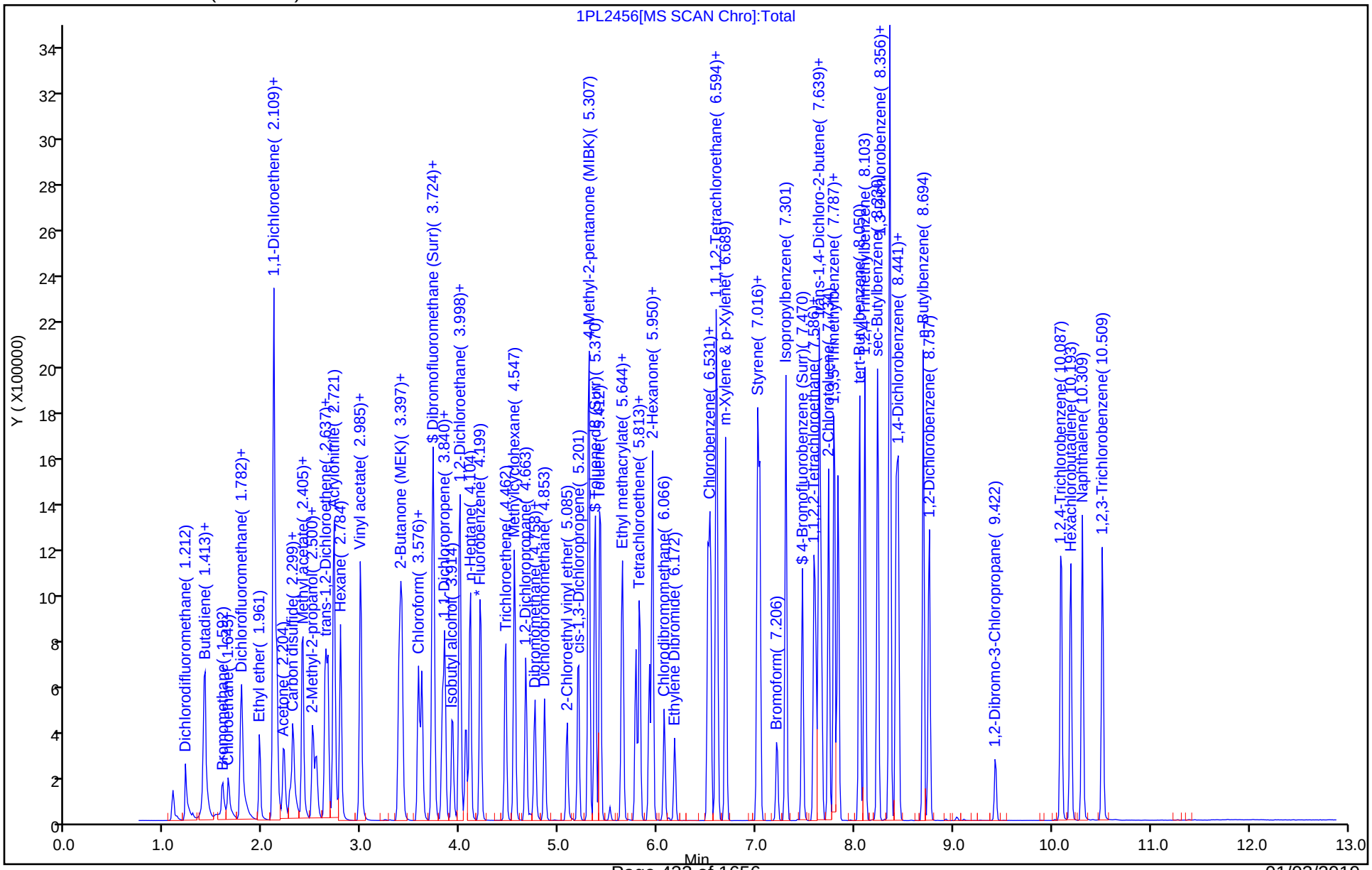
Lims ID: ccvis Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1801t.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	18-Dec-2018 08:27:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 g	Dil. Factor:	1.0000		
Sample Info:	680-0052682-001				
Misc. Info.:	bfb				
Operator ID:	jk	Instrument ID:	CMSAA		
Method:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\8260AQ.m				
Limit Group:	8260B				
Last Update:	18-Dec-2018 13:57:04	Calib Date:	18-Dec-2018 12:45:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D				
Column 1 :	DB-VRX 20m x 0.18um x 1.0um (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1017				
First Level Reviewer: kitchingsj		Date:	18-Dec-2018 08:38:19		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 8 BFB

Reagents:

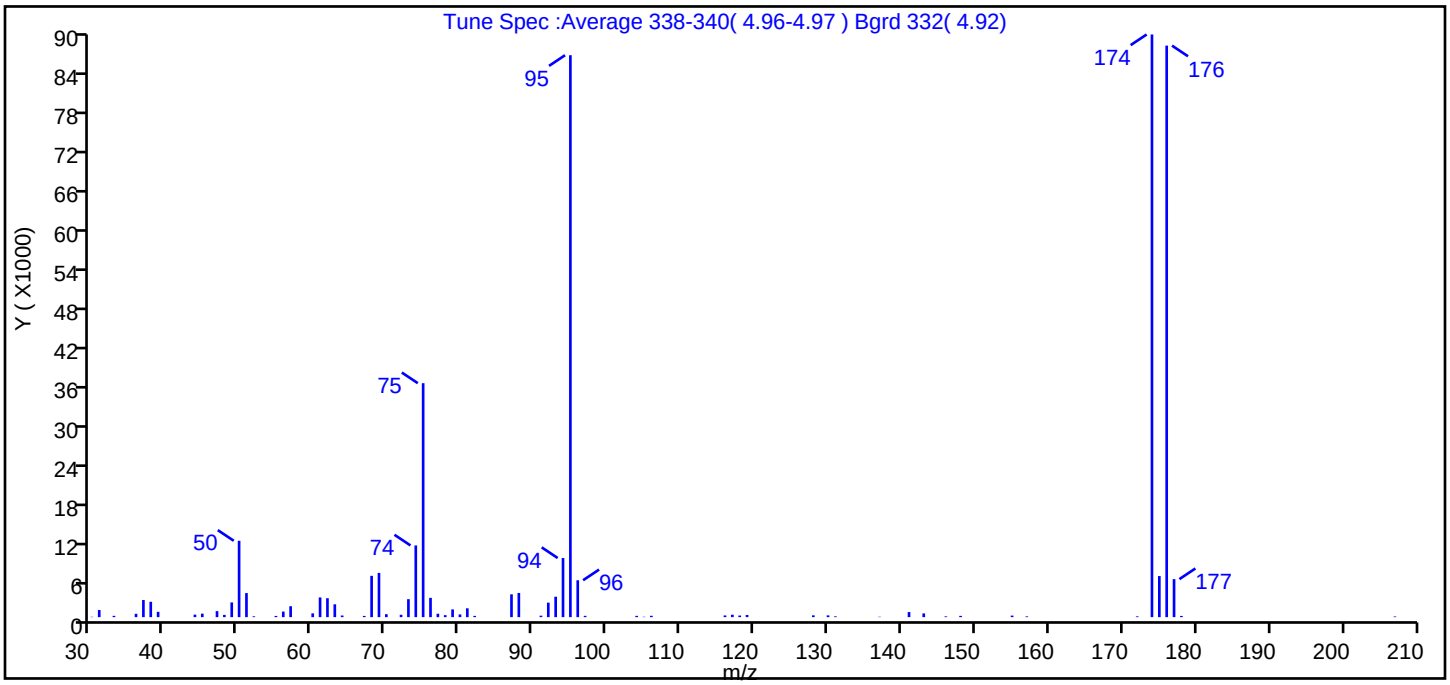
VM_bfb_00170 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1801t.D
Injection Date: 18-Dec-2018 08:27:30 Instrument ID: CMSAA
Lims ID: bfb
Client ID:
Operator ID: jk ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 5.0 g Dil. Factor: 1.0000
Method: 8260AQ Limit Group: 8260B
Tune Method: BFB Method CLP OLM4.2

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	base peak, 100 percent relative abundance	100
50	8.0-40.0 percent of mass 95	13.6
75	30.0-66.0 percent of mass 95	41.6
96	5.0-9.0 percent of mass 95	6.6
173	less than 2.0 percent of mass 174	0.0 (0.0)
174	50.0-120.0 percent of mass 95	104
175	4.0-9.0 percent of mass 174	7.3 (7.1)
176	93.0-101.0 percent of mass 174	102 (98.1)
177	5.0-9.0 percent of mass 176	6.8 (6.7)

Data File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1801t.D\8260AQ.rslt\spectra.d
Injection Date: 18-Dec-2018 08:27:30
Spectrum: Tune Spec :Average 338-340(4.96-4.97) Bgrd 332(4.92)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
30.00	52	60.00	583	81.00	1363	128.00	276
31.00	1101	61.00	3040	82.00	195	130.00	272
33.00	200	62.00	2922	87.00	3520	131.00	124
36.00	516	63.00	1982	88.00	3729	137.00	58
37.00	2640	64.00	251	91.00	227	141.00	784
38.00	2372	67.00	189	92.00	2236	143.00	575
39.00	819	68.00	6374	93.00	3153	146.00	121
44.00	388	69.00	6825	94.00	9121	148.00	198
45.00	539	70.00	458	95.00	86696	155.00	240
47.00	930	72.00	362	96.00	5692	157.00	118
48.00	347	73.00	2774	97.00	203	172.00	121
49.00	2271	74.00	11063	104.00	200	174.00	89896
50.00	11781	75.00	36096	105.00	56	175.00	6338
51.00	3713	76.00	2975	106.00	210	176.00	88176
52.00	125	77.00	527	116.00	264	177.00	5864
55.00	187	78.00	306	117.00	375	178.00	189
56.00	861	79.00	1194	118.00	249	207.00	104
57.00	1687	80.00	421	119.00	331		

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2001t.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	20-Dec-2018 08:42:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 g	Dil. Factor:	1.0000		
Sample Info:	680-0052743-001				
Misc. Info.:	bfb				
Operator ID:	ea	Instrument ID:	CMSAA		
Method:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\8260AQ.m				
Limit Group:	8260B				
Last Update:	20-Dec-2018 09:11:49	Calib Date:	18-Dec-2018 12:45:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D				
Column 1 :	DB-VRX 20m x 0.18um x 1.0um (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0309				
First Level Reviewer: manniona		Date:	20-Dec-2018 09:11:49		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 8 BFB

Reagents:

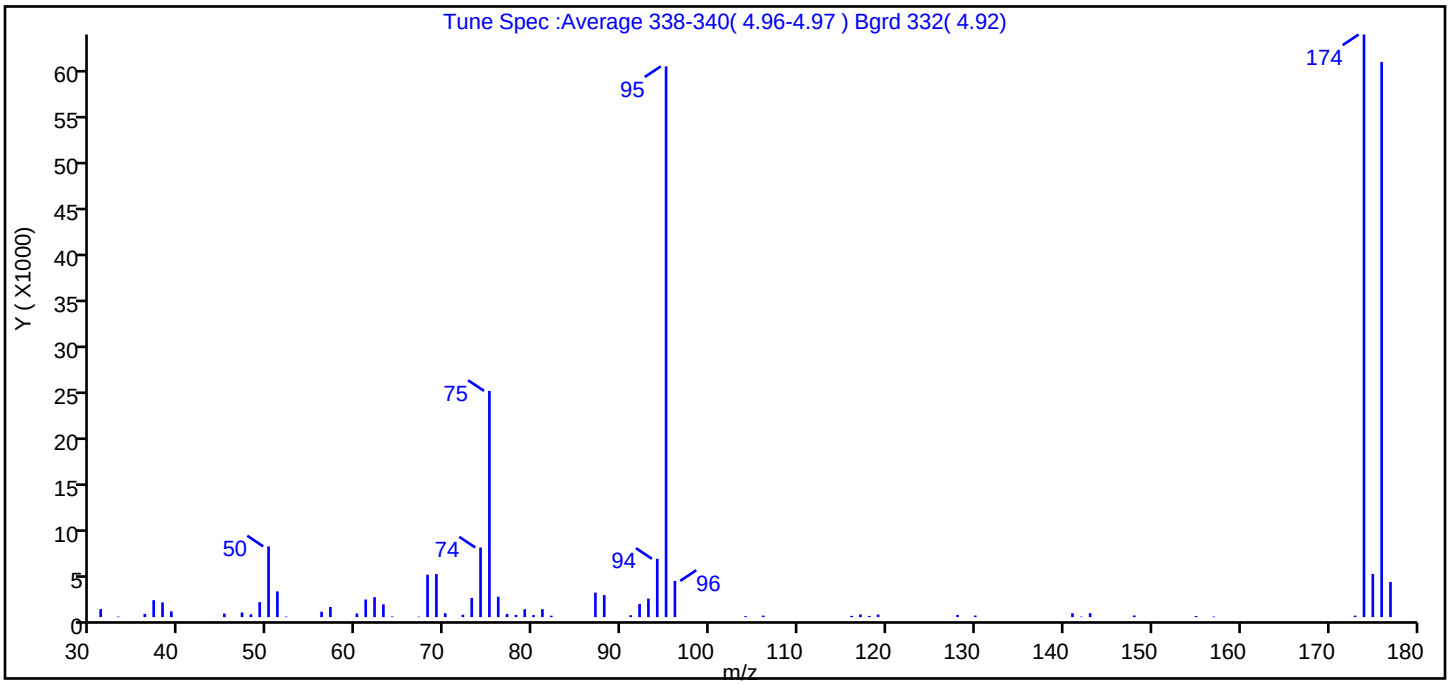
VM_bfb_00170 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2001t.D				
Injection Date:	20-Dec-2018 08:42:30	Instrument ID:	CMSAA		
Lims ID:	bfb				
Client ID:					
Operator ID:	ea	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 g	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Tune Method:	BFB Method CLP OLM4.2				

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	base peak, 100 percent relative abundance	100
50	8.0-40.0 percent of mass 95	12.8
75	30.0-66.0 percent of mass 95	41.1
96	5.0-9.0 percent of mass 95	6.6
173	less than 2.0 percent of mass 174	0.3 (0.3)
174	50.0-120.0 percent of mass 95	106
175	4.0-9.0 percent of mass 174	7.8 (7.4)
176	93.0-101.0 percent of mass 174	101 (95.3)
177	5.0-9.0 percent of mass 176	6.4 (6.3)

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2001t.D\8260AQ.rslt\spectra.d
Injection Date: 20-Dec-2018 08:42:30
Spectrum: Tune Spec :Average 338-340(4.96-4.97) Bgrd 332(4.92)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	871	60.00	392	79.00	851	118.00	136
33.00	61	61.00	1906	80.00	228	119.00	282
36.00	354	62.00	2164	81.00	865	128.00	242
37.00	1839	63.00	1379	82.00	157	130.00	172
38.00	1594	64.00	68	87.00	2655	141.00	417
39.00	624	67.00	56	88.00	2384	142.00	56
44.00	10	68.00	4592	91.00	212	143.00	424
45.00	385	69.00	4658	92.00	1421	148.00	182
47.00	505	70.00	424	93.00	2005	155.00	127
48.00	307	72.00	260	94.00	6313	157.00	63
49.00	1621	73.00	2079	95.00	59584	173.00	163
50.00	7653	74.00	7534	96.00	3922	174.00	63032
51.00	2784	75.00	24472	104.00	111	175.00	4667
52.00	60	76.00	2219	106.00	169	176.00	60048
56.00	585	77.00	347	116.00	137	177.00	3810
57.00	1109	78.00	237	117.00	297		

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2101t.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	21-Dec-2018 08:35:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 g	Dil. Factor:	1.0000		
Sample Info:	680-0052778-001				
Misc. Info.:	bfb				
Operator ID:	ea	Instrument ID:	CMSAA		
Method:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\8260AQ.m				
Limit Group:	8260B				
Last Update:	24-Dec-2018 09:23:38	Calib Date:	18-Dec-2018 12:45:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D				
Column 1 :	DB-VRX 20m x 0.18um x 1.0um (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0330				
First Level Reviewer: soparaky		Date:	24-Dec-2018 09:23:38		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 8 BFB

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

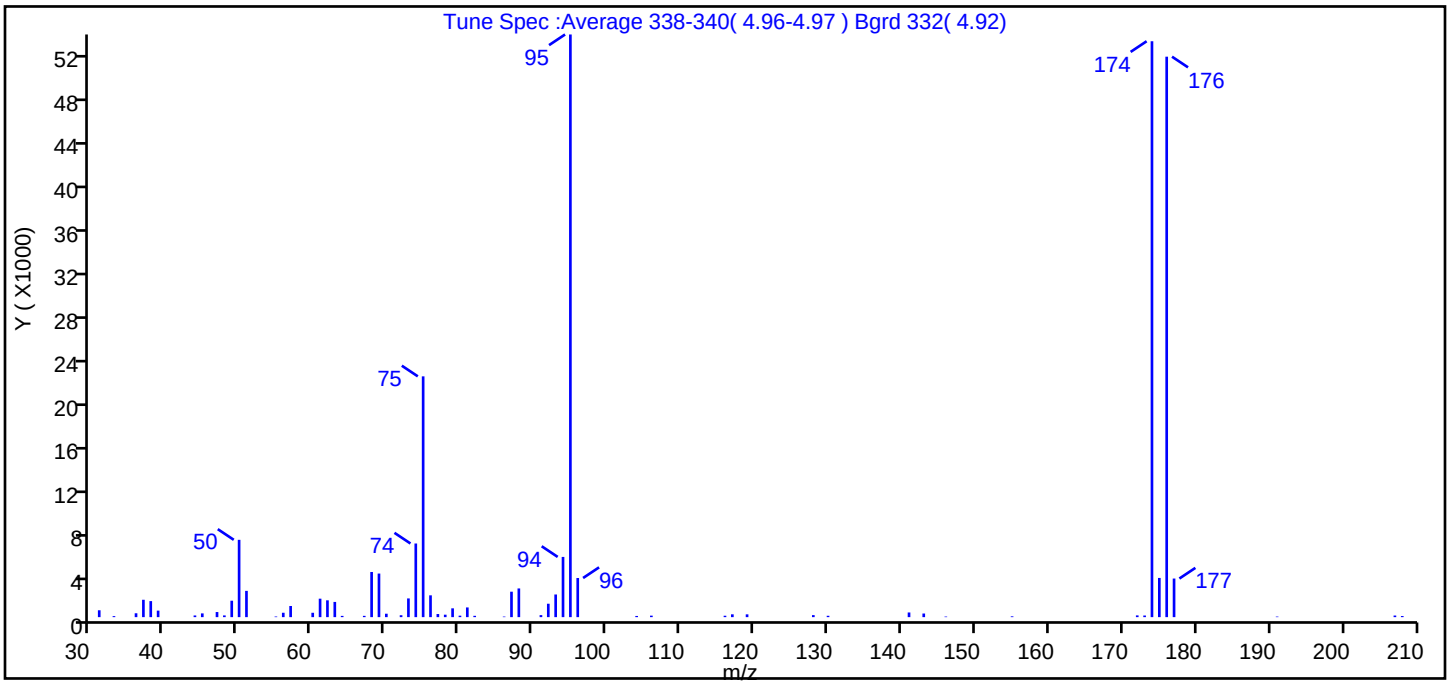
VM_bfb_00170 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2101t.D
Injection Date: 21-Dec-2018 08:35:30 Instrument ID: CMSAA
Lims ID: bfb
Client ID:
Operator ID: ea ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 5.0 g Dil. Factor: 1.0000
Method: 8260AQ Limit Group: 8260B
Tune Method: BFB Method CLP OLM4.2

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	base peak, 100 percent relative abundance	100
50	8.0-40.0 percent of mass 95	13.3
75	30.0-66.0 percent of mass 95	41.3
96	5.0-9.0 percent of mass 95	6.7
173	less than 2.0 percent of mass 174	0.3 (0.3)
174	50.0-120.0 percent of mass 95	98.8
175	4.0-9.0 percent of mass 174	6.7 (6.8)
176	93.0-101.0 percent of mass 174	96.2 (97.3)
177	5.0-9.0 percent of mass 176	6.6 (6.9)

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2101t.D\8260AQ.rslt\spectra.d
Injection Date: 21-Dec-2018 08:35:30
Spectrum: Tune Spec :Average 338-340(4.96-4.97) Bgrd 332(4.92)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 65

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	634	61.00	1702	81.00	895	130.00	126
33.00	93	62.00	1551	82.00	122	141.00	430
36.00	358	63.00	1403	86.00	52	143.00	334
37.00	1602	64.00	116	87.00	2346	146.00	54
38.00	1478	67.00	119	88.00	2646	155.00	73
39.00	601	68.00	4163	91.00	187	172.00	161
44.00	155	69.00	4019	92.00	1237	173.00	150
45.00	346	70.00	316	93.00	2089	174.00	53096
47.00	471	72.00	177	94.00	5552	175.00	3614
48.00	159	73.00	1726	95.00	53720	176.00	51672
49.00	1515	74.00	6790	96.00	3608	177.00	3559
50.00	7129	75.00	22200	104.00	109	191.00	52
51.00	2422	76.00	2011	106.00	138	207.00	148
55.00	58	77.00	287	116.00	130	208.00	101
56.00	405	78.00	226	117.00	261		
57.00	1028	79.00	813	119.00	258		
60.00	403	80.00	136	128.00	187		

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01201T.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	12-Nov-2018 10:02:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	680-0051771-001				
Misc. Info.:	bfb				
Operator ID:	MJY	Instrument ID:	CMSO2		
Method:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\2014_MSO2.m				
Limit Group:	8260B				
Last Update:	13-Nov-2018 10:07:30	Calib Date:	12-Nov-2018 15:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D				
Column 1 :	Rtx-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1008				
First Level Reviewer: anchorse		Date:	12-Nov-2018 10:18:29		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 127 BFB

Reagents:

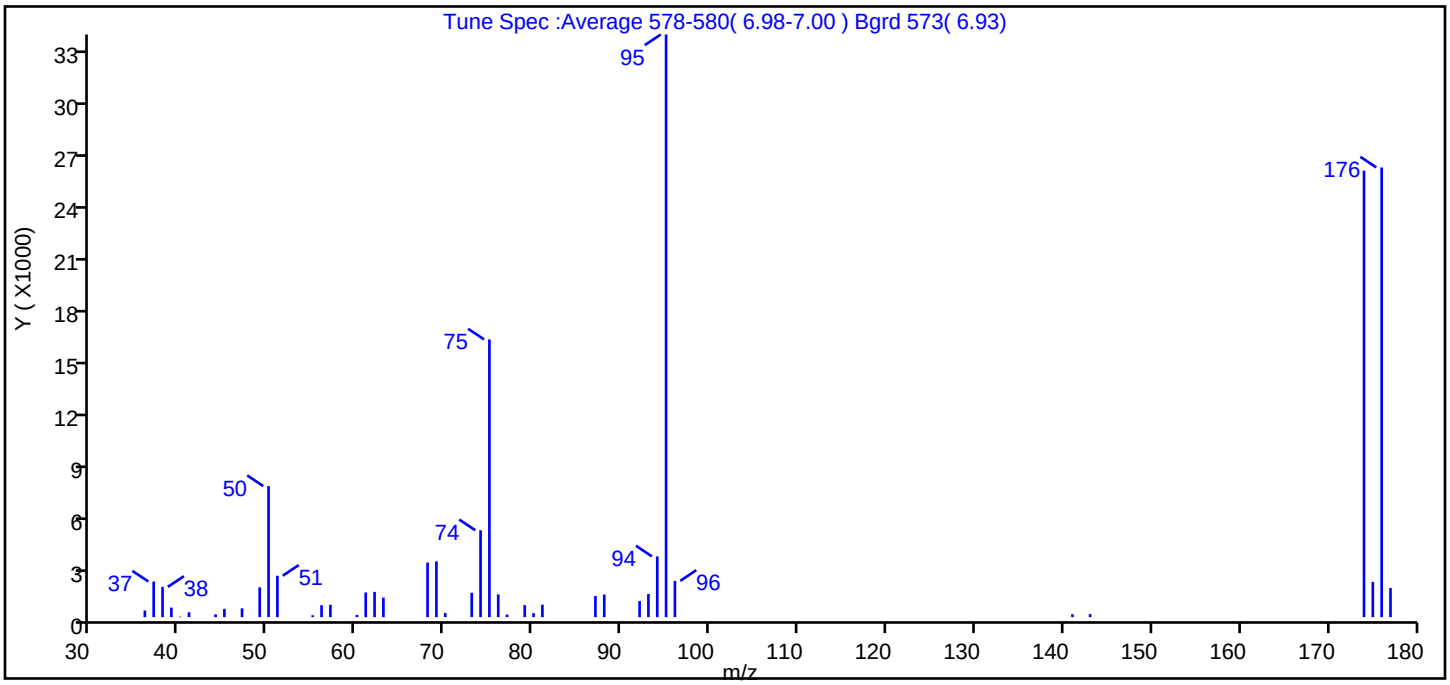
VM_bfb_00167 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Savannah

Data File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01201T.D				
Injection Date:	12-Nov-2018 10:02:30	Instrument ID:	CMSO2		
Lims ID:	bfb				
Client ID:					
Operator ID:	MJY	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Tune Method:	BFB Method 624				

$ 127 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	22.5
75	30-60% of mass 95	47.7
96	5-9% of mass 95	6.2
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	76.6
175	5-9% of mass 174	6.1 (7.9)
176	>95% but <101% of mass 174	77.2 (100.7)
177	5-9% of mass 176	5.0 (6.5)

Data File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01201T.D\2014_MSO2.rslt\spectra.d
Injection Date: 12-Nov-2018 10:02:30
Spectrum: Tune Spec :Average 578-580(6.98-7.00) Bgrd 573(6.93)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 43

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	382	51.00	2376	73.00	1399	93.00	1326
37.00	2044	55.00	110	74.00	4989	94.00	3486
38.00	1738	56.00	684	75.00	15939	95.00	33440
39.00	548	57.00	708	76.00	1303	96.00	2082
40.00	29	60.00	129	77.00	149	141.00	167
41.00	280	61.00	1418	79.00	690	143.00	174
44.00	162	62.00	1451	80.00	229	174.00	25624
45.00	477	63.00	1122	81.00	716	175.00	2024
47.00	505	68.00	3134	87.00	1214	176.00	25808
49.00	1711	69.00	3203	88.00	1299	177.00	1669
50.00	7523	70.00	231	92.00	921		

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\1O2L2001T.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	20-Dec-2018 08:49:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	680-0052745-001				
Operator ID:	EA	Instrument ID:	CMSO2		
Method:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m				
Limit Group:	8260B				
Last Update:	21-Dec-2018 09:45:23	Calib Date:	12-Nov-2018 15:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D				
Column 1 :	Rtx-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0321				
First Level Reviewer: manniona		Date:	20-Dec-2018 09:12:46		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 127 BFB

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

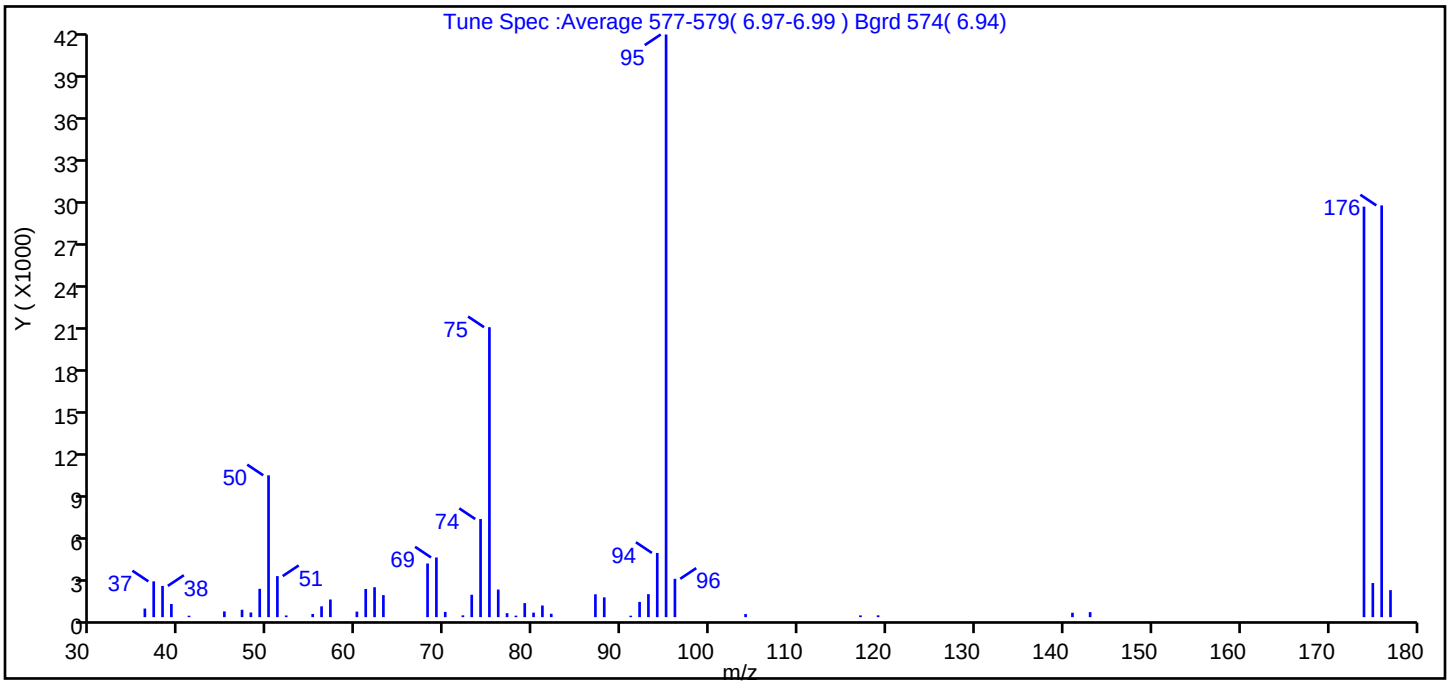
VM_bfb_00170 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\1O2L2001T.D				
Injection Date:	20-Dec-2018 08:49:30	Instrument ID:	CMSO2		
Lims ID:	bfb				
Client ID:					
Operator ID:	EA	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Tune Method:	BFB Method 624				

$ 127 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	24.3
75	30-60% of mass 95	49.8
96	5-9% of mass 95	6.6
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	70.5
175	5-9% of mass 174	5.9 (8.3)
176	>95% but <101% of mass 174	70.7 (100.3)
177	5-9% of mass 176	4.6 (6.6)

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\1O2L2001T.D\2014_MSO2.rslt\spectra.d
Injection Date: 20-Dec-2018 08:49:30
Spectrum: Tune Spec :Average 577-579(6.97-6.99) Bgrd 574(6.94)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 50

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	616	56.00	774	76.00	1979	95.00	41752
37.00	2564	57.00	1265	77.00	285	96.00	2748
38.00	2239	60.00	397	78.00	107	104.00	221
39.00	942	61.00	2017	79.00	1006	117.00	126
41.00	102	62.00	2143	80.00	323	119.00	131
45.00	411	63.00	1578	81.00	833	141.00	315
47.00	530	68.00	3845	82.00	242	143.00	358
48.00	334	69.00	4275	87.00	1637	174.00	29416
49.00	2030	70.00	376	88.00	1419	175.00	2444
50.00	10163	72.00	129	91.00	103	176.00	29504
51.00	2941	73.00	1603	92.00	1091	177.00	1934
52.00	121	74.00	7030	93.00	1647		
55.00	225	75.00	20776	94.00	4601		

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\PL0607T.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	06-Dec-2018 13:41:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	680-0052384-001				
Misc. Info.:	bfb				
Operator ID:	ea	Instrument ID:	CMSP2		
Method:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2014_MSP2.m				
Limit Group:	8260B				
Last Update:	07-Dec-2018 09:26:42	Calib Date:	06-Dec-2018 19:13:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\2PL0614.D				
Column 1 :	Rxi-624 Sil MS (0.18 mm)		Det: MS SCAN		
Process Host:	CTX1018				
First Level Reviewer: soparaky		Date:	07-Dec-2018 08:02:24		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 8 BFB

Reagents:

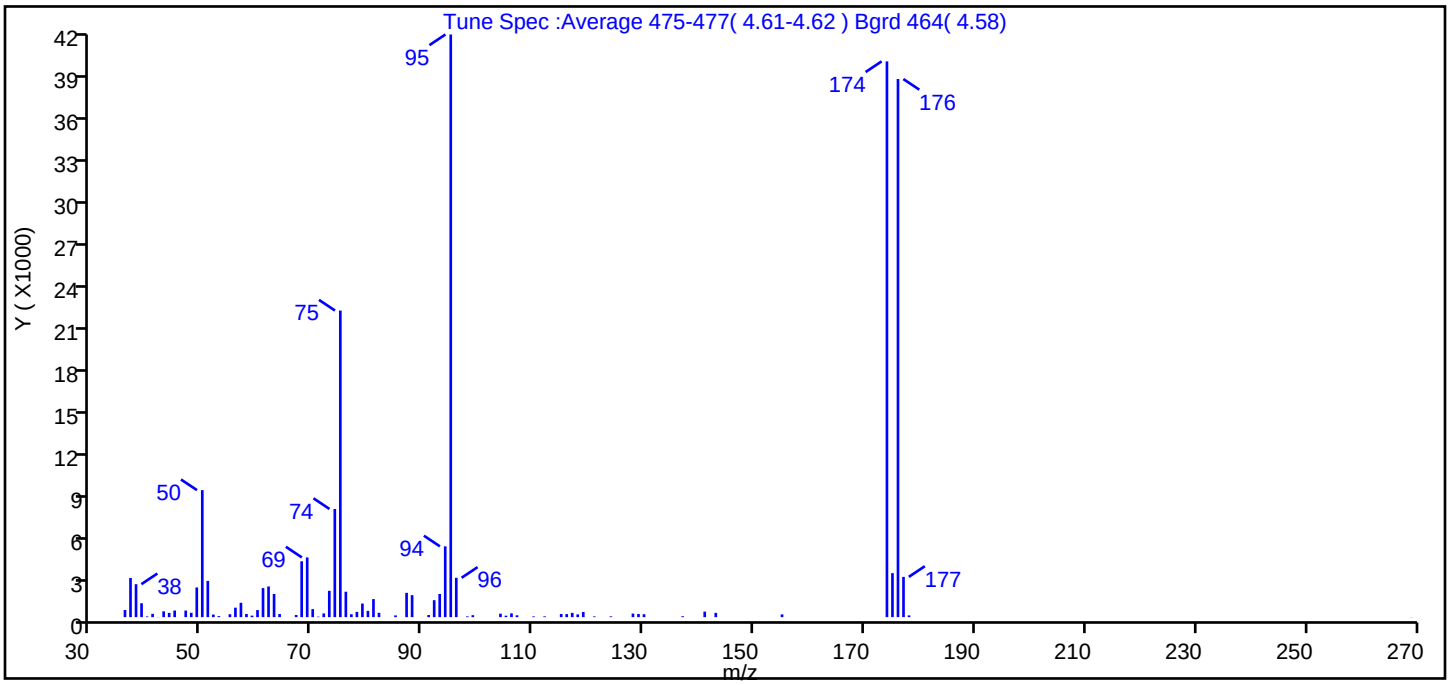
VM_bfb_00169 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\PL0607T.D				
Injection Date:	06-Dec-2018 13:41:30	Instrument ID:	CMSP2		
Lims ID:	bfb				
Client ID:					
Operator ID:	ea	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Tune Method:	BFB Method 624				

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	21.8
75	30-60% of mass 95	52.6
96	5-9% of mass 95	6.8
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	95.4
175	5-9% of mass 174	7.6 (7.9)
176	>95% but <101% of mass 174	92.4 (96.8)
177	5-9% of mass 176	6.9 (7.5)

Data File: \\chromna\Savannah\ChromData\CMSP2\20181206-52384.b\PL0607T.D\2014_MSP2.rslt\spectra.d
Injection Date: 06-Dec-2018 13:41:30
Spectrum: Tune Spec :Average 475-477(4.61-4.62) Bgrd 464(4.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	505	58.00	222	80.00	446	115.00	223
37.00	2771	59.00	107	81.00	1278	116.00	215
38.00	2333	60.00	500	82.00	309	117.00	301
39.00	983	61.00	2057	85.00	122	118.00	196
40.00	50	62.00	2170	87.00	1720	119.00	367
41.00	234	63.00	1641	88.00	1557	121.00	52
42.00	12	64.00	218	91.00	149	124.00	56
43.00	411	67.00	152	92.00	1201	128.00	253
44.00	300	68.00	3954	93.00	1638	129.00	223
45.00	468	69.00	4225	94.00	5009	130.00	206
47.00	467	70.00	570	95.00	41232	137.00	64
48.00	307	71.00	34	96.00	2785	141.00	391
49.00	2101	72.00	263	98.00	54	143.00	303
50.00	8988	73.00	1863	99.00	139	155.00	194
51.00	2564	74.00	7654	104.00	244	174.00	39328
52.00	184	75.00	21696	105.00	104	175.00	3115
53.00	72	76.00	1799	106.00	268	176.00	38080
55.00	206	77.00	204	107.00	131	177.00	2849
56.00	669	78.00	371	110.00	52	178.00	123
57.00	1017	79.00	961	112.00	55	269.00	11

TestAmerica Savannah
Target Compound Quantitation Report

Data File:	\\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2401T.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	24-Dec-2018 10:32:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Sample Info:	680-0052833-001				
Misc. Info.:	bfb				
Operator ID:	ea	Instrument ID:	CMSP2		
Method:	\\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\2014_MSP2.m				
Limit Group:	8260B				
Last Update:	25-Dec-2018 11:11:16	Calib Date:	07-Dec-2018 12:54:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Savannah\ChromData\CMSP2\20181207-52418.b\1PL0709.D				
Column 1 :	Rxi-624 Sil MS (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0312				
First Level Reviewer: soparaky		Date:	25-Dec-2018 11:11:16		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

$ 8 BFB

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

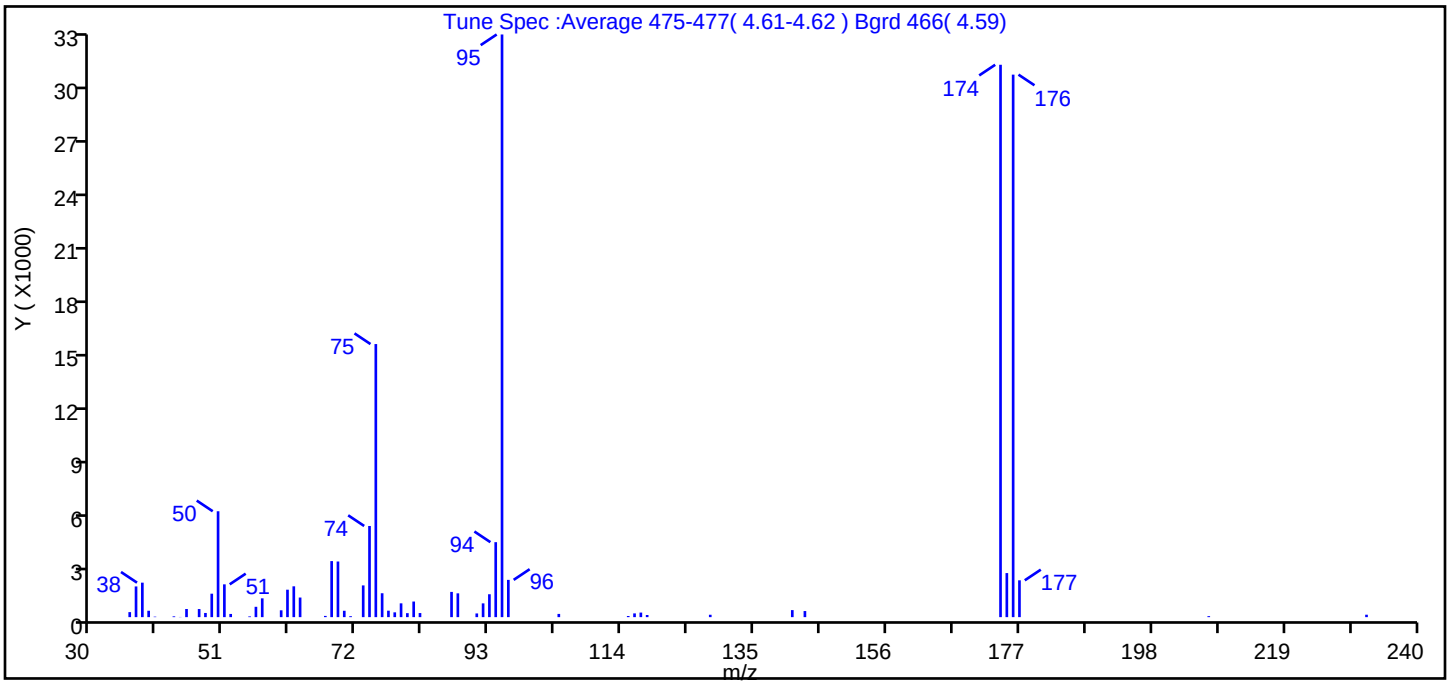
VM_bfb_00170 Amount Added: 2.00 Units: uL

MS Tune Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2401T.D				
Injection Date:	24-Dec-2018 10:32:30	Instrument ID:	CMSP2		
Lims ID:	bfb				
Client ID:					
Operator ID:	ea	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	5.0 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Tune Method:	BFB Method 624				

$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% Relative Abundance	100.0
50	15-40% of mass 95	18.2
75	30-60% of mass 95	46.9
96	5-9% of mass 95	6.4
173	<2% of mass 174	0.0 (0.0)
174	>50% of mass 95	94.8
175	5-9% of mass 174	7.6 (8.0)
176	>95% but <101% of mass 174	93.1 (98.2)
177	5-9% of mass 176	6.3 (6.8)

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2401T.D\2014_MSP2.rslt\spectra.d
Injection Date: 24-Dec-2018 10:32:30
Spectrum: Tune Spec :Average 475-477(4.61-4.62) Bgrd 466(4.59)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	281	56.00	579	77.00	362	115.00	63
37.00	1719	57.00	1053	78.00	269	116.00	210
38.00	1931	60.00	383	79.00	773	117.00	255
39.00	358	61.00	1537	80.00	223	118.00	120
40.00	27	62.00	1726	81.00	874	128.00	134
43.00	44	63.00	1098	82.00	229	141.00	394
44.00	10	67.00	69	87.00	1413	143.00	341
45.00	456	68.00	3138	88.00	1333	174.00	30928
47.00	453	69.00	3115	91.00	207	175.00	2467
48.00	234	70.00	357	92.00	771	176.00	30376
49.00	1313	71.00	52	93.00	1282	177.00	2062
50.00	5929	73.00	1777	94.00	4198	207.00	55
51.00	1837	74.00	5104	95.00	32624	232.00	136
52.00	179	75.00	15290	96.00	2087		
55.00	41	76.00	1338	104.00	181		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-552552/8

Matrix: Water | Lab File ID: AAL2061.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 11:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-552552/8

Matrix: Water | Lab File ID: AAL2061.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 11:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		73-131
2037-26-5	Toluene-d8 (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-122
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2061.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 20-Dec-2018 11:45:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052743-008
Operator ID: ea Instrument ID: CMSAA

Method: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\8260AQ.m
Limit Group: 8260B
Last Update: 20-Dec-2018 12:53:53 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: manniona Date: 20-Dec-2018 12:53:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.914	3.908	0.006	100	549897	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	82	219204	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	270527	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	135065	50.0	50.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.718	0.000	96	123300	50.0	47.3	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	533939	50.0	48.8	
$ 7 4-Bromofluorobenzene (Surr	95	7.158	7.153	0.005	98	204246	50.0	49.2	
$ 8 BFB									

Reagents:

DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 20-Dec-2018 12:53:55 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2061.D

Injection Date: 20-Dec-2018 11:45:30 Instrument ID: CMSAA Operator ID: ea

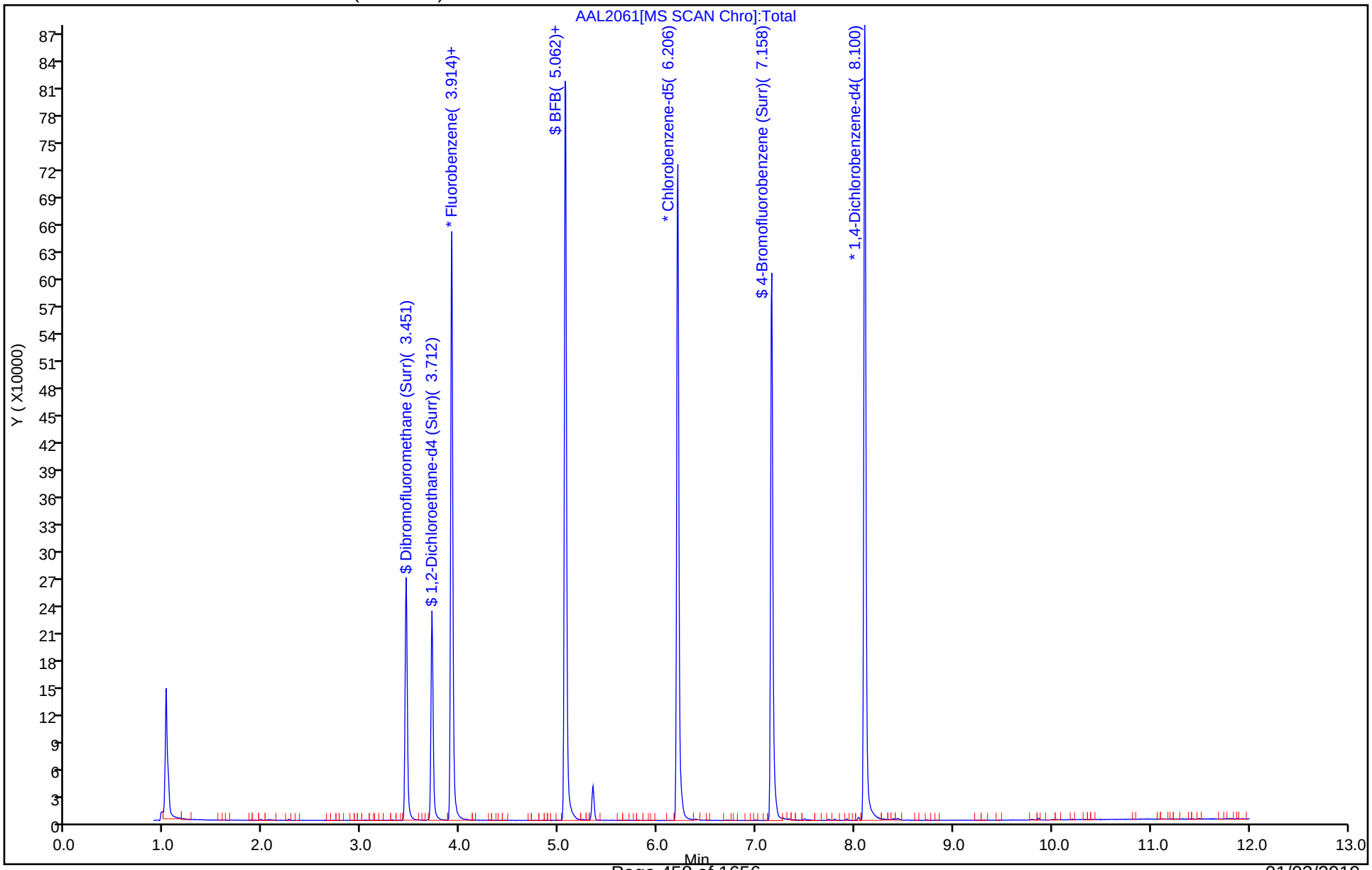
Lims ID: mb Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



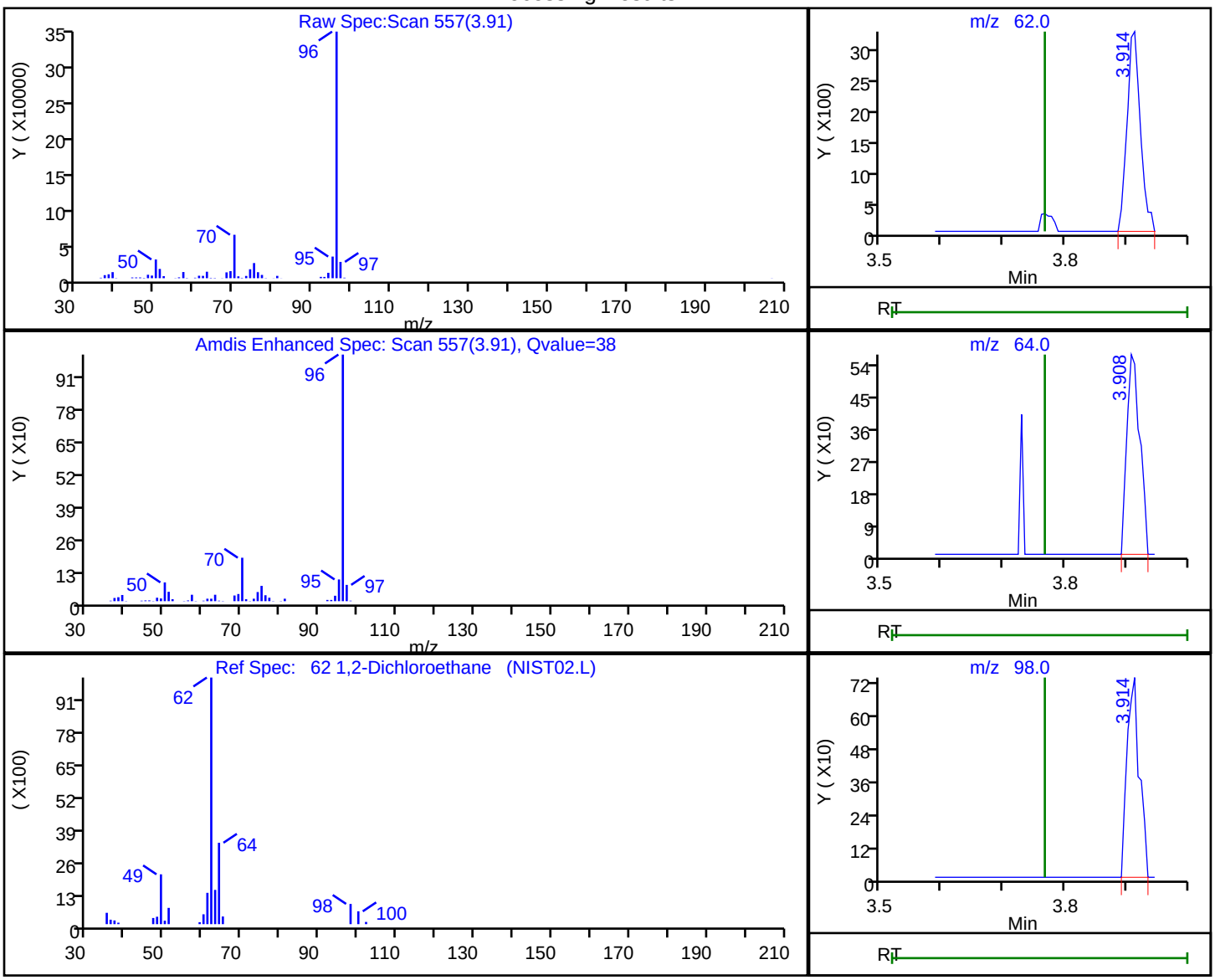
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2061.D				
Injection Date:	20-Dec-2018 11:45:30	Instrument ID:	CMSAA		
Lims ID:	mb				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

62 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.91	62.00	4983	1.597070
3.91	64.00	831	
3.91	98.00	1025	

Reviewer: manniona, 20-Dec-2018 12:53:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-552557/8

Matrix: Water | Lab File ID: O2Lo2061.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 11:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-552557/8

Matrix: Water | Lab File ID: O2Lo2061.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 11:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		73-131
2037-26-5	Toluene-d8 (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-122
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2061.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 20-Dec-2018 11:54:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052745-008
Operator ID: EA Instrument ID: CMSO2

Method: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 21-Dec-2018 09:48:36 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: soparaky Date: 21-Dec-2018 09:48:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
16 Isopropyl alcohol	45	1.854	1.854	0.000	27	401		NC	
38 Tetrahydrofuran	42	3.109	3.100	0.009	86	2813		1.04	
$ 44 Dibromofluoromethane (Surr	113	3.278	3.269	0.009	96	164957	50.0	48.5	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.511	-0.001	98	223414	50.0	46.7	
* 55 Fluorobenzene	96	3.742	3.743	-0.001	98	623414	50.0	50.0	
$ 69 Toluene-d8 (Surr)	98	4.913	4.914	-0.001	99	571388	50.0	47.5	
80 1-Chlorohexane	55	6.042	6.032	0.009	28	5036		NC	
* 81 Chlorobenzene-d5	82	6.042	6.043	-0.001	87	243523	50.0	50.0	
86 n-Butyl acrylate	55	6.991	6.993	-0.002	3	685		NC	
$ 92 4-Bromofluorobenzene (Surr	95	7.002	7.003	-0.001	93	224165	50.0	45.3	
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.952	-0.001	96	232018	50.0	50.0	
$ 127 BFB									

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 21-Dec-2018 09:48:37 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2061.D

Injection Date: 20-Dec-2018 11:54:30 Instrument ID: CMSO2 Operator ID: EA

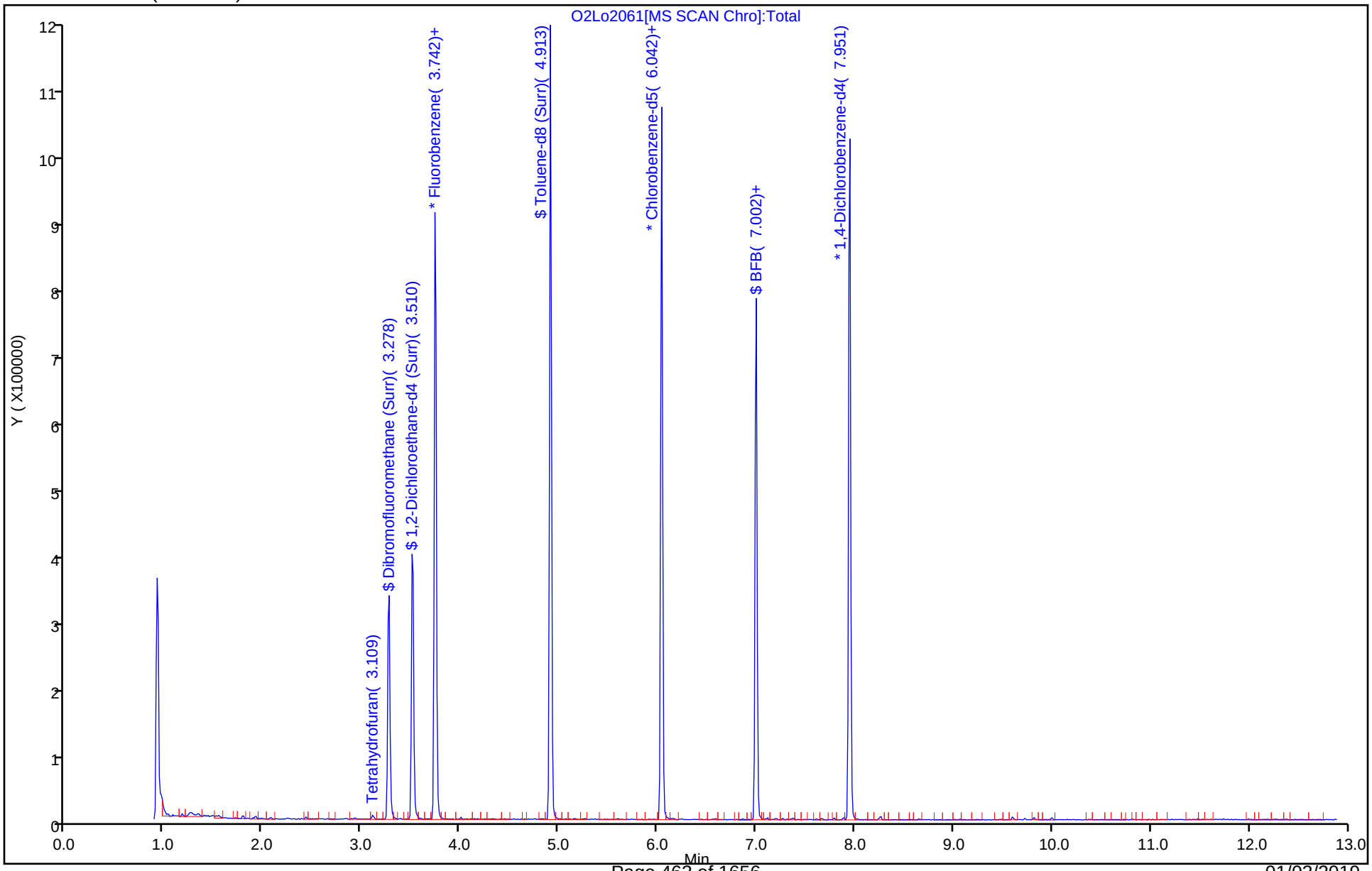
Lims ID: mb Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



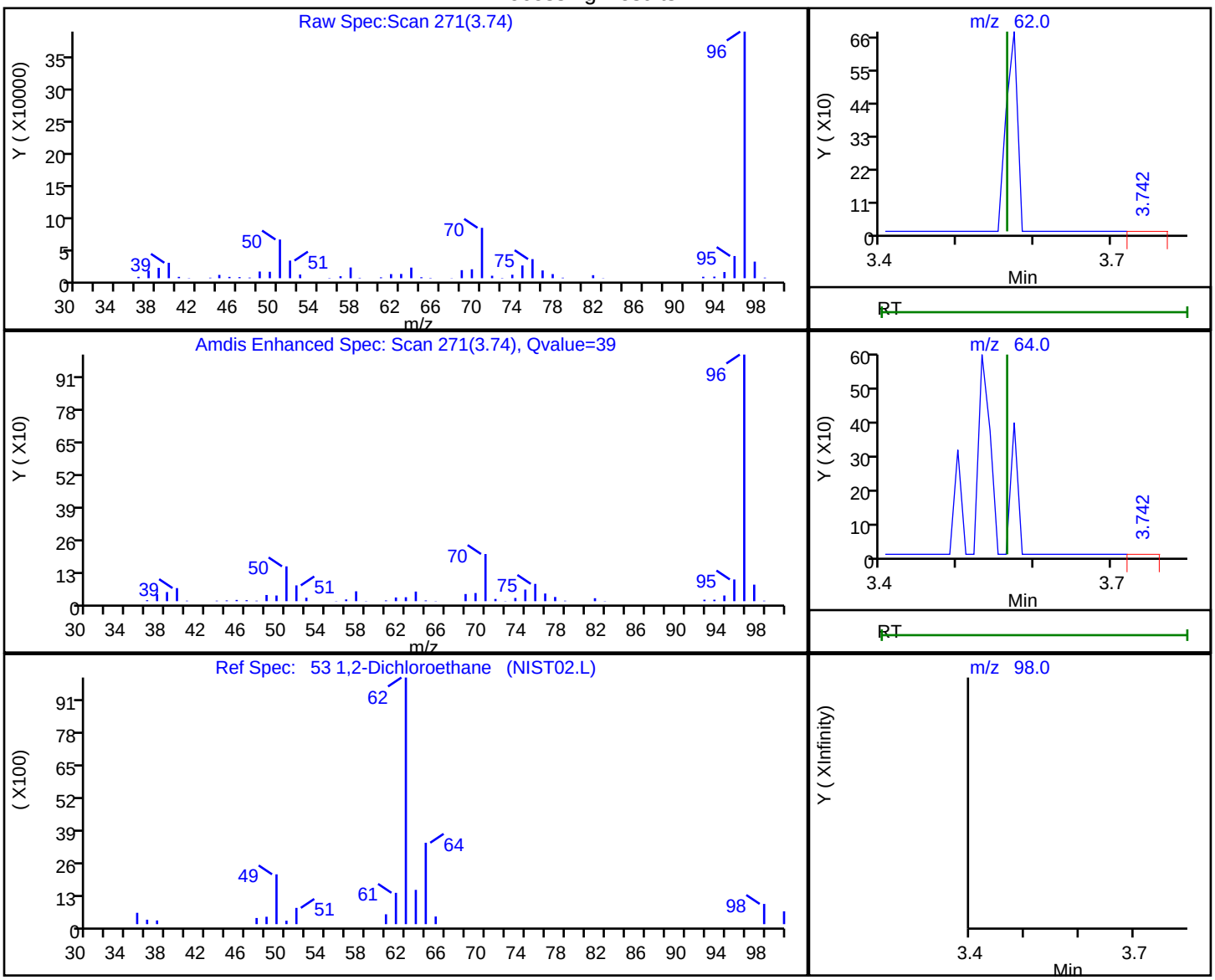
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2061.D				
Injection Date:	20-Dec-2018 11:54:30	Instrument ID:	CMSO2		
Lims ID:	mb				
Client ID:					
Operator ID:	EA	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

53 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.74	62.00	9588	1.678562
3.74	64.00	1722	
3.74	98.00	793	

Reviewer: manniona, 20-Dec-2018 12:56:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

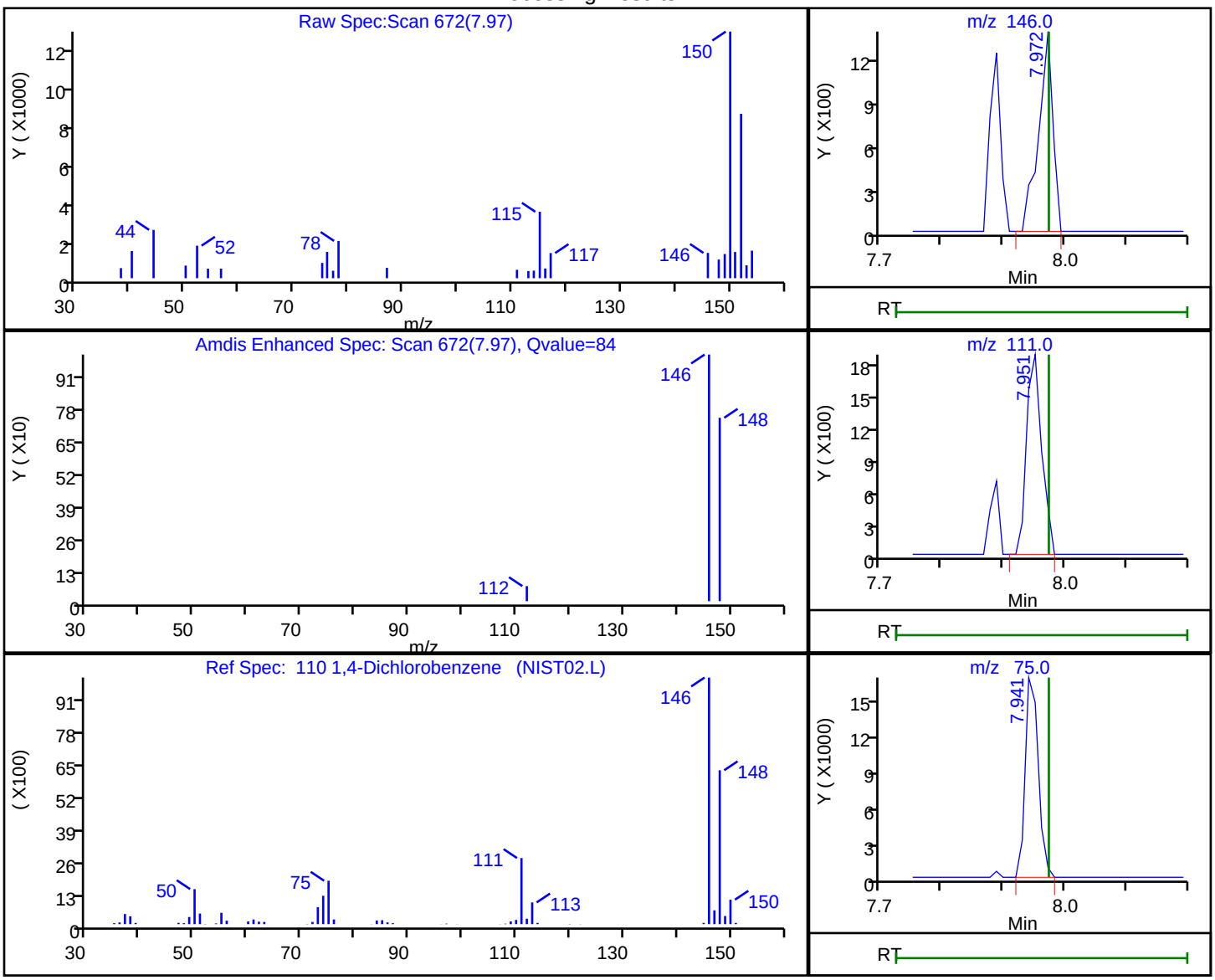
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2061.D				
Injection Date:	20-Dec-2018 11:54:30	Instrument ID:	CMSO2		
Lims ID:	mb				
Client ID:					
Operator ID:	EA	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

110 1,4-Dichlorobenzene, CAS: 106-46-7

Processing Results



RT	Mass	Response	Amount
7.97	146.00	2162	0.297221
7.95	111.00	3257	
7.94	75.00	25075	

Reviewer: manniona, 20-Dec-2018 12:56:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

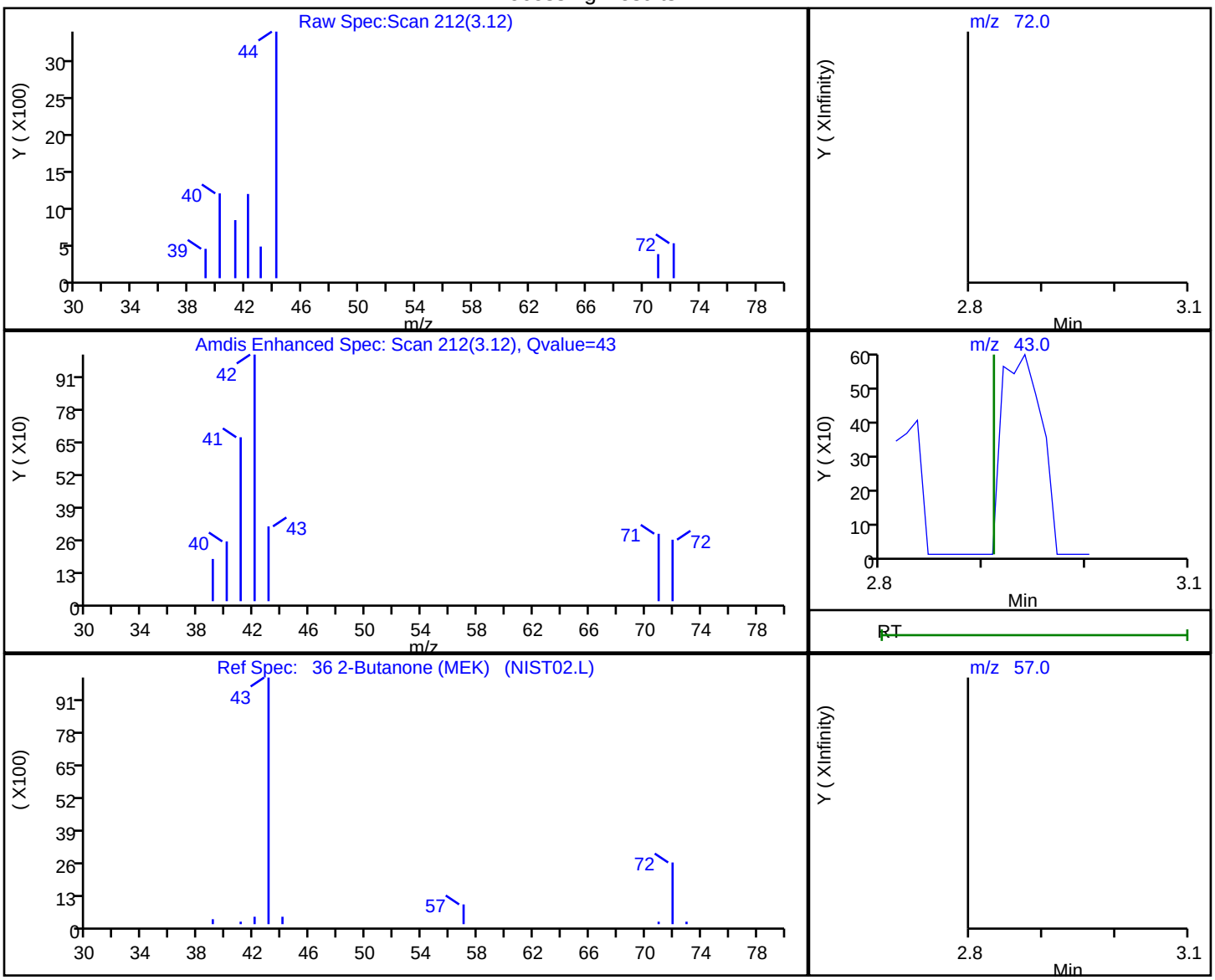
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2061.D				
Injection Date:	20-Dec-2018 11:54:30	Instrument ID:	CMSO2		
Lims ID:	mb				
Client ID:					
Operator ID:	EA	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

36 2-Butanone (MEK), CAS: 78-93-3

Processing Results



RT	Mass	Response	Amount
3.12	72.00	534	0.847461
3.11	43.00	1078	
2.91	57.00	0	

Reviewer: soparaky, 21-Dec-2018 09:48:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-552754/8

Matrix: Water | Lab File ID: AAL2161.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/21/2018 11:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552754 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-552754/8

Matrix: Water | Lab File ID: AAL2161.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/21/2018 11:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552754 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		73-131
2037-26-5	Toluene-d8 (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-122
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2161.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 21-Dec-2018 11:35:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052778-008
Operator ID: ea Instrument ID: CMSAA

Method: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\8260AQ.m
Limit Group: 8260B
Last Update: 24-Dec-2018 09:26:07 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0330

First Level Reviewer: manniona Date: 21-Dec-2018 12:56:13

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.914	3.908	0.006	100	496269	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.206	6.206	0.000	82	201311	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	244834	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	123257	50.0	50.5	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	96	113171	50.0	48.2	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	489975	50.0	49.6	
$ 7 4-Bromofluorobenzene (Surr	95	7.158	7.153	0.005	98	184517	50.0	49.1	
$ 8 BFB									
112 4-Isopropyltoluene	119	8.040	8.035	0.005	95	1671		0.1318	

Reagents:

DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 24-Dec-2018 09:26:10 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2161.D

Injection Date: 21-Dec-2018 11:35:30 Instrument ID: CMSAA Operator ID: ea

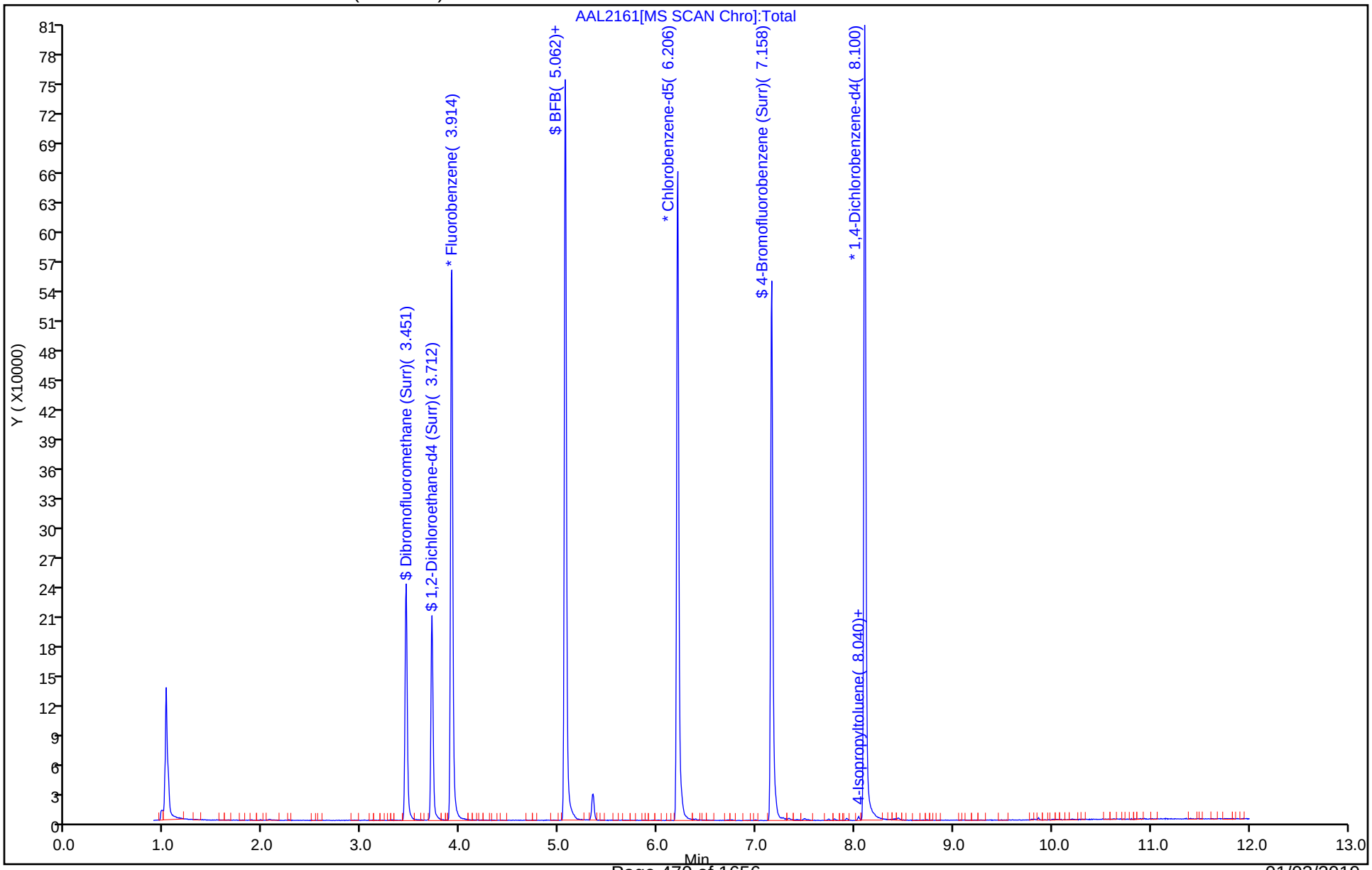
Lims ID: mb Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



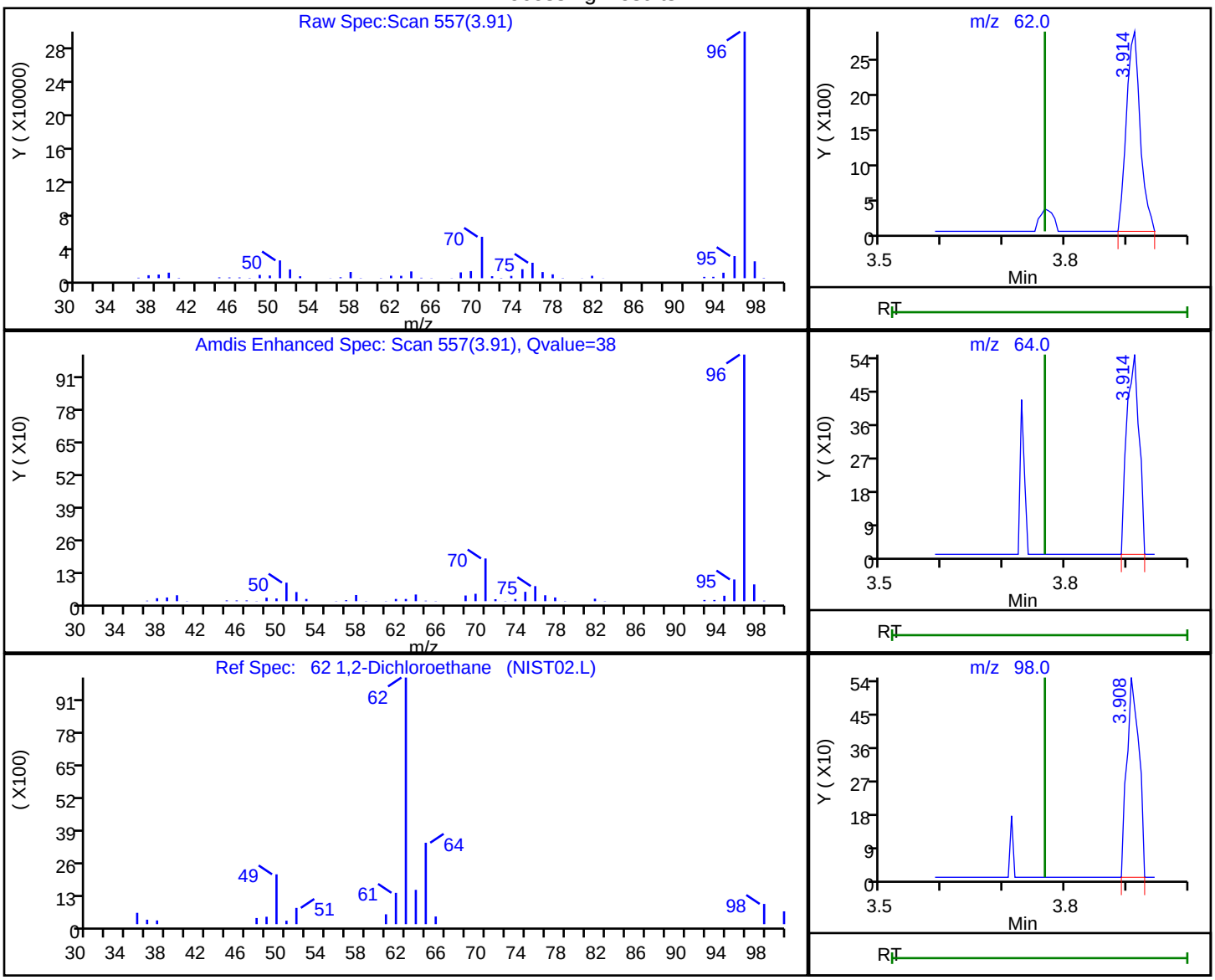
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2161.D				
Injection Date:	21-Dec-2018 11:35:30	Instrument ID:	CMSAA		
Lims ID:	mb				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

62 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
3.91	62.00	4524	1.606645
3.91	64.00	757	
3.91	98.00	748	

Reviewer: manniona, 21-Dec-2018 12:55:11

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

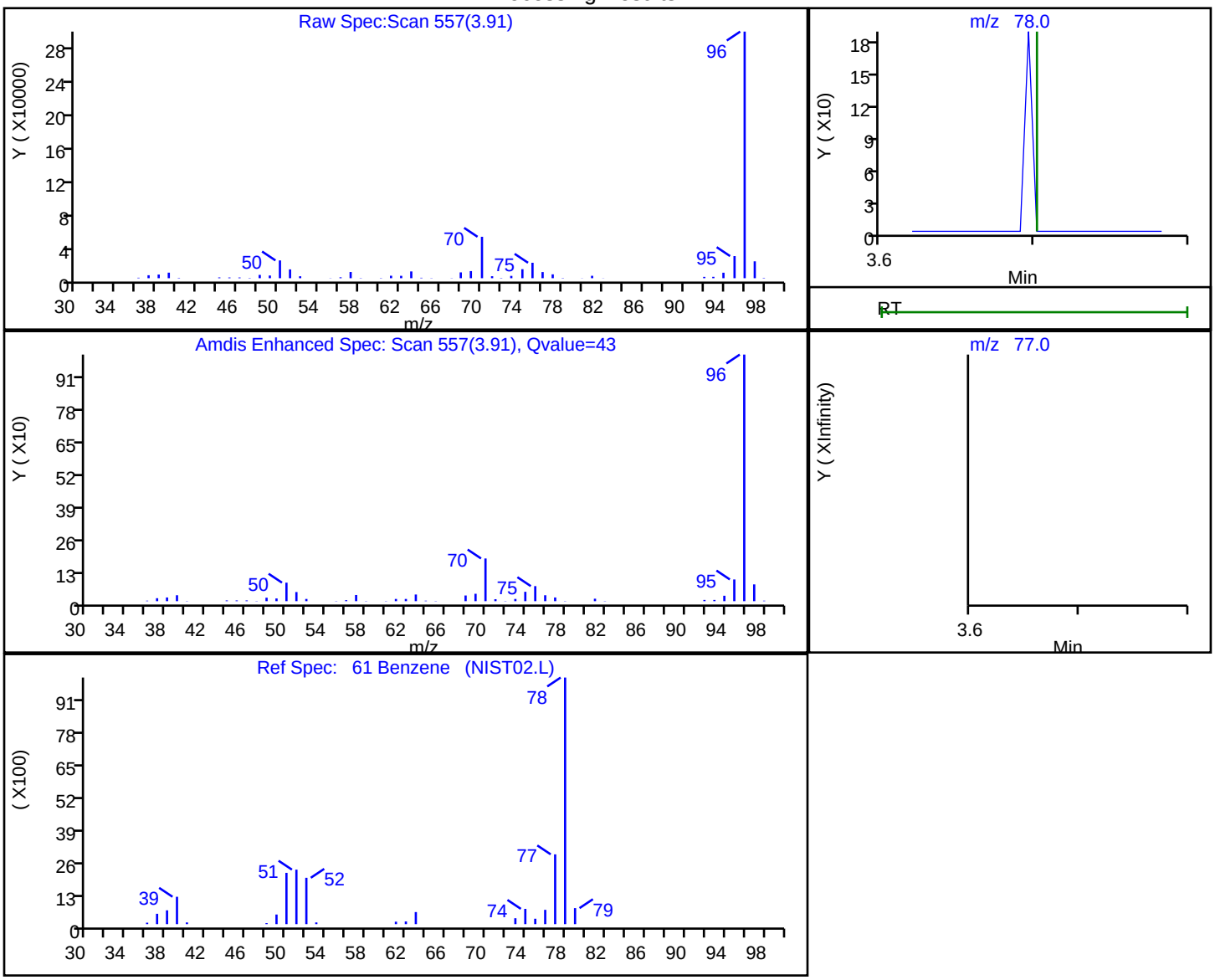
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2161.D				
Injection Date:	21-Dec-2018 11:35:30	Instrument ID:	CMSAA		
Lims ID:	mb				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	8260AQ	Limit Group:	8260B		
Column:	DB-VRX 20m x 0.18um x 1.0um (0.18mm)	Detector	MS SCAN		

61 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
3.91	78.00	363	0.034932
3.91	77.00	7023	

Reviewer: soparaky, 24-Dec-2018 09:25:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-553025/8

Matrix: Water | Lab File ID: 1PL2461.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/24/2018 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624 MS ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 553025 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.36
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.33
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.38
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	5.0	U	5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.1
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.37
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.50
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.67
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.43
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.46
78-93-3	Methyl Ethyl Ketone	10	U	10	3.4
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	methyl isobutyl ketone	10	U	10	2.1
67-64-1	Acetone	10	U	10	7.0
71-43-2	Benzene	1.0	U	1.0	0.43
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	5.0	U	5.0	2.5
75-15-0	Carbon disulfide	2.0	U	2.0	1.0
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.33
108-90-7	Chlorobenzene	1.0	U	1.0	0.26
124-48-1	Dibromochloromethane	1.0	U	1.0	0.32
75-00-3	Chloroethane	5.0	U	5.0	2.5
67-66-3	Chloroform	1.0	U	1.0	0.50
74-87-3	Chloromethane	1.0	U	1.0	0.40
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.40
110-82-7	Cyclohexane	1.0	U	1.0	0.39
75-27-4	Bromodichloromethane	1.0	U	1.0	0.44
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.60
100-41-4	Ethylbenzene	1.0	U	1.0	0.33
106-93-4	1,2-Dibromoethane	1.0	U	1.0	0.44
98-82-8	Isopropylbenzene	1.0	U	1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 680-553025/8

Matrix: Water | Lab File ID: 1PL2461.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/24/2018 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624 MS ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 553025 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5.0	U	5.0	1.8
1634-04-4	Methyl tert-butyl ether	10	U	10	0.30
108-87-2	Methylcyclohexane	1.0	U	1.0	0.43
75-09-2	Methylene Chloride	5.0	U	5.0	2.5
100-42-5	Styrene	1.0	U	1.0	0.27
127-18-4	Tetrachloroethene	1.0	U	1.0	0.74
108-88-3	Toluene	1.0	U	1.0	0.48
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.42
79-01-6	Trichloroethene	1.0	U	1.0	0.48
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.42
75-01-4	Vinyl chloride	1.0	U	1.0	0.50
1330-20-7	Xylenes, Total	1.0	U	1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		73-131
2037-26-5	Toluene-d8 (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-122
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2461.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 24-Dec-2018 13:34:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052833-008
Operator ID: ea Instrument ID: CMSP2

Method: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 25-Dec-2018 11:15:59 Calib Date: 07-Dec-2018 12:54:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181207-52418.b\1PL0709.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: soparaky Date: 25-Dec-2018 11:15:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.209	4.199	0.010	99	806792	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	87	320344	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	94	328498	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	97	195371	50.0	48.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	95	237934	50.0	45.8	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	98	788930	50.0	49.7	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	96	280721	50.0	46.6	
$ 8 BFB									

Reagents:

DOD ISSU_00322 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 25-Dec-2018 11:16:00 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2461.D

Injection Date: 24-Dec-2018 13:34:30 Instrument ID: CMSP2 Operator ID: ea

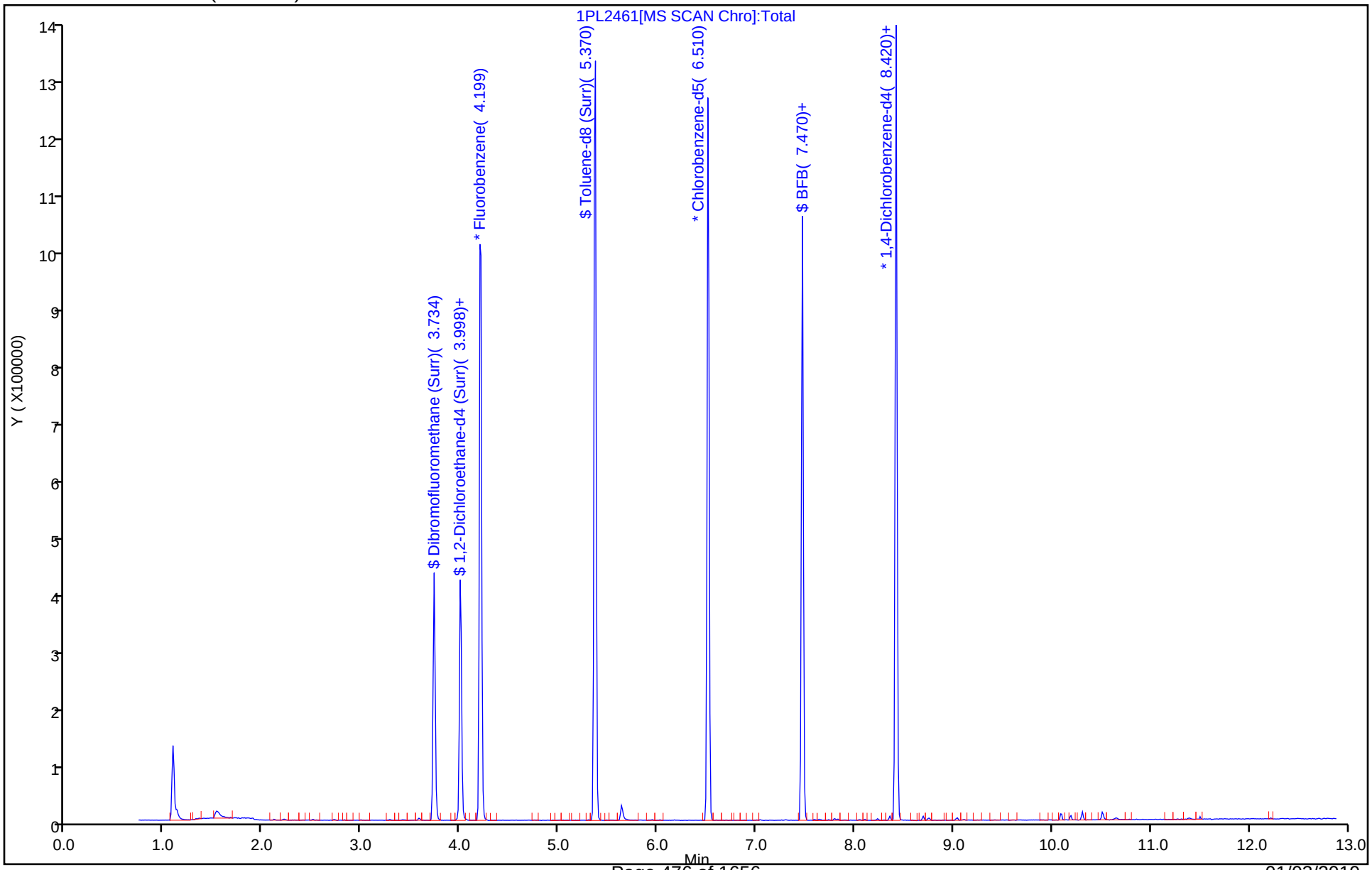
Lims ID: mb Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 7

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



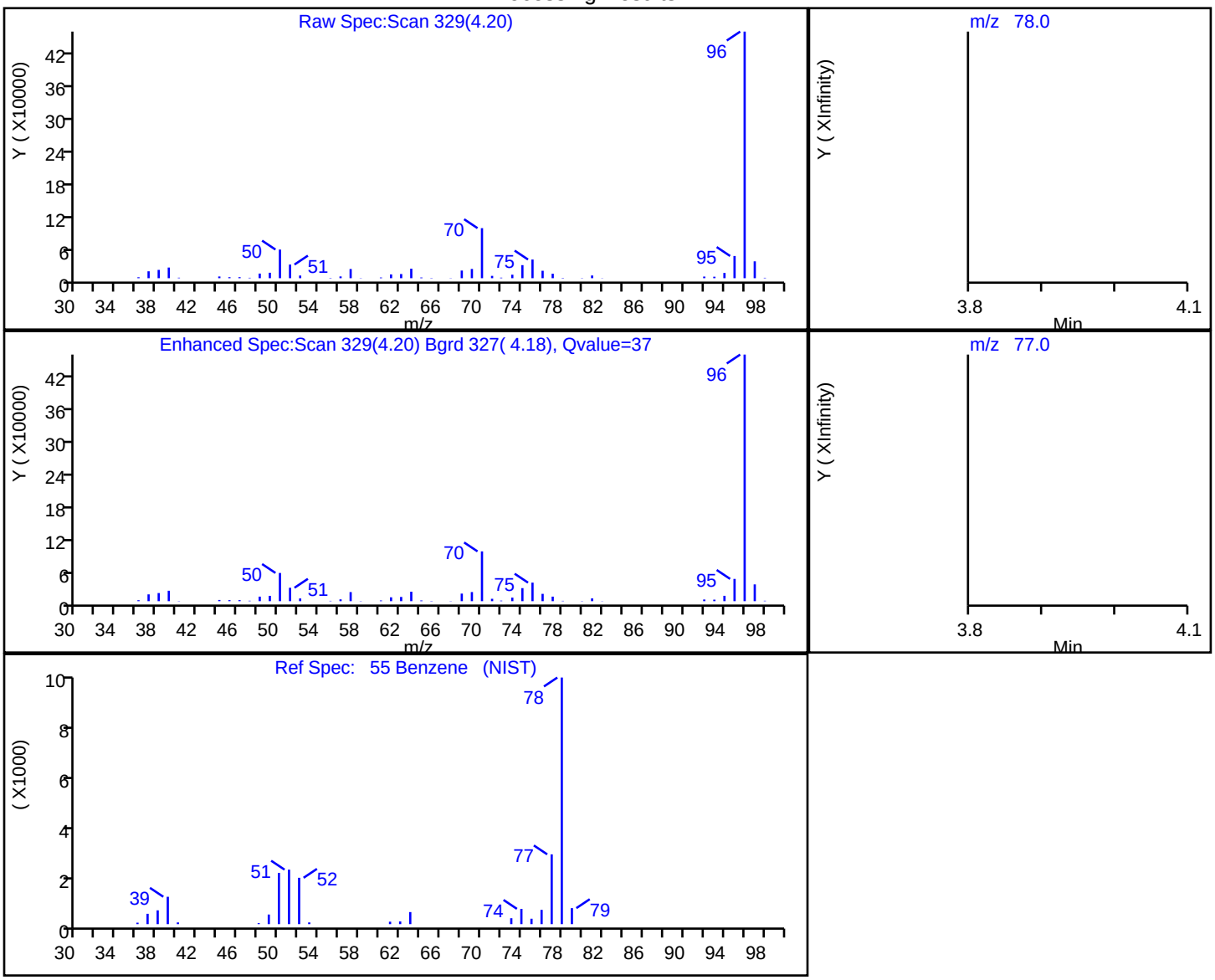
User Disabled Compound Report

TestAmerica Savannah

Data File:	\\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2461.D				
Injection Date:	24-Dec-2018 13:34:30	Instrument ID:	CMSP2		
Lims ID:	mb				
Client ID:					
Operator ID:	ea	ALS Bottle#:	7	Worklist Smp#:	8
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSP2	Limit Group:	8260B		
Column:	Rxi-624 Sil MS (0.18 mm)	Detector	MS SCAN		

55 Benzene, CAS: 71-43-2

Processing Results



RT	Mass	Response	Amount
4.20	78.00	733	0.041833
4.20	77.00	13969	

Reviewer: soparaky, 25-Dec-2018 11:15:30

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 680-552552/3

Matrix: Water | Lab File ID: AAL2056.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 09:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	50.4		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	51.7		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50.9		1.0	0.36
79-00-5	1,1,2-Trichloroethane	51.4		1.0	0.33
75-34-3	1,1-Dichloroethane	48.5		1.0	0.38
75-35-4	1,1-Dichloroethene	48.6		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	46.6		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	43.3		5.0	1.1
95-50-1	1,2-Dichlorobenzene	51.0		1.0	0.37
107-06-2	1,2-Dichloroethane	48.0		1.0	0.50
78-87-5	1,2-Dichloropropane	50.5		1.0	0.67
541-73-1	1,3-Dichlorobenzene	50.1		1.0	0.43
106-46-7	1,4-Dichlorobenzene	49.3		1.0	0.46
78-93-3	Methyl Ethyl Ketone	247		10	3.4
591-78-6	2-Hexanone	245		10	2.0
108-10-1	methyl isobutyl ketone	265		10	2.1
67-64-1	Acetone	251		10	7.0
71-43-2	Benzene	50.2		1.0	0.43
75-25-2	Bromoform	54.7		1.0	0.43
74-83-9	Bromomethane	34.4		5.0	2.5
75-15-0	Carbon disulfide	47.7		2.0	1.0
56-23-5	Carbon tetrachloride	51.5		1.0	0.33
108-90-7	Chlorobenzene	49.7		1.0	0.26
124-48-1	Dibromochloromethane	52.5		1.0	0.32
75-00-3	Chloroethane	43.4		5.0	2.5
67-66-3	Chloroform	49.0		1.0	0.50
74-87-3	Chloromethane	41.4		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	49.7		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	51.3		1.0	0.40
110-82-7	Cyclohexane	51.4		1.0	0.39
75-27-4	Bromodichloromethane	51.4		1.0	0.44
75-71-8	Dichlorodifluoromethane	42.3		1.0	0.60
100-41-4	Ethylbenzene	50.2		1.0	0.33
106-93-4	1,2-Dibromoethane	52.3		1.0	0.44
98-82-8	Isopropylbenzene	51.3		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 680-552552/3

Matrix: Water | Lab File ID: AAL2056.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 09:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	101		5.0	1.8
1634-04-4	Methyl tert-butyl ether	50.3		10	0.30
108-87-2	Methylcyclohexane	52.4		1.0	0.43
75-09-2	Methylene Chloride	44.2		5.0	2.5
100-42-5	Styrene	52.9		1.0	0.27
127-18-4	Tetrachloroethene	50.3		1.0	0.74
108-88-3	Toluene	50.3		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	50.7		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	49.7		1.0	0.42
79-01-6	Trichloroethene	50.8		1.0	0.48
75-69-4	Trichlorofluoromethane	46.3		1.0	0.42
75-01-4	Vinyl chloride	44.7		1.0	0.50
1330-20-7	Xylenes, Total	103		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		73-131
2037-26-5	Toluene-d8 (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-122
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2056.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 20-Dec-2018 09:51:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052743-003
Operator ID: ea Instrument ID: CMSAA

Method: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\8260AQ.m
Limit Group: 8260B
Last Update: 20-Dec-2018 12:03:03 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: manniona Date: 20-Dec-2018 12:03:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	498835	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	82	192313	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	91	248241	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.451	3.451	0.000	99	123046	50.0	50.2	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.718	0.000	96	115202	50.0	48.8	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	482803	50.0	48.6	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	185101	50.0	48.6	
9 Dichlorodifluoromethane	85	1.089	1.094	-0.005	99	130588	50.0	42.3	
10 Vinyl chloride	62	1.252	1.252	0.000	98	131410	50.0	44.7	
12 Butadiene	54	1.257	1.257	0.000	91	118348	50.0	44.1	
11 Chloromethane	50	1.257	1.257	0.000	60	165397	50.0	41.4	
14 Bromomethane	96	1.432	1.432	0.000	100	70096	50.0	34.4	
15 Chloroethane	64	1.481	1.481	0.000	98	73844	50.0	43.4	
17 Dichlorofluoromethane	67	1.584	1.586	0.000	99	172309	50.0	46.1	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	99	151962	50.0	46.3	
20 Ethyl ether	59	1.747	1.747	0.000	94	100564	50.0	52.5	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.872	-0.005	96	114608	50.0	50.9	
23 Acrolein	56	1.878	1.878	0.000	94	584592	1000.0	949.6	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	119500	50.0	48.6	
25 Acetone	58	1.970	1.970	0.000	90	55913	250.0	250.5	
26 Iodomethane	142	2.036	2.036	0.000	95	198720	50.0	46.0	
27 Carbon disulfide	76	2.063	2.063	0.000	98	367005	50.0	47.7	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	94	80745	50.0	49.2	
29 Methyl acetate	43	2.156	2.156	0.000	97	145148	100.0	101.2	
32 Methylene Chloride	84	2.254	2.259	-0.005	84	133134	50.0	44.2	
33 2-Methyl-2-propanol	59	2.286	2.286	0.000	99	114324	500.0	508.3	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	337656	50.0	50.3	
36 trans-1,2-Dichloroethene	96	2.395	2.401	-0.005	89	138941	50.0	50.7	
37 Acrylonitrile	53	2.455	2.460	-0.005	97	462015	500.0	516.8	
38 Hexane	57	2.520	2.520	0.000	88	155398	50.0	50.6	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	205059	50.0	48.5	
43 Vinyl acetate	43	2.722	2.722	0.000	99	405801	100.0	101.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 2,2-Dichloropropane	77	3.097	3.097	0.000	92	173055	50.0	50.5	
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	95	152181	50.0	49.7	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	238697	250.0	246.6	
51 Chlorobromomethane	49	3.293	3.293	0.000	81	91323	50.0	47.5	
50 Tetrahydrofuran	42	3.293	3.293	0.000	80	63976	100.0	93.4	
52 Chloroform	83	3.331	3.331	0.000	99	207664	50.0	49.0	
54 Cyclohexane	56	3.429	3.429	0.000	85	206726	50.0	51.4	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	179376	50.0	50.4	
57 Carbon tetrachloride	117	3.527	3.533	-0.006	97	152291	50.0	51.5	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	96	164393	50.0	51.0	
60 Isobutyl alcohol	43	3.647	3.647	0.000	95	113620	1250.0	1210.7	
61 Benzene	78	3.702	3.702	0.000	95	524787	50.0	50.2	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	135853	50.0	48.0	
63 n-Heptane	43	3.816	3.816	0.000	86	118472	50.0	44.5	
65 Trichloroethene	132	4.164	4.164	0.000	93	149717	50.0	50.8	
66 Methylcyclohexane	83	4.251	4.251	0.000	91	223607	50.0	52.4	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	127838	50.0	50.5	
69 1,4-Dioxane	88	4.447	4.447	0.000	88	31697	1000.0	992.9	
68 Dibromomethane	93	4.458	4.458	0.000	90	81176	50.0	50.8	
70 Dichlorobromomethane	83	4.556	4.562	-0.006	99	160648	50.0	51.4	
72 2-Chloroethyl vinyl ether	63	4.790	4.797	0.000	94	60223	50.0	52.1	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	87	216131	50.0	51.3	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	92	527917	250.0	264.9	
76 Toluene	92	5.117	5.117	0.000	93	344283	50.0	50.3	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	97	189004	50.0	49.7	
78 Ethyl methacrylate	69	5.356	5.356	0.000	86	170263	50.0	50.8	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	107668	50.0	51.4	
80 Tetrachloroethene	164	5.514	5.514	0.000	94	129039	50.0	50.3	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	208019	50.0	51.0	
82 2-Hexanone	43	5.650	5.656	-0.006	92	351007	250.0	245.3	
85 Chlorodibromomethane	129	5.765	5.765	0.000	98	140808	50.0	52.5	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	137905	50.0	52.3	
88 Chlorobenzene	112	6.227	6.227	0.000	98	404060	50.0	49.7	
89 Ethylbenzene	91	6.287	6.287	0.000	96	625136	50.0	50.2	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.298	0.000	95	138553	50.0	52.5	
92 m-Xylene & p-Xylene	106	6.385	6.385	0.000	98	272896	50.0	50.8	
95 o-Xylene	106	6.701	6.701	0.000	96	268461	50.0	51.9	
96 Styrene	104	6.728	6.728	0.000	98	438902	50.0	52.9	
97 Bromoform	173	6.897	6.897	0.000	99	105497	50.0	54.7	
98 Isopropylbenzene	105	6.989	6.989	0.000	94	653599	50.0	51.3	
100 Bromobenzene	156	7.273	7.273	0.001	89	198959	50.0	51.4	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	175886	50.0	51.7	
102 N-Propylbenzene	120	7.327	7.327	0.000	100	202325	50.0	51.3	
103 1,2,3-Trichloropropane	110	7.343	7.343	0.000	97	56572	50.0	51.9	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.360	-0.006	90	38526	50.0	41.2	
105 2-Chlorotoluene	126	7.420	7.420	0.001	95	173975	50.0	49.7	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	94	563050	50.0	51.0	
107 4-Chlorotoluene	126	7.517	7.518	0.000	95	185884	50.0	50.5	
108 tert-Butylbenzene	119	7.730	7.735	-0.005	97	505593	50.0	50.8	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	583420	50.0	51.4	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	724306	50.0	50.6	
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	660441	50.0	51.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	99	376899	50.0	50.1	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	393177	50.0	49.3	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	524700	50.0	50.2	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	360889	50.0	51.0	
117 1,2-Dibromo-3-Chloropropan	157	9.107	9.107	0.000	88	35699	50.0	43.3	
118 1,2,4-Trichlorobenzene	180	9.766	9.766	0.000	93	174561	50.0	46.6	
119 Hexachlorobutadiene	225	9.858	9.864	-0.006	99	102255	50.0	53.2	
120 Naphthalene	128	9.978	9.978	0.000	99	262888	50.0	45.6	
121 1,2,3-Trichlorobenzene	180	10.179	10.185	-0.006	95	76886	50.0	45.9	
S 127 1,3-Dichloropropene, Total	1				0		100.0	101.0	
S 126 Xylenes, Total	1				0		100.0	102.7	
S 125 1,2-Dichloroethene, Total	1				0		100.0	100.5	

Reagents:

DOD ISTD_00167 Amount Added: 5.00 Units: uL
VM_MMIX_01940 Amount Added: 5.00 Units: uL
VM_Acrolein_00193 Amount Added: 5.00 Units: uL

Report Date: 20-Dec-2018 12:03:06 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2056.D

Injection Date: 20-Dec-2018 09:51:30 Instrument ID: CMSAA Operator ID: ea

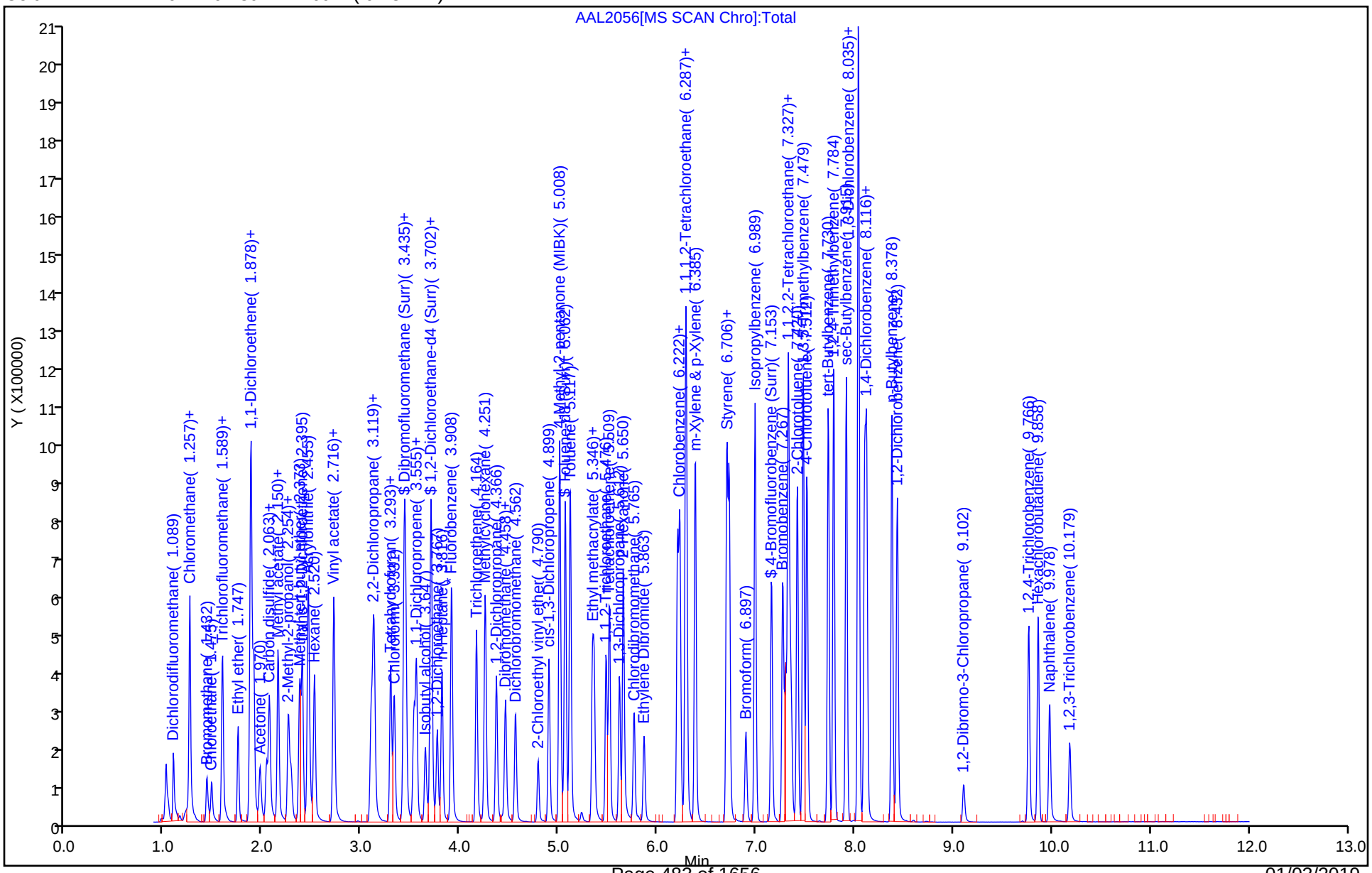
Lims ID: lcs Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 680-552557/3

Matrix: Water | Lab File ID: O2Lo2056.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 09:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	52.5		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	50.5		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	55.9		1.0	0.36
79-00-5	1,1,2-Trichloroethane	53.9		1.0	0.33
75-34-3	1,1-Dichloroethane	49.8		1.0	0.38
75-35-4	1,1-Dichloroethene	54.2		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	50.7		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	57.4		5.0	1.1
95-50-1	1,2-Dichlorobenzene	54.2		1.0	0.37
107-06-2	1,2-Dichloroethane	52.5		1.0	0.50
78-87-5	1,2-Dichloropropane	52.4		1.0	0.67
541-73-1	1,3-Dichlorobenzene	54.5		1.0	0.43
106-46-7	1,4-Dichlorobenzene	52.1		1.0	0.46
78-93-3	Methyl Ethyl Ketone	288		10	3.4
591-78-6	2-Hexanone	270		10	2.0
108-10-1	methyl isobutyl ketone	264		10	2.1
67-64-1	Acetone	287		10	7.0
71-43-2	Benzene	51.0		1.0	0.43
75-25-2	Bromoform	55.9		1.0	0.43
74-83-9	Bromomethane	28.7		5.0	2.5
75-15-0	Carbon disulfide	53.3		2.0	1.0
56-23-5	Carbon tetrachloride	54.7		1.0	0.33
108-90-7	Chlorobenzene	52.2		1.0	0.26
124-48-1	Dibromochloromethane	57.7		1.0	0.32
75-00-3	Chloroethane	55.9		5.0	2.5
67-66-3	Chloroform	50.6		1.0	0.50
74-87-3	Chloromethane	50.8		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	47.3		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	53.5		1.0	0.40
110-82-7	Cyclohexane	53.1		1.0	0.39
75-27-4	Bromodichloromethane	54.0		1.0	0.44
75-71-8	Dichlorodifluoromethane	53.0		1.0	0.60
100-41-4	Ethylbenzene	52.6		1.0	0.33
106-93-4	1,2-Dibromoethane	57.0		1.0	0.44
98-82-8	Isopropylbenzene	53.3		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 680-552557/3

Matrix: Water | Lab File ID: O2Lo2056.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 09:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	109		5.0	1.8
1634-04-4	Methyl tert-butyl ether	51.2		10	0.30
108-87-2	Methylcyclohexane	53.9		1.0	0.43
75-09-2	Methylene Chloride	48.4		5.0	2.5
100-42-5	Styrene	53.5		1.0	0.27
127-18-4	Tetrachloroethene	61.5		1.0	0.74
108-88-3	Toluene	55.3		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	51.9		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	54.4		1.0	0.42
79-01-6	Trichloroethene	49.4		1.0	0.48
75-69-4	Trichlorofluoromethane	58.8		1.0	0.42
75-01-4	Vinyl chloride	54.3		1.0	0.50
1330-20-7	Xylenes, Total	102		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		73-131
2037-26-5	Toluene-d8 (Surr)	106		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-122
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2056.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 20-Dec-2018 09:56:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052745-003
Operator ID: EA Instrument ID: CMSO2

Method: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 21-Dec-2018 09:46:41 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: manniona Date: 20-Dec-2018 11:17:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.031	1.022	0.009	99	161928	50.0	53.0	
2 Vinyl chloride	62	1.168	1.170	-0.002	99	162588	50.0	54.3	
4 Chloromethane	50	1.179	1.180	-0.001	61	302509	50.0	50.8	
3 Butadiene	54	1.179	1.180	-0.001	92	191988	50.0	55.2	
5 Bromomethane	94	1.316	1.317	-0.001	96	44920	50.0	28.7	E
6 Chloroethane	64	1.369	1.370	-0.001	97	79272	50.0	55.9	
7 Dichlorofluoromethane	67	1.474	1.476	-0.002	98	221960	50.0	53.0	
8 Trichlorofluoromethane	101	1.495	1.497	-0.002	99	206192	50.0	58.8	
11 Ethyl ether	59	1.632	1.634	-0.002	92	174104	50.0	54.3	
13 Acrolein	56	1.717	1.718	-0.001	96	1519899	1000.0	1585.9	
12 1,1,2-Trichloro-1,2,2-trif	151	1.770	1.771	-0.001	94	115693	50.0	55.9	
14 1,1-Dichloroethene	96	1.770	1.771	-0.001	99	142519	50.0	54.2	
15 Acetone	58	1.791	1.792	-0.001	84	143239	250.0	287.0	
17 Iodomethane	142	1.875	1.876	-0.001	98	182344	50.0	45.1	
18 Carbon disulfide	76	1.917	1.919	-0.002	100	438986	50.0	53.3	
20 Methyl acetate	43	1.970	1.971	-0.001	98	517104	100.0	109.2	
19 3-Chloro-1-propene	76	1.991	1.992	-0.001	88	100251	50.0	52.7	
22 Methylene Chloride	84	2.076	2.077	-0.001	96	155564	50.0	48.4	
23 2-Methyl-2-propanol	59	2.128	2.119	0.009	99	346064	500.0	556.6	
26 Acrylonitrile	53	2.223	2.224	-0.001	94	1235691	500.0	538.5	
24 Methyl tert-butyl ether	73	2.244	2.235	0.009	97	553532	50.0	51.2	
25 trans-1,2-Dichloroethene	96	2.244	2.246	-0.002	98	160891	50.0	51.9	
27 Hexane	57	2.434	2.425	0.009	93	226883	50.0	48.3	
30 Vinyl acetate	43	2.529	2.530	-0.001	100	1268524	100.0	106.7	
29 1,1-Dichloroethane	63	2.540	2.541	-0.001	99	298680	50.0	49.8	
36 2-Butanone (MEK)	72	2.919	2.910	0.009	98	162441	250.0	287.8	
34 cis-1,2-Dichloroethene	61	2.930	2.921	0.009	92	292772	50.0	47.3	
33 2,2-Dichloropropane	77	2.930	2.931	-0.001	94	248912	50.0	53.7	
39 Chlorobromomethane	130	3.099	3.100	-0.001	97	101331	50.0	53.3	
38 Tetrahydrofuran	42	3.099	3.100	-0.001	93	228092	100.0	94.5	
41 Chloroform	83	3.162	3.163	-0.001	97	285282	50.0	50.6	
$ 44 Dibromofluoromethane (Surr	113	3.267	3.269	-0.002	97	154455	50.0	50.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 1,1,1-Trichloroethane	97	3.278	3.279	-0.001	98	251708	50.0	52.5	
42 Cyclohexane	84	3.331	3.332	-0.001	97	220563	50.0	53.1	
45 Carbon tetrachloride	117	3.384	3.385	-0.001	95	210534	50.0	54.7	
46 1,1-Dichloropropene	75	3.394	3.385	0.009	92	208398	50.0	52.5	
47 Isobutyl alcohol	43	3.457	3.459	-0.002	96	407500	1250.0	1208.7	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.511	-0.001	96	211209	50.0	49.3	
50 Benzene	78	3.531	3.532	-0.001	98	612672	50.0	51.0	
53 1,2-Dichloroethane	62	3.563	3.564	-0.001	97	268494	50.0	52.5	
54 n-Heptane	43	3.742	3.733	0.009	61	224937	50.0	42.1	
* 55 Fluorobenzene	96	3.742	3.743	-0.001	94	558462	50.0	50.0	
57 Trichloroethene	132	4.006	4.007	-0.001	96	158523	50.0	49.4	
59 Methylcyclohexane	83	4.175	4.176	-0.001	92	243159	50.0	53.9	
60 1,2-Dichloropropane	63	4.196	4.197	-0.001	89	182147	50.0	52.4	
62 1,4-Dioxane	88	4.248	4.250	-0.002	95	73345	1000.0	1247.8	
63 Dibromomethane	93	4.259	4.260	-0.001	96	121241	50.0	57.3	
64 Dichlorobromomethane	83	4.386	4.387	-0.001	98	239844	50.0	54.0	
65 2-Chloroethyl vinyl ether	63	4.597	4.598	-0.001	92	143283	50.0	51.5	
67 cis-1,3-Dichloropropene	75	4.713	4.714	-0.001	97	288330	50.0	53.5	
68 4-Methyl-2-pentanone (MIBK	43	4.829	4.819	0.010	99	1645334	250.0	263.7	
$ 69 Toluene-d8 (Surr)	98	4.913	4.914	-0.001	99	572430	50.0	53.1	
70 Toluene	92	4.966	4.967	-0.001	93	408963	50.0	55.3	
71 trans-1,3-Dichloropropene	75	5.145	5.146	-0.001	97	271693	50.0	54.4	
72 Ethyl methacrylate	69	5.187	5.189	-0.002	94	262235	50.0	53.6	
73 1,1,2-Trichloroethane	83	5.293	5.294	-0.001	92	135044	50.0	53.9	
74 Tetrachloroethene	164	5.356	5.357	-0.001	98	129804	50.0	61.5	
75 1,3-Dichloropropane	76	5.419	5.421	-0.002	98	279402	50.0	54.4	
76 2-Hexanone	43	5.462	5.463	-0.001	99	1194319	250.0	269.9	
78 Chlorodibromomethane	129	5.588	5.589	-0.001	98	186289	50.0	57.7	
79 Ethylene Dibromide	107	5.683	5.674	0.009	98	179095	50.0	57.0	
* 81 Chlorobenzene-d5	82	6.042	6.043	-0.001	88	239954	50.0	50.0	
82 Chlorobenzene	112	6.063	6.064	-0.001	93	447381	50.0	52.2	
84 1,1,1,2-Tetrachloroethane	131	6.137	6.138	-0.001	93	166521	50.0	54.0	
83 Ethylbenzene	91	6.147	6.149	-0.002	99	771219	50.0	52.6	
85 m-Xylene & p-Xylene	91	6.253	6.254	-0.001	98	608959	50.0	51.3	
87 o-Xylene	91	6.559	6.560	-0.001	94	631146	50.0	51.1	
88 Styrene	104	6.580	6.581	-0.001	95	487223	50.0	53.5	
89 Bromoform	173	6.717	6.718	-0.001	97	145489	50.0	55.9	
90 Isopropylbenzene	105	6.854	6.855	-0.001	97	734546	50.0	53.3	
$ 92 4-Bromofluorobenzene (Surr	95	7.002	7.003	-0.001	95	234707	50.0	47.7	
93 Bromobenzene	156	7.107	7.108	-0.001	92	198807	50.0	56.2	
94 1,1,2,2-Tetrachloroethane	83	7.118	7.119	-0.001	97	238150	50.0	50.5	
97 trans-1,4-Dichloro-2-buten	53	7.149	7.151	-0.002	86	91384	50.0	42.8	
96 1,2,3-Trichloropropane	110	7.160	7.161	-0.001	96	79756	50.0	54.8	
95 N-Propylbenzene	91	7.202	7.203	-0.001	99	889461	50.0	52.7	
98 2-Chlorotoluene	91	7.265	7.267	-0.002	98	539897	50.0	50.0	
99 1,3,5-Trimethylbenzene	105	7.350	7.351	-0.001	91	624393	50.0	52.0	
100 4-Chlorotoluene	91	7.371	7.372	-0.001	98	640392	50.0	51.4	
103 tert-Butylbenzene	119	7.603	7.604	-0.001	93	520317	50.0	53.2	
105 1,2,4-Trimethylbenzene	105	7.656	7.657	-0.001	98	648269	50.0	51.2	
106 sec-Butylbenzene	105	7.793	7.794	-0.001	99	746107	50.0	51.2	
108 1,3-Dichlorobenzene	146	7.877	7.878	-0.001	95	374297	50.0	54.5	
107 4-Isopropyltoluene	119	7.919	7.921	-0.002	98	650651	50.0	49.7	

Report Date: 21-Dec-2018 09:47:13 Chrom Revision: 2.3 13-Dec-2018 17:23:12
Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2056.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.952	-0.001	94	230687	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.972	7.973	-0.001	94	377047	50.0	52.1	
113 n-Butylbenzene	91	8.257	8.258	-0.001	98	540521	50.0	45.8	
114 1,2-Dichlorobenzene	146	8.257	8.258	-0.001	81	368732	50.0	54.2	
115 1,2-Dibromo-3-Chloropropan	157	8.911	8.912	-0.001	94	74725	50.0	57.4	
117 1,2,4-Trichlorobenzene	180	9.597	9.598	-0.001	93	242296	50.0	50.7	
118 Hexachlorobutadiene	225	9.723	9.724	-0.001	95	103477	50.0	51.7	
119 Naphthalene	128	9.808	9.809	-0.001	99	655259	50.0	49.0	
120 1,2,3-Trichlorobenzene	180	9.997	9.999	-0.002	96	236805	50.0	50.2	
S 122 1,2-Dichloroethene, Total	1				0		100.0	99.2	
S 123 Xylenes, Total	1				0		100.0	102.4	
S 124 1,3-Dichloropropene, Total	1				0		100.0	107.9	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VM_MMIX_01940	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL
DOD ISTD_00167	Amount Added:	5.00	Units: uL

Report Date: 21-Dec-2018 09:47:13 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2056.D

Injection Date: 20-Dec-2018 09:56:30 Instrument ID: CMSO2 Operator ID: EA

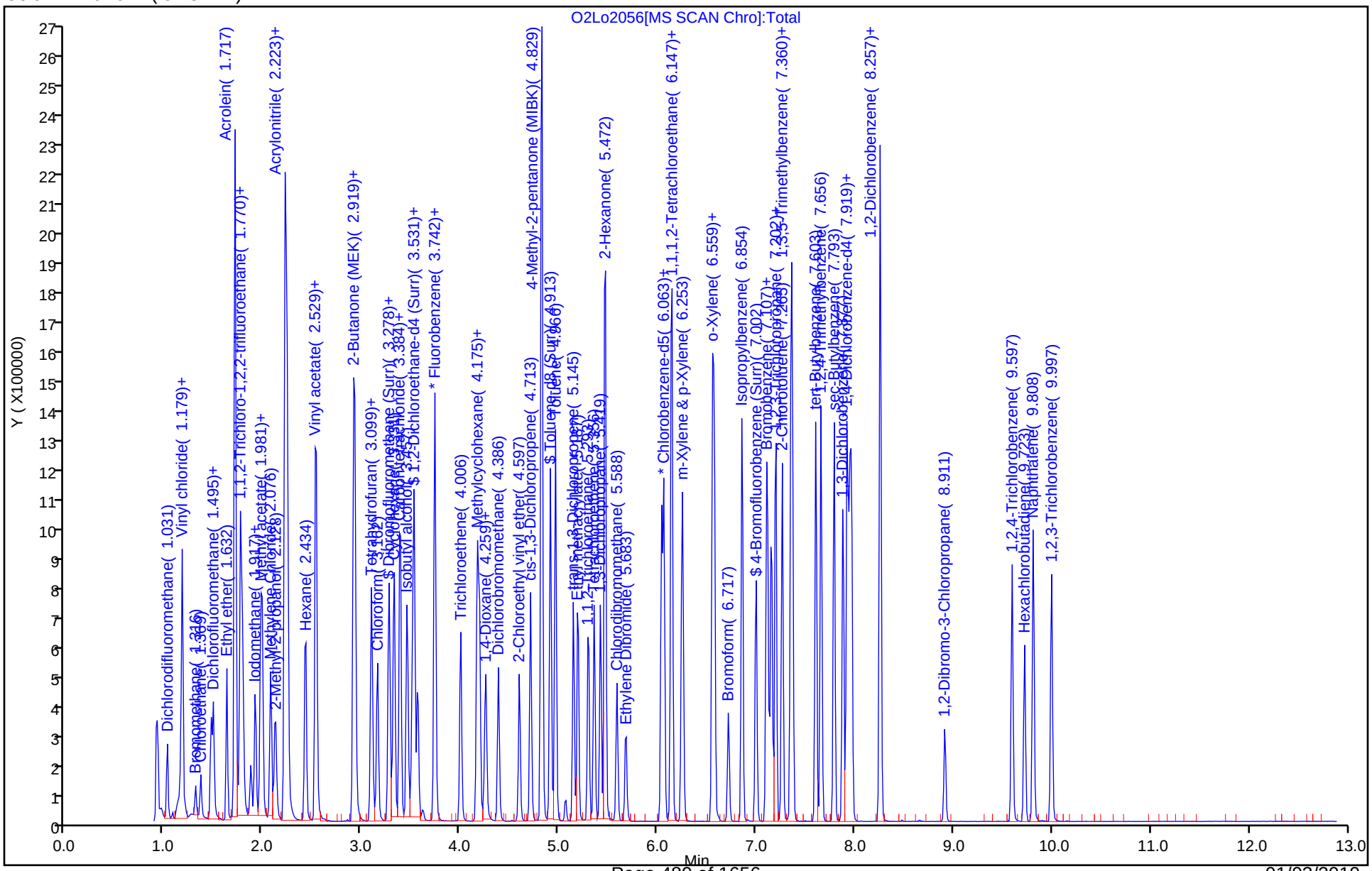
Lims ID: lcs Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 680-552754/3

Matrix: Water | Lab File ID: AAL2156.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/21/2018 09:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552754 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	51.7		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	51.8		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	51.0		1.0	0.36
79-00-5	1,1,2-Trichloroethane	52.4		1.0	0.33
75-34-3	1,1-Dichloroethane	51.2		1.0	0.38
75-35-4	1,1-Dichloroethene	50.3		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	49.6		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	44.2		5.0	1.1
95-50-1	1,2-Dichlorobenzene	52.8		1.0	0.37
107-06-2	1,2-Dichloroethane	49.3		1.0	0.50
78-87-5	1,2-Dichloropropane	51.9		1.0	0.67
541-73-1	1,3-Dichlorobenzene	51.7		1.0	0.43
106-46-7	1,4-Dichlorobenzene	50.5		1.0	0.46
78-93-3	Methyl Ethyl Ketone	233		10	3.4
591-78-6	2-Hexanone	249		10	2.0
108-10-1	methyl isobutyl ketone	267		10	2.1
67-64-1	Acetone	246		10	7.0
71-43-2	Benzene	51.6		1.0	0.43
75-25-2	Bromoform	53.8		1.0	0.43
74-83-9	Bromomethane	40.9		5.0	2.5
75-15-0	Carbon disulfide	49.8		2.0	1.0
56-23-5	Carbon tetrachloride	51.9		1.0	0.33
108-90-7	Chlorobenzene	51.2		1.0	0.26
124-48-1	Dibromochloromethane	52.0		1.0	0.32
75-00-3	Chloroethane	45.4		5.0	2.5
67-66-3	Chloroform	50.8		1.0	0.50
74-87-3	Chloromethane	45.3		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	52.2		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	52.4		1.0	0.40
110-82-7	Cyclohexane	52.0		1.0	0.39
75-27-4	Bromodichloromethane	51.9		1.0	0.44
75-71-8	Dichlorodifluoromethane	45.2		1.0	0.60
100-41-4	Ethylbenzene	51.7		1.0	0.33
106-93-4	1,2-Dibromoethane	52.8		1.0	0.44
98-82-8	Isopropylbenzene	53.0		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 680-552754/3

Matrix: Water | Lab File ID: AAL2156.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/21/2018 09:41

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552754 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	98.3		5.0	1.8
1634-04-4	Methyl tert-butyl ether	46.5		10	0.30
108-87-2	Methylcyclohexane	53.6		1.0	0.43
75-09-2	Methylene Chloride	45.9		5.0	2.5
100-42-5	Styrene	54.0		1.0	0.27
127-18-4	Tetrachloroethene	52.0		1.0	0.74
108-88-3	Toluene	51.6		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	53.3		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	50.7		1.0	0.42
79-01-6	Trichloroethene	51.4		1.0	0.48
75-69-4	Trichlorofluoromethane	48.9		1.0	0.42
75-01-4	Vinyl chloride	47.5		1.0	0.50
1330-20-7	Xylenes, Total	104		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		73-131
2037-26-5	Toluene-d8 (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-122
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2156.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 21-Dec-2018 09:41:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052778-003
Operator ID: ea Instrument ID: CMSAA

Method: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\8260AQ.m
Limit Group: 8260B
Last Update: 24-Dec-2018 09:24:04 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0330

First Level Reviewer: manniona Date: 21-Dec-2018 10:52:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.909	3.908	0.001	100	471835	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	82	182009	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	236165	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.446	3.451	-0.005	99	119854	50.0	51.7	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.707	3.712	-0.005	96	109091	50.0	48.8	
$ 6 Toluene-d8 (Surr)	98	5.063	5.062	0.001	99	473604	50.0	50.4	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	179364	50.0	49.5	
9 Dichlorodifluoromethane	85	1.089	1.094	-0.005	99	131825	50.0	45.2	
10 Vinyl chloride	62	1.252	1.252	0.000	98	131959	50.0	47.5	
12 Butadiene	54	1.258	1.257	0.001	91	122054	50.0	48.1	
11 Chloromethane	50	1.258	1.257	0.001	68	171452	50.0	45.3	
14 Bromomethane	96	1.432	1.432	0.000	100	78935	50.0	40.9	
15 Chloroethane	64	1.481	1.481	0.000	98	73171	50.0	45.4	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	99	169203	50.0	47.8	
18 Trichlorofluoromethane	101	1.590	1.589	0.001	99	151645	50.0	48.9	
20 Ethyl ether	59	1.747	1.747	0.000	94	88673	50.0	49.0	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.873	-0.006	97	108441	50.0	51.0	
23 Acrolein	56	1.878	1.878	0.000	95	583427	1000.0	1001.9	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	116957	50.0	50.3	
25 Acetone	58	1.971	1.971	0.000	90	51985	250.0	246.3	
26 Iodomethane	142	2.036	2.036	0.000	95	209055	50.0	51.2	
27 Carbon disulfide	76	2.063	2.063	0.000	98	362288	50.0	49.8	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	94	79654	50.0	51.3	
29 Methyl acetate	43	2.156	2.156	0.000	97	133401	100.0	98.3	
32 Methylene Chloride	84	2.259	2.259	0.000	84	130902	50.0	45.9	
33 2-Methyl-2-propanol	59	2.281	2.281	0.000	99	102300	500.0	480.8	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	97	295383	50.0	46.5	
36 trans-1,2-Dichloroethene	96	2.395	2.401	-0.006	89	138177	50.0	53.3	
37 Acrylonitrile	53	2.455	2.460	-0.005	96	438804	500.0	518.9	
38 Hexane	57	2.520	2.520	0.000	88	146729	50.0	50.5	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	204907	50.0	51.2	
43 Vinyl acetate	43	2.722	2.722	0.000	99	349545	100.0	92.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 2,2-Dichloropropane	77	3.097	3.097	0.000	92	166331	50.0	51.3	
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	98	151100	50.0	52.2	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	213038	250.0	232.7	
50 Tetrahydrofuran	42	3.293	3.293	0.000	76	58328	100.0	90.0	
51 Chlorobromomethane	49	3.293	3.293	0.000	79	102805	50.0	56.5	
52 Chloroform	83	3.326	3.331	-0.005	99	203416	50.0	50.8	
54 Cyclohexane	56	3.429	3.429	0.000	85	197857	50.0	52.0	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	173908	50.0	51.7	
57 Carbon tetrachloride	117	3.527	3.527	0.000	97	145208	50.0	51.9	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	97	157097	50.0	51.5	
60 Isobutyl alcohol	43	3.647	3.647	0.000	95	107519	1250.0	1211.2	
61 Benzene	78	3.702	3.702	0.000	95	510076	50.0	51.6	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	97	131926	50.0	49.3	
63 n-Heptane	43	3.816	3.816	0.000	86	119398	50.0	47.4	
65 Trichloroethene	132	4.164	4.164	0.000	93	143134	50.0	51.4	
66 Methylcyclohexane	83	4.251	4.251	0.000	91	216227	50.0	53.6	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	95	124408	50.0	51.9	
69 1,4-Dioxane	88	4.447	4.447	0.000	89	28518	1000.0	945.6	
68 Dibromomethane	93	4.458	4.458	0.000	90	78554	50.0	52.0	
70 Dichlorobromomethane	83	4.556	4.562	-0.006	99	153354	50.0	51.9	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	94	58958	50.0	53.9	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	208855	50.0	52.4	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	92	502734	250.0	266.7	
76 Toluene	92	5.117	5.117	0.000	93	333638	50.0	51.6	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	96	182266	50.0	50.7	
78 Ethyl methacrylate	69	5.357	5.356	0.000	85	160610	50.0	50.6	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	103779	50.0	52.4	
80 Tetrachloroethene	164	5.509	5.514	-0.005	94	126106	50.0	52.0	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	202969	50.0	52.7	
82 2-Hexanone	43	5.650	5.650	0.000	92	337032	250.0	249.0	
85 Chlorodibromomethane	129	5.759	5.759	0.000	98	131748	50.0	52.0	
86 Ethylene Dibromide	107	5.863	5.863	0.000	99	131723	50.0	52.8	
88 Chlorobenzene	112	6.227	6.227	0.000	99	394020	50.0	51.2	
89 Ethylbenzene	91	6.287	6.287	0.000	96	609312	50.0	51.7	
90 1,1,1,2-Tetrachloroethane	131	6.293	6.298	-0.005	95	131785	50.0	52.7	
92 m-Xylene & p-Xylene	106	6.380	6.380	0.000	98	261669	50.0	51.5	
95 o-Xylene	106	6.701	6.701	0.000	95	259074	50.0	52.9	
96 Styrene	104	6.728	6.728	0.000	98	423439	50.0	54.0	
97 Bromoform	173	6.897	6.897	0.000	99	98246	50.0	53.8	
98 Isopropylbenzene	105	6.990	6.990	0.000	94	639712	50.0	53.0	
100 Bromobenzene	156	7.273	7.273	0.000	89	195005	50.0	53.2	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	99	166819	50.0	51.8	
102 N-Propylbenzene	120	7.327	7.327	0.000	100	198270	50.0	53.1	
103 1,2,3-Trichloropropane	110	7.338	7.343	-0.005	97	54577	50.0	52.9	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.354	0.000	89	40391	50.0	45.6	
105 2-Chlorotoluene	126	7.420	7.420	0.000	96	172347	50.0	52.0	
106 1,3,5-Trimethylbenzene	105	7.480	7.479	0.001	94	547528	50.0	52.4	
107 4-Chlorotoluene	126	7.512	7.518	-0.006	95	181654	50.0	52.1	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	489597	50.0	52.0	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	576356	50.0	53.7	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	710276	50.0	52.5	
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	639757	50.0	52.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	76	369690	50.0	51.7	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	383481	50.0	50.5	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	518434	50.0	52.1	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	355706	50.0	52.8	
117 1,2-Dibromo-3-Chloropropan	157	9.107	9.107	0.000	87	34605	50.0	44.2	
118 1,2,4-Trichlorobenzene	180	9.766	9.766	0.000	93	176785	50.0	49.6	
119 Hexachlorobutadiene	225	9.858	9.864	-0.006	99	99887	50.0	54.7	
120 Naphthalene	128	9.978	9.978	0.000	99	277135	50.0	50.3	
121 1,2,3-Trichlorobenzene	180	10.180	10.185	-0.005	96	83796	50.0	52.4	
S 127 1,3-Dichloropropene, Total	1				0		100.0	103.1	
S 126 Xylenes, Total	1				0		100.0	104.4	
S 125 1,2-Dichloroethene, Total	1				0		100.0	105.5	

Reagents:

DOD ISTD_00167 Amount Added: 5.00 Units: uL
VM_MMIX_01940 Amount Added: 5.00 Units: uL
VM_Acrolein_00193 Amount Added: 5.00 Units: uL

Report Date: 24-Dec-2018 09:24:59 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2156.D

Injection Date: 21-Dec-2018 09:41:30 Instrument ID: CMSAA Operator ID: ea

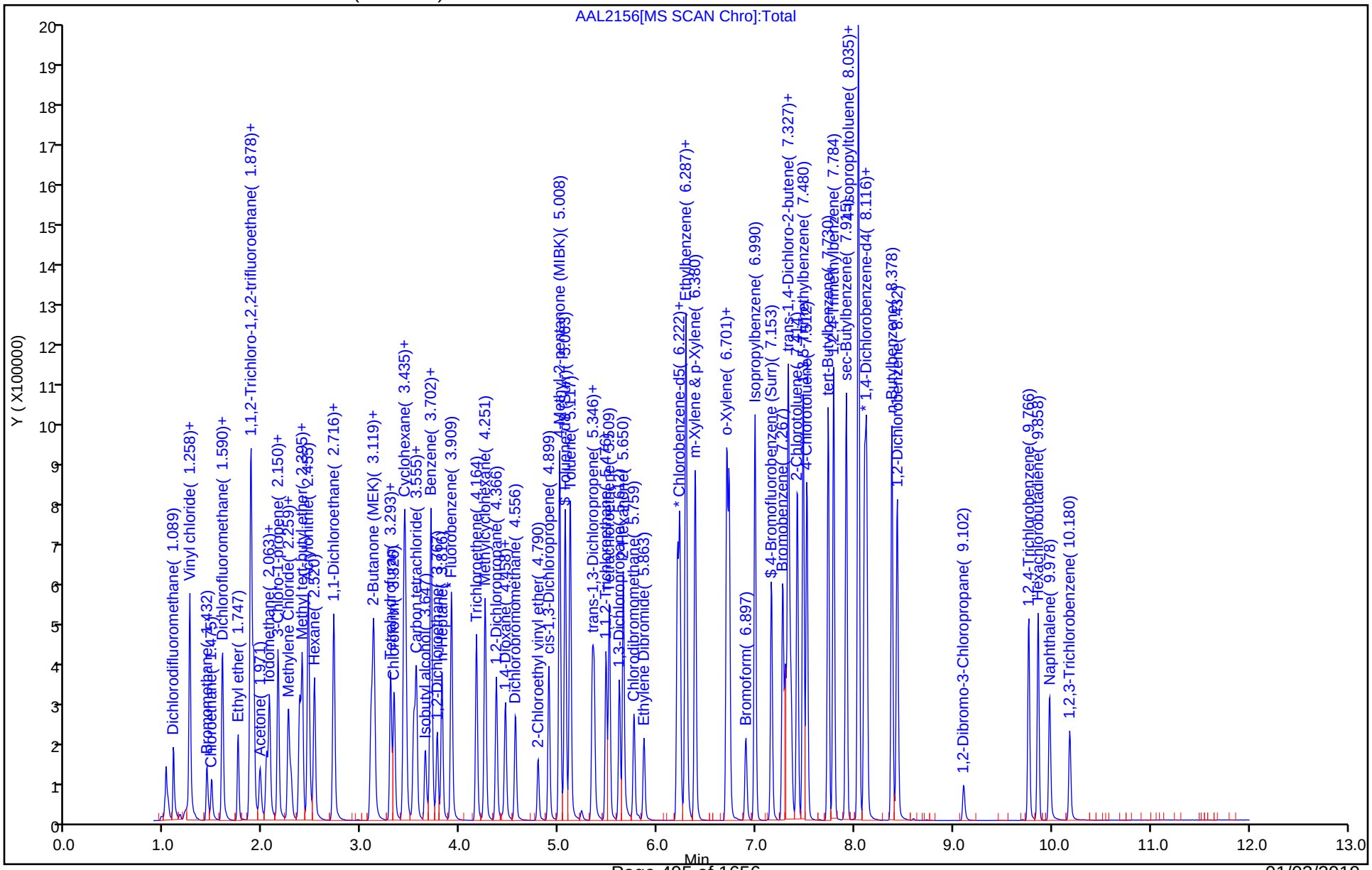
Lims ID: lcs Worklist Smp#: 3

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 2

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 680-553025/4

Matrix: Water | Lab File ID: 1PL2457.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/24/2018 11:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624 MS ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 553025 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	47.5		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	47.7		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50.6		1.0	0.36
79-00-5	1,1,2-Trichloroethane	48.4		1.0	0.33
75-34-3	1,1-Dichloroethane	46.0		1.0	0.38
75-35-4	1,1-Dichloroethene	50.5		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	48.2		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	45.7		5.0	1.1
95-50-1	1,2-Dichlorobenzene	49.2		1.0	0.37
107-06-2	1,2-Dichloroethane	46.2		1.0	0.50
78-87-5	1,2-Dichloropropane	47.2		1.0	0.67
541-73-1	1,3-Dichlorobenzene	48.1		1.0	0.43
106-46-7	1,4-Dichlorobenzene	49.4		1.0	0.46
78-93-3	Methyl Ethyl Ketone	240		10	3.4
591-78-6	2-Hexanone	219		10	2.0
108-10-1	methyl isobutyl ketone	219		10	2.1
67-64-1	Acetone	222		10	7.0
71-43-2	Benzene	47.9		1.0	0.43
75-25-2	Bromoform	42.3		1.0	0.43
74-83-9	Bromomethane	36.3		5.0	2.5
75-15-0	Carbon disulfide	46.3		2.0	1.0
56-23-5	Carbon tetrachloride	42.8		1.0	0.33
108-90-7	Chlorobenzene	48.9		1.0	0.26
124-48-1	Dibromochloromethane	45.7		1.0	0.32
75-00-3	Chloroethane	46.1		5.0	2.5
67-66-3	Chloroform	48.1		1.0	0.50
74-87-3	Chloromethane	36.6		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	47.1		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	48.8		1.0	0.40
110-82-7	Cyclohexane	45.1		1.0	0.39
75-27-4	Bromodichloromethane	46.2		1.0	0.44
75-71-8	Dichlorodifluoromethane	36.4		1.0	0.60
100-41-4	Ethylbenzene	48.1		1.0	0.33
106-93-4	1,2-Dibromoethane	48.1		1.0	0.44
98-82-8	Isopropylbenzene	49.2		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 680-553025/4

Matrix: Water | Lab File ID: 1PL2457.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/24/2018 11:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624 MS ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 553025 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	80.4		5.0	1.8
1634-04-4	Methyl tert-butyl ether	46.2		10	0.30
108-87-2	Methylcyclohexane	45.8		1.0	0.43
75-09-2	Methylene Chloride	47.7		5.0	2.5
100-42-5	Styrene	46.4		1.0	0.27
127-18-4	Tetrachloroethene	50.8		1.0	0.74
108-88-3	Toluene	48.7		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	51.4		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	44.6		1.0	0.42
79-01-6	Trichloroethene	49.3		1.0	0.48
75-69-4	Trichlorofluoromethane	42.2		1.0	0.42
75-01-4	Vinyl chloride	43.3		1.0	0.50
1330-20-7	Xylenes, Total	97.8		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		73-131
2037-26-5	Toluene-d8 (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-122
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2457.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 24-Dec-2018 11:56:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052833-004
Operator ID: ea Instrument ID: CMSP2

Method: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 25-Dec-2018 11:14:10 Calib Date: 07-Dec-2018 12:54:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181207-52418.b\1PL0709.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: soparaky Date: 25-Dec-2018 11:14:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.209	4.209	0.000	99	777656	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	85	321888	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	94	346764	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	85	191597	50.0	49.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	55	227420	50.0	45.4	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	778579	50.0	48.8	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	96	288725	50.0	45.4	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	100	225801	50.0	36.4	
10 Vinyl chloride	62	1.391	1.391	0.000	100	218448	50.0	43.3	
12 Chloromethane	50	1.412	1.412	0.000	74	284562	50.0	36.6	
11 Butadiene	54	1.412	1.412	0.000	93	200682	50.0	45.0	
13 Bromomethane	94	1.592	1.592	0.000	97	124295	50.0	36.3	
14 Chloroethane	64	1.645	1.645	0.000	100	140783	50.0	46.1	
15 Dichlorofluoromethane	67	1.771	1.771	0.000	98	348198	50.0	48.5	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	98	279283	50.0	42.2	
19 Ethyl ether	59	1.961	1.961	0.000	95	160349	50.0	48.5	
22 1,1,2-Trichloro-1,2,2-trif	151	2.109	2.109	0.000	37	178145	50.0	50.6	
20 Acrolein	56	2.109	2.109	0.000	97	1332532	1000.0	1353.1	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	97	185708	50.0	50.5	
23 Acetone	58	2.214	2.214	0.000	85	114630	250.0	221.6	
25 Iodomethane	142	2.278	2.278	0.000	97	239548	50.0	38.0	
26 Carbon disulfide	76	2.299	2.299	0.000	99	567718	50.0	46.3	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	82	141851	50.0	49.5	
28 Methyl acetate	43	2.404	2.404	0.000	97	321965	100.0	80.4	
30 Methylene Chloride	84	2.499	2.499	0.000	92	200157	50.0	47.7	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	98	241250	500.0	429.0	
34 Methyl tert-butyl ether	73	2.637	2.637	0.000	95	587733	50.0	46.2	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	94	203740	50.0	51.4	
32 Acrylonitrile	53	2.721	2.721	0.000	93	887235	500.0	446.8	
35 Hexane	57	2.784	2.784	0.000	91	303662	50.0	46.5	
36 Vinyl acetate	43	2.985	2.985	0.000	100	863962	100.0	88.1	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	63	338447	50.0	46.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	77	3.375	3.375	0.000	96	312808	50.0	45.8	
43 cis-1,2-Dichloroethene	61	3.396	3.396	0.000	97	317371	50.0	47.1	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	100	148524	250.0	239.9	
47 Tetrahydrofuran	42	3.576	3.576	0.000	87	137962	100.0	89.8	
48 Chlorobromomethane	130	3.576	3.576	0.000	83	137397	50.0	46.6	
49 Chloroform	83	3.607	3.607	0.000	98	350977	50.0	48.1	
51 Cyclohexane	84	3.713	3.713	0.000	91	312921	50.0	45.1	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	93	311536	50.0	47.5	
52 Carbon tetrachloride	117	3.819	3.819	0.000	98	249219	50.0	42.8	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	95	271322	50.0	47.9	
54 Isobutyl alcohol	43	3.914	3.914	0.000	98	241230	1250.0	980.1	
55 Benzene	78	3.998	3.998	0.000	96	809316	50.0	47.9	
57 1,2-Dichloroethane	62	4.061	4.061	0.000	81	270690	50.0	46.2	
60 n-Heptane	43	4.103	4.103	0.000	88	309573	50.0	42.6	
62 Trichloroethene	132	4.462	4.462	0.000	95	221096	50.0	49.3	
64 Methylcyclohexane	83	4.547	4.547	0.000	96	383878	50.0	45.8	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	87	196761	50.0	47.2	
68 1,4-Dioxane	88	4.747	4.747	0.000	54	69427	1000.0	975.2	
67 Dibromomethane	93	4.758	4.758	0.000	89	124046	50.0	45.7	
69 Dichlorobromomethane	83	4.853	4.853	0.000	99	266008	50.0	46.2	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	94	139110	50.0	45.6	
72 cis-1,3-Dichloropropene	75	5.201	5.201	0.000	92	329912	50.0	48.8	
73 4-Methyl-2-pentanone (MIBK	43	5.306	5.306	0.000	95	1081728	250.0	218.7	
74 Toluene	92	5.423	5.423	0.000	84	524429	50.0	48.7	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	94	291165	50.0	44.6	
76 Ethyl methacrylate	69	5.655	5.655	0.000	85	259116	50.0	45.2	
77 1,1,2-Trichloroethane	83	5.781	5.781	0.000	94	157530	50.0	48.4	
78 Tetrachloroethene	164	5.824	5.824	0.000	76	211656	50.0	50.8	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	94	301525	50.0	47.5	
80 2-Hexanone	43	5.950	5.950	0.000	96	786750	250.0	219.5	
82 Chlorodibromomethane	129	6.066	6.066	0.000	95	207351	50.0	45.7	
83 Ethylene Dibromide	107	6.172	6.172	0.000	98	195697	50.0	48.1	
85 Chlorobenzene	112	6.541	6.541	0.000	97	594353	50.0	48.9	
87 Ethylbenzene	91	6.594	6.594	0.000	97	1026216	50.0	48.1	
86 1,1,1,2-Tetrachloroethane	131	6.604	6.604	0.000	53	204103	50.0	45.7	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	810202	50.0	49.0	
89 o-Xylene	91	7.016	7.016	0.000	93	824066	50.0	48.8	
90 Styrene	104	7.037	7.037	0.000	96	635362	50.0	46.4	
91 Bromoform	173	7.206	7.206	0.000	96	151432	50.0	42.3	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	1065833	50.0	49.2	
94 Bromobenzene	156	7.586	7.586	0.000	92	286805	50.0	50.3	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	96	254228	50.0	47.7	
98 N-Propylbenzene	91	7.639	7.639	0.000	92	1287524	50.0	49.7	
97 1,2,3-Trichloropropane	110	7.649	7.649	0.000	54	85074	50.0	48.9	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	43	86835	50.0	44.8	
99 2-Chlorotoluene	91	7.734	7.734	0.000	96	705644	50.0	48.3	
101 1,3,5-Trimethylbenzene	105	7.786	7.786	0.000	78	910519	50.0	49.5	
102 4-Chlorotoluene	91	7.829	7.829	0.000	88	749162	50.0	49.0	
103 tert-Butylbenzene	119	8.050	8.050	0.000	91	821253	50.0	49.0	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	70	919364	50.0	48.5	
106 sec-Butylbenzene	105	8.230	8.230	0.000	99	1225604	50.0	49.5	
108 4-Isopropyltoluene	119	8.356	8.356	0.000	94	1076564	50.0	48.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	8.356	8.356	0.000	68	535887	50.0	48.1	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	96	548842	50.0	49.4	
112 n-Butylbenzene	91	8.694	8.694	0.000	97	956721	50.0	47.2	
113 1,2-Dichlorobenzene	146	8.757	8.757	0.000	94	505762	50.0	49.2	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	86	73534	50.0	45.7	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	91	394805	50.0	48.2	
117 Hexachlorobutadiene	225	10.192	10.192	0.000	98	224825	50.0	49.7	
118 Naphthalene	128	10.309	10.309	0.000	99	960783	50.0	48.9	
119 1,2,3-Trichlorobenzene	180	10.509	10.509	0.000	94	366912	50.0	49.4	
S 124 Xylenes, Total	1				0		100.0	97.8	
S 123 1,2-Dichloroethene, Total	1				0		100.0	98.5	
S 122 1,3-Dichloropropene, Total	1				0		100.0	93.4	

Reagents:

VM_MMIX_01940 Amount Added: 5.00 Units: uL
VM_Acrolein_00193 Amount Added: 5.00 Units: uL
DOD ISTD_00167 Amount Added: 5.00 Units: uL

Report Date: 25-Dec-2018 11:14:12 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2457.D

Injection Date: 24-Dec-2018 11:56:30 Instrument ID: CMSP2 Operator ID: ea

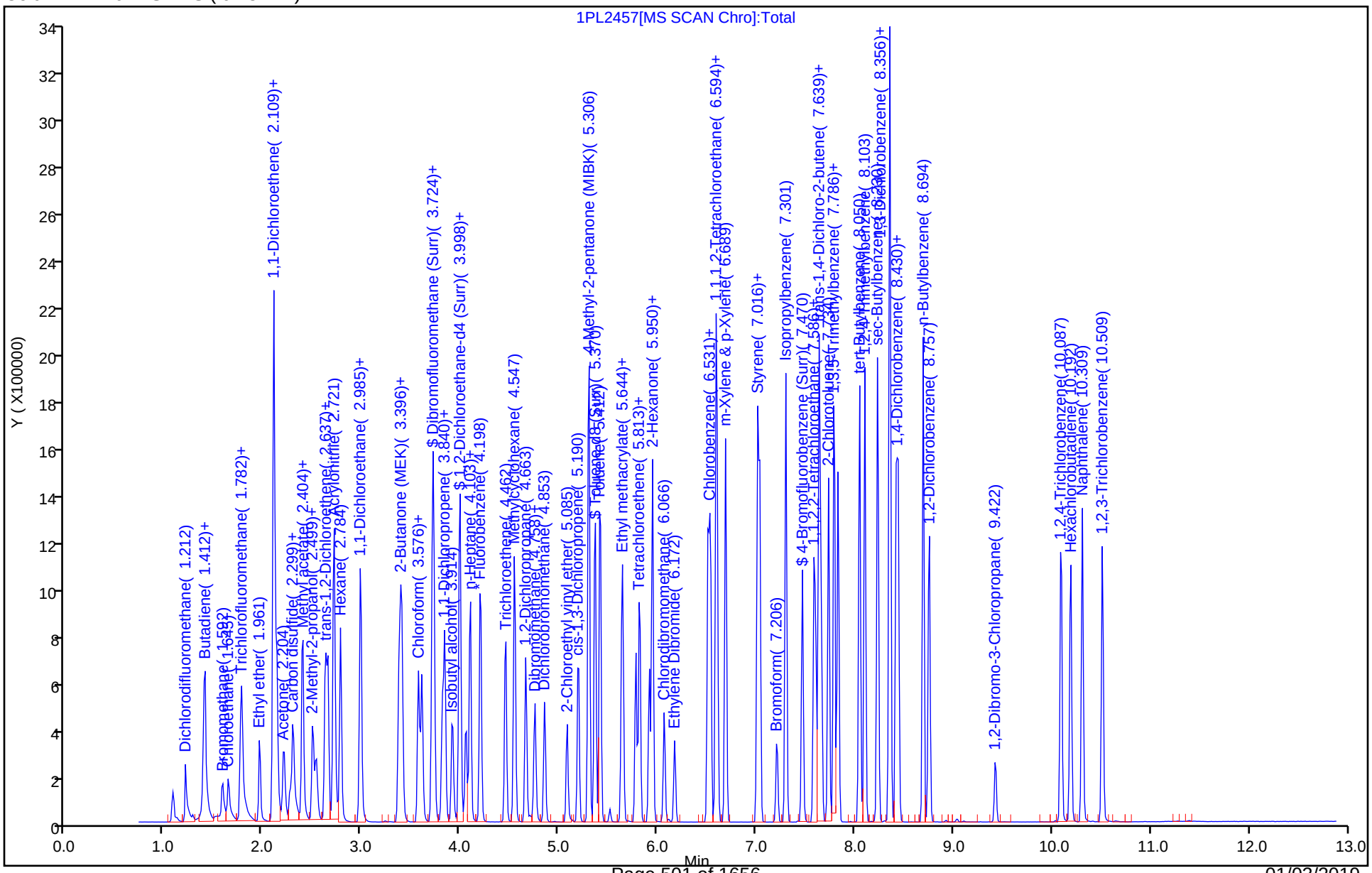
Lims ID: lcs Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 680-552552/4

Matrix: Water | Lab File ID: AAL2057.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 10:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	50.6		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	51.7		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	50.6		1.0	0.36
79-00-5	1,1,2-Trichloroethane	49.7		1.0	0.33
75-34-3	1,1-Dichloroethane	48.7		1.0	0.38
75-35-4	1,1-Dichloroethene	49.2		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	49.2		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	45.2		5.0	1.1
95-50-1	1,2-Dichlorobenzene	52.3		1.0	0.37
107-06-2	1,2-Dichloroethane	46.8		1.0	0.50
78-87-5	1,2-Dichloropropane	49.3		1.0	0.67
541-73-1	1,3-Dichlorobenzene	51.2		1.0	0.43
106-46-7	1,4-Dichlorobenzene	49.4		1.0	0.46
78-93-3	Methyl Ethyl Ketone	233		10	3.4
591-78-6	2-Hexanone	235		10	2.0
108-10-1	methyl isobutyl ketone	254		10	2.1
67-64-1	Acetone	236		10	7.0
71-43-2	Benzene	49.9		1.0	0.43
75-25-2	Bromoform	54.2		1.0	0.43
74-83-9	Bromomethane	35.1		5.0	2.5
75-15-0	Carbon disulfide	47.8		2.0	1.0
56-23-5	Carbon tetrachloride	50.8		1.0	0.33
108-90-7	Chlorobenzene	50.7		1.0	0.26
124-48-1	Dibromochloromethane	50.8		1.0	0.32
75-00-3	Chloroethane	42.5		5.0	2.5
67-66-3	Chloroform	48.8		1.0	0.50
74-87-3	Chloromethane	41.2		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	49.9		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	50.3		1.0	0.40
110-82-7	Cyclohexane	50.8		1.0	0.39
75-27-4	Bromodichloromethane	49.5		1.0	0.44
75-71-8	Dichlorodifluoromethane	41.9		1.0	0.60
100-41-4	Ethylbenzene	51.5		1.0	0.33
106-93-4	1,2-Dibromoethane	50.3		1.0	0.44
98-82-8	Isopropylbenzene	52.7		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 680-552552/4

Matrix: Water | Lab File ID: AAL2057.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/20/2018 10:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552552 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	95.2		5.0	1.8
1634-04-4	Methyl tert-butyl ether	46.7		10	0.30
108-87-2	Methylcyclohexane	52.9		1.0	0.43
75-09-2	Methylene Chloride	43.3		5.0	2.5
100-42-5	Styrene	53.2		1.0	0.27
127-18-4	Tetrachloroethene	50.4		1.0	0.74
108-88-3	Toluene	49.9		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	51.6		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	48.1		1.0	0.42
79-01-6	Trichloroethene	50.5		1.0	0.48
75-69-4	Trichlorofluoromethane	46.3		1.0	0.42
75-01-4	Vinyl chloride	44.2		1.0	0.50
1330-20-7	Xylenes, Total	104		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		73-131
2037-26-5	Toluene-d8 (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-122
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2057.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 20-Dec-2018 10:14:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052743-004
Operator ID: ea Instrument ID: CMSAA

Method: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\8260AQ.m
Limit Group: 8260B
Last Update: 20-Dec-2018 12:17:45 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0309

First Level Reviewer: manniona Date: 20-Dec-2018 12:17:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.909	3.908	0.001	100	525140	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	83	196774	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	92	254279	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.446	3.451	-0.005	99	128969	50.0	49.9	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.713	3.718	0.001	96	116916	50.0	47.0	
$ 6 Toluene-d8 (Surr)	98	5.063	5.062	0.001	99	511705	50.0	48.9	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	189875	50.0	48.7	
9 Dichlorodifluoromethane	85	1.089	1.094	-0.005	99	136093	50.0	41.9	
10 Vinyl chloride	62	1.252	1.252	0.000	98	136819	50.0	44.2	
12 Butadiene	54	1.257	1.257	0.000	91	126224	50.0	44.7	
11 Chloromethane	50	1.257	1.257	0.000	67	173281	50.0	41.2	
14 Bromomethane	96	1.432	1.432	0.000	100	75483	50.0	35.1	
15 Chloroethane	64	1.475	1.481	-0.006	98	76225	50.0	42.5	
17 Dichlorofluoromethane	67	1.584	1.586	0.000	99	178725	50.0	45.4	
18 Trichlorofluoromethane	101	1.590	1.589	0.001	99	159792	50.0	46.3	
20 Ethyl ether	59	1.747	1.747	0.000	94	95745	50.0	47.5	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.872	-0.005	95	119826	50.0	50.6	
23 Acrolein	56	1.878	1.878	0.000	94	586186	1000.0	904.5	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	93	127388	50.0	49.2	
25 Acetone	58	1.971	1.970	0.001	90	55472	250.0	236.1	
26 Iodomethane	142	2.036	2.036	0.000	96	218506	50.0	48.1	
27 Carbon disulfide	76	2.063	2.063	0.000	98	386852	50.0	47.8	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	95	84489	50.0	48.9	
29 Methyl acetate	43	2.156	2.156	0.000	97	143746	100.0	95.2	
32 Methylene Chloride	84	2.259	2.259	0.000	83	137276	50.0	43.3	
33 2-Methyl-2-propanol	59	2.286	2.286	0.000	99	116426	500.0	491.7	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	330007	50.0	46.7	
36 trans-1,2-Dichloroethene	96	2.395	2.401	-0.005	89	148740	50.0	51.6	
37 Acrylonitrile	53	2.455	2.460	-0.005	96	456116	500.0	484.6	
38 Hexane	57	2.520	2.520	0.000	88	162378	50.0	50.2	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	216961	50.0	48.7	
43 Vinyl acetate	43	2.722	2.722	0.000	99	388612	100.0	92.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 2,2-Dichloropropane	77	3.097	3.097	0.000	92	181757	50.0	50.4	
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	94	160559	50.0	49.9	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	237381	250.0	232.9	
50 Tetrahydrofuran	42	3.293	3.293	0.000	79	64282	100.0	89.1	
51 Chlorobromomethane	49	3.293	3.293	0.000	77	92190	50.0	45.5	
52 Chloroform	83	3.332	3.331	0.001	99	217672	50.0	48.8	
54 Cyclohexane	56	3.429	3.429	0.000	84	215322	50.0	50.8	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	189599	50.0	50.6	
57 Carbon tetrachloride	117	3.527	3.533	-0.006	97	158299	50.0	50.8	
58 1,1-Dichloropropene	75	3.555	3.555	0.000	97	172155	50.0	50.8	
60 Isobutyl alcohol	43	3.647	3.647	0.000	95	117956	1250.0	1194.0	
61 Benzene	78	3.702	3.702	0.000	95	549133	50.0	49.9	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	96	139591	50.0	46.8	
63 n-Heptane	43	3.816	3.816	0.000	85	124813	50.0	44.5	
65 Trichloroethene	132	4.164	4.164	0.000	93	156516	50.0	50.5	
66 Methylcyclohexane	83	4.251	4.251	0.000	91	237540	50.0	52.9	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	131563	50.0	49.3	
69 1,4-Dioxane	88	4.447	4.447	0.000	87	32447	1000.0	966.2	
68 Dibromomethane	93	4.458	4.458	0.000	90	83001	50.0	49.4	
70 Dichlorobromomethane	83	4.556	4.562	-0.006	99	162709	50.0	49.5	
72 2-Chloroethyl vinyl ether	63	4.790	4.797	0.000	94	61105	50.0	50.2	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	88	223136	50.0	50.3	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	91	532853	250.0	253.9	
76 Toluene	92	5.117	5.117	0.000	93	359351	50.0	49.9	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	97	192751	50.0	48.1	
78 Ethyl methacrylate	69	5.357	5.356	0.000	85	170126	50.0	48.2	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	95	109526	50.0	49.7	
80 Tetrachloroethene	164	5.514	5.514	0.000	94	136183	50.0	50.4	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	212153	50.0	49.4	
82 2-Hexanone	43	5.650	5.656	-0.006	91	353369	250.0	234.8	
85 Chlorodibromomethane	129	5.759	5.765	-0.006	98	143322	50.0	50.8	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	139683	50.0	50.3	
88 Chlorobenzene	112	6.227	6.227	0.000	99	421825	50.0	50.7	
89 Ethylbenzene	91	6.287	6.287	0.000	96	655674	50.0	51.5	
90 1,1,1,2-Tetrachloroethane	131	6.298	6.298	0.000	96	141760	50.0	52.5	
92 m-Xylene & p-Xylene	106	6.380	6.385	-0.005	98	282204	50.0	51.3	
95 o-Xylene	106	6.707	6.701	0.005	95	278402	50.0	52.6	
96 Styrene	104	6.728	6.728	0.000	98	451367	50.0	53.2	
97 Bromoform	173	6.897	6.897	0.000	99	106882	50.0	54.2	
98 Isopropylbenzene	105	6.990	6.989	0.001	94	686998	50.0	52.7	
100 Bromobenzene	156	7.273	7.273	0.001	88	205191	50.0	51.8	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	180106	50.0	51.7	
102 N-Propylbenzene	120	7.327	7.327	0.000	100	212008	50.0	52.6	
103 1,2,3-Trichloropropane	110	7.343	7.343	0.000	97	57770	50.0	51.8	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.360	-0.006	89	41238	50.0	43.1	
105 2-Chlorotoluene	126	7.420	7.420	0.001	95	183301	50.0	51.2	
106 1,3,5-Trimethylbenzene	105	7.480	7.479	0.001	95	586295	50.0	51.9	
107 4-Chlorotoluene	126	7.518	7.518	0.001	94	197535	50.0	52.4	
108 tert-Butylbenzene	119	7.730	7.735	-0.005	97	528795	50.0	51.9	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	608640	50.0	52.4	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	763383	50.0	52.2	
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	692433	50.0	52.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	98	394066	50.0	51.2	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	404343	50.0	49.4	
115 n-Butylbenzene	91	8.378	8.378	0.000	97	558933	50.0	52.2	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	378747	50.0	52.3	
117 1,2-Dibromo-3-Chloropropan	157	9.102	9.107	-0.005	88	38156	50.0	45.2	
118 1,2,4-Trichlorobenzene	180	9.766	9.766	0.000	93	188784	50.0	49.2	
119 Hexachlorobutadiene	225	9.858	9.864	-0.006	99	108871	50.0	55.3	
120 Naphthalene	128	9.978	9.978	0.000	99	292368	50.0	49.4	
121 1,2,3-Trichlorobenzene	180	10.180	10.185	-0.005	96	88062	50.0	51.2	
S 125 1,2-Dichloroethene, Total	1				0		100.0	101.4	
S 126 Xylenes, Total	1				0		100.0	103.9	
S 127 1,3-Dichloropropene, Total	1				0		100.0	98.5	

Reagents:

DOD ISTD_00167 Amount Added: 5.00 Units: uL
VM_MMIX_01940 Amount Added: 5.00 Units: uL
VM_Acrolein_00193 Amount Added: 5.00 Units: uL

Report Date: 20-Dec-2018 12:18:00 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181220-52743.b\AAL2057.D

Injection Date: 20-Dec-2018 10:14:30 Instrument ID: CMSAA Operator ID: ea

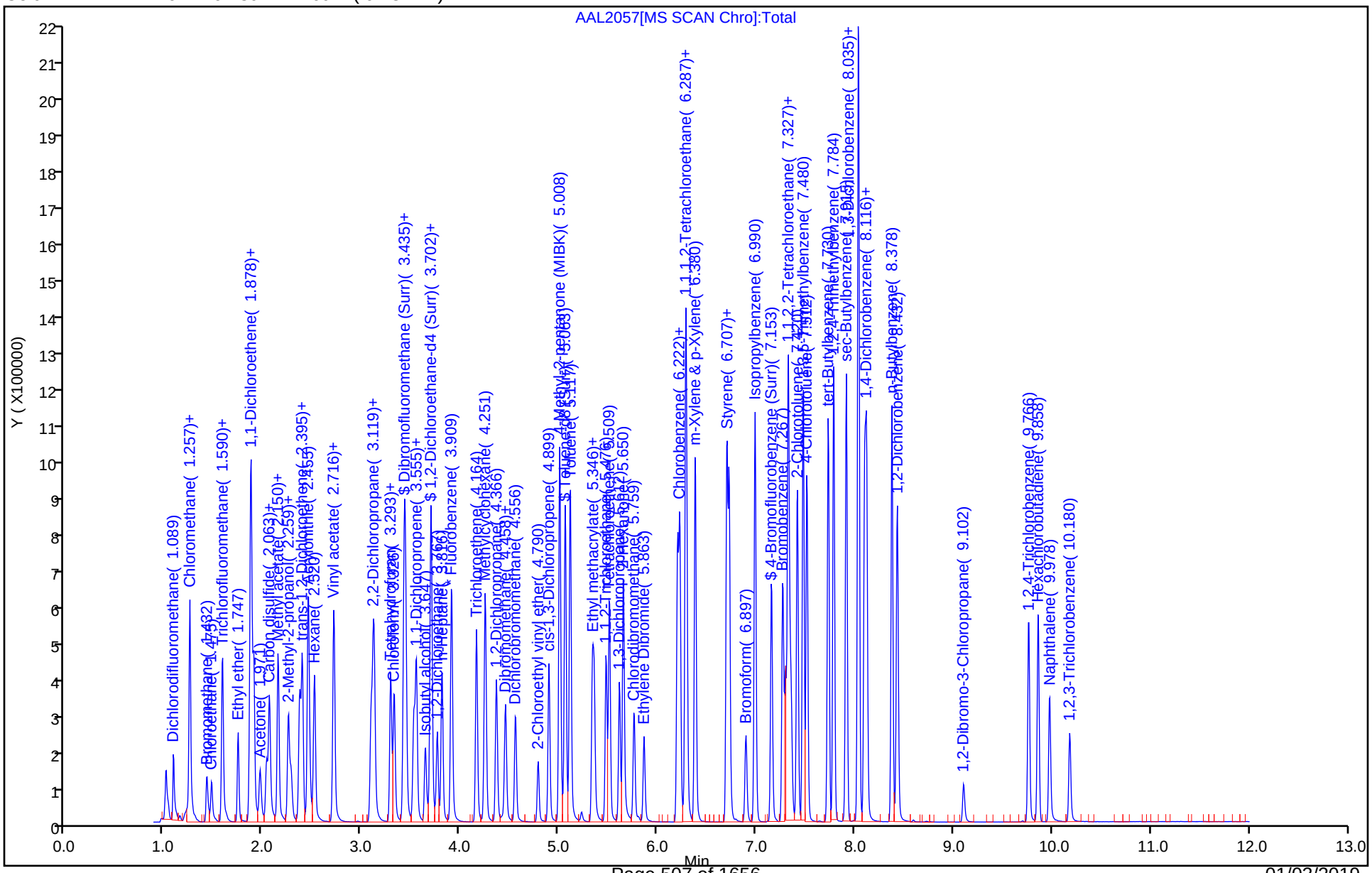
Lims ID: lcsd Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 680-552557/4

Matrix: Water | Lab File ID: O2Lo2057.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 10:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	53.3		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	49.9		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	56.0		1.0	0.36
79-00-5	1,1,2-Trichloroethane	49.5		1.0	0.33
75-34-3	1,1-Dichloroethane	48.8		1.0	0.38
75-35-4	1,1-Dichloroethene	52.0		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	49.5		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	53.0		5.0	1.1
95-50-1	1,2-Dichlorobenzene	52.5		1.0	0.37
107-06-2	1,2-Dichloroethane	49.5		1.0	0.50
78-87-5	1,2-Dichloropropane	48.5		1.0	0.67
541-73-1	1,3-Dichlorobenzene	52.7		1.0	0.43
106-46-7	1,4-Dichlorobenzene	51.4		1.0	0.46
78-93-3	Methyl Ethyl Ketone	265		10	3.4
591-78-6	2-Hexanone	242		10	2.0
108-10-1	methyl isobutyl ketone	234		10	2.1
67-64-1	Acetone	245		10	7.0
71-43-2	Benzene	48.9		1.0	0.43
75-25-2	Bromoform	53.5		1.0	0.43
74-83-9	Bromomethane	29.2		5.0	2.5
75-15-0	Carbon disulfide	51.4		2.0	1.0
56-23-5	Carbon tetrachloride	55.8		1.0	0.33
108-90-7	Chlorobenzene	51.8		1.0	0.26
124-48-1	Dibromochloromethane	51.3		1.0	0.32
75-00-3	Chloroethane	54.1		5.0	2.5
67-66-3	Chloroform	49.8		1.0	0.50
74-87-3	Chloromethane	48.1		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	46.4		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	48.2		1.0	0.40
110-82-7	Cyclohexane	52.4		1.0	0.39
75-27-4	Bromodichloromethane	49.9		1.0	0.44
75-71-8	Dichlorodifluoromethane	49.5		1.0	0.60
100-41-4	Ethylbenzene	51.7		1.0	0.33
106-93-4	1,2-Dibromoethane	51.1		1.0	0.44
98-82-8	Isopropylbenzene	52.5		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 680-552557/4

Matrix: Water | Lab File ID: O2Lo2057.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 10:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	97.8		5.0	1.8
1634-04-4	Methyl tert-butyl ether	49.5		10	0.30
108-87-2	Methylcyclohexane	49.9		1.0	0.43
75-09-2	Methylene Chloride	45.3		5.0	2.5
100-42-5	Styrene	52.1		1.0	0.27
127-18-4	Tetrachloroethene	56.0		1.0	0.74
108-88-3	Toluene	49.3		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	52.0		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	48.7		1.0	0.42
79-01-6	Trichloroethene	47.9		1.0	0.48
75-69-4	Trichlorofluoromethane	57.4		1.0	0.42
75-01-4	Vinyl chloride	50.8		1.0	0.50
1330-20-7	Xylenes, Total	102		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		73-131
2037-26-5	Toluene-d8 (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-122
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2057.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 20-Dec-2018 10:20:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052745-004
Operator ID: EA Instrument ID: CMSO2

Method: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 21-Dec-2018 09:46:41 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: manniona Date: 20-Dec-2018 11:20:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.024	1.022	0.002	99	159942	50.0	49.5	
2 Vinyl chloride	62	1.171	1.170	0.001	99	161104	50.0	50.8	
4 Chloromethane	50	1.182	1.180	0.002	60	303079	50.0	48.1	
3 Butadiene	54	1.182	1.180	0.002	94	202732	50.0	55.1	
5 Bromomethane	94	1.319	1.317	0.002	99	48418	50.0	29.2	E
6 Chloroethane	64	1.372	1.370	0.002	97	81674	50.0	54.1	
7 Dichlorofluoromethane	67	1.477	1.476	0.001	98	223572	50.0	50.4	
8 Trichlorofluoromethane	101	1.498	1.497	0.001	98	213240	50.0	57.4	
11 Ethyl ether	59	1.635	1.634	0.001	91	168671	50.0	49.7	
13 Acrolein	56	1.720	1.718	0.002	97	1492887	1000.0	1471.1	
12 1,1,2-Trichloro-1,2,2-trif	151	1.772	1.771	0.001	94	122830	50.0	56.0	
14 1,1-Dichloroethene	96	1.772	1.771	0.001	96	144854	50.0	52.0	
15 Acetone	58	1.794	1.792	0.002	85	129520	250.0	245.1	
17 Iodomethane	142	1.878	1.876	0.002	98	203353	50.0	47.5	
18 Carbon disulfide	76	1.920	1.919	0.001	100	448251	50.0	51.4	
20 Methyl acetate	43	1.973	1.971	0.002	98	490253	100.0	97.8	
19 3-Chloro-1-propene	76	1.994	1.992	0.002	88	102860	50.0	51.1	
22 Methylene Chloride	84	2.078	2.077	0.001	97	154286	50.0	45.3	
23 2-Methyl-2-propanol	59	2.121	2.119	0.002	99	345102	500.0	524.2	
26 Acrylonitrile	53	2.226	2.224	0.002	94	1206339	500.0	496.5	
24 Methyl tert-butyl ether	73	2.237	2.235	0.002	97	567082	50.0	49.5	
25 trans-1,2-Dichloroethene	96	2.247	2.246	0.001	98	170643	50.0	52.0	
27 Hexane	57	2.426	2.425	0.001	93	234022	50.0	47.1	
30 Vinyl acetate	43	2.532	2.530	0.002	100	1242506	100.0	98.7	
29 1,1-Dichloroethane	63	2.542	2.541	0.001	99	309700	50.0	48.8	
36 2-Butanone (MEK)	72	2.922	2.910	0.012	98	158513	250.0	265.2	
34 cis-1,2-Dichloroethene	61	2.933	2.921	0.012	91	303767	50.0	46.4	
33 2,2-Dichloropropane	77	2.933	2.931	0.002	96	264047	50.0	53.8	
39 Chlorobromomethane	130	3.102	3.100	0.002	99	100915	50.0	50.2	
38 Tetrahydrofuran	42	3.102	3.100	0.002	94	223053	100.0	87.3	
41 Chloroform	83	3.165	3.163	0.002	97	296920	50.0	49.8	
$ 44 Dibromofluoromethane (Surr	113	3.270	3.269	0.001	96	159115	50.0	49.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 1,1,1-Trichloroethane	97	3.281	3.279	0.002	99	270350	50.0	53.3	
42 Cyclohexane	84	3.334	3.332	0.002	97	230849	50.0	52.4	
45 Carbon tetrachloride	117	3.386	3.385	0.001	94	227343	50.0	55.8	
46 1,1-Dichloropropene	75	3.386	3.385	0.001	92	216855	50.0	51.6	
47 Isobutyl alcohol	43	3.460	3.459	0.001	96	394218	1250.0	1104.3	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.513	3.511	0.002	98	218458	50.0	48.2	
50 Benzene	78	3.534	3.532	0.002	98	621181	50.0	48.9	
53 1,2-Dichloroethane	62	3.566	3.564	0.002	97	268140	50.0	49.5	
54 n-Heptane	43	3.734	3.733	0.001	98	229685	50.0	40.6	
* 55 Fluorobenzene	96	3.745	3.743	0.002	98	591341	50.0	50.0	
57 Trichloroethene	132	4.009	4.007	0.002	97	162772	50.0	47.9	
59 Methylcyclohexane	83	4.178	4.176	0.002	88	238345	50.0	49.9	
60 1,2-Dichloropropane	63	4.199	4.197	0.002	89	178523	50.0	48.5	
62 1,4-Dioxane	88	4.251	4.250	0.001	94	69645	1000.0	1119.0	
63 Dibromomethane	93	4.251	4.260	-0.009	97	115091	50.0	51.4	
64 Dichlorobromomethane	83	4.388	4.387	0.001	98	234628	50.0	49.9	
65 2-Chloroethyl vinyl ether	63	4.599	4.598	0.001	92	140599	50.0	47.7	
67 cis-1,3-Dichloropropene	75	4.716	4.714	0.002	97	275435	50.0	48.2	
68 4-Methyl-2-pentanone (MIBK	43	4.821	4.819	0.002	99	1547113	250.0	234.2	
$ 69 Toluene-d8 (Surr)	98	4.916	4.914	0.002	99	542998	50.0	47.6	
70 Toluene	92	4.969	4.967	0.002	94	385990	50.0	49.3	
71 trans-1,3-Dichloropropene	75	5.148	5.146	0.002	96	257254	50.0	48.7	
72 Ethyl methacrylate	69	5.190	5.189	0.001	95	243262	50.0	47.0	
73 1,1,2-Trichloroethane	83	5.296	5.294	0.002	92	131258	50.0	49.5	
74 Tetrachloroethene	164	5.359	5.357	0.002	97	125048	50.0	56.0	
75 1,3-Dichloropropane	76	5.422	5.421	0.001	97	266390	50.0	49.0	
76 2-Hexanone	43	5.464	5.463	0.001	99	1131881	250.0	241.5	
78 Chlorodibromomethane	129	5.591	5.589	0.002	98	175345	50.0	51.3	
79 Ethylene Dibromide	107	5.675	5.674	0.001	98	169815	50.0	51.1	
* 81 Chlorobenzene-d5	82	6.045	6.043	0.002	87	229020	50.0	50.0	
82 Chlorobenzene	112	6.066	6.064	0.002	94	424043	50.0	51.8	
84 1,1,1,2-Tetrachloroethane	131	6.140	6.138	0.002	93	155625	50.0	52.9	
83 Ethylbenzene	91	6.150	6.149	0.001	99	722691	50.0	51.7	
85 m-Xylene & p-Xylene	91	6.256	6.254	0.002	98	580750	50.0	51.3	
87 o-Xylene	91	6.561	6.560	0.001	93	599699	50.0	50.9	
88 Styrene	104	6.572	6.581	-0.009	94	452660	50.0	52.1	
89 Bromoform	173	6.720	6.718	0.002	97	132936	50.0	53.5	
90 Isopropylbenzene	105	6.857	6.855	0.002	97	690050	50.0	52.5	
$ 92 4-Bromofluorobenzene (Surr	95	6.994	7.003	-0.009	94	219195	50.0	46.5	
93 Bromobenzene	156	7.110	7.108	0.002	93	186588	50.0	55.3	
94 1,1,2,2-Tetrachloroethane	83	7.121	7.119	0.002	98	224727	50.0	49.9	
97 trans-1,4-Dichloro-2-buten	53	7.152	7.151	0.001	86	85354	50.0	41.8	
96 1,2,3-Trichloropropane	110	7.163	7.161	0.002	97	75700	50.0	54.5	
95 N-Propylbenzene	91	7.194	7.203	-0.009	99	846346	50.0	52.5	
98 2-Chlorotoluene	91	7.268	7.267	0.001	98	505360	50.0	49.0	
99 1,3,5-Trimethylbenzene	105	7.353	7.351	0.002	92	587833	50.0	51.3	
100 4-Chlorotoluene	91	7.363	7.372	-0.009	99	599917	50.0	50.5	
103 tert-Butylbenzene	119	7.606	7.604	0.002	94	490643	50.0	52.5	
105 1,2,4-Trimethylbenzene	105	7.659	7.657	0.002	98	613133	50.0	50.7	
106 sec-Butylbenzene	105	7.796	7.794	0.002	99	709875	50.0	51.1	
108 1,3-Dichlorobenzene	146	7.880	7.878	0.002	95	347383	50.0	52.7	
107 4-Isopropyltoluene	119	7.922	7.921	0.001	98	613369	50.0	48.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 109 1,4-Dichlorobenzene-d4	152	7.954	7.952	0.002	97	221030	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.964	7.973	-0.009	92	356104	50.0	51.4	
113 n-Butylbenzene	91	8.260	8.258	0.002	98	512326	50.0	45.3	
114 1,2-Dichlorobenzene	146	8.260	8.258	0.002	79	342185	50.0	52.5	
115 1,2-Dibromo-3-Chloropropan	157	8.914	8.912	0.002	93	66038	50.0	53.0	
117 1,2,4-Trichlorobenzene	180	9.599	9.598	0.001	95	226916	50.0	49.5	
118 Hexachlorobutadiene	225	9.726	9.724	0.002	95	97165	50.0	50.7	
119 Naphthalene	128	9.810	9.809	0.001	99	636845	50.0	49.7	
120 1,2,3-Trichlorobenzene	180	10.000	9.999	0.001	95	215702	50.0	47.7	
S 122 1,2-Dichloroethene, Total	1				0		100.0	98.4	
S 123 Xylenes, Total	1				0		100.0	102.2	
S 124 1,3-Dichloropropene, Total	1				0		100.0	96.9	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

VM_MMIX_01940	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL
DOD ISTD_00167	Amount Added:	5.00	Units: uL

Report Date: 21-Dec-2018 09:47:41 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2057.D

Injection Date: 20-Dec-2018 10:20:30 Instrument ID: CMSO2 Operator ID: EA

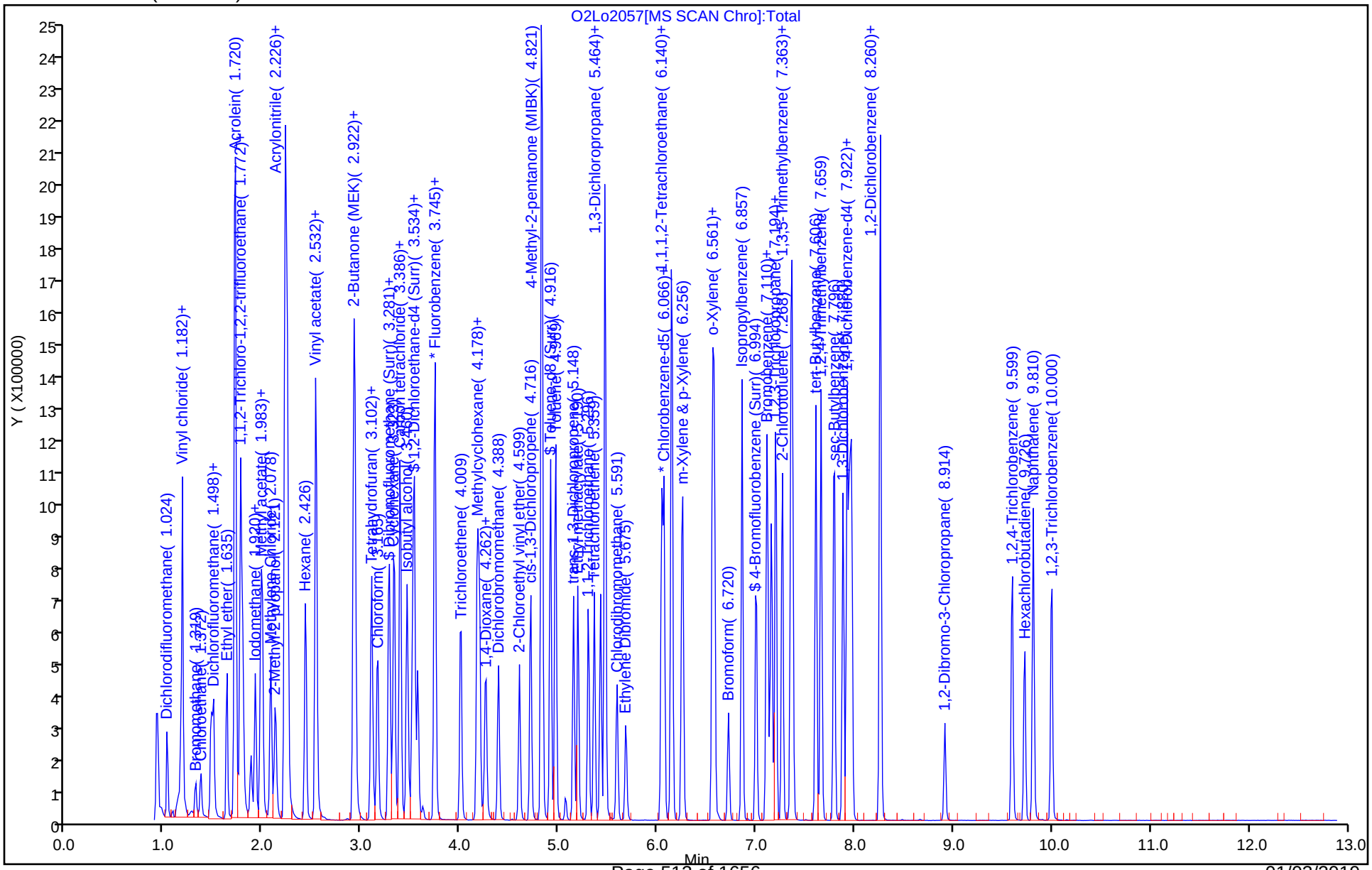
Lims ID: lcsd Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 680-552754/4

Matrix: Water | Lab File ID: AAL2157.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/21/2018 10:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552754 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	51.6		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	52.0		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	52.3		1.0	0.36
79-00-5	1,1,2-Trichloroethane	50.4		1.0	0.33
75-34-3	1,1-Dichloroethane	49.8		1.0	0.38
75-35-4	1,1-Dichloroethene	50.2		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	50.2		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	45.2		5.0	1.1
95-50-1	1,2-Dichlorobenzene	51.4		1.0	0.37
107-06-2	1,2-Dichloroethane	47.8		1.0	0.50
78-87-5	1,2-Dichloropropane	50.3		1.0	0.67
541-73-1	1,3-Dichlorobenzene	50.8		1.0	0.43
106-46-7	1,4-Dichlorobenzene	49.6		1.0	0.46
78-93-3	Methyl Ethyl Ketone	228		10	3.4
591-78-6	2-Hexanone	246		10	2.0
108-10-1	methyl isobutyl ketone	260		10	2.1
67-64-1	Acetone	245		10	7.0
71-43-2	Benzene	50.8		1.0	0.43
75-25-2	Bromoform	52.8		1.0	0.43
74-83-9	Bromomethane	40.0		5.0	2.5
75-15-0	Carbon disulfide	49.9		2.0	1.0
56-23-5	Carbon tetrachloride	52.2		1.0	0.33
108-90-7	Chlorobenzene	50.2		1.0	0.26
124-48-1	Dibromochloromethane	50.6		1.0	0.32
75-00-3	Chloroethane	44.0		5.0	2.5
67-66-3	Chloroform	50.1		1.0	0.50
74-87-3	Chloromethane	43.7		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	51.6		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	51.4		1.0	0.40
110-82-7	Cyclohexane	52.5		1.0	0.39
75-27-4	Bromodichloromethane	50.0		1.0	0.44
75-71-8	Dichlorodifluoromethane	44.5		1.0	0.60
100-41-4	Ethylbenzene	51.2		1.0	0.33
106-93-4	1,2-Dibromoethane	51.4		1.0	0.44
98-82-8	Isopropylbenzene	52.4		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 680-552754/4

Matrix: Water | Lab File ID: AAL2157.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 12/21/2018 10:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-VRX (20m) ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552754 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	94.9		5.0	1.8
1634-04-4	Methyl tert-butyl ether	46.7		10	0.30
108-87-2	Methylcyclohexane	54.8		1.0	0.43
75-09-2	Methylene Chloride	44.1		5.0	2.5
100-42-5	Styrene	53.0		1.0	0.27
127-18-4	Tetrachloroethene	50.7		1.0	0.74
108-88-3	Toluene	50.3		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	53.3		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	48.9		1.0	0.42
79-01-6	Trichloroethene	51.4		1.0	0.48
75-69-4	Trichlorofluoromethane	48.1		1.0	0.42
75-01-4	Vinyl chloride	46.6		1.0	0.50
1330-20-7	Xylenes, Total	104		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		73-131
2037-26-5	Toluene-d8 (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-122
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2157.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 21-Dec-2018 10:04:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052778-004
Operator ID: ea Instrument ID: CMSAA

Method: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\8260AQ.m
Limit Group: 8260B
Last Update: 24-Dec-2018 09:24:04 Calib Date: 18-Dec-2018 12:45:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSAA\20181218-52682.b\AAL1811.D

Column 1 : DB-VRX 20m x 0.18um x 1.0um (0.18 mm) Det: MS SCAN
Process Host: CTX0330

First Level Reviewer: manniona Date: 21-Dec-2018 10:54:43

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	3.908	3.908	0.000	100	493988	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.200	6.206	-0.006	82	188546	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.100	8.100	0.000	91	244363	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.446	3.451	-0.005	100	121043	50.0	49.8	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.712	3.712	0.000	96	110804	50.0	47.4	
$ 6 Toluene-d8 (Surr)	98	5.062	5.062	0.000	99	480559	50.0	48.8	
$ 7 4-Bromofluorobenzene (Surr	95	7.153	7.153	0.000	98	182230	50.0	48.6	
9 Dichlorodifluoromethane	85	1.089	1.094	-0.005	99	135984	50.0	44.5	
10 Vinyl chloride	62	1.252	1.252	0.000	98	135570	50.0	46.6	
12 Butadiene	54	1.257	1.257	0.000	91	123988	50.0	46.6	
11 Chloromethane	50	1.257	1.257	0.000	69	173152	50.0	43.7	
14 Bromomethane	96	1.431	1.432	-0.001	99	80881	50.0	40.0	
15 Chloroethane	64	1.480	1.481	-0.001	98	74248	50.0	44.0	
17 Dichlorofluoromethane	67	1.584	1.584	0.000	99	172718	50.0	46.6	
18 Trichlorofluoromethane	101	1.589	1.589	0.000	99	156458	50.0	48.1	
20 Ethyl ether	59	1.747	1.747	0.000	94	92519	50.0	48.8	
22 1,1,2-Trichloro-1,2,2-trif	101	1.867	1.873	-0.006	96	116486	50.0	52.3	
23 Acrolein	56	1.878	1.878	0.000	94	592942	1000.0	972.6	
24 1,1-Dichloroethene	96	1.905	1.905	0.000	92	122352	50.0	50.2	
25 Acetone	58	1.970	1.971	-0.001	90	54231	250.0	245.4	
26 Iodomethane	142	2.036	2.036	0.000	95	213690	50.0	50.0	
27 Carbon disulfide	76	2.063	2.063	0.000	98	379611	50.0	49.9	
28 3-Chloro-1-propene	76	2.150	2.150	0.000	95	84107	50.0	51.7	
29 Methyl acetate	43	2.155	2.156	-0.001	97	134903	100.0	94.9	
32 Methylene Chloride	84	2.259	2.259	0.000	84	131529	50.0	44.1	
33 2-Methyl-2-propanol	59	2.281	2.281	0.000	99	106635	500.0	478.7	
34 Methyl tert-butyl ether	73	2.373	2.373	0.000	96	310329	50.0	46.7	
36 trans-1,2-Dichloroethene	96	2.395	2.401	-0.006	89	144620	50.0	53.3	
37 Acrylonitrile	53	2.460	2.460	0.000	96	442510	500.0	499.8	
38 Hexane	57	2.520	2.520	0.000	87	163013	50.0	53.6	
42 1,1-Dichloroethane	63	2.711	2.711	0.000	99	208780	50.0	49.8	
43 Vinyl acetate	43	2.722	2.722	0.000	100	371221	100.0	93.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
47 2,2-Dichloropropane	77	3.097	3.097	0.000	92	174584	50.0	51.5	
48 cis-1,2-Dichloroethene	96	3.119	3.119	0.000	94	156329	50.0	51.6	
49 2-Butanone (MEK)	43	3.130	3.130	0.000	97	218345	250.0	227.8	
50 Tetrahydrofuran	42	3.293	3.293	0.000	78	59511	100.0	87.7	
51 Chlorobromomethane	49	3.293	3.293	0.000	77	89928	50.0	47.2	
52 Chloroform	83	3.331	3.331	0.000	99	210024	50.0	50.1	
54 Cyclohexane	56	3.429	3.429	0.000	84	209220	50.0	52.5	
55 1,1,1-Trichloroethane	97	3.440	3.440	0.000	97	181684	50.0	51.6	
57 Carbon tetrachloride	117	3.527	3.527	0.000	97	152790	50.0	52.2	
58 1,1-Dichloropropene	75	3.554	3.555	-0.001	96	165516	50.0	51.9	
60 Isobutyl alcohol	43	3.647	3.647	0.000	96	108547	1250.0	1168.3	
61 Benzene	78	3.701	3.702	-0.001	95	525960	50.0	50.8	
62 1,2-Dichloroethane	62	3.767	3.767	0.000	96	134089	50.0	47.8	
63 n-Heptane	43	3.816	3.816	0.000	85	125828	50.0	47.7	
65 Trichloroethene	132	4.164	4.164	0.000	93	149912	50.0	51.4	
66 Methylcyclohexane	83	4.251	4.251	0.000	91	231407	50.0	54.8	
67 1,2-Dichloropropane	63	4.366	4.366	0.000	94	126079	50.0	50.3	
69 1,4-Dioxane	88	4.447	4.447	0.000	89	29058	1000.0	921.0	
68 Dibromomethane	93	4.458	4.458	0.000	91	78342	50.0	49.5	
70 Dichlorobromomethane	83	4.562	4.562	0.000	99	154663	50.0	50.0	
72 2-Chloroethyl vinyl ether	63	4.790	4.790	0.000	94	58495	50.0	51.1	
73 cis-1,3-Dichloropropene	75	4.899	4.899	0.000	87	214424	50.0	51.4	
75 4-Methyl-2-pentanone (MIBK	43	5.008	5.008	0.000	92	513407	250.0	260.1	
76 Toluene	92	5.117	5.117	0.000	93	340905	50.0	50.3	
77 trans-1,3-Dichloropropene	75	5.340	5.340	0.000	97	184319	50.0	48.9	
78 Ethyl methacrylate	69	5.356	5.356	0.000	86	163532	50.0	49.2	
79 1,1,2-Trichloroethane	83	5.476	5.476	0.000	96	104410	50.0	50.4	
80 Tetrachloroethene	164	5.509	5.514	-0.005	94	128665	50.0	50.7	
81 1,3-Dichloropropane	76	5.612	5.612	0.000	89	203034	50.0	50.3	
82 2-Hexanone	43	5.650	5.650	0.000	92	349158	250.0	246.4	
85 Chlorodibromomethane	129	5.759	5.759	0.000	98	134339	50.0	50.6	
86 Ethylene Dibromide	107	5.863	5.863	0.000	98	134161	50.0	51.4	
88 Chlorobenzene	112	6.227	6.227	0.000	98	399769	50.0	50.2	
89 Ethylbenzene	91	6.287	6.287	0.000	96	624874	50.0	51.2	
90 1,1,1,2-Tetrachloroethane	131	6.293	6.298	-0.005	96	134137	50.0	51.8	
92 m-Xylene & p-Xylene	106	6.380	6.380	0.000	98	272496	50.0	51.7	
95 o-Xylene	106	6.701	6.701	0.000	95	263719	50.0	52.0	
96 Styrene	104	6.728	6.728	0.000	98	430469	50.0	53.0	
97 Bromoform	173	6.897	6.897	0.000	99	99860	50.0	52.8	
98 Isopropylbenzene	105	6.989	6.990	-0.001	94	654135	50.0	52.4	
100 Bromobenzene	156	7.272	7.273	-0.001	89	195556	50.0	51.5	
101 1,1,2,2-Tetrachloroethane	83	7.300	7.300	0.000	98	173546	50.0	52.0	
102 N-Propylbenzene	120	7.327	7.327	0.000	100	203607	50.0	52.7	
103 1,2,3-Trichloropropane	110	7.343	7.343	0.000	94	55762	50.0	52.2	
104 trans-1,4-Dichloro-2-buten	53	7.354	7.354	0.000	90	39858	50.0	43.4	
105 2-Chlorotoluene	126	7.419	7.420	-0.001	96	174965	50.0	51.0	
106 1,3,5-Trimethylbenzene	105	7.479	7.479	0.000	95	559149	50.0	51.7	
107 4-Chlorotoluene	126	7.512	7.518	-0.006	95	186119	50.0	51.5	
108 tert-Butylbenzene	119	7.730	7.730	0.000	97	506144	50.0	51.9	
109 1,2,4-Trimethylbenzene	105	7.784	7.784	0.000	95	586241	50.0	52.7	
110 sec-Butylbenzene	105	7.915	7.915	0.000	99	734283	50.0	52.4	
112 4-Isopropyltoluene	119	8.035	8.035	0.000	98	660729	50.0	52.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
111 1,3-Dichlorobenzene	146	8.040	8.040	0.000	99	375724	50.0	50.8	
113 1,4-Dichlorobenzene	146	8.122	8.122	0.000	97	390162	50.0	49.6	
115 n-Butylbenzene	91	8.377	8.378	-0.001	97	537068	50.0	52.2	
116 1,2-Dichlorobenzene	146	8.432	8.432	0.000	99	358293	50.0	51.4	
117 1,2-Dibromo-3-Chloropropan	157	9.107	9.107	0.000	88	36640	50.0	45.2	
118 1,2,4-Trichlorobenzene	180	9.766	9.766	0.000	93	185218	50.0	50.2	
119 Hexachlorobutadiene	225	9.858	9.864	-0.006	98	104076	50.0	55.1	
120 Naphthalene	128	9.972	9.978	-0.006	99	303289	50.0	53.1	
121 1,2,3-Trichlorobenzene	180	10.179	10.185	-0.006	96	92412	50.0	55.8	
S 127 1,3-Dichloropropene, Total	1				0		100.0	100.4	
S 126 Xylenes, Total	1				0		100.0	103.7	
S 125 1,2-Dichloroethene, Total	1				0		100.0	104.9	

Reagents:

DOD ISTD_00167 Amount Added: 5.00 Units: uL
VM_MMIX_01940 Amount Added: 5.00 Units: uL
VM_Acrolein_00193 Amount Added: 5.00 Units: uL

Report Date: 24-Dec-2018 09:25:29 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSAA\20181221-52778.b\AAL2157.D

Injection Date: 21-Dec-2018 10:04:30 Instrument ID: CMSAA Operator ID: ea

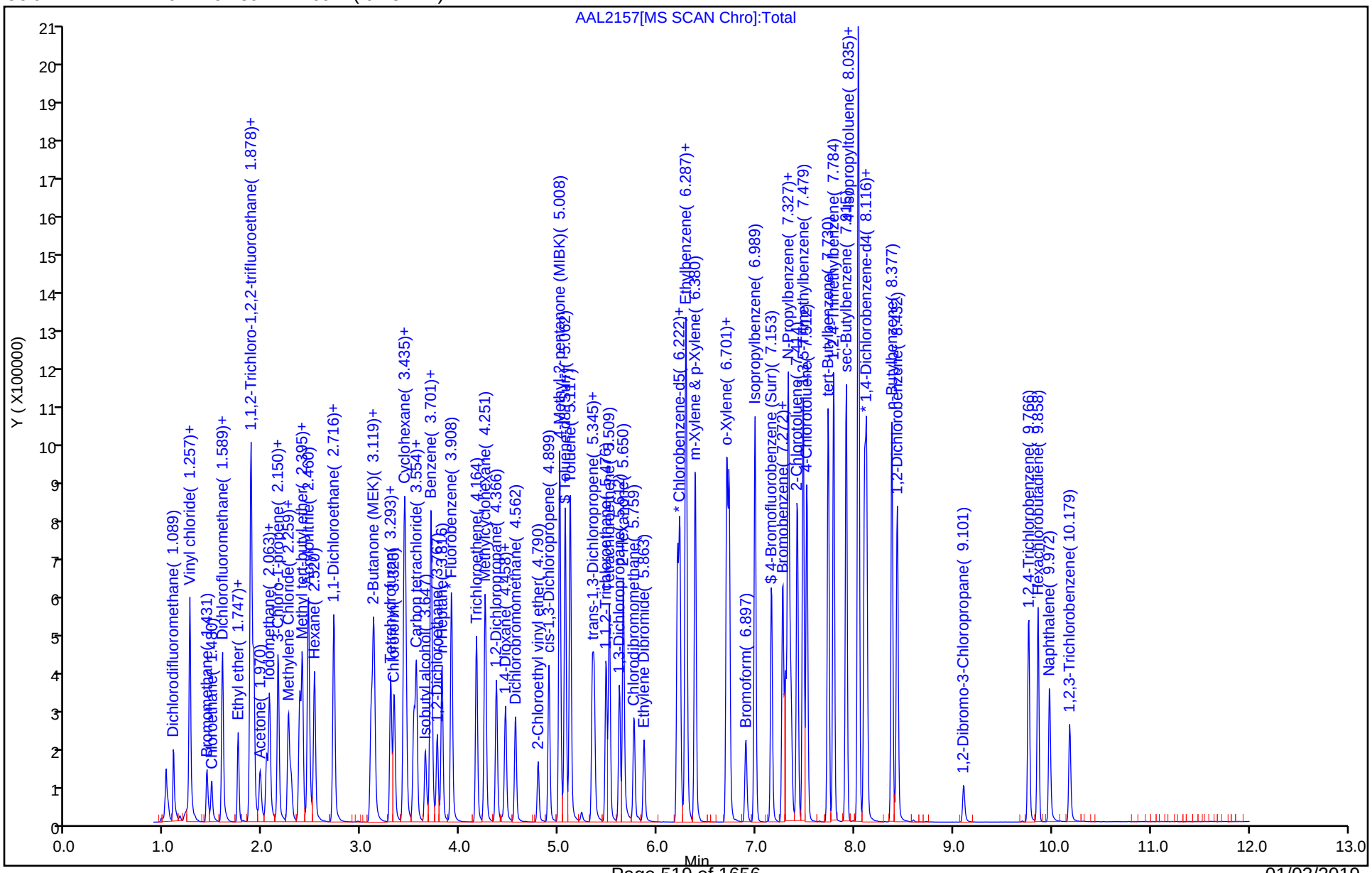
Lims ID: lcsd Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 3

Method: 8260AQ Limit Group: 8260B

Column: DB-VRX 20m x 0.18um x 1.0um (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 680-553025/5

Matrix: Water | Lab File ID: 1PL2458.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/24/2018 12:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624 MS ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 553025 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	49.2		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	51.0		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	52.2		1.0	0.36
79-00-5	1,1,2-Trichloroethane	52.1		1.0	0.33
75-34-3	1,1-Dichloroethane	48.2		1.0	0.38
75-35-4	1,1-Dichloroethene	52.0		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	51.3		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	49.5		5.0	1.1
95-50-1	1,2-Dichlorobenzene	51.1		1.0	0.37
107-06-2	1,2-Dichloroethane	49.6		1.0	0.50
78-87-5	1,2-Dichloropropane	49.9		1.0	0.67
541-73-1	1,3-Dichlorobenzene	51.0		1.0	0.43
106-46-7	1,4-Dichlorobenzene	51.6		1.0	0.46
78-93-3	Methyl Ethyl Ketone	262		10	3.4
591-78-6	2-Hexanone	238		10	2.0
108-10-1	methyl isobutyl ketone	236		10	2.1
67-64-1	Acetone	237		10	7.0
71-43-2	Benzene	50.2		1.0	0.43
75-25-2	Bromoform	45.4		1.0	0.43
74-83-9	Bromomethane	39.0		5.0	2.5
75-15-0	Carbon disulfide	48.0		2.0	1.0
56-23-5	Carbon tetrachloride	45.1		1.0	0.33
108-90-7	Chlorobenzene	51.2		1.0	0.26
124-48-1	Dibromochloromethane	49.2		1.0	0.32
75-00-3	Chloroethane	47.7		5.0	2.5
67-66-3	Chloroform	50.2		1.0	0.50
74-87-3	Chloromethane	38.0		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	48.9		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	51.3		1.0	0.40
110-82-7	Cyclohexane	46.3		1.0	0.39
75-27-4	Bromodichloromethane	48.8		1.0	0.44
75-71-8	Dichlorodifluoromethane	37.9		1.0	0.60
100-41-4	Ethylbenzene	49.8		1.0	0.33
106-93-4	1,2-Dibromoethane	52.2		1.0	0.44
98-82-8	Isopropylbenzene	51.6		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 680-553025/5

Matrix: Water | Lab File ID: 1PL2458.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 12/24/2018 12:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rxi-624 MS ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 553025 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	87.7		5.0	1.8
1634-04-4	Methyl tert-butyl ether	49.6		10	0.30
108-87-2	Methylcyclohexane	48.1		1.0	0.43
75-09-2	Methylene Chloride	50.7		5.0	2.5
100-42-5	Styrene	48.5		1.0	0.27
127-18-4	Tetrachloroethene	53.1		1.0	0.74
108-88-3	Toluene	51.6		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	53.1		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	48.0		1.0	0.42
79-01-6	Trichloroethene	52.3		1.0	0.48
75-69-4	Trichlorofluoromethane	50.3		1.0	0.42
75-01-4	Vinyl chloride	44.5		1.0	0.50
1330-20-7	Xylenes, Total	102		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		73-131
2037-26-5	Toluene-d8 (Surr)	101		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-122
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2458.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 24-Dec-2018 12:20:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052833-005
Operator ID: ea Instrument ID: CMSP2

Method: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\2014_MSP2.m
Limit Group: 8260B
Last Update: 25-Dec-2018 11:14:10 Calib Date: 07-Dec-2018 12:54:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Savannah\ChromData\CMSP2\20181207-52418.b\1PL0709.D

Column 1 : Rxi-624 Sil MS (0.18 mm) Det: MS SCAN
Process Host: CTX0312

First Level Reviewer: soparaky Date: 25-Dec-2018 11:14:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	4.199	4.199	0.000	98	728800	50.0	50.0	
* 2 Chlorobenzene-d5	82	6.510	6.510	0.000	87	306251	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	8.420	8.420	0.000	94	333626	50.0	50.0	
$ 4 Dibromofluoromethane (Surr	113	3.734	3.734	0.000	88	190524	50.0	52.0	
$ 5 1,2-Dichloroethane-d4 (Sur	65	3.998	3.998	0.000	57	231433	50.0	49.3	
$ 6 Toluene-d8 (Surr)	98	5.370	5.370	0.000	93	766155	50.0	50.5	
$ 7 4-Bromofluorobenzene (Surr	95	7.470	7.470	0.000	96	287817	50.0	47.0	
9 Dichlorodifluoromethane	85	1.212	1.212	0.000	100	220816	50.0	37.9	
10 Vinyl chloride	62	1.392	1.391	0.001	99	210366	50.0	44.5	
12 Chloromethane	50	1.402	1.413	-0.011	76	276527	50.0	38.0	
11 Butadiene	54	1.413	1.413	0.000	93	193349	50.0	46.3	
13 Bromomethane	94	1.582	1.592	-0.010	97	125280	50.0	39.0	
14 Chloroethane	64	1.645	1.645	0.000	100	136036	50.0	47.7	
15 Dichlorofluoromethane	67	1.772	1.771	0.001	97	338180	50.0	50.3	
16 Trichlorofluoromethane	101	1.782	1.782	0.000	98	312044	50.0	50.3	
19 Ethyl ether	59	1.961	1.961	0.000	93	157697	50.0	50.9	
22 1,1,2-Trichloro-1,2,2-trif	151	2.099	2.109	-0.010	47	171993	50.0	52.2	
20 Acrolein	56	2.109	2.109	0.000	97	1332589	1000.0	1443.8	
21 1,1-Dichloroethene	96	2.141	2.141	0.000	97	179186	50.0	52.0	
23 Acetone	58	2.204	2.215	-0.011	84	114850	250.0	236.9	
25 Iodomethane	142	2.278	2.278	0.000	97	232938	50.0	39.4	
26 Carbon disulfide	76	2.299	2.299	0.000	99	551481	50.0	48.0	
29 3-Chloro-1-propene	76	2.394	2.394	0.000	83	126869	50.0	47.3	
28 Methyl acetate	43	2.405	2.405	0.000	97	329119	100.0	87.7	
30 Methylene Chloride	84	2.500	2.500	0.000	92	199354	50.0	50.7	
31 2-Methyl-2-propanol	59	2.542	2.542	0.000	98	244842	500.0	464.5	
34 Methyl tert-butyl ether	73	2.637	2.637	0.000	95	590980	50.0	49.6	
33 trans-1,2-Dichloroethene	96	2.658	2.658	0.000	93	197169	50.0	53.1	
32 Acrylonitrile	53	2.721	2.721	0.000	94	904266	500.0	485.9	
35 Hexane	57	2.785	2.784	0.001	91	293296	50.0	47.9	
37 1,1-Dichloroethane	63	2.985	2.985	0.000	61	332585	50.0	48.2	
36 Vinyl acetate	43	2.985	2.985	0.000	99	865686	100.0	94.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 2,2-Dichloropropane	77	3.376	3.375	0.001	96	307458	50.0	48.0	
43 cis-1,2-Dichloroethene	61	3.397	3.397	0.000	97	308644	50.0	48.9	
41 2-Butanone (MEK)	72	3.407	3.407	0.000	99	151939	250.0	261.9	
47 Tetrahydrofuran	42	3.576	3.576	0.000	88	138366	100.0	96.2	
48 Chlorobromomethane	130	3.576	3.576	0.000	83	138174	50.0	50.0	
49 Chloroform	83	3.608	3.608	0.000	98	343658	50.0	50.2	
51 Cyclohexane	84	3.713	3.713	0.000	91	300998	50.0	46.3	
50 1,1,1-Trichloroethane	97	3.724	3.724	0.000	94	301919	50.0	49.2	
52 Carbon tetrachloride	117	3.819	3.819	0.000	99	245846	50.0	45.1	
53 1,1-Dichloropropene	75	3.840	3.840	0.000	93	266048	50.0	50.1	
54 Isobutyl alcohol	43	3.914	3.914	0.000	98	246883	1250.0	1070.3	
55 Benzene	78	3.988	3.987	0.001	97	795224	50.0	50.2	
57 1,2-Dichloroethane	62	4.051	4.051	0.000	74	272451	50.0	49.6	
60 n-Heptane	43	4.104	4.104	0.000	88	297804	50.0	43.7	
62 Trichloroethene	132	4.463	4.462	0.000	94	219809	50.0	52.3	
64 Methylcyclohexane	83	4.547	4.547	0.000	96	377584	50.0	48.1	
65 1,2-Dichloropropane	63	4.663	4.663	0.000	87	194991	50.0	49.9	
68 1,4-Dioxane	88	4.747	4.747	0.000	54	73797	1000.0	1106.1	
67 Dibromomethane	93	4.758	4.758	0.000	87	125795	50.0	49.4	
69 Dichlorobromomethane	83	4.853	4.853	0.000	99	263727	50.0	48.8	
71 2-Chloroethyl vinyl ether	63	5.085	5.085	0.000	94	139961	50.0	49.0	
72 cis-1,3-Dichloropropene	75	5.191	5.201	-0.010	97	324619	50.0	51.3	
73 4-Methyl-2-pentanone (MIBK	43	5.307	5.307	0.000	95	1093316	250.0	235.8	
74 Toluene	92	5.412	5.423	-0.011	85	520479	50.0	51.6	
75 trans-1,3-Dichloropropene	75	5.634	5.634	0.000	94	293798	50.0	48.0	
76 Ethyl methacrylate	69	5.644	5.655	-0.011	83	258887	50.0	48.2	
77 1,1,2-Trichloroethane	83	5.782	5.781	0.001	93	158897	50.0	52.1	
78 Tetrachloroethene	164	5.813	5.813	0.000	90	207577	50.0	53.1	
79 1,3-Dichloropropane	76	5.919	5.919	0.000	93	305335	50.0	51.3	
80 2-Hexanone	43	5.950	5.950	0.000	95	800176	250.0	238.2	
82 Chlorodibromomethane	129	6.067	6.066	0.001	94	209059	50.0	49.2	
83 Ethylene Dibromide	107	6.172	6.172	0.000	99	198751	50.0	52.2	
85 Chlorobenzene	112	6.531	6.541	-0.010	92	592132	50.0	51.2	
87 Ethylbenzene	91	6.594	6.594	0.000	97	1010019	50.0	49.8	
86 1,1,1,2-Tetrachloroethane	131	6.605	6.605	0.000	56	207645	50.0	48.9	
88 m-Xylene & p-Xylene	91	6.689	6.689	0.000	98	794760	50.0	50.5	
89 o-Xylene	91	7.016	7.016	0.000	93	823550	50.0	51.3	
90 Styrene	104	7.037	7.037	0.000	96	631024	50.0	48.5	
91 Bromoform	173	7.206	7.206	0.000	97	154615	50.0	45.4	
92 Isopropylbenzene	105	7.301	7.301	0.000	96	1063731	50.0	51.6	
94 Bromobenzene	156	7.586	7.586	0.000	92	286476	50.0	52.8	
95 1,1,2,2-Tetrachloroethane	83	7.607	7.607	0.000	95	258263	50.0	51.0	
98 N-Propylbenzene	91	7.639	7.639	0.000	92	1256207	50.0	50.9	
97 1,2,3-Trichloropropane	110	7.649	7.649	0.000	54	85891	50.0	51.9	
96 trans-1,4-Dichloro-2-buten	53	7.660	7.660	0.000	46	88656	50.0	48.1	
99 2-Chlorotoluene	91	7.734	7.734	0.000	96	705497	50.0	50.7	
101 1,3,5-Trimethylbenzene	105	7.787	7.787	0.000	78	901544	50.0	51.5	
102 4-Chlorotoluene	91	7.829	7.829	0.000	88	738967	50.0	50.8	
103 tert-Butylbenzene	119	8.050	8.050	0.000	91	813461	50.0	51.1	
105 1,2,4-Trimethylbenzene	105	8.103	8.103	0.000	70	914536	50.0	50.8	
106 sec-Butylbenzene	105	8.230	8.230	0.000	99	1213089	50.0	51.5	
108 4-Isopropyltoluene	119	8.357	8.356	0.001	94	1072878	50.0	50.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 1,3-Dichlorobenzene	146	8.357	8.356	0.001	71	546779	50.0	51.0	
109 1,4-Dichlorobenzene	146	8.441	8.441	0.000	96	551685	50.0	51.6	
112 n-Butylbenzene	91	8.694	8.694	0.000	97	947263	50.0	48.5	
113 1,2-Dichlorobenzene	146	8.758	8.757	0.001	94	505558	50.0	51.1	
114 1,2-Dibromo-3-Chloropropan	157	9.433	9.433	0.000	85	76699	50.0	49.5	
116 1,2,4-Trichlorobenzene	180	10.098	10.098	0.000	92	404029	50.0	51.3	
117 Hexachlorobutadiene	225	10.193	10.193	0.000	98	222162	50.0	51.1	
118 Naphthalene	128	10.309	10.309	0.000	99	975729	50.0	51.6	
119 1,2,3-Trichlorobenzene	180	10.509	10.509	0.000	96	374526	50.0	52.4	
S 122 1,3-Dichloropropene, Total	1				0		100.0	99.3	
S 123 1,2-Dichloroethene, Total	1				0		100.0	101.9	
S 124 Xylenes, Total	1				0		100.0	101.8	

Reagents:

VM_MMIX_01940 Amount Added: 5.00 Units: uL
VM_Acrolein_00193 Amount Added: 5.00 Units: uL
DOD ISTD_00167 Amount Added: 5.00 Units: uL

Report Date: 25-Dec-2018 11:14:54 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSP2\20181224-52833.b\1PL2458.D

Injection Date: 24-Dec-2018 12:20:30 Instrument ID: CMSP2 Operator ID: ea

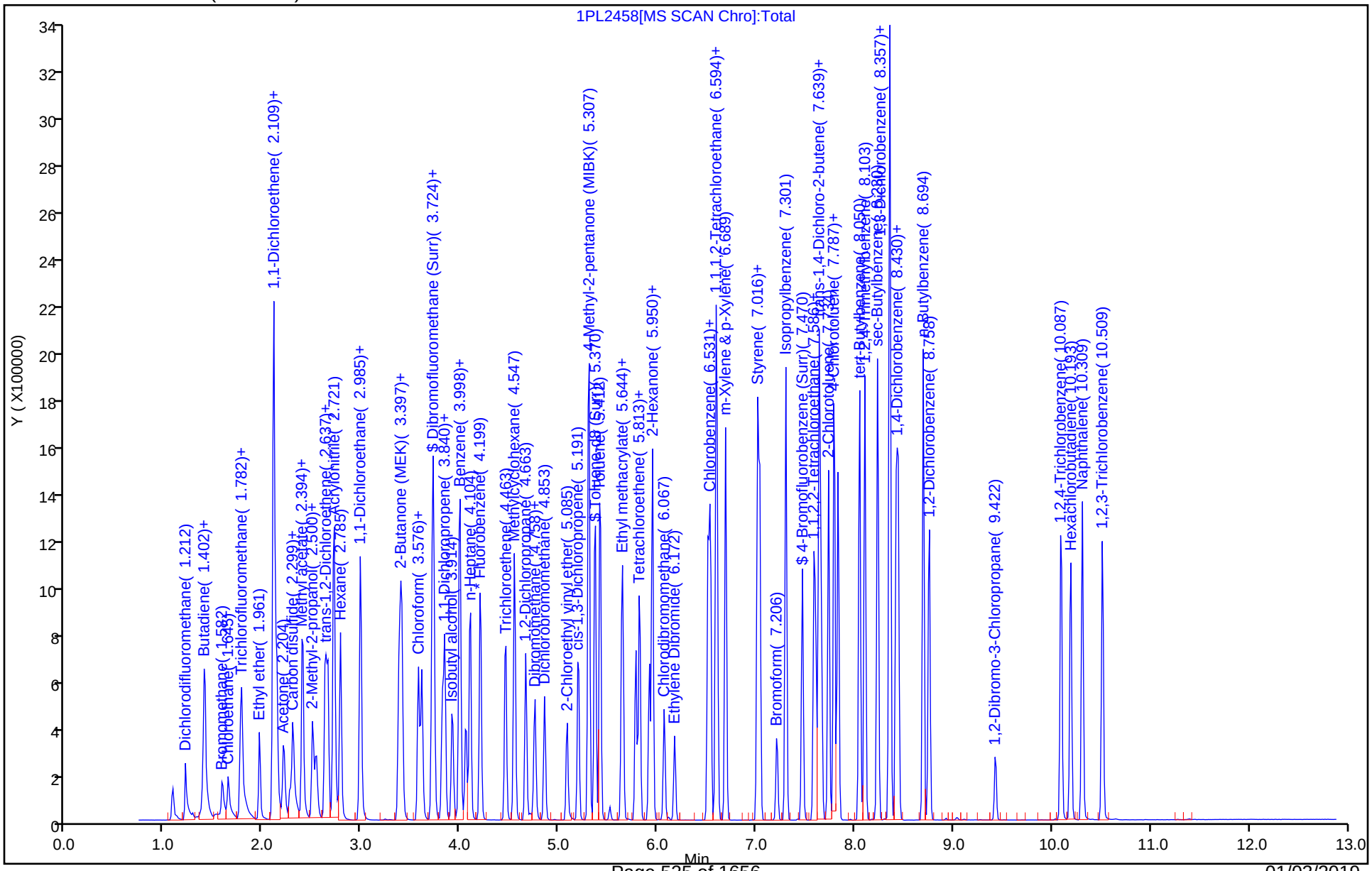
Lims ID: lcsd Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 2014_MSP2 Limit Group: 8260B

Column: Rxi-624 Sil MS (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-22R MS | Lab Sample ID: 680-162184-8 MS

Matrix: Water | Lab File ID: O2Lo2080.D

Analysis Method: 8260B | Date Collected: 12/12/2018 10:43

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 19:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	55.7		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	48.6		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	61.0		1.0	0.36
79-00-5	1,1,2-Trichloroethane	47.6		1.0	0.33
75-34-3	1,1-Dichloroethane	50.7		1.0	0.38
75-35-4	1,1-Dichloroethene	54.0		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	42.4		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	50.0		5.0	1.1
95-50-1	1,2-Dichlorobenzene	46.4		1.0	0.37
107-06-2	1,2-Dichloroethane	50.6		1.0	0.50
78-87-5	1,2-Dichloropropane	47.1		1.0	0.67
541-73-1	1,3-Dichlorobenzene	46.3		1.0	0.43
106-46-7	1,4-Dichlorobenzene	44.8		1.0	0.46
78-93-3	Methyl Ethyl Ketone	278		10	3.4
591-78-6	2-Hexanone	241		10	2.0
108-10-1	methyl isobutyl ketone	236		10	2.1
67-64-1	Acetone	256		10	7.0
71-43-2	Benzene	50.8		1.0	0.43
75-25-2	Bromoform	51.6		1.0	0.43
74-83-9	Bromomethane	20.6		5.0	2.5
75-15-0	Carbon disulfide	54.1		2.0	1.0
56-23-5	Carbon tetrachloride	60.4		1.0	0.33
108-90-7	Chlorobenzene	50.1		1.0	0.26
124-48-1	Dibromochloromethane	49.8		1.0	0.32
75-00-3	Chloroethane	61.2		5.0	2.5
67-66-3	Chloroform	50.6		1.0	0.50
74-87-3	Chloromethane	53.3		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	46.2		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	46.0		1.0	0.40
110-82-7	Cyclohexane	57.3		1.0	0.39
75-27-4	Bromodichloromethane	50.7		1.0	0.44
75-71-8	Dichlorodifluoromethane	65.4		1.0	0.60
100-41-4	Ethylbenzene	51.5		1.0	0.33
106-93-4	1,2-Dibromoethane	50.5		1.0	0.44
98-82-8	Isopropylbenzene	51.7		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-22R MS | Lab Sample ID: 680-162184-8 MS

Matrix: Water | Lab File ID: O2Lo2080.D

Analysis Method: 8260B | Date Collected: 12/12/2018 10:43

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 19:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	88.1		5.0	1.8
1634-04-4	Methyl tert-butyl ether	48.1		10	0.30
108-87-2	Methylcyclohexane	54.8		1.0	0.43
75-09-2	Methylene Chloride	45.1		5.0	2.5
100-42-5	Styrene	53.6		1.0	0.27
127-18-4	Tetrachloroethene	57.0		1.0	0.74
108-88-3	Toluene	50.3		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	51.9		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	47.3		1.0	0.42
79-01-6	Trichloroethene	48.4		1.0	0.48
75-69-4	Trichlorofluoromethane	64.9		1.0	0.42
75-01-4	Vinyl chloride	59.0		1.0	0.50
1330-20-7	Xylenes, Total	99.7		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		73-131
2037-26-5	Toluene-d8 (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-122
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2080.D
Lims ID: 680-162184-A-8 MS
Client ID: MW-22R
Sample Type: MS
Inject. Date: 20-Dec-2018 19:22:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052745-027
Operator ID: EA Instrument ID: CMSO2

Method: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 21-Dec-2018 10:02:33 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: soparaky Date: 21-Dec-2018 10:02:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.023	1.022	0.001	99	196157	50.0	65.4	
2 Vinyl chloride	62	1.171	1.170	0.001	99	173626	50.0	59.0	
4 Chloromethane	50	1.182	1.180	0.002	61	311748	50.0	53.3	
3 Butadiene	54	1.182	1.180	0.002	94	213140	50.0	62.4	
5 Bromomethane	94	1.319	1.319	0.002	97	31719	50.0	20.6	EM
6 Chloroethane	64	1.372	1.370	0.002	97	83998	50.0	61.2	
7 Dichlorofluoromethane	67	1.477	1.476	0.001	98	226487	50.0	55.1	
8 Trichlorofluoromethane	101	1.498	1.497	0.001	99	223836	50.0	64.9	
10 Ethanol	45	1.635	1.568	0.067	76	138753		NC	
11 Ethyl ether	59	1.635	1.634	0.001	92	157693	50.0	50.1	
13 Acrolein	56	1.720	1.718	0.002	97	973352	1000.0	1033.2	
9 Furan	68	1.498	1.728	-0.230	53	13886		NC	
12 1,1,2-Trichloro-1,2,2-trif	151	1.772	1.771	0.001	94	124246	50.0	61.0	
14 1,1-Dichloroethene	96	1.772	1.771	0.001	96	139406	50.0	54.0	
15 Acetone	58	1.794	1.792	0.002	84	125537	250.0	255.9	
16 Isopropyl alcohol	45	1.867	1.854	0.013	36	36592		NC	
17 Iodomethane	142	1.878	1.876	0.002	98	126033	50.0	31.7	
18 Carbon disulfide	76	1.920	1.919	0.001	100	438299	50.0	54.1	
20 Methyl acetate	43	1.973	1.971	0.002	98	410190	100.0	88.1	
21 Acetonitrile	41	1.994	1.991	0.003	77	329499		NC	
19 3-Chloro-1-propene	76	1.994	1.992	0.002	89	97445	50.0	52.1	
22 Methylene Chloride	84	2.078	2.077	0.001	95	142553	50.0	45.1	
23 2-Methyl-2-propanol	59	2.131	2.119	0.012	98	310137	500.0	507.5	
26 Acrylonitrile	53	2.226	2.224	0.002	96	1141965	500.0	506.3	
24 Methyl tert-butyl ether	73	2.247	2.235	0.012	96	511180	50.0	48.1	
25 trans-1,2-Dichloroethene	96	2.247	2.246	0.001	98	158009	50.0	51.9	
27 Hexane	57	2.437	2.425	0.012	94	220137	50.0	47.7	
30 Vinyl acetate	43	2.532	2.530	0.002	100	1070447	100.0	91.6	
29 1,1-Dichloroethane	63	2.542	2.541	0.001	99	298733	50.0	50.7	
28 Isopropyl ether	45	2.532	2.560	-0.028	32	8044		NC	
36 2-Butanone (MEK)	72	2.922	2.910	0.012	98	154302	250.0	278.1	
34 cis-1,2-Dichloroethene	61	2.933	2.921	0.012	91	281132	50.0	46.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 2,2-Dichloropropane	77	2.933	2.931	0.002	96	213277	50.0	46.8	
35 Ethyl acetate	43	2.922	2.951	-0.029	93	827625		NC	
37 Propionitrile	54	2.922	2.972	-0.050	31	1555		NC	
39 Chlorobromomethane	130	3.102	3.100	0.002	98	92896	50.0	49.8	
38 Tetrahydrofuran	42	3.102	3.100	0.002	93	208452	100.0	87.9	
41 Chloroform	83	3.165	3.163	0.002	96	280521	50.0	50.6	
$ 44 Dibromofluoromethane (Surr	113	3.270	3.269	0.001	97	154012	50.0	51.4	
43 1,1,1-Trichloroethane	97	3.281	3.279	0.002	99	262210	50.0	55.7	
42 Cyclohexane	84	3.334	3.332	0.002	98	234140	50.0	57.3	
45 Carbon tetrachloride	117	3.386	3.385	0.001	94	228239	50.0	60.4	
46 1,1-Dichloropropene	75	3.397	3.385	0.012	92	211218	50.0	54.2	
47 Isobutyl alcohol	43	3.460	3.459	0.001	97	362808	1250.0	1094.9	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.513	3.511	0.002	98	203757	50.0	48.4	
50 Benzene	78	3.534	3.532	0.002	98	599371	50.0	50.8	
49 t-Amyl alcohol	59	3.523	3.541	-0.019	31	762		NC	
53 1,2-Dichloroethane	62	3.566	3.564	0.002	97	254615	50.0	50.6	
54 n-Heptane	43	3.745	3.733	0.012	94	204432	50.0	39.0	
* 55 Fluorobenzene	96	3.745	3.743	0.002	98	548931	50.0	50.0	
57 Trichloroethene	132	4.009	4.007	0.002	98	152802	50.0	48.4	
58 Ethyl acrylate	55	4.177	4.080	0.097	93	236668		NC	
59 Methylcyclohexane	83	4.177	4.176	0.001	91	242999	50.0	54.8	
60 1,2-Dichloropropane	63	4.199	4.197	0.002	86	161108	50.0	47.1	
61 Methyl methacrylate	69	4.241	4.249	-0.008	44	5618		NC	
62 1,4-Dioxane	88	4.251	4.250	0.001	93	63704	1000.0	1102.6	
63 Dibromomethane	93	4.262	4.260	0.002	98	110338	50.0	53.1	
64 Dichlorobromomethane	83	4.388	4.387	0.001	98	221381	50.0	50.7	
66 2-Nitropropane	43	4.715	4.565	0.150	15	1098		NC	
67 cis-1,3-Dichloropropene	75	4.715	4.714	0.001	97	244115	50.0	46.0	
68 4-Methyl-2-pentanone (MIBK	43	4.831	4.819	0.012	99	1449022	250.0	236.3	
$ 69 Toluene-d8 (Surr)	98	4.916	4.914	0.002	99	526422	50.0	49.7	
70 Toluene	92	4.969	4.967	0.002	93	365646	50.0	50.3	
71 trans-1,3-Dichloropropene	75	5.148	5.146	0.002	97	232195	50.0	47.3	
72 Ethyl methacrylate	69	5.190	5.189	0.001	95	230409	50.0	47.9	
73 1,1,2-Trichloroethane	83	5.296	5.294	0.002	93	117240	50.0	47.6	
74 Tetrachloroethene	164	5.359	5.356	0.002	97	118188	50.0	57.0	
75 1,3-Dichloropropane	76	5.422	5.421	0.001	98	243337	50.0	48.2	
76 2-Hexanone	43	5.464	5.464	0.001	99	1049630	250.0	241.3	
78 Chlorodibromomethane	129	5.591	5.589	0.002	98	158173	50.0	49.8	
79 Ethylene Dibromide	107	5.675	5.674	0.001	98	155974	50.0	50.5	
80 1-Chlorohexane	55	6.045	6.032	0.012	28	6392		NC	
* 81 Chlorobenzene-d5	82	6.045	6.043	0.002	88	218686	50.0	50.0	
82 Chlorobenzene	112	6.066	6.065	0.002	93	391802	50.0	50.1	
84 1,1,1,2-Tetrachloroethane	131	6.139	6.139	0.001	92	140512	50.0	50.0	
83 Ethylbenzene	91	6.150	6.147	0.001	99	688027	50.0	51.5	
85 m-Xylene & p-Xylene	91	6.256	6.253	0.002	98	544363	50.0	50.4	
87 o-Xylene	91	6.561	6.561	0.001	92	555403	50.0	49.3	
88 Styrene	104	6.583	6.579	0.002	94	444335	50.0	53.6	
89 Bromoform	173	6.720	6.716	0.002	96	122411	50.0	51.6	
90 Isopropylbenzene	105	6.857	6.857	0.002	97	649284	50.0	51.7	
91 Cyclohexanone	55	6.857	6.939	-0.083	38	807		NC	
86 n-Butyl acrylate	55	6.994	6.993	0.001	15	636		NC	
$ 92 4-Bromofluorobenzene (Surr	95	7.004	7.003	0.001	93	216045	50.0	45.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
93 Bromobenzene	156	7.110	7.109	0.002	93	165382	50.0	51.3	
94 1,1,2,2-Tetrachloroethane	83	7.121	7.120	0.001	98	208984	50.0	48.6	
97 trans-1,4-Dichloro-2-buten	53	7.152	7.151	0.001	80	67997	50.0	34.9	
96 1,2,3-Trichloropropane	110	7.163	7.162	0.002	96	65907	50.0	49.7	
95 N-Propylbenzene	91	7.205	7.203	0.002	99	786036	50.0	51.1	
98 2-Chlorotoluene	91	7.268	7.267	0.001	97	468304	50.0	47.6	
99 1,3,5-Trimethylbenzene	105	7.353	7.352	0.002	92	547423	50.0	50.0	
100 4-Chlorotoluene	91	7.374	7.372	0.002	98	551987	50.0	48.7	
103 tert-Butylbenzene	119	7.606	7.605	0.002	93	464286	50.0	52.1	
105 1,2,4-Trimethylbenzene	105	7.658	7.657	0.001	98	565636	50.0	49.0	
106 sec-Butylbenzene	105	7.796	7.794	0.002	98	664541	50.0	50.1	
108 1,3-Dichlorobenzene	146	7.880	7.880	0.002	94	305153	50.0	46.3	
107 4-Isopropyltoluene	119	7.922	7.921	0.001	98	558869	50.0	44.5	
* 109 1,4-Dichlorobenzene-d4	152	7.954	7.952	0.002	95	221275	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.975	7.975	0.002	94	310543	50.0	44.8	
111 1,2,3-Trimethylbenzene	105	7.922	8.015	-0.094	44	20754		NC	
113 n-Butylbenzene	91	8.260	8.258	0.002	98	477938	50.0	42.2	
114 1,2-Dichlorobenzene	146	8.260	8.260	0.002	77	302846	50.0	46.4	
115 1,2-Dibromo-3-Chloropropan	157	8.914	8.910	0.002	94	62445	50.0	50.0	
117 1,2,4-Trichlorobenzene	180	9.599	9.600	0.001	94	194480	50.0	42.4	
118 Hexachlorobutadiene	225	9.726	9.725	0.002	93	77332	50.0	40.3	
119 Naphthalene	128	9.810	9.809	0.001	99	560339	50.0	43.7	
120 1,2,3-Trichlorobenzene	180	10.000	10.000	0.001	96	184259	50.0	40.7	
S 122 1,2-Dichloroethene, Total	1				0		100.0	98.1	
S 123 Xylenes, Total	1				0		100.0	99.7	
S 124 1,3-Dichloropropene, Total	1				0		100.0	93.4	
$ 127 BFB									

QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

Reagents:

VM_MMIX_01940	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL
DOD ISTD_00167	Amount Added:	5.00	Units: uL

Report Date: 21-Dec-2018 10:02:34 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2080.D

Injection Date: 20-Dec-2018 19:22:30 Instrument ID: CMSO2 Operator ID: EA

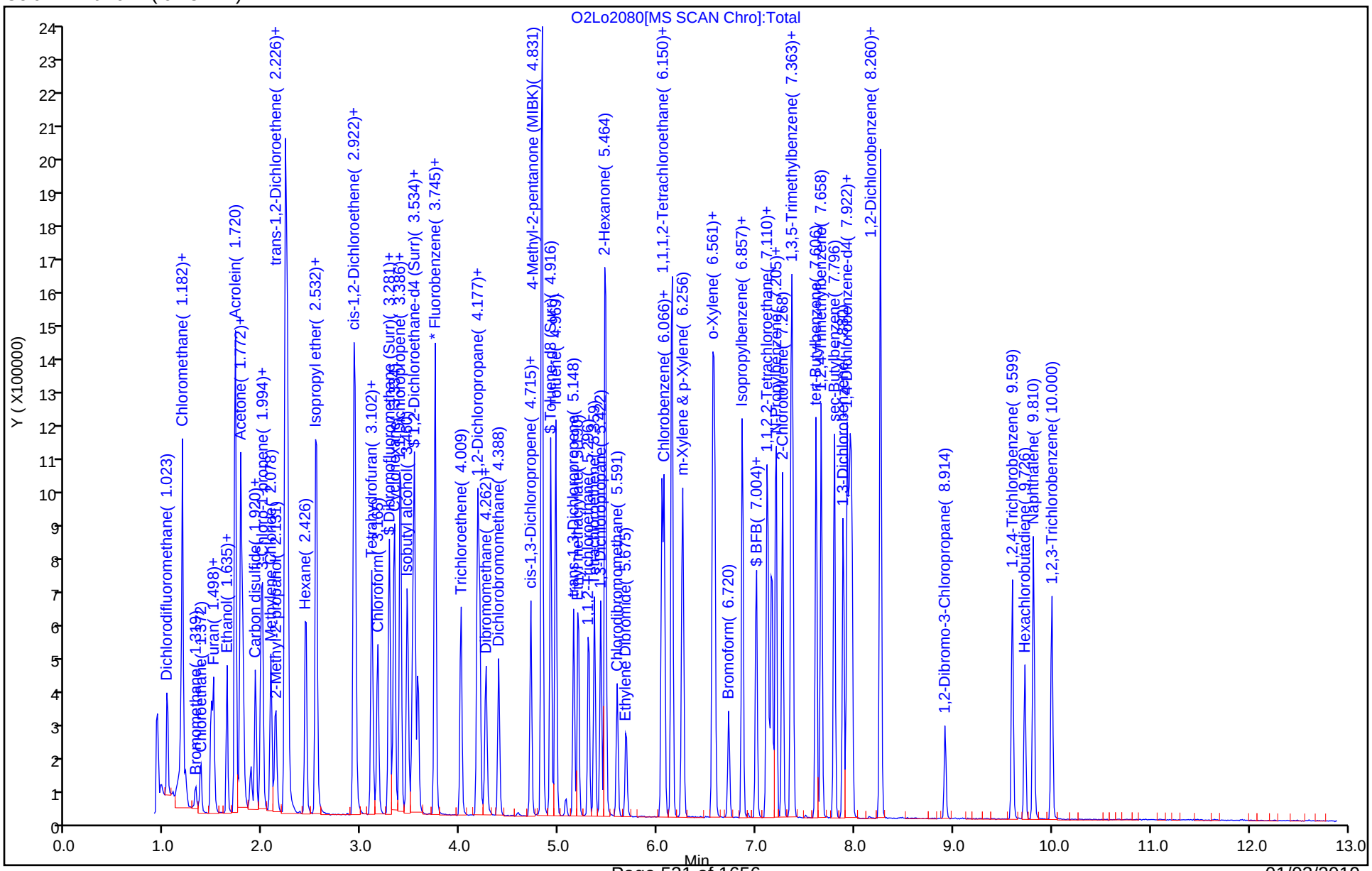
Lims ID: 680-162184-A-8 MS Worklist Smp#: 27

Client ID: MW-22R

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 26

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



Manual Integration/User Assign Peak Report

TestAmerica Savannah

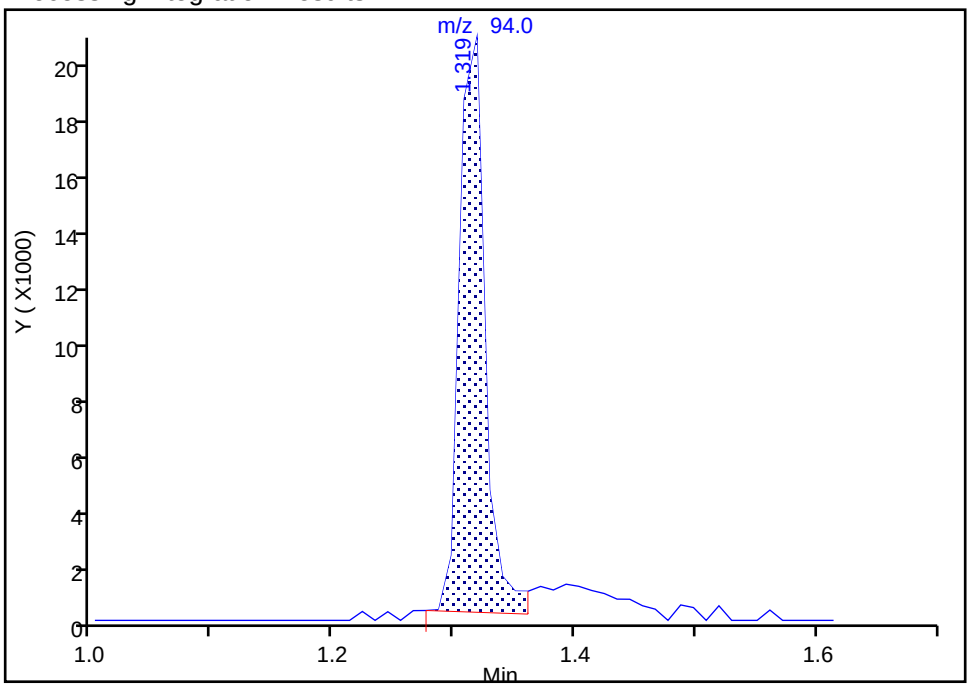
Data File:	\\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2080.D				
Injection Date:	20-Dec-2018 19:22:30	Instrument ID:	CMSO2		
Lims ID:	680-162184-A-8 MS				
Client ID:	MW-22R				
Operator ID:	EA	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	2014_MSO2	Limit Group:	8260B		
Column:	Rtx-624 (0.18 mm)	Detector	MS SCAN		

5 Bromomethane, CAS: 74-83-9

Signal: 1

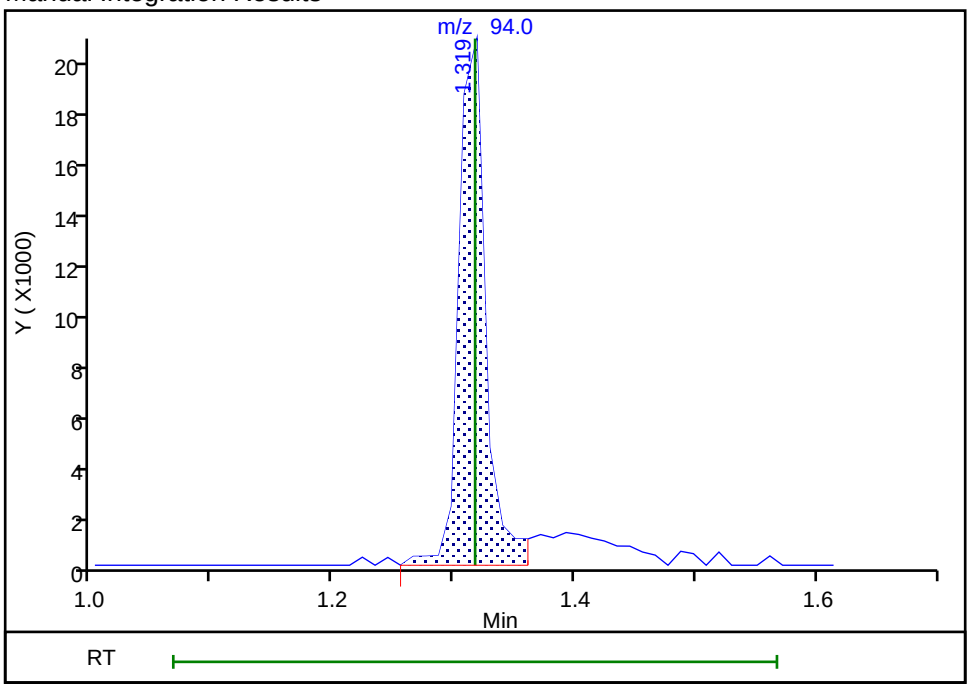
Processing Integration Results

RT: 1.32
Area: 29890
Amount: 19.424407
Amount Units: ug/l



Manual Integration Results

RT: 1.32
Area: 31719
Amount: 20.613007
Amount Units: ug/l



Reviewer: soparaky, 21-Dec-2018 10:02:29

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-22R MSD | Lab Sample ID: 680-162184-8 MSD

Matrix: Water | Lab File ID: O2Lo2081.D

Analysis Method: 8260B | Date Collected: 12/12/2018 10:43

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 19:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	55.2		1.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	48.9		1.0	0.62
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	61.7		1.0	0.36
79-00-5	1,1,2-Trichloroethane	46.9		1.0	0.33
75-34-3	1,1-Dichloroethane	49.4		1.0	0.38
75-35-4	1,1-Dichloroethene	54.7		1.0	0.36
120-82-1	1,2,4-Trichlorobenzene	47.4		5.0	2.5
96-12-8	1,2-Dibromo-3-Chloropropane	56.1		5.0	1.1
95-50-1	1,2-Dichlorobenzene	50.1		1.0	0.37
107-06-2	1,2-Dichloroethane	49.2		1.0	0.50
78-87-5	1,2-Dichloropropane	46.8		1.0	0.67
541-73-1	1,3-Dichlorobenzene	49.1		1.0	0.43
106-46-7	1,4-Dichlorobenzene	49.1		1.0	0.46
78-93-3	Methyl Ethyl Ketone	277		10	3.4
591-78-6	2-Hexanone	238		10	2.0
108-10-1	methyl isobutyl ketone	232		10	2.1
67-64-1	Acetone	261		10	7.0
71-43-2	Benzene	50.2		1.0	0.43
75-25-2	Bromoform	54.1		1.0	0.43
74-83-9	Bromomethane	26.3		5.0	2.5
75-15-0	Carbon disulfide	54.5		2.0	1.0
56-23-5	Carbon tetrachloride	60.1		1.0	0.33
108-90-7	Chlorobenzene	51.2		1.0	0.26
124-48-1	Dibromochloromethane	48.7		1.0	0.32
75-00-3	Chloroethane	59.7		5.0	2.5
67-66-3	Chloroform	49.9		1.0	0.50
74-87-3	Chloromethane	51.3		1.0	0.40
156-59-2	cis-1,2-Dichloroethene	45.5		1.0	0.41
10061-01-5	cis-1,3-Dichloropropene	44.5		1.0	0.40
110-82-7	Cyclohexane	55.9		1.0	0.39
75-27-4	Bromodichloromethane	49.3		1.0	0.44
75-71-8	Dichlorodifluoromethane	64.5		1.0	0.60
100-41-4	Ethylbenzene	52.4		1.0	0.33
106-93-4	1,2-Dibromoethane	49.9		1.0	0.44
98-82-8	Isopropylbenzene	53.3		1.0	0.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG No.:

Client Sample ID: MW-22R MSD | Lab Sample ID: 680-162184-8 MSD

Matrix: Water | Lab File ID: O2Lo2081.D

Analysis Method: 8260B | Date Collected: 12/12/2018 10:43

Sample wt/vol: 5(mL) | Date Analyzed: 12/20/2018 19:45

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: Rtx-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 552557 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	87.3		5.0	1.8
1634-04-4	Methyl tert-butyl ether	48.4		10	0.30
108-87-2	Methylcyclohexane	52.6		1.0	0.43
75-09-2	Methylene Chloride	44.7		5.0	2.5
100-42-5	Styrene	54.8		1.0	0.27
127-18-4	Tetrachloroethene	56.4		1.0	0.74
108-88-3	Toluene	49.1		1.0	0.48
156-60-5	trans-1,2-Dichloroethene	52.4		1.0	0.37
10061-02-6	trans-1,3-Dichloropropene	46.3		1.0	0.42
79-01-6	Trichloroethene	49.5		1.0	0.48
75-69-4	Trichlorofluoromethane	65.4		1.0	0.42
75-01-4	Vinyl chloride	59.0		1.0	0.50
1330-20-7	Xylenes, Total	102		1.0	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		73-131
2037-26-5	Toluene-d8 (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-122
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120

TestAmerica Savannah
Target Compound Quantitation Report

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2081.D
Lims ID: 680-162184-A-8 MSD
Client ID: MW-22R
Sample Type: MSD
Inject. Date: 20-Dec-2018 19:45:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 680-0052745-028
Operator ID: EA Instrument ID: CMSO2

Method: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\2014_MSO2.m
Limit Group: 8260B
Last Update: 21-Dec-2018 10:05:40 Calib Date: 12-Nov-2018 15:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Savannah\ChromData\CMSO2\20181112-51771.b\OK01218.D

Column 1 : Rtx-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0321

First Level Reviewer: soparaky Date: 21-Dec-2018 10:05:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.032	1.022	0.010	100	199968	50.0	64.5	
2 Vinyl chloride	62	1.169	1.170	-0.001	99	179292	50.0	59.0	
4 Chloromethane	50	1.179	1.180	-0.001	63	310341	50.0	51.3	
3 Butadiene	54	1.179	1.180	-0.001	93	206920	50.0	58.6	
5 Bromomethane	94	1.316	1.319	-0.001	98	41871	50.0	26.3	E
6 Chloroethane	64	1.369	1.370	-0.001	97	84996	50.0	59.7	
7 Dichlorofluoromethane	67	1.475	1.476	-0.001	98	226267	50.0	53.3	
8 Trichlorofluoromethane	101	1.496	1.497	-0.001	100	233046	50.0	65.4	
10 Ethanol	45	1.633	1.568	0.065	76	137749		NC	
11 Ethyl ether	59	1.633	1.634	-0.001	93	157942	50.0	48.6	
13 Acrolein	56	1.717	1.718	-0.001	97	1009375	1000.0	1037.5	
9 Furan	68	1.770	1.728	0.042	18	7732		NC	
12 1,1,2-Trichloro-1,2,2-trif	151	1.770	1.771	-0.001	95	129601	50.0	61.7	
14 1,1-Dichloroethene	96	1.770	1.771	-0.001	97	145919	50.0	54.7	
15 Acetone	58	1.791	1.792	-0.001	84	132322	250.0	261.2	
16 Isopropyl alcohol	45	1.865	1.854	0.011	29	29121		NC	
17 Iodomethane	142	1.875	1.876	-0.001	98	167260	50.0	40.7	
18 Carbon disulfide	76	1.918	1.919	-0.001	100	455859	50.0	54.5	
20 Methyl acetate	43	1.970	1.971	-0.001	98	419565	100.0	87.3	
21 Acetonitrile	41	1.991	1.991	0.000	73	329713		NC	
19 3-Chloro-1-propene	76	1.991	1.992	-0.001	88	98248	50.0	50.9	
22 Methylene Chloride	84	2.076	2.077	-0.001	98	145929	50.0	44.7	
23 2-Methyl-2-propanol	59	2.129	2.119	0.010	99	335588	500.0	531.7	
26 Acrylonitrile	53	2.224	2.224	0.000	93	1148514	500.0	493.0	
24 Methyl tert-butyl ether	73	2.245	2.235	0.010	97	531452	50.0	48.4	
25 trans-1,2-Dichloroethene	96	2.255	2.246	0.009	98	164745	50.0	52.4	
27 Hexane	57	2.435	2.425	0.010	94	218458	50.0	45.8	
30 Vinyl acetate	43	2.529	2.530	-0.001	100	1079629	100.0	89.5	
29 1,1-Dichloroethane	63	2.540	2.541	-0.001	100	300514	50.0	49.4	
28 Isopropyl ether	45	2.529	2.560	-0.031	30	8224		NC	
36 2-Butanone (MEK)	72	2.920	2.910	0.010	98	158878	250.0	277.3	
34 cis-1,2-Dichloroethene	61	2.930	2.921	0.009	92	285651	50.0	45.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 2,2-Dichloropropane	77	2.930	2.931	-0.001	97	217429	50.0	46.2	
35 Ethyl acetate	43	2.920	2.951	-0.031	93	848402		NC	
37 Propionitrile	54	2.920	2.972	-0.052	31	1574		NC	
39 Chlorobromomethane	130	3.099	3.100	-0.001	98	91525	50.0	47.5	
38 Tetrahydrofuran	42	3.099	3.100	-0.001	93	216364	100.0	88.3	
41 Chloroform	83	3.162	3.163	-0.001	96	285325	50.0	49.9	
$ 44 Dibromofluoromethane (Surr	113	3.268	3.269	-0.001	97	153316	50.0	49.5	
43 1,1,1-Trichloroethane	97	3.278	3.279	-0.001	98	268332	50.0	55.2	
42 Cyclohexane	84	3.331	3.332	-0.001	97	235934	50.0	55.9	
45 Carbon tetrachloride	117	3.394	3.385	0.009	95	234542	50.0	60.1	
46 1,1-Dichloropropene	75	3.394	3.385	0.009	89	218995	50.0	54.4	
47 Isobutyl alcohol	43	3.458	3.459	-0.001	96	395705	1250.0	1156.3	
$ 51 1,2-Dichloroethane-d4 (Sur	65	3.510	3.511	-0.001	98	202749	50.0	46.6	
50 Benzene	78	3.532	3.532	0.000	98	611957	50.0	50.2	
49 t-Amyl alcohol	59	3.458	3.541	-0.084	18	10440		NC	
53 1,2-Dichloroethane	62	3.574	3.564	0.010	97	255391	50.0	49.2	
54 n-Heptane	43	3.743	3.733	0.010	94	196720	50.0	36.3	
* 55 Fluorobenzene	96	3.743	3.743	0.000	98	566890	50.0	50.0	
57 Trichloroethene	132	4.006	4.007	-0.001	97	161458	50.0	49.5	
58 Ethyl acrylate	55	4.175	4.080	0.095	88	233299		NC	
59 Methylcyclohexane	83	4.175	4.176	-0.001	92	240969	50.0	52.6	
60 1,2-Dichloropropane	63	4.196	4.197	-0.001	91	165148	50.0	46.8	
61 Methyl methacrylate	69	4.238	4.249	-0.011	43	4606		NC	
62 1,4-Dioxane	88	4.249	4.250	-0.001	96	70273	1000.0	1177.7	
63 Dibromomethane	93	4.259	4.260	-0.001	96	111800	50.0	52.1	
64 Dichlorobromomethane	83	4.386	4.387	-0.001	98	222279	50.0	49.3	
66 2-Nitropropane	43	4.713	4.565	0.148	16	1286		NC	
67 cis-1,3-Dichloropropene	75	4.713	4.714	-0.001	97	243550	50.0	44.5	
68 4-Methyl-2-pentanone (MIBK	43	4.829	4.819	0.010	99	1466734	250.0	231.6	
$ 69 Toluene-d8 (Surr)	98	4.913	4.914	-0.001	99	531289	50.0	48.6	
70 Toluene	92	4.966	4.967	-0.001	93	368213	50.0	49.1	
71 trans-1,3-Dichloropropene	75	5.145	5.146	-0.001	97	234530	50.0	46.3	
72 Ethyl methacrylate	69	5.198	5.189	0.009	95	232905	50.0	46.9	
73 1,1,2-Trichloroethane	83	5.304	5.294	0.010	93	119190	50.0	46.9	
74 Tetrachloroethene	164	5.356	5.356	-0.001	97	120799	50.0	56.4	
75 1,3-Dichloropropane	76	5.420	5.421	-0.001	97	246939	50.0	47.3	
76 2-Hexanone	43	5.472	5.464	0.009	99	1067968	250.0	237.7	
78 Chlorodibromomethane	129	5.589	5.589	0.000	97	159814	50.0	48.7	
79 Ethylene Dibromide	107	5.683	5.674	0.009	99	159053	50.0	49.9	
80 1-Chlorohexane	55	6.042	6.032	0.009	28	5532		NC	
* 81 Chlorobenzene-d5	82	6.042	6.043	-0.001	88	220325	50.0	50.0	
82 Chlorobenzene	112	6.063	6.065	-0.001	93	403379	50.0	51.2	
84 1,1,1,2-Tetrachloroethane	131	6.137	6.139	-0.001	94	148554	50.0	52.5	
83 Ethylbenzene	91	6.148	6.147	-0.001	99	705519	50.0	52.4	
85 m-Xylene & p-Xylene	91	6.253	6.253	-0.001	98	559238	50.0	51.3	
87 o-Xylene	91	6.559	6.561	-0.001	93	568960	50.0	50.2	
88 Styrene	104	6.580	6.579	-0.001	94	457632	50.0	54.8	
89 Bromoform	173	6.717	6.716	-0.001	97	129221	50.0	54.1	
90 Isopropylbenzene	105	6.854	6.857	-0.001	97	674977	50.0	53.3	
91 Cyclohexanone	55	6.865	6.939	-0.075	1	530		NC	
86 n-Butyl acrylate	55	6.991	6.993	-0.002	15	688		NC	
$ 92 4-Bromofluorobenzene (Surr	95	7.002	7.003	-0.001	92	209897	50.0	46.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
93 Bromobenzene	156	7.108	7.109	0.000	93	174932	50.0	53.9	
94 1,1,2,2-Tetrachloroethane	83	7.118	7.120	-0.001	98	211724	50.0	48.9	
97 trans-1,4-Dichloro-2-buten	53	7.150	7.151	-0.001	81	71918	50.0	36.6	
96 1,2,3-Trichloropropane	110	7.160	7.162	-0.001	97	70383	50.0	52.7	
95 N-Propylbenzene	91	7.202	7.203	-0.001	99	793752	50.0	51.2	
98 2-Chlorotoluene	91	7.266	7.267	-0.001	97	486923	50.0	49.1	
99 1,3,5-Trimethylbenzene	105	7.350	7.352	-0.001	92	560709	50.0	50.9	
100 4-Chlorotoluene	91	7.371	7.372	-0.001	98	567039	50.0	49.6	
103 tert-Butylbenzene	119	7.603	7.605	-0.001	93	472528	50.0	52.6	
105 1,2,4-Trimethylbenzene	105	7.656	7.657	-0.001	98	574561	50.0	49.4	
106 sec-Butylbenzene	105	7.793	7.794	-0.001	99	669130	50.0	50.0	
108 1,3-Dichlorobenzene	146	7.888	7.880	0.010	97	311868	50.0	49.1	
107 4-Isopropyltoluene	119	7.920	7.921	-0.001	98	572508	50.0	47.3	
* 109 1,4-Dichlorobenzene-d4	152	7.951	7.952	-0.001	95	213134	50.0	50.0	
110 1,4-Dichlorobenzene	146	7.972	7.975	-0.001	95	328412	50.0	49.1	
111 1,2,3-Trimethylbenzene	105	7.920	8.015	-0.096	44	20736		NC	
113 n-Butylbenzene	91	8.257	8.258	-0.001	98	486569	50.0	44.6	
114 1,2-Dichlorobenzene	146	8.257	8.260	-0.001	79	314871	50.0	50.1	
115 1,2-Dibromo-3-Chloropropan	157	8.922	8.910	0.010	94	67481	50.0	56.1	
117 1,2,4-Trichlorobenzene	180	9.597	9.600	-0.001	94	209238	50.0	47.4	
118 Hexachlorobutadiene	225	9.724	9.725	0.000	94	88541	50.0	47.9	
119 Naphthalene	128	9.808	9.809	-0.001	99	598784	50.0	48.4	
120 1,2,3-Trichlorobenzene	180	9.998	10.000	-0.001	96	205379	50.0	47.1	
S 122 1,2-Dichloroethene, Total	1				0		100.0	97.8	
S 123 Xylenes, Total	1				0		100.0	101.5	
S 124 1,3-Dichloropropene, Total	1				0		100.0	90.8	
$ 127 BFB									

QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

Reagents:

VM_MMIX_01940	Amount Added:	5.00	Units: uL
VM_Acrolein_00193	Amount Added:	5.00	Units: uL
DOD ISTD_00167	Amount Added:	5.00	Units: uL

Report Date: 21-Dec-2018 10:05:41 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Savannah

Data File: \\chromna\Savannah\ChromData\CMSO2\20181220-52745.b\O2Lo2081.D

Injection Date: 20-Dec-2018 19:45:30 Instrument ID: CMSO2 Operator ID: EA

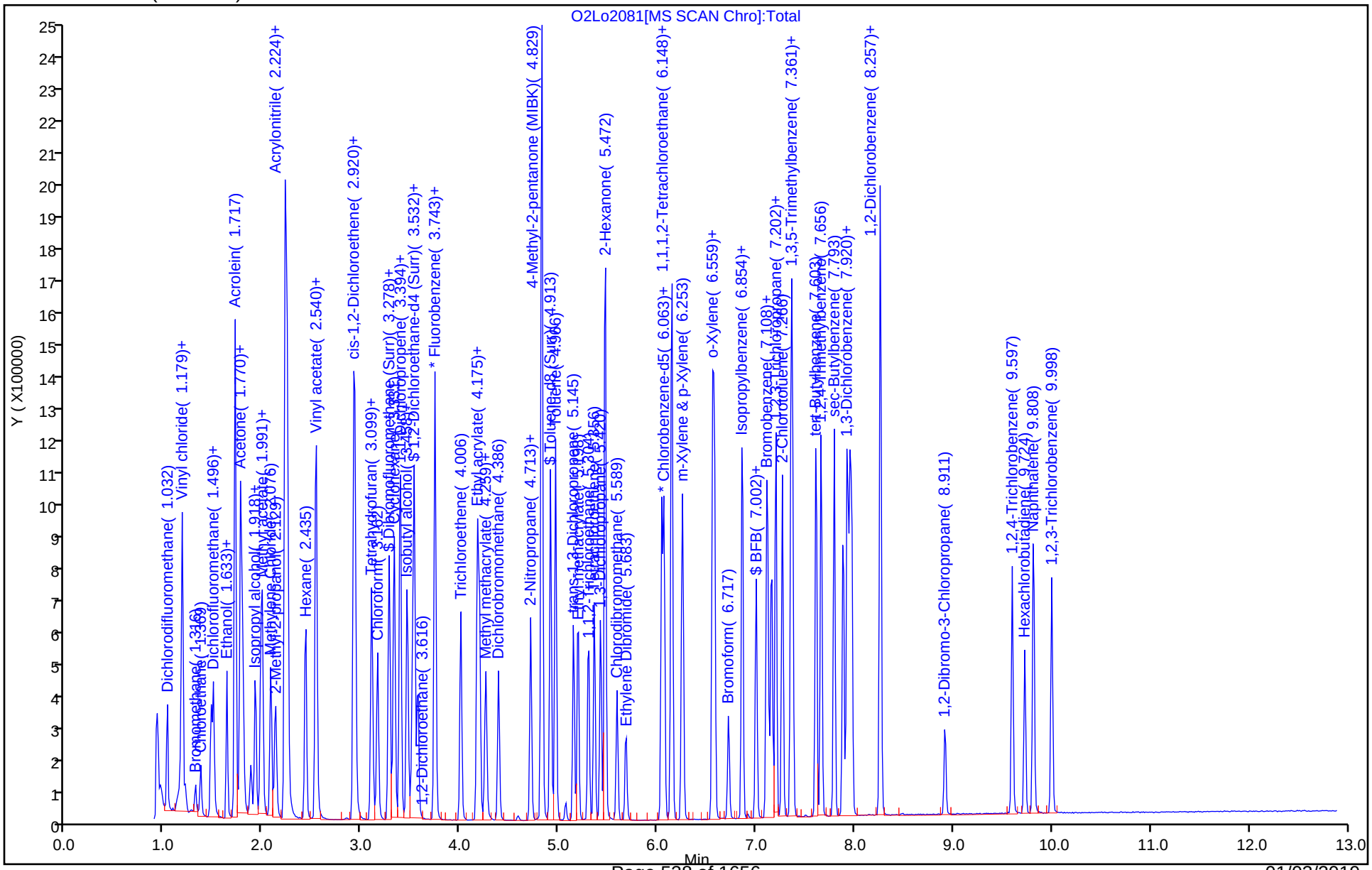
Lims ID: 680-162184-A-8 MSD Worklist Smp#: 28

Client ID: MW-22R

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 27

Method: 2014_MSO2 Limit Group: 8260B

Column: Rtx-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: CMSAA Start Date: 12/18/2018 08:27

Analysis Batch Number: 552203 End Date: 12/18/2018 13:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-552203/1		12/18/2018 08:27	1	AAL1801t.D	DB-VRX (20m) 0.18(mm)
IC 680-552203/5		12/18/2018 10:06	1	AAL1804.D	DB-VRX (20m) 0.18(mm)
IC 680-552203/6		12/18/2018 10:29	1	AAL1805.D	DB-VRX (20m) 0.18(mm)
IC 680-552203/7		12/18/2018 10:51	1	AAL1806.D	DB-VRX (20m) 0.18(mm)
IC 680-552203/8		12/18/2018 11:14	1	AAL1807.D	DB-VRX (20m) 0.18(mm)
IC 680-552203/9		12/18/2018 11:37	1	AAL1808.D	DB-VRX (20m) 0.18(mm)
ICIS 680-552203/10		12/18/2018 12:00	1	AAL1809.D	DB-VRX (20m) 0.18(mm)
IC 680-552203/11		12/18/2018 12:22	1	AAL1810.D	DB-VRX (20m) 0.18(mm)
IC 680-552203/12		12/18/2018 12:45	1	AAL1811.D	DB-VRX (20m) 0.18(mm)
ICV 680-552203/14		12/18/2018 13:30	1	AAL1813.D	DB-VRX (20m) 0.18(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: CMSAA Start Date: 12/20/2018 08:42

Analysis Batch Number: 552552 End Date: 12/20/2018 19:19

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-552552/1		12/20/2018 08:42	1	AAL2001t.D	DB-VRX (20m) 0.18(mm)
CCVIS 680-552552/2		12/20/2018 09:29	1	AAL2055.D	DB-VRX (20m) 0.18(mm)
LCS 680-552552/3		12/20/2018 09:51	1	AAL2056.D	DB-VRX (20m) 0.18(mm)
LCSD 680-552552/4		12/20/2018 10:14	1	AAL2057.D	DB-VRX (20m) 0.18(mm)
MB 680-552552/8		12/20/2018 11:45	1	AAL2061.D	DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 12:07	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 12:30	25		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 12:53	50		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 13:16	5		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 13:38	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 14:01	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 14:24	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 14:46	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 15:09	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 15:32	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 15:55	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 16:17	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 16:40	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 17:03	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 17:26	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 18:11	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/20/2018 18:34	50		DB-VRX (20m) 0.18(mm)
680-162184-5		12/20/2018 18:56	1	AAL2080.D	DB-VRX (20m) 0.18(mm)
680-162184-6		12/20/2018 19:19	1	AAL2081.D	DB-VRX (20m) 0.18(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: CMSAA Start Date: 12/21/2018 08:35

Analysis Batch Number: 552754 End Date: 12/21/2018 19:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-552754/1		12/21/2018 08:35	1	AAL2101t.D	DB-VRX (20m) 0.18(mm)
CCVIS 680-552754/2		12/21/2018 09:19	1	AAL2155.D	DB-VRX (20m) 0.18(mm)
LCS 680-552754/3		12/21/2018 09:41	1	AAL2156.D	DB-VRX (20m) 0.18(mm)
LCSD 680-552754/4		12/21/2018 10:04	1	AAL2157.D	DB-VRX (20m) 0.18(mm)
MB 680-552754/8		12/21/2018 11:35	1	AAL2161.D	DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 11:58	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 12:20	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 12:43	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 13:06	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 13:29	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 13:51	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 14:14	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 14:37	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 14:59	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 15:22	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 15:45	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 16:08	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 16:31	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 16:53	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 17:16	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 17:39	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 18:01	1		DB-VRX (20m) 0.18(mm)
ZZZZZ		12/21/2018 18:47	10		DB-VRX (20m) 0.18(mm)
680-162184-1		12/21/2018 19:10	100	AAL2181.D	DB-VRX (20m) 0.18(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: CMSO2 Start Date: 11/12/2018 10:02

Analysis Batch Number: 547166 End Date: 11/12/2018 21:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-547166/1		11/12/2018 10:02	1	OK01201T.D	Rtx-624 0.18(mm)
IC 680-547166/5		11/12/2018 12:50	1	OK01211.D	Rtx-624 0.18(mm)
IC 680-547166/6		11/12/2018 13:14	1	OK01212.D	Rtx-624 0.18(mm)
IC 680-547166/7		11/12/2018 13:37	1	OK01213.D	Rtx-624 0.18(mm)
IC 680-547166/8		11/12/2018 14:01	1	OK01214.D	Rtx-624 0.18(mm)
IC 680-547166/9		11/12/2018 14:24	1	OK01215.D	Rtx-624 0.18(mm)
ICIS 680-547166/10		11/12/2018 14:47	1	OK01216.D	Rtx-624 0.18(mm)
IC 680-547166/11		11/12/2018 15:11	1	OK01217.D	Rtx-624 0.18(mm)
IC 680-547166/12		11/12/2018 15:35	1	OK01218.D	Rtx-624 0.18(mm)
ICV 680-547166/14		11/12/2018 16:21	1	OK01220.D	Rtx-624 0.18(mm)
CCVIS 680-547166/15		11/12/2018 16:45	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 17:08	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 17:32	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 18:42	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 19:05	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 19:29	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 19:52	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 20:16	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 20:39	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 21:02	1		Rtx-624 0.18(mm)
ZZZZZ		11/12/2018 21:26	1		Rtx-624 0.18(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: CMSO2 Start Date: 12/20/2018 08:49

Analysis Batch Number: 552557 End Date: 12/20/2018 19:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-552557/1		12/20/2018 08:49	1	1O2L2001T.D	Rtx-624 0.18(mm)
CCVIS 680-552557/2		12/20/2018 09:32	1	O2Lo2055.D	Rtx-624 0.18(mm)
LCS 680-552557/3		12/20/2018 09:56	1	O2Lo2056.D	Rtx-624 0.18(mm)
LCSD 680-552557/4		12/20/2018 10:20	1	O2Lo2057.D	Rtx-624 0.18(mm)
MB 680-552557/8		12/20/2018 11:54	1	O2Lo2061.D	Rtx-624 0.18(mm)
680-162184-17		12/20/2018 12:17	1	O2Lo2062.D	Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 12:41	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 13:05	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 13:28	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 13:52	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 14:15	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 14:39	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 15:03	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 15:26	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 15:50	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 16:13	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 16:37	1		Rtx-624 0.18(mm)
ZZZZZ		12/20/2018 17:01	1		Rtx-624 0.18(mm)
680-162184-7		12/20/2018 17:24	1	O2Lo2075.D	Rtx-624 0.18(mm)
680-162184-8		12/20/2018 17:48	1	O2Lo2076.D	Rtx-624 0.18(mm)
680-162184-11		12/20/2018 18:11	1	O2Lo2077.D	Rtx-624 0.18(mm)
680-162184-15		12/20/2018 18:35	1	O2Lo2078.D	Rtx-624 0.18(mm)
680-162184-8 MS		12/20/2018 19:22	1	O2Lo2080.D	Rtx-624 0.18(mm)
680-162184-8 MSD		12/20/2018 19:45	1	O2Lo2081.D	Rtx-624 0.18(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: CMSP2 Start Date: 12/06/2018 13:41

Analysis Batch Number: 550348 End Date: 12/06/2018 20:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-550348/1		12/06/2018 13:41	1	PL0607T.D	Rxi-624 MS 0.18(mm)
IC 680-550348/7		12/06/2018 16:21	1	2PL0607.D	Rxi-624 MS 0.18(mm)
IC 680-550348/8		12/06/2018 16:46	1	2PL0608.D	Rxi-624 MS 0.18(mm)
IC 680-550348/9		12/06/2018 17:11	1	2PL0609.D	Rxi-624 MS 0.18(mm)
IC 680-550348/10		12/06/2018 17:35	1	2PL0610.D	Rxi-624 MS 0.18(mm)
IC 680-550348/11		12/06/2018 18:00	1	2PL0611.D	Rxi-624 MS 0.18(mm)
ICIS 680-550348/12		12/06/2018 18:24	1	2PL0612.D	Rxi-624 MS 0.18(mm)
IC 680-550348/13		12/06/2018 18:49	1	2PL0613.D	Rxi-624 MS 0.18(mm)
IC 680-550348/14		12/06/2018 19:13	1	2PL0614.D	Rxi-624 MS 0.18(mm)
ICV 680-550348/16		12/06/2018 20:02	1	2PL0616.D	Rxi-624 MS 0.18(mm)

8260B

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: CMSP2 Start Date: 12/24/2018 10:32

Analysis Batch Number: 553025 End Date: 12/24/2018 21:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 680-553025/1		12/24/2018 10:32	1	1PL2401T.D	Rxi-624 MS 0.18(mm)
CCVIS 680-553025/3		12/24/2018 11:31	1	1PL2456.D	Rxi-624 MS 0.18(mm)
LCS 680-553025/4		12/24/2018 11:56	1	1PL2457.D	Rxi-624 MS 0.18(mm)
LCSD 680-553025/5		12/24/2018 12:20	1	1PL2458.D	Rxi-624 MS 0.18(mm)
MB 680-553025/8		12/24/2018 13:34	1	1PL2461.D	Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 13:58	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 14:23	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 14:48	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 15:12	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 15:37	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 16:02	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 16:26	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 16:51	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 17:15	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 17:40	5		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 18:05	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 18:29	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 18:54	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 19:18	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 19:43	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 20:08	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 20:32	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 20:57	1		Rxi-624 MS 0.18(mm)
ZZZZZ		12/24/2018 21:21	1		Rxi-624 MS 0.18(mm)
680-162184-1 DL		12/24/2018 21:46	250	1PL2481.D	Rxi-624 MS 0.18(mm)

8260B

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 547166 Batch Start Date: 11/12/18 10:02 Batch Analyst: Kitchings, Jenna L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DOD ISTD 00163	VM_Acrolein 00189	VM_bfb 00167	VM_MMIX 01936
BFB 680-547166/1		8260B		5 mL	5 mL			2 uL	
IC 680-547166/5		8260B		5 mL	5 mL	5 uL	0.1 uL		0.1 uL
IC 680-547166/6		8260B		5 mL	5 mL	5 uL	0.2 uL		0.2 uL
IC 680-547166/7		8260B		5 mL	5 mL	5 uL	0.5 uL		0.5 uL
IC 680-547166/8		8260B		5 mL	5 mL	5 uL	1 uL		1 uL
IC 680-547166/9		8260B		5 mL	5 mL	5 uL	2 uL		2 uL
ICIS 680-547166/10		8260B		5 mL	5 mL	5 uL	5 uL		5 uL
IC 680-547166/11		8260B		5 mL	5 mL	5 uL	10 uL		10 uL
IC 680-547166/12		8260B		5 mL	5 mL	5 uL	20 uL		20 uL
ICV 680-547166/14		8260B		5 mL	5 mL	5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_MMIX SEC 00080					
BFB 680-547166/1		8260B							
IC 680-547166/5		8260B							
IC 680-547166/6		8260B							
IC 680-547166/7		8260B							
IC 680-547166/8		8260B							
IC 680-547166/9		8260B							
ICIS 680-547166/10		8260B							
IC 680-547166/11		8260B							
IC 680-547166/12		8260B							
ICV 680-547166/14		8260B		5 uL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 547166 Batch Start Date: 11/12/18 10:02 Batch Analyst: Kitchings, Jenna L

Batch Method: 8260B Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 550348 Batch Start Date: 12/06/18 13:41 Batch Analyst: Kitchings, Jenna L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DOD ISTD 00166	VM_Acrolein 00191	VM_ACROLEIN2 00110	VM_bfb 00169
BFB 680-550348/1		8260B		5 mL	5 mL				2 uL
IC 680-550348/7		8260B		5 mL	5 mL	5 uL	0.1 uL		
IC 680-550348/8		8260B		5 mL	5 mL	5 uL	0.2 uL		
IC 680-550348/9		8260B		5 mL	5 mL	5 uL	0.5 uL		
IC 680-550348/10		8260B		5 mL	5 mL	5 uL	1 uL		
IC 680-550348/11		8260B		5 mL	5 mL	5 uL	2 uL		
ICIS 680-550348/12		8260B		5 mL	5 mL	5 uL	5 uL		
IC 680-550348/13		8260B		5 mL	5 mL	5 uL	10 uL		
IC 680-550348/14		8260B		5 mL	5 mL	5 uL	20 uL		
ICV 680-550348/16		8260B		5 mL	5 mL	5 uL		5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_MMIX 01939	VM_MMIX SEC 00082				
BFB 680-550348/1		8260B							
IC 680-550348/7		8260B		0.1 uL					
IC 680-550348/8		8260B		0.2 uL					
IC 680-550348/9		8260B		0.5 uL					
IC 680-550348/10		8260B		1 uL					
IC 680-550348/11		8260B		2 uL					
ICIS 680-550348/12		8260B		5 uL					
IC 680-550348/13		8260B		10 uL					
IC 680-550348/14		8260B		20 uL					
ICV 680-550348/16		8260B			5 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 550348 Batch Start Date: 12/06/18 13:41 Batch Analyst: Kitchings, Jenna L

Batch Method: 8260B Batch End Date:

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552203 Batch Start Date: 12/18/18 08:27 Batch Analyst: Kitchings, Jenna L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DOD ISTD 00167	VM_Acrolein 00193	VM_ACROLEIN2 00111	VM_bfb 00170
BFB 680-552203/1		8260B		5 g	5 g				2 uL
IC 680-552203/5		8260B		5 g	5 g	5 uL	0.1 uL		
IC 680-552203/6		8260B		5 g	5 g	5 uL	0.2 uL		
IC 680-552203/7		8260B		5 g	5 g	5 uL	0.5 uL		
IC 680-552203/8		8260B		5 g	5 g	5 uL	1 uL		
IC 680-552203/9		8260B		5 g	5 g	5 uL	2 uL		
ICIS 680-552203/10		8260B		5 g	5 g	5 uL	5 uL		
IC 680-552203/11		8260B		5 g	5 g	5 uL	10 uL		
IC 680-552203/12		8260B		5 g	5 g	5 uL	20 uL		
ICV 680-552203/14		8260B		5 g	5 g	5 uL		5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_MMIX 01940	VM_MMIX SEC 00083				
BFB 680-552203/1		8260B							
IC 680-552203/5		8260B		0.1 uL					
IC 680-552203/6		8260B		0.2 uL					
IC 680-552203/7		8260B		0.5 uL					
IC 680-552203/8		8260B		1 uL					
IC 680-552203/9		8260B		2 uL					
ICIS 680-552203/10		8260B		5 uL					
IC 680-552203/11		8260B		10 uL					
IC 680-552203/12		8260B		20 uL					
ICV 680-552203/14		8260B			5 uL				

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552203 Batch Start Date: 12/18/18 08:27 Batch Analyst: Kitchings, Jenna L

Batch Method: 8260B Batch End Date:

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552552 Batch Start Date: 12/20/18 08:42 Batch Analyst: Kitchings, Jenna L

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DOD ISSU 00322	DOD ISTD 00167	VM_Acrolein 00193	VM_bfb 00170
BFB 680-552552/1		8260B		5 g	5 g				2 uL
CCVIS 680-552552/2		8260B		5 g	5 g		5 uL	5 uL	
LCS 680-552552/3		8260B		5 g	5 g		5 uL	5 uL	
LCSD 680-552552/4		8260B		5 g	5 g		5 uL	5 uL	
MB 680-552552/8		8260B		5 g	5 g	5 uL			
680-162184-C-5	MW-21R	8260B	T	5 g	5 g	5 uL			
680-162184-A-6	MW-21D	8260B	T	5 g	5 g	5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_MMIX 01940					
BFB 680-552552/1		8260B							
CCVIS 680-552552/2		8260B		5 uL					
LCS 680-552552/3		8260B		5 uL					
LCSD 680-552552/4		8260B		5 uL					
MB 680-552552/8		8260B							
680-162184-C-5	MW-21R	8260B	T						
680-162184-A-6	MW-21D	8260B	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552557 Batch Start Date: 12/20/18 08:49 Batch Analyst: Soparak, Yupin 1

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DOD ISSU 00322	DOD ISTD 00167	VM_Acrolein 00193	VM_bfb 00170
BFB 680-552557/1		8260B		5 mL	5 mL				2 uL
CCVIS 680-552557/2		8260B		5 mL	5 mL		5 uL	5 uL	
LCS 680-552557/3		8260B		5 mL	5 mL		5 uL	5 uL	
LCSD 680-552557/4		8260B		5 mL	5 mL		5 uL	5 uL	
MB 680-552557/8		8260B		5 mL	5 mL	5 uL			
680-162184-A-17	TRIP BLANK	8260B	T	5 mL	5 mL	5 uL			
680-162184-C-7	MW-22D	8260B	T	5 mL	5 mL	5 uL			
680-162184-C-8	MW-22R	8260B	T	5 mL	5 mL	5 uL			
680-162184-A-11	MW-25S	8260B	T	5 mL	5 mL	5 uL			
680-162184-A-15	VOCDUP_20181212	8260B	T	5 mL	5 mL	5 uL			
680-162184-A-8 MS	MW-22R	8260B	T	5 mL	5 mL		5 uL	5 uL	
680-162184-A-8 MSD	MW-22R	8260B	T	5 mL	5 mL		5 uL	5 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_MMIX 01940					
BFB 680-552557/1		8260B							
CCVIS 680-552557/2		8260B		5 uL					
LCS 680-552557/3		8260B		5 uL					
LCSD 680-552557/4		8260B		5 uL					
MB 680-552557/8		8260B							
680-162184-A-17	TRIP BLANK	8260B	T						
680-162184-C-7	MW-22D	8260B	T						
680-162184-C-8	MW-22R	8260B	T						
680-162184-A-11	MW-25S	8260B	T						
680-162184-A-15	VOCDUP_20181212	8260B	T						
680-162184-A-8 MS	MW-22R	8260B	T	5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552557 Batch Start Date: 12/20/18 08:49 Batch Analyst: Soparak, Yupin 1

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_MMIX 01940					
680-162184-A-8 MSD	MW-22R	8260B	T	5 uL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552754 Batch Start Date: 12/21/18 08:35 Batch Analyst: Soparak, Yupin 1

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DOD ISSU 00322	DOD ISTD 00167	VM_Acrolein 00193	VM_bfb 00170
BFB 680-552754/1		8260B		5 g	5 g				2 uL
CCVIS 680-552754/2		8260B		5 g	5 g		5 uL	5 uL	
LCS 680-552754/3		8260B		5 g	5 g		5 uL	5 uL	
LCSD 680-552754/4		8260B		5 g	5 g		5 uL	5 uL	
MB 680-552754/8		8260B		5 g	5 g	5 uL			
680-162184-B-1	MW-3	8260B	T	5 g	5 g	5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_MMIX 01940					
BFB 680-552754/1		8260B							
CCVIS 680-552754/2		8260B		5 uL					
LCS 680-552754/3		8260B		5 uL					
LCSD 680-552754/4		8260B		5 uL					
MB 680-552754/8		8260B							
680-162184-B-1	MW-3	8260B	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 553025 Batch Start Date: 12/24/18 10:32 Batch Analyst: Soparak, Yupin 1

Batch Method: 8260B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DOD ISSU 00322	DOD ISTD 00167	VM_Acrolein 00193	VM_bfb 00170
BFB 680-553025/1		8260B		5 mL	5 mL				2 uL
CCVIS 680-553025/3		8260B		5 mL	5 mL		5 uL	5 uL	
LCS 680-553025/4		8260B		5 mL	5 mL		5 uL	5 uL	
LCSD 680-553025/5		8260B		5 mL	5 mL		5 uL	5 uL	
MB 680-553025/8		8260B		5 mL	5 mL	5 uL			
680-162184-C-1	MW-3	8260B	T	5 mL	5 mL	5 uL			

Lab Sample ID	Client Sample ID	Method Chain	Basis	VM_MMIX 01940					
BFB 680-553025/1		8260B							
CCVIS 680-553025/3		8260B		5 uL					
LCS 680-553025/4		8260B		5 uL					
LCSD 680-553025/5		8260B		5 uL					
MB 680-553025/8		8260B							
680-162184-C-1	MW-3	8260B	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8270D SIM-ID

Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DXE #
MW-15S	680-162184-2	21
MW-16S	680-162184-4	22
MW-21R	680-162184-5	21
MW-21R RE	680-162184-5 RE	23
MW-22R	680-162184-8	25
MW-24S	680-162184-9	26
MW-25S	680-162184-11	25
MW-26S	680-162184-12	25
EQUIP BLANK	680-162184-16	24
MW-10	680-162184-19	27
MW-11D	680-162184-20	23
PFASDUP_20181211	680-162184-21	27
	MB 480-451231/1-A	25
	MB 480-452766/1-A	32
	LCS 480-451231/2-A	26
	LCS 480-452766/2-A	30
MW-15S MS	680-162184-2 MS	25
MW-15S MSD	680-162184-2 MSD	24

	QC LIMITS
DXE = 1,4-Dioxane-d8	15-110

Column to be used to flag recovery values

FORM II 8270D SIM ID

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U3314343.D

Lab ID: LCS 480-451231/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	1.00	1.47	147	40-140	E *
1,4-Dioxane-d8	10.0	2.59	26	15-110	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U3314476.D

Lab ID: LCS 480-452766/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,4-Dioxane	1.00	1.27	127	40-140	
1,4-Dioxane-d8	10.0	3.02	30	15-110	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U3314346.D

Lab ID: 680-162184-2 MS Client ID: MW-15S MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,4-Dioxane	1.00	0.20 U	1.74	174	40-140	E F1
1,4-Dioxane-d8	10.0	2.1	2.46	25	15-110	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Matrix: Water Level: Low Lab File ID: U3314347.D

Lab ID: 680-162184-2 MSD Client ID: MW-15S MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,4-Dioxane	1.00	1.35	135	25	20	40-140	E F2
1,4-Dioxane-d8	10.0	2.37	24			15-110	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM ID

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Lab File ID: U3314342.D Lab Sample ID: MB 480-451231/1-A

Matrix: Water Date Extracted: 12/17/2018 14:25

Instrument ID: HP5973U Date Analyzed: 12/18/2018 15:00

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-451231/2-A	U3314343.D	12/18/2018 15:25
MW-15S MS	680-162184-2 MS	U3314346.D	12/18/2018 16:38
MW-15S MSD	680-162184-2 MSD	U3314347.D	12/18/2018 17:02
MW-15S	680-162184-2	U3314349.D	12/18/2018 17:51
MW-16S	680-162184-4	U3314352.D	12/18/2018 19:05
MW-21R	680-162184-5	U3314353.D	12/18/2018 19:30
MW-22R	680-162184-8	U3314354.D	12/18/2018 19:54
MW-24S	680-162184-9	U3314355.D	12/18/2018 20:19
MW-25S	680-162184-11	U3314356.D	12/18/2018 20:44
MW-26S	680-162184-12	U3314357.D	12/18/2018 21:09
EQUIP BLANK	680-162184-16	U3314358.D	12/18/2018 21:33
MW-10	680-162184-19	U3314359.D	12/18/2018 21:58
MW-11D	680-162184-20	U3314360.D	12/18/2018 22:23
PFASDUP_20181211	680-162184-21	U3314361.D	12/18/2018 22:48

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Lab File ID: U3314475.D Lab Sample ID: MB 480-452766/1-A

Matrix: Water Date Extracted: 12/27/2018 15:17

Instrument ID: HP5973U Date Analyzed: 12/28/2018 16:54

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-452766/2-A	U3314476.D	12/28/2018 17:19
MW-21R RE	680-162184-5 RE	U3314482.D	12/28/2018 19:47

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Lab File ID: U3314029.D DFTPP Injection Date: 12/07/2018

Instrument ID: HP5973U DFTPP Injection Time: 15:11

Analysis Batch No.: 449428

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10-80% of Base Peak	58.1
68	Less than 2% of mass 69	0.0 (0.0) 1
69	Mass 69 Relative abundance	55.1
70	Less than 2% of mass 69	0.2 (0.4) 1
127	10-80% of Base Peak	59.1
197	Less than 2% of mass 198	0.0
198	Base peak	100.0
199	5-9% of mass 198	6.8
275	10-60% of Base Peak	26.6
365	Greater than 1% of mass 198	3.6
441	present but less than 24% of mass 442	11.8 (15.9) 2
442	Greater than 50% of mass 198	74.5
443	15-24% of mass 442	13.7 (18.4) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-449428/3	U3314030.D	12/07/2018	15:39
	IC 480-449428/4	U3314031.D	12/07/2018	16:04
	ICIS 480-449428/5	U3314032.D	12/07/2018	16:28
	IC 480-449428/6	U3314033.D	12/07/2018	16:52
	IC 480-449428/7	U3314034.D	12/07/2018	17:17
	IC 480-449428/8	U3314035.D	12/07/2018	17:41

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Lab File ID: U3314337.D DFTPP Injection Date: 12/18/2018

Instrument ID: HP5973U DFTPP Injection Time: 12:53

Analysis Batch No.: 451416

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	40.9	
68	Less than 2% of mass 69	0.0	(0.0) 1
69	Mass 69 Relative abundance	43.5	
70	Less than 2% of mass 69	0.2	(0.5) 1
127	10-80% of Base Peak	52.3	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	6.7	
275	10-60% of Base Peak	28.2	
365	Greater than 1% of mass 198	3.7	
441	present but less than 24% of mass 442	13.9	(17.1) 2
442	Greater than 50% of mass 198	81.0	
443	15-24% of mass 442	15.3	(18.8) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-451416/3	U3314338.D	12/18/2018	13:22
	MB 480-451231/1-A	U3314342.D	12/18/2018	15:00
	LCS 480-451231/2-A	U3314343.D	12/18/2018	15:25
MW-15S MS	680-162184-2 MS	U3314346.D	12/18/2018	16:38
MW-15S MSD	680-162184-2 MSD	U3314347.D	12/18/2018	17:02
MW-15S	680-162184-2	U3314349.D	12/18/2018	17:51
MW-16S	680-162184-4	U3314352.D	12/18/2018	19:05
MW-21R	680-162184-5	U3314353.D	12/18/2018	19:30
MW-22R	680-162184-8	U3314354.D	12/18/2018	19:54
MW-24S	680-162184-9	U3314355.D	12/18/2018	20:19
MW-25S	680-162184-11	U3314356.D	12/18/2018	20:44
MW-26S	680-162184-12	U3314357.D	12/18/2018	21:09
EQUIP BLANK	680-162184-16	U3314358.D	12/18/2018	21:33
MW-10	680-162184-19	U3314359.D	12/18/2018	21:58
MW-11D	680-162184-20	U3314360.D	12/18/2018	22:23
PFASDUP_20181211	680-162184-21	U3314361.D	12/18/2018	22:48

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Lab File ID: U3314468.D DFTPP Injection Date: 12/28/2018

Instrument ID: HP5973U DFTPP Injection Time: 13:55

Analysis Batch No.: 452932

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	37.7	
68	Less than 2% of mass 69	0.0	(0.0) 1
69	Mass 69 Relative abundance	40.6	
70	Less than 2% of mass 69	0.2	(0.5) 1
127	10-80% of Base Peak	50.4	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	7.1	
275	10-60% of Base Peak	30.2	
365	Greater than 1% of mass 198	4.3	
441	present but less than 24% of mass 442	16.0	(16.9) 2
442	Greater than 50% of mass 198	94.5	
443	15-24% of mass 442	18.5	(19.5) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-452932/3	U3314469.D	12/28/2018	14:24
	MB 480-452766/1-A	U3314475.D	12/28/2018	16:54
	LCS 480-452766/2-A	U3314476.D	12/28/2018	17:19
MW-21R RE	680-162184-5 RE	U3314482.D	12/28/2018	19:47

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Sample No.: ICIS 480-449428/5 Date Analyzed: 12/07/2018 16:28

Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)

Lab File ID (Standard): U3314032.D Heated Purge: (Y/N) N

Calibration ID: 35518

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		358908	5.95				
UPPER LIMIT		717816	6.45				
LOWER LIMIT		179454	5.45				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-451416/3		354380	5.94				
CCVIS 480-452932/3		261508	5.94				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D SIM ID

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Sample No.: CCVIS 480-451416/3 Date Analyzed: 12/18/2018 13:22

Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)

Lab File ID (Standard): U3314338.D Heated Purge: (Y/N) N

Calibration ID: 35518

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		354380	5.94				
UPPER LIMIT		708760	6.44				
LOWER LIMIT		177190	5.44				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 480-451231/1-A		352423	5.95				
LCS 480-451231/2-A		359855	5.95				
680-162184-2 MS	MW-15S MS	352783	5.95				
680-162184-2 MSD	MW-15S MSD	362159	5.96				
680-162184-2	MW-15S	365984	5.95				
680-162184-4	MW-16S	361232	5.95				
680-162184-5	MW-21R	338347	5.95				
680-162184-8	MW-22R	356633	5.95				
680-162184-9	MW-24S	348287	5.95				
680-162184-11	MW-25S	363625	5.95				
680-162184-12	MW-26S	340850	5.95				
680-162184-16	EQUIP BLANK	357885	5.95				
680-162184-19	MW-10	357248	5.95				
680-162184-20	MW-11D	346228	5.95				
680-162184-21	PFASDUP_20181211	339293	5.95				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D SIM ID

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Sample No.: CCVIS 480-452932/3 Date Analyzed: 12/28/2018 14:24

Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)

Lab File ID (Standard): U3314469.D Heated Purge: (Y/N) N

Calibration ID: 35518

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		261508	5.94				
UPPER LIMIT		523016	6.44				
LOWER LIMIT		130754	5.44				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 480-452766/1-A		256558	5.95				
LCS 480-452766/2-A		257605	5.95				
680-162184-5 RE	MW-21R RE	248476	5.95				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D SIM ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-15S
Lab Sample ID: 680-162184-2
Matrix: Water
Lab File ID: U3314349.D
Analysis Method: 8270D SIM ID
Date Collected: 12/11/2018 12:00
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 17:51
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U * F1 F2	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	21		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314349.D
Lims ID: 680-162184-A-2-C
Client ID: MW-15S
Sample Type: Client
Inject. Date: 18-Dec-2018 17:51:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-014
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:52:41

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.819	2.741	0.078	90	94102	2.15	21.5	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	97	365984	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

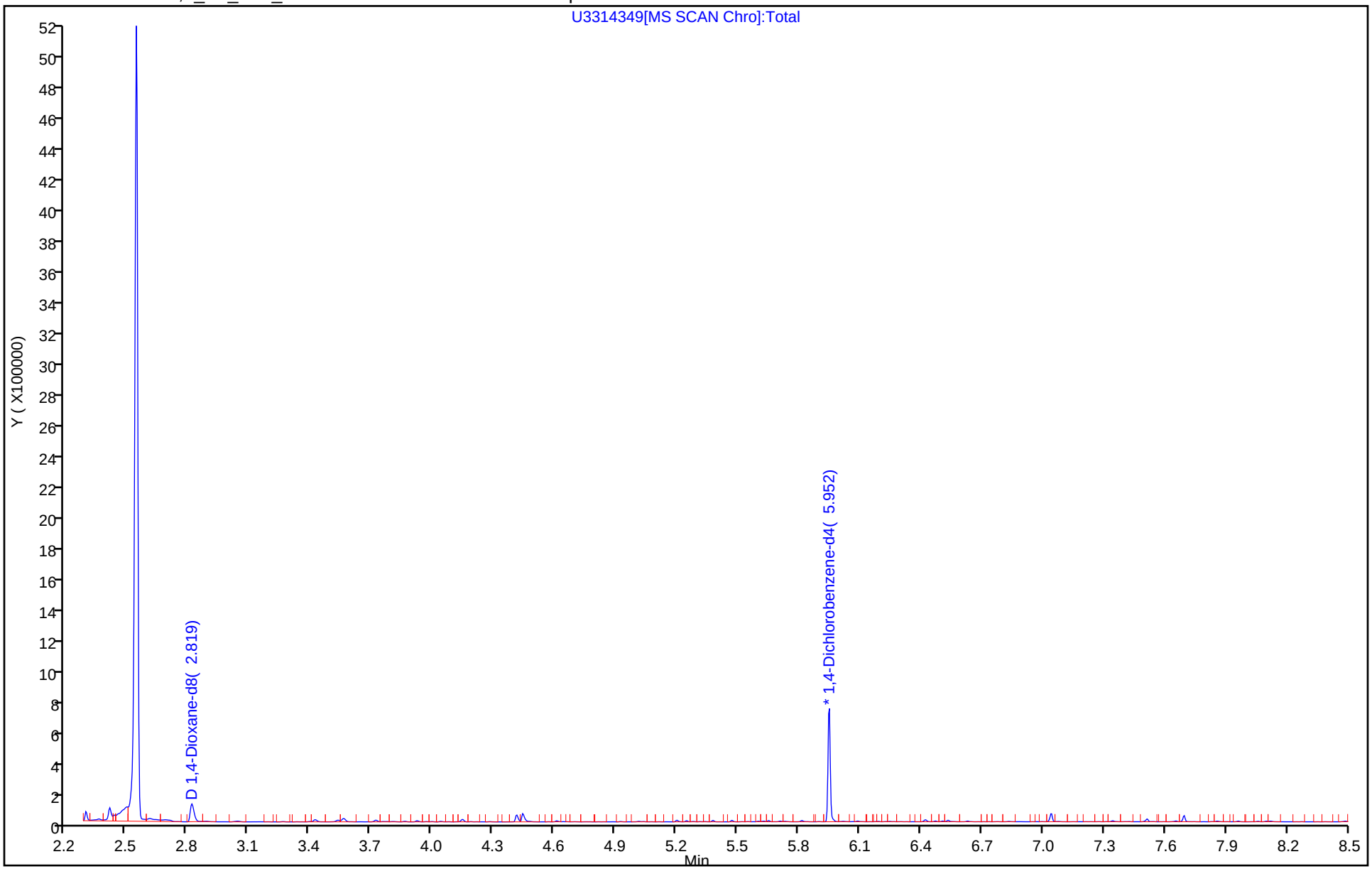
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:28 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314349.D				
Injection Date:	18-Dec-2018 17:51:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-2-C	Lab Sample ID:	480-162184-2	Worklist Smp#:	14
Client ID:	MW-15S				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

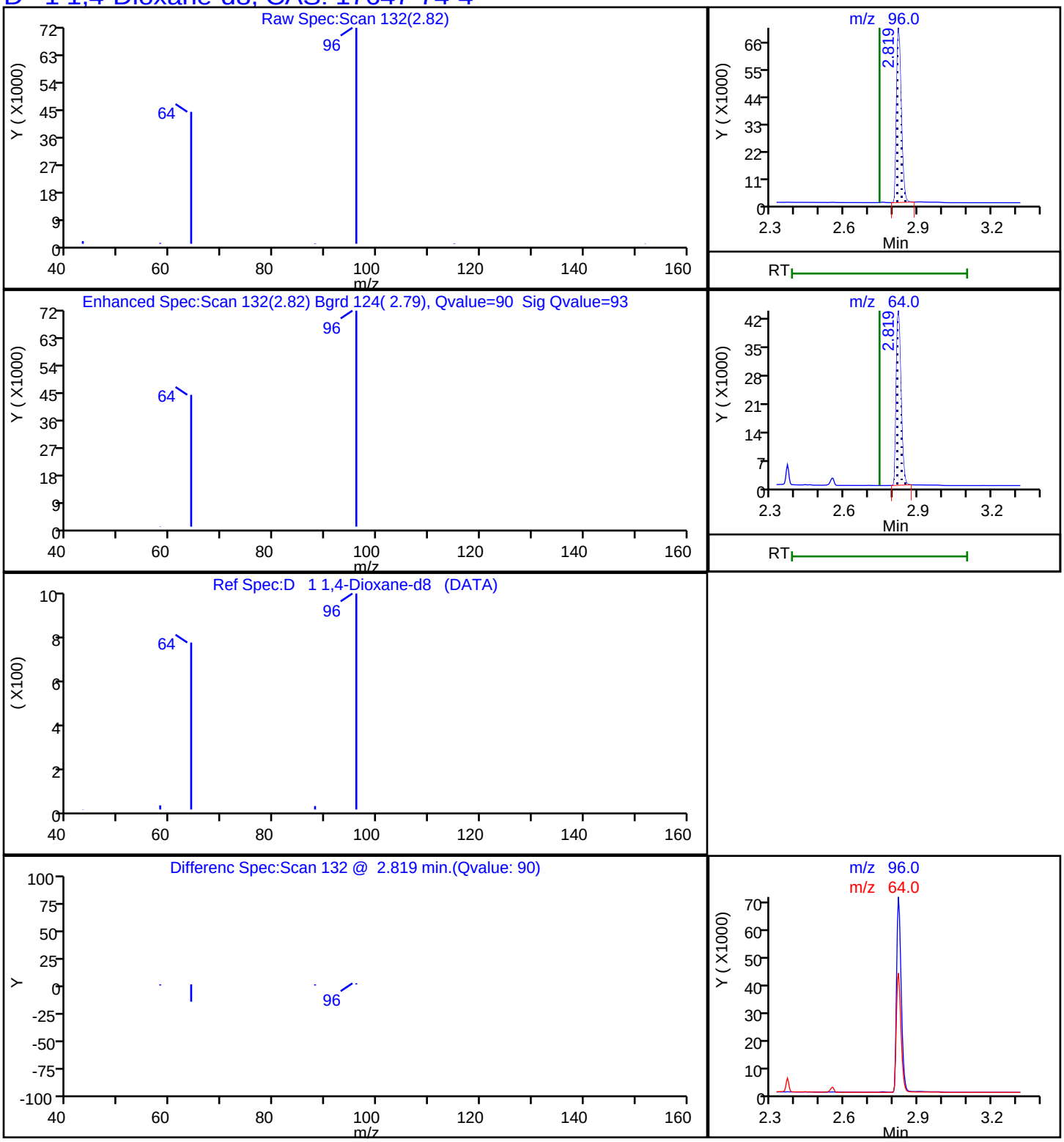


Report Date: 26-Dec-2018 11:55:28 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314349.D				
Injection Date:	18-Dec-2018 17:51:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-2-C	Lab Sample ID:	480-162184-2		
Client ID:	MW-15S				
Operator ID:	DR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



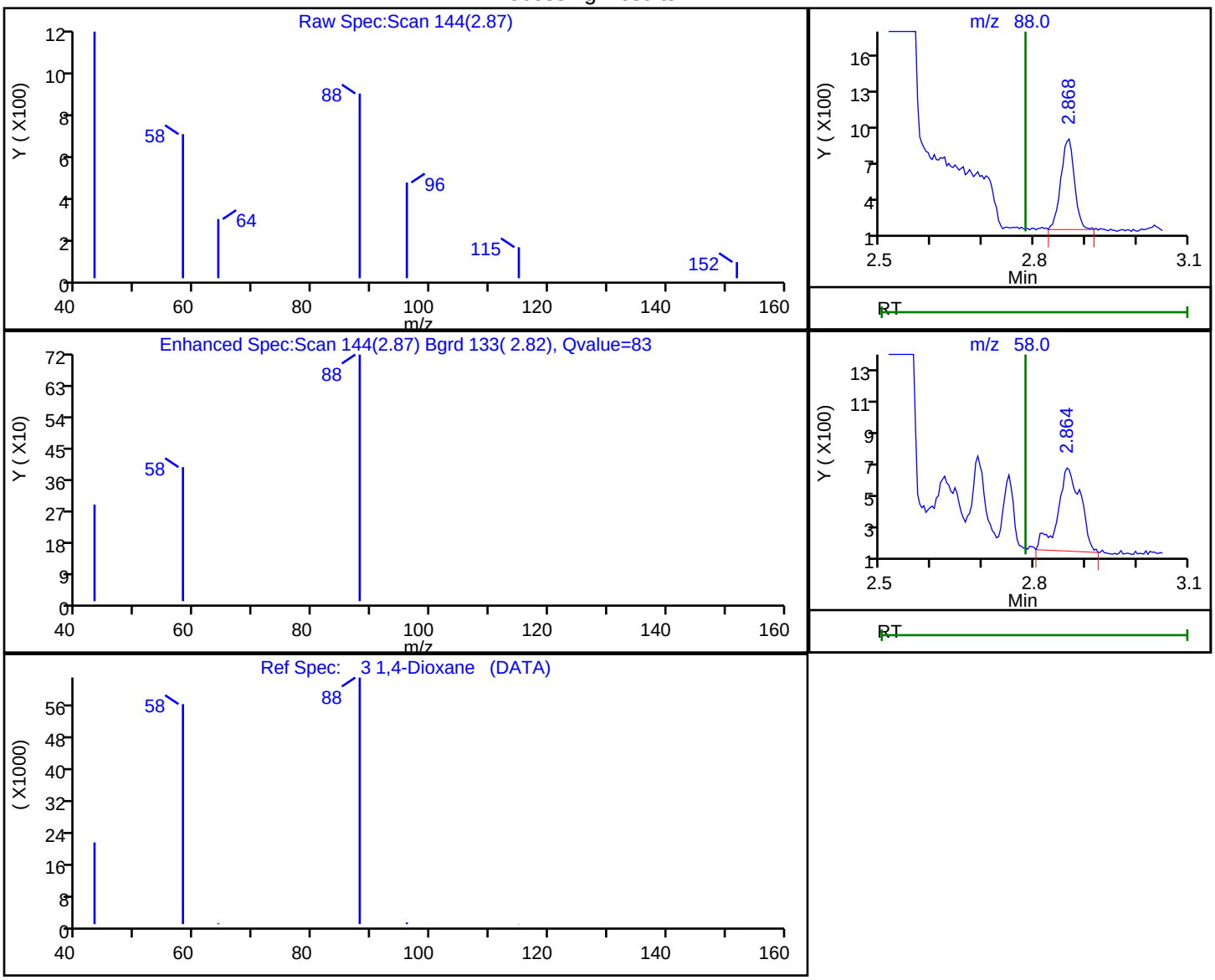
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314349.D				
Injection Date:	18-Dec-2018 17:51:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-2-C	Lab Sample ID:	480-162184-2		
Client ID:	MW-15S				
Operator ID:	DR	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.87	88.00	1341	0.134058
2.86	58.00	1541	

Reviewer: richardsd, 26-Dec-2018 11:52:40

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-16S
Lab Sample ID: 680-162184-4
Matrix: Water
Lab File ID: U3314352.D
Analysis Method: 8270D SIM ID
Date Collected: 12/11/2018 15:45
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 19:05
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U *	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	22		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314352.D
Lims ID: 680-162184-A-4-A
Client ID: MW-16S
Sample Type: Client
Inject. Date: 18-Dec-2018 19:05:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-017
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:53:07

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.819	2.741	0.078	90	94894	2.19	21.9	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	96	361232	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

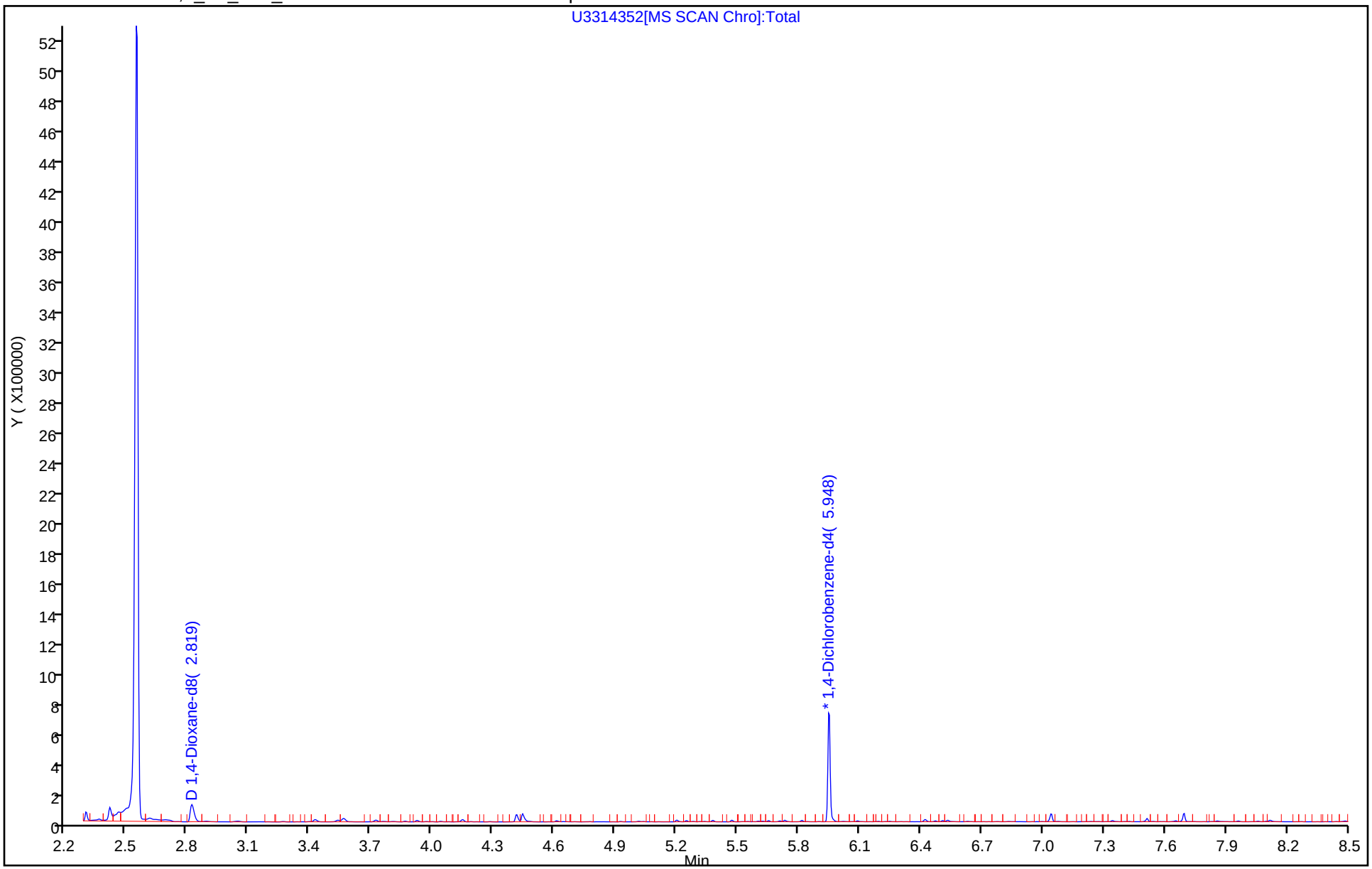
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:30 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314352.D				
Injection Date:	18-Dec-2018 19:05:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-4-A	Lab Sample ID:	480-162184-4	Worklist Smp#:	17
Client ID:	MW-16S				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

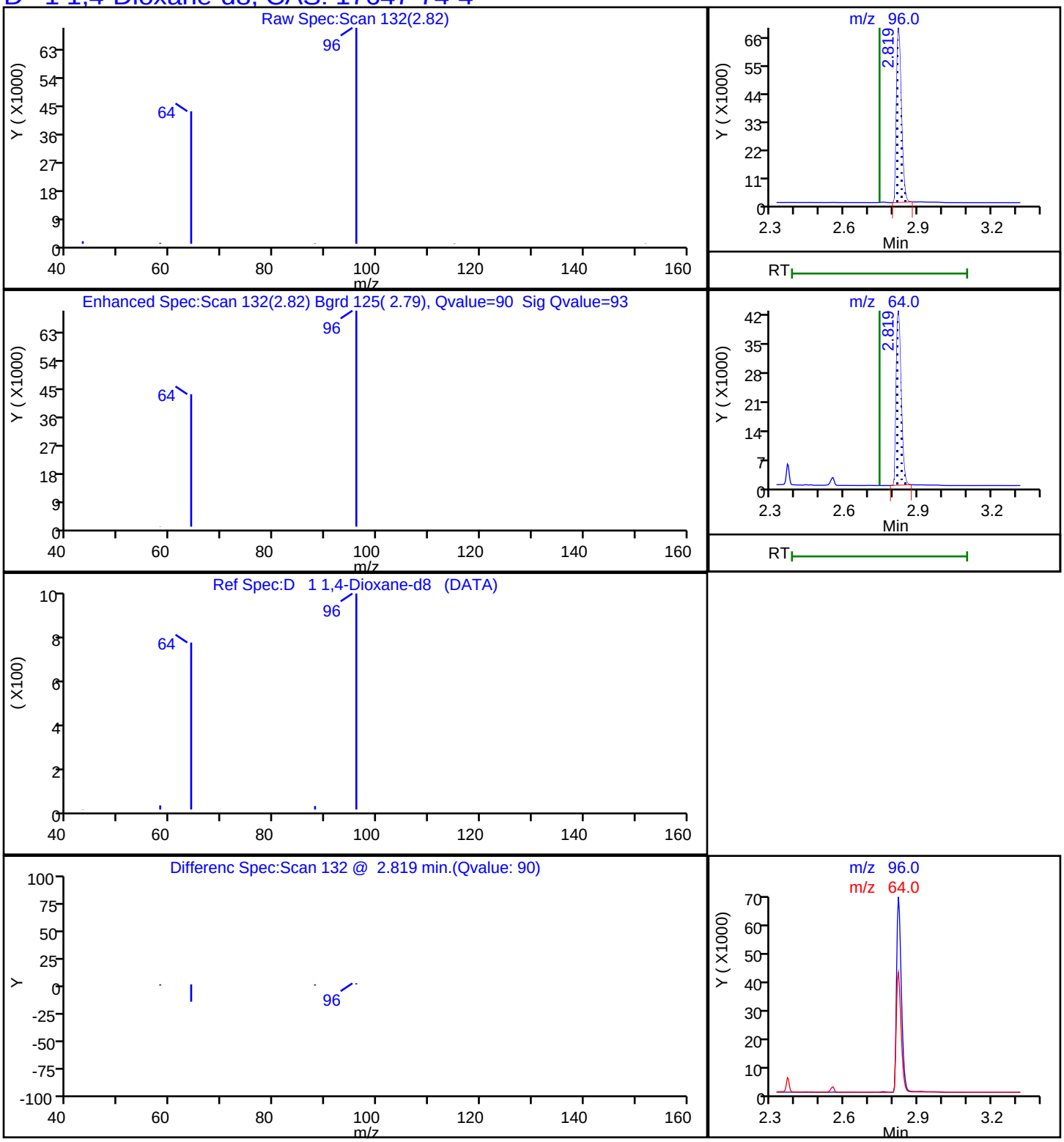


Report Date: 26-Dec-2018 11:55:30 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314352.D				
Injection Date:	18-Dec-2018 19:05:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-4-A	Lab Sample ID:	480-162184-4		
Client ID:	MW-16S				
Operator ID:	DR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



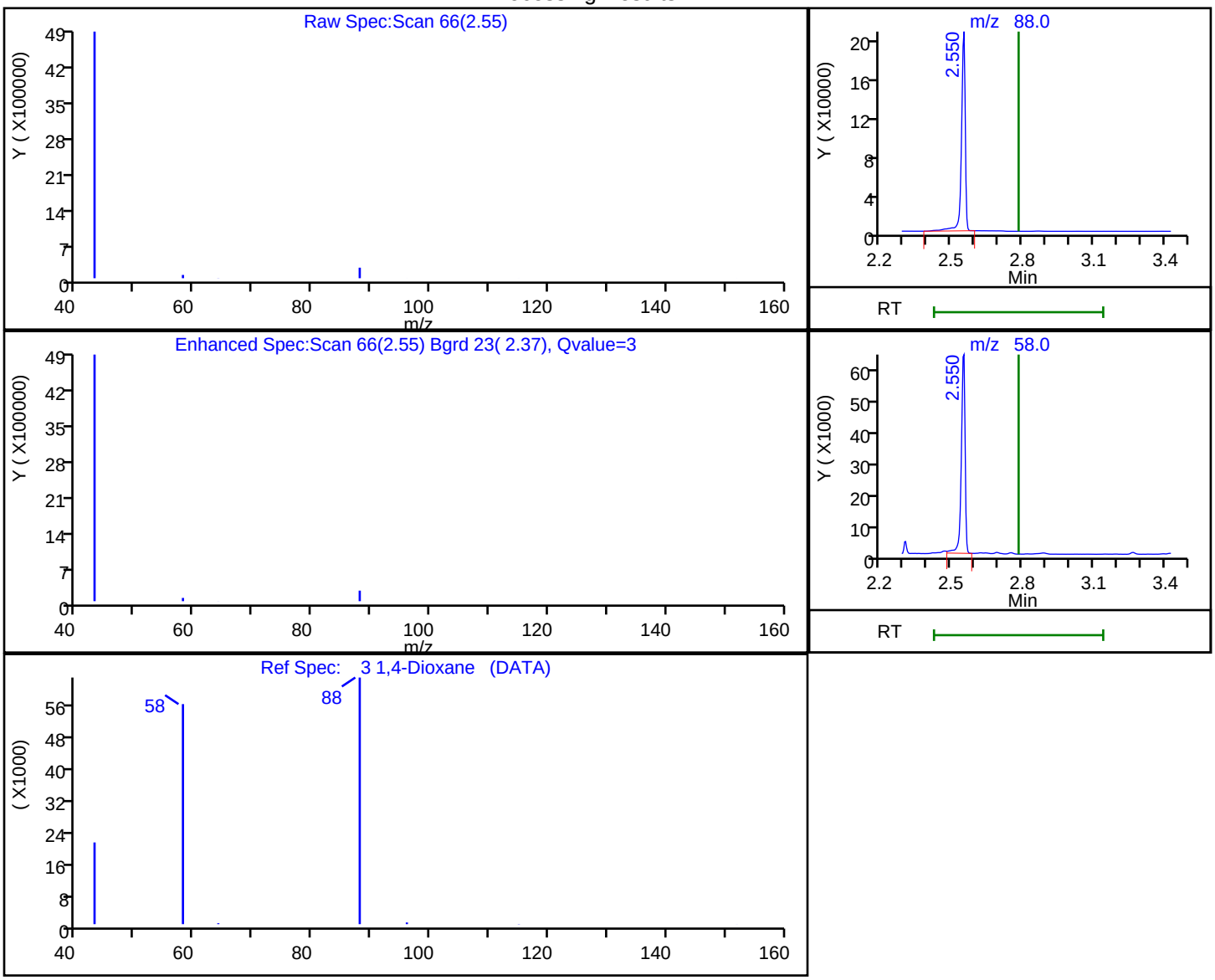
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314352.D				
Injection Date:	18-Dec-2018 19:05:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-4-A	Lab Sample ID:	480-162184-4		
Client ID:	MW-16S				
Operator ID:	DR	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.55	88.00	231854	22.984620
2.55	58.00	72009	

Reviewer: richardsd, 26-Dec-2018 11:53:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-21R
Lab Sample ID: 680-162184-5
Matrix: Water
Lab File ID: U3314353.D
Analysis Method: 8270D SIM ID
Date Collected: 12/11/2018 13:23
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 19:30
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	*1,4-Dioxane*	*3.3*	*B **	*0.20*	*0.10*

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	21		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314353.D
Lims ID: 680-162184-A-5-A
Client ID: MW-21R
Sample Type: Client
Inject. Date: 18-Dec-2018 19:30:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-018
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:53:15

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.815	2.741	0.074	93	86683	2.14	21.4	
	3 1,4-Dioxane	88	2.856	2.782	0.074	87	30355	3.29		E
*	2 1,4-Dichlorobenzene-d4	152	5.948	5.944	0.004	99	338347	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

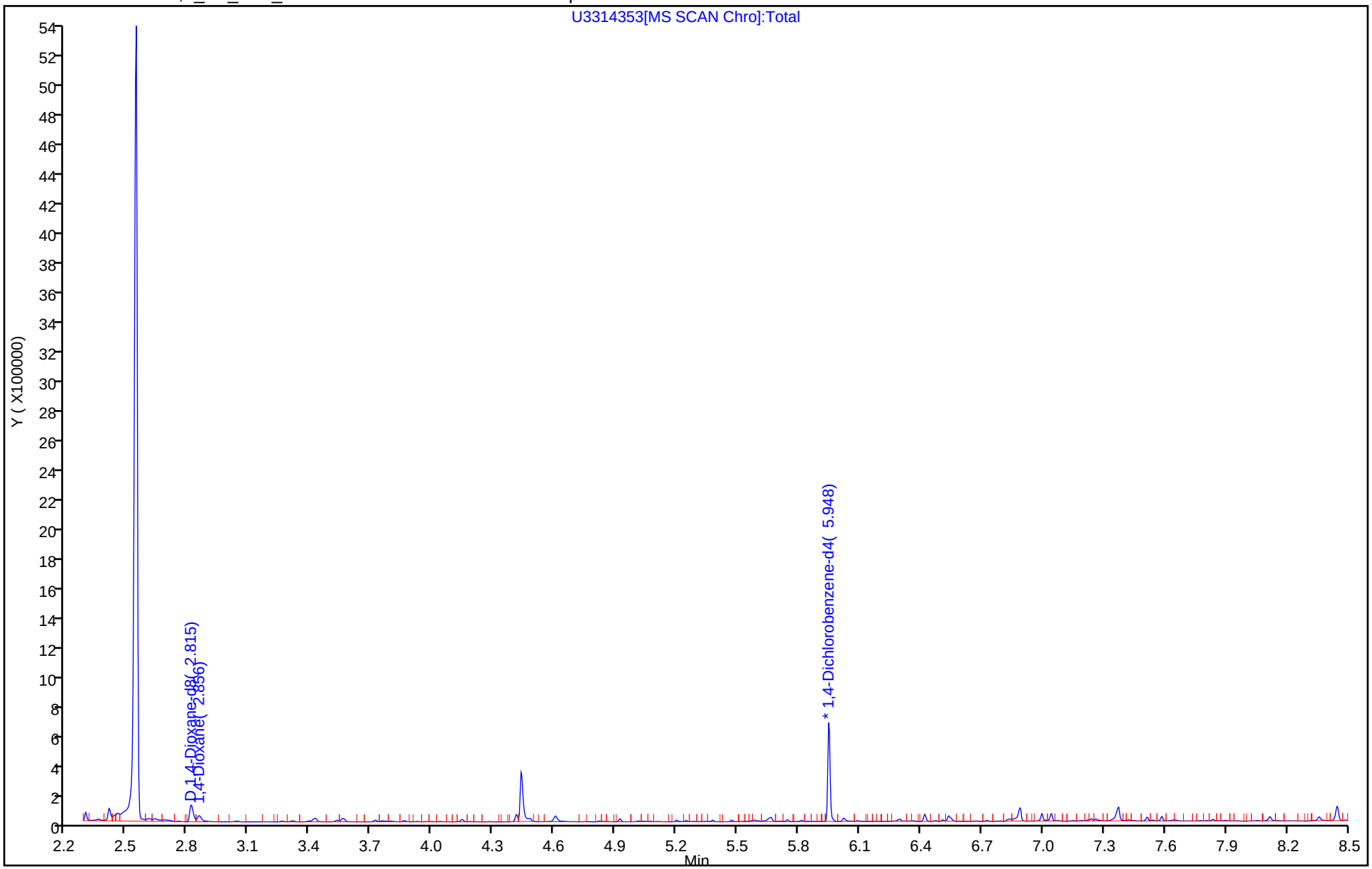
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:31 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314353.D				
Injection Date:	18-Dec-2018 19:30:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-5-A	Lab Sample ID:	480-162184-5	Worklist Smp#:	18
Client ID:	MW-21R				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

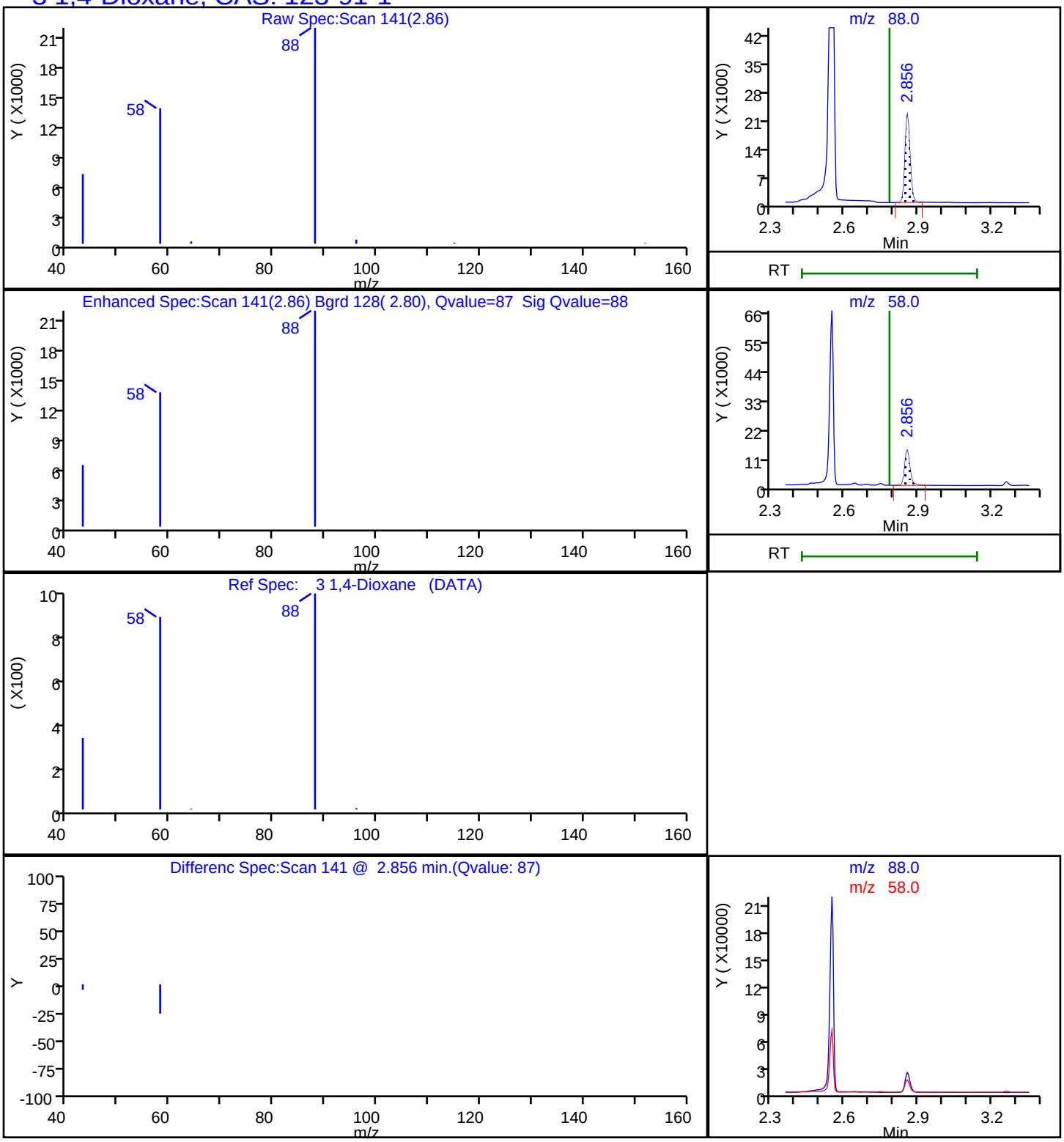


Report Date: 26-Dec-2018 11:55:31 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314353.D				
Injection Date:	18-Dec-2018 19:30:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-5-A	Lab Sample ID:	480-162184-5		
Client ID:	MW-21R				
Operator ID:	DR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

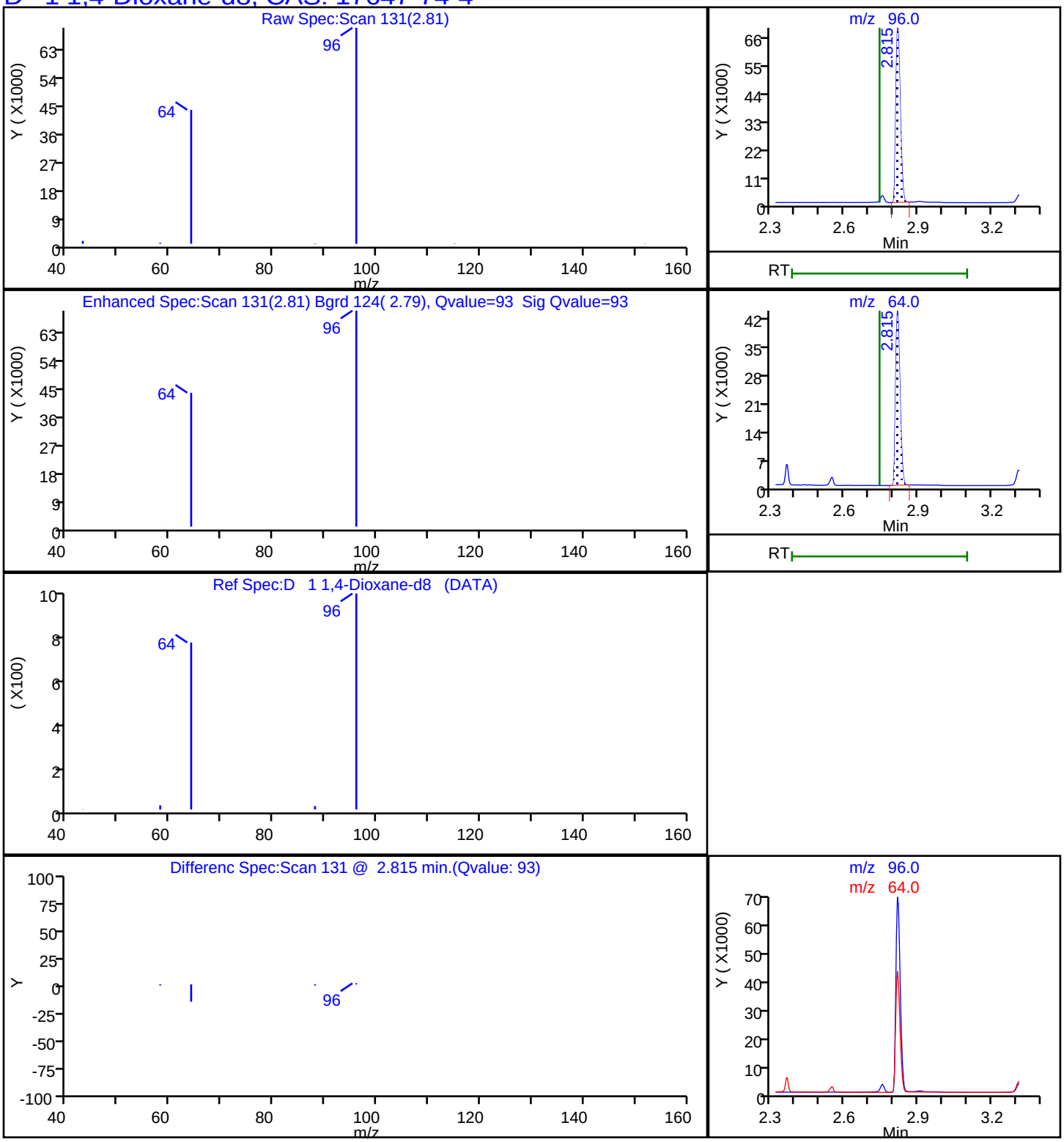


Report Date: 26-Dec-2018 11:55:31 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314353.D				
Injection Date:	18-Dec-2018 19:30:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-5-A	Lab Sample ID:	480-162184-5		
Client ID:	MW-21R				
Operator ID:	DR	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-21R RE
Lab Sample ID: 680-162184-5 RE
Matrix: Water
Lab File ID: U3314482.D
Analysis Method: 8270D SIM ID
Date Collected: 12/11/2018 13:23
Extract. Method: 3510C
Date Extracted: 12/27/2018 15:17
Sample wt/vol: 1000(mL)
Date Analyzed: 12/28/2018 19:47
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 452932
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	3.5	H	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	23		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314482.D
Lims ID: 680-162184-B-5-A
Client ID: MW-21R
Sample Type: Client
Inject. Date: 28-Dec-2018 19:47:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077632-016
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 28-Dec-2018 18:29:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX1013

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.815	2.741	0.074	90	69265	2.33	23.3	
	3 1,4-Dioxane	88	2.856	2.786	0.070	87	25661	3.49		E
*	2 1,4-Dichlorobenzene-d4	152	5.948	5.944	0.004	97	248476	4.00		

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

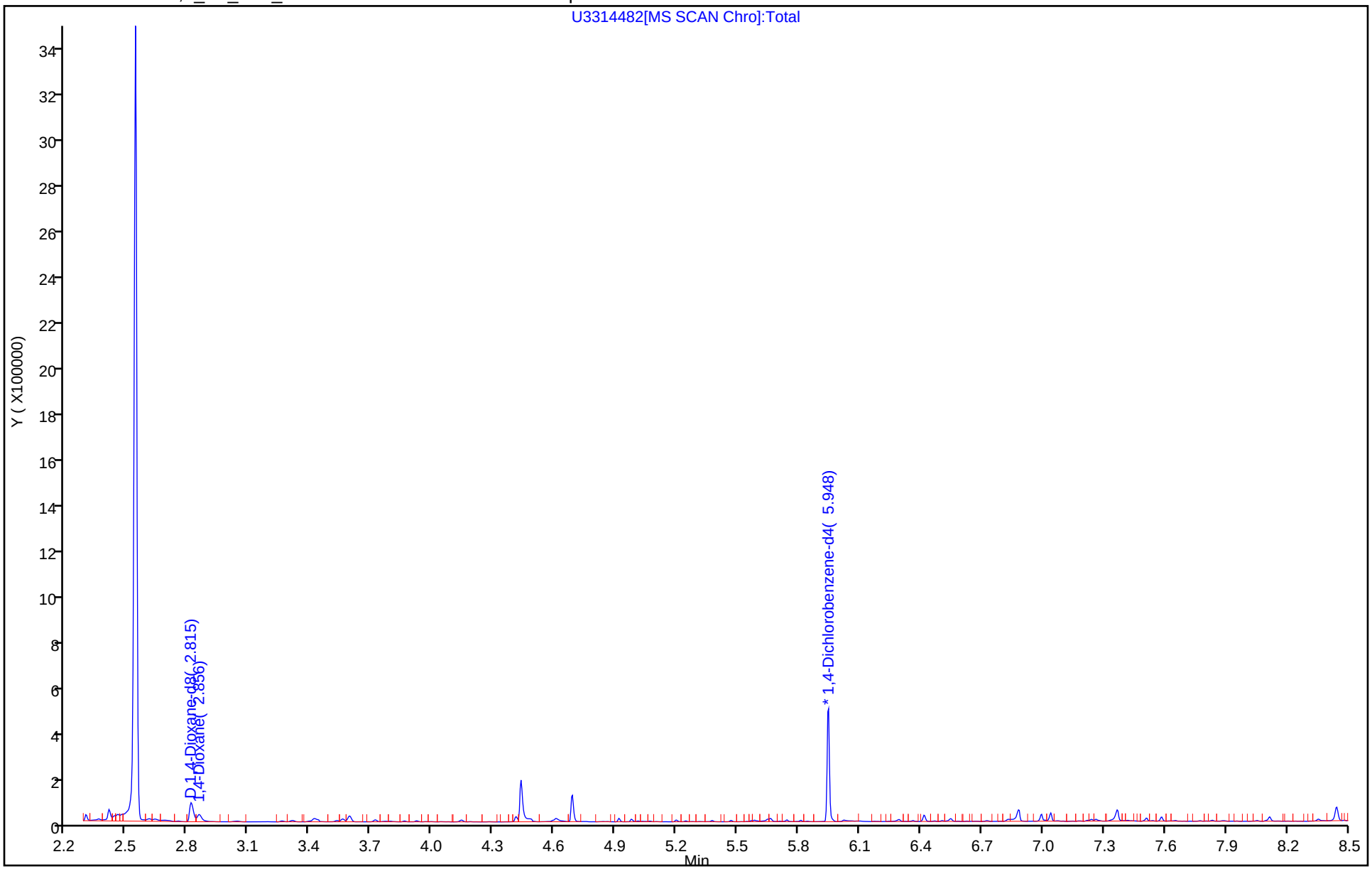
Reagents:

MB_LLIS_WRK_00160 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 31-Dec-2018 16:01:02 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314482.D				
Injection Date:	28-Dec-2018 19:47:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-B-5-A	Lab Sample ID:	480-162184-5	Worklist Smp#:	16
Client ID:	MW-21R				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

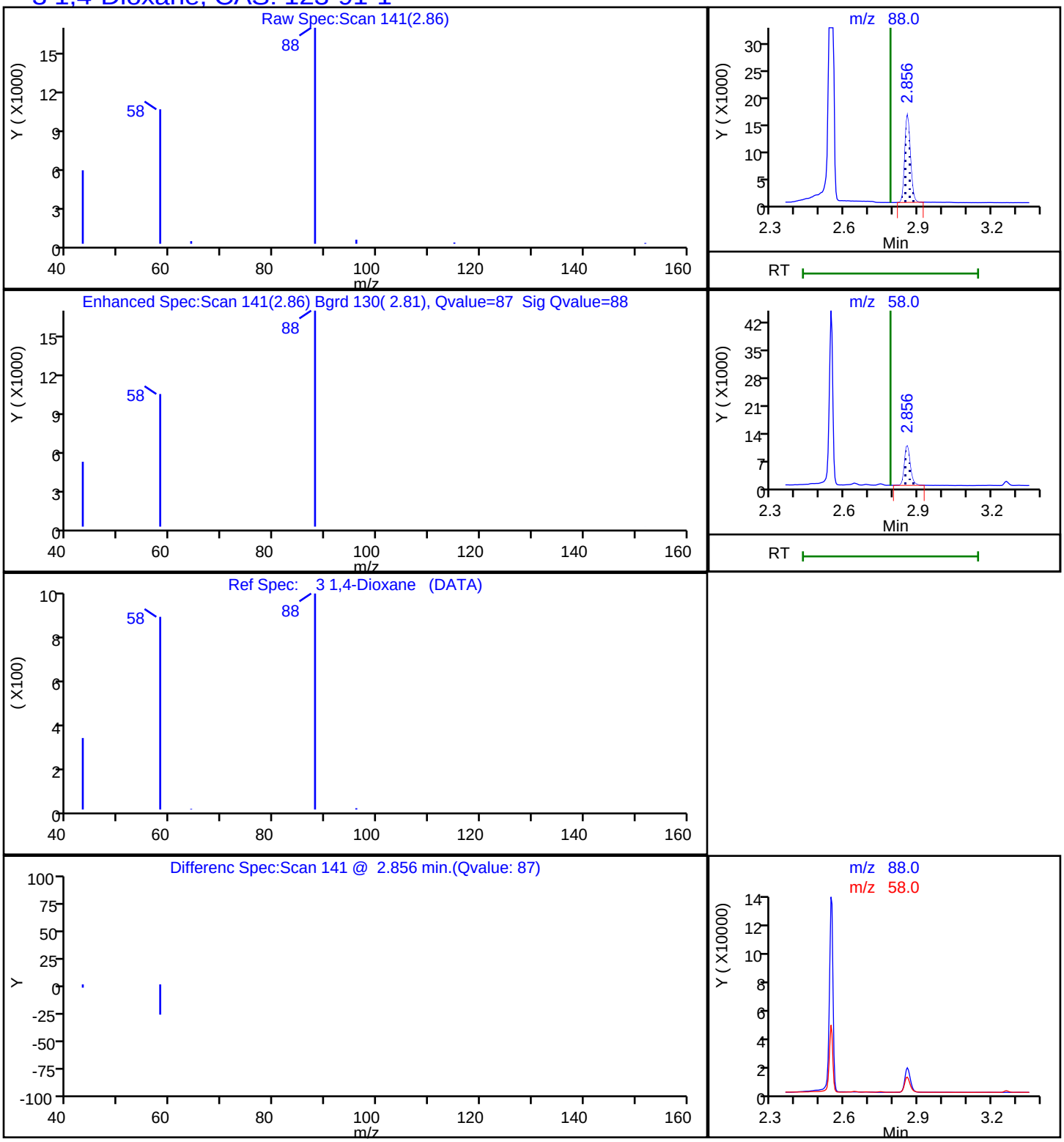


Report Date: 31-Dec-2018 16:01:03 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314482.D				
Injection Date:	28-Dec-2018 19:47:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-B-5-A	Lab Sample ID:	480-162184-5		
Client ID:	MW-21R				
Operator ID:	DR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

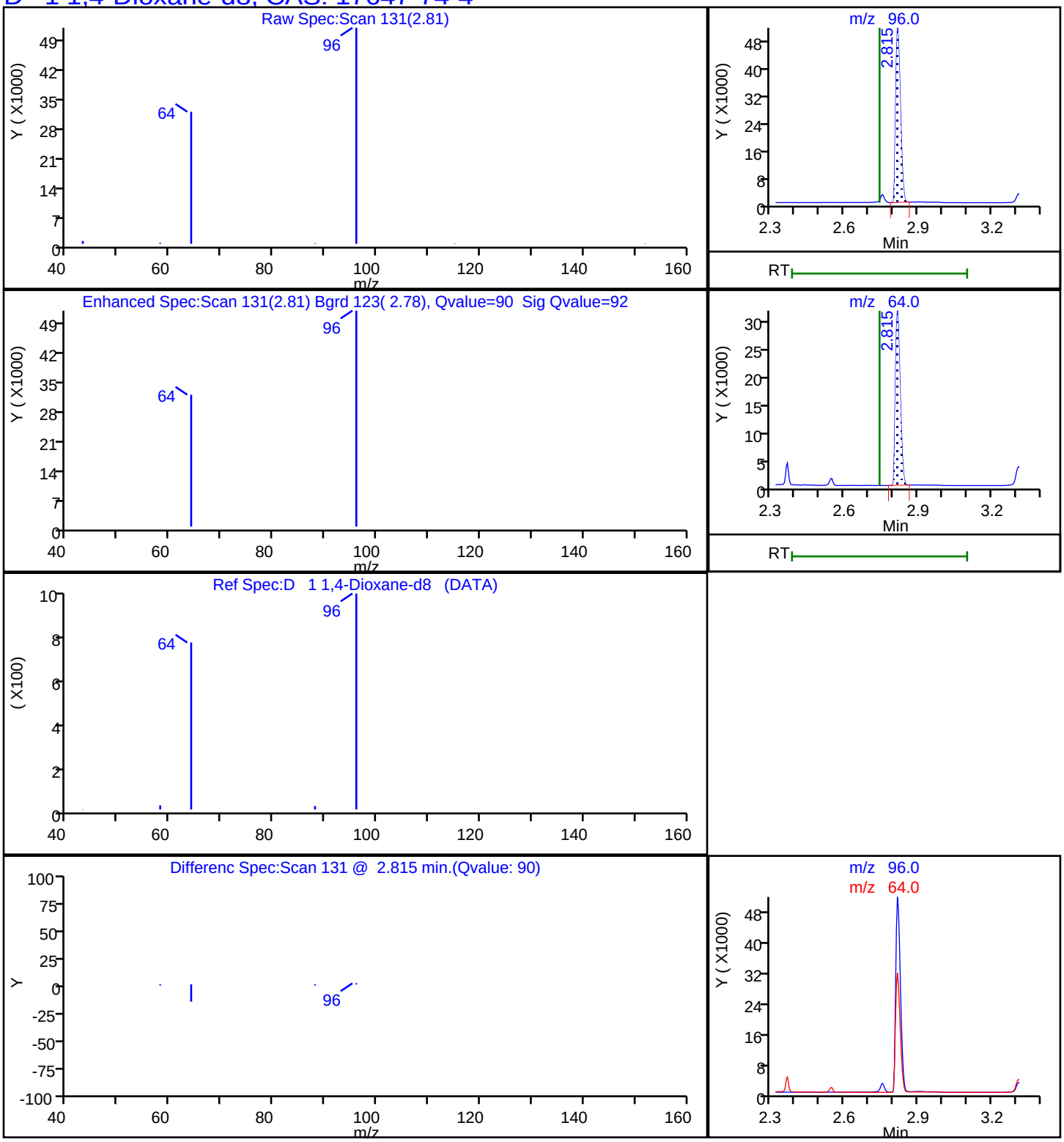


Report Date: 31-Dec-2018 16:01:02 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314482.D				
Injection Date:	28-Dec-2018 19:47:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-B-5-A	Lab Sample ID:	480-162184-5		
Client ID:	MW-21R				
Operator ID:	DR	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-22R
Lab Sample ID: 680-162184-8
Matrix: Water
Lab File ID: U3314354.D
Analysis Method: 8270D SIM ID
Date Collected: 12/12/2018 10:43
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 950(mL)
Date Analyzed: 12/18/2018 19:54
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U *	0.21	0.11

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314354.D
Lims ID: 680-162184-A-8-A
Client ID: MW-22R
Sample Type: Client
Inject. Date: 18-Dec-2018 19:54:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-019
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:53:22

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.823	2.741	0.082	90	106173	2.49	24.9	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	97	356633	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

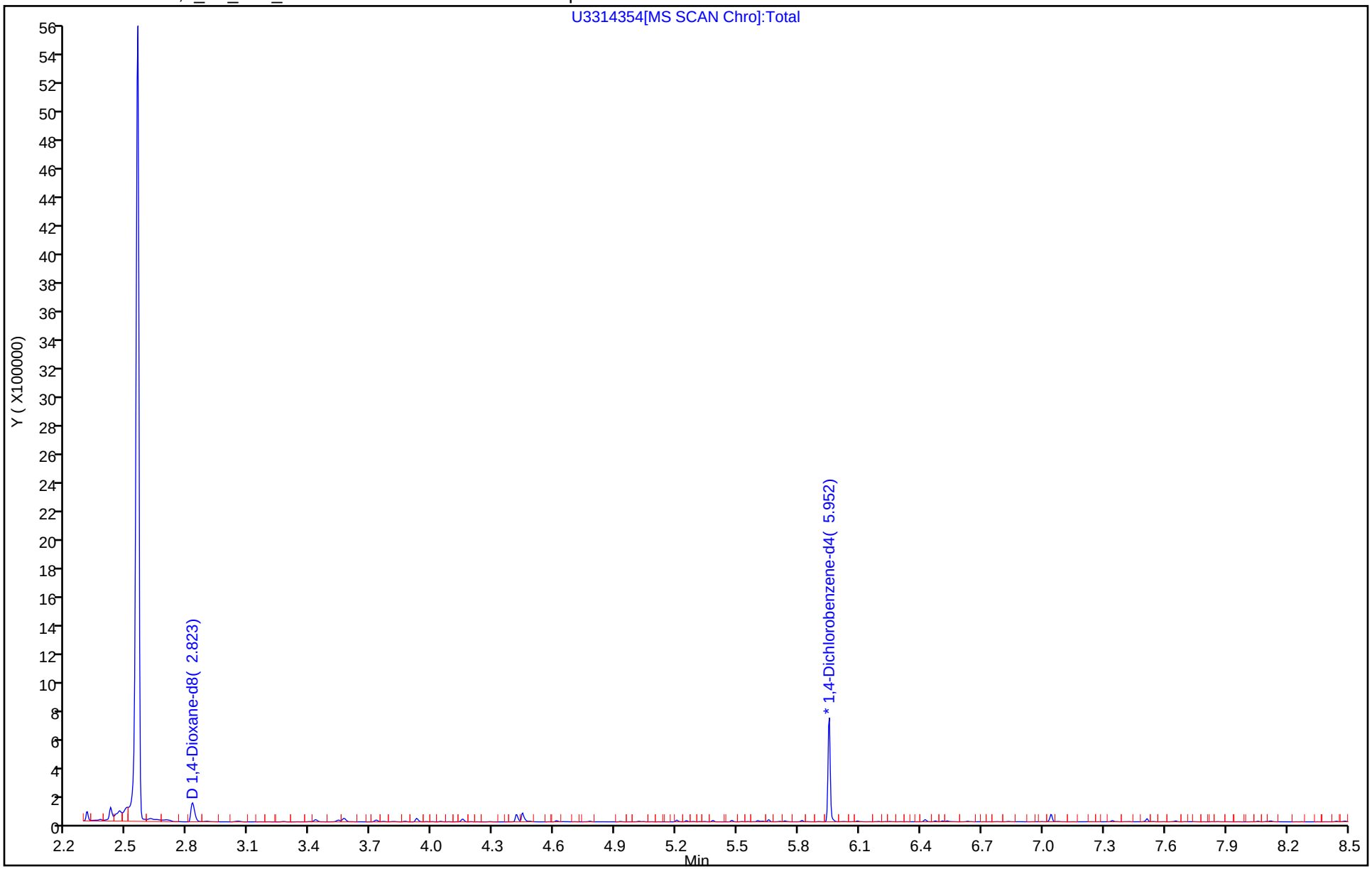
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:32 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314354.D				
Injection Date:	18-Dec-2018 19:54:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-8-A	Lab Sample ID:	480-162184-8	Worklist Smp#:	19
Client ID:	MW-22R				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

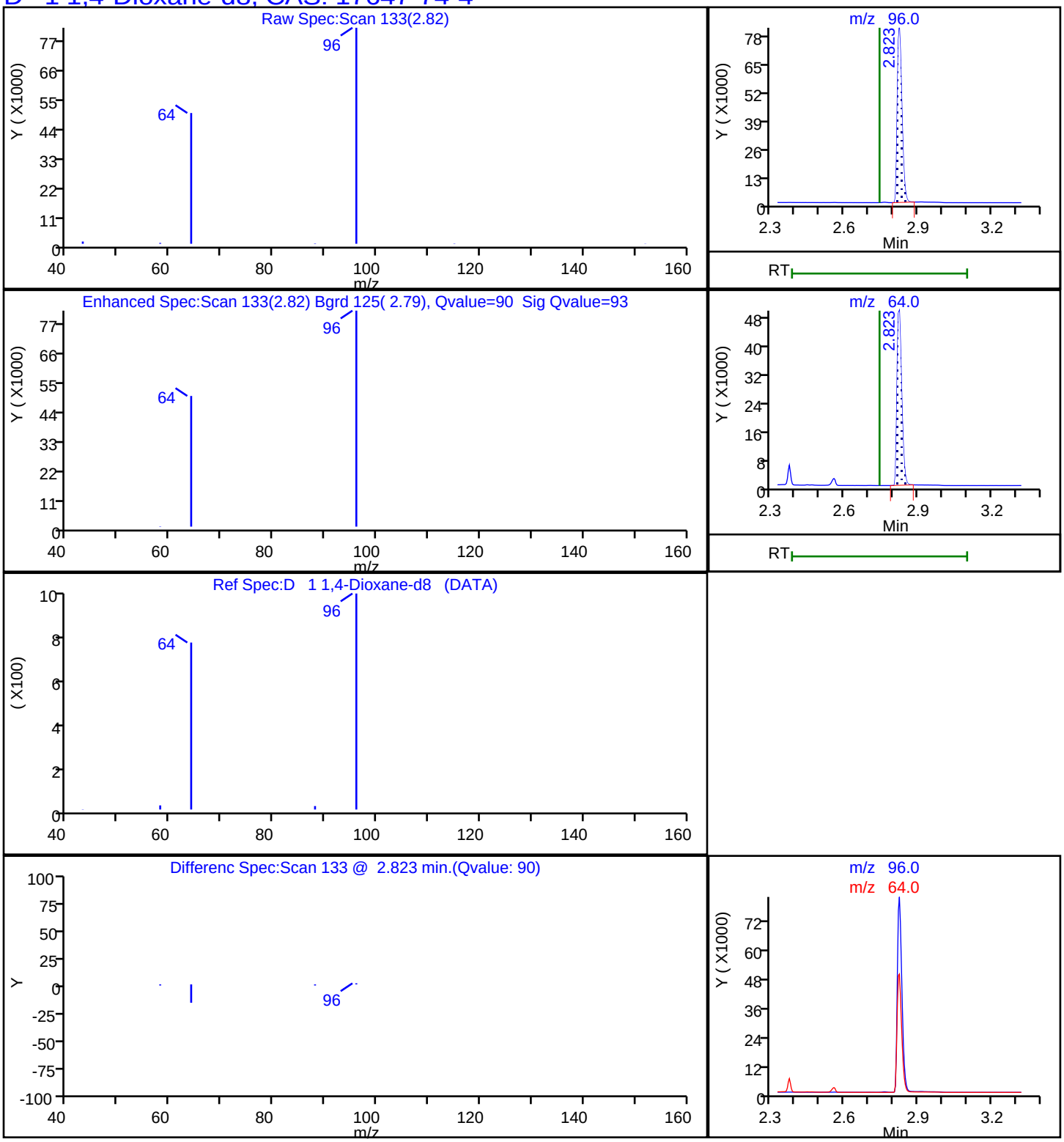


Report Date: 26-Dec-2018 11:55:32 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314354.D				
Injection Date:	18-Dec-2018 19:54:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-8-A	Lab Sample ID:	480-162184-8		
Client ID:	MW-22R				
Operator ID:	DR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



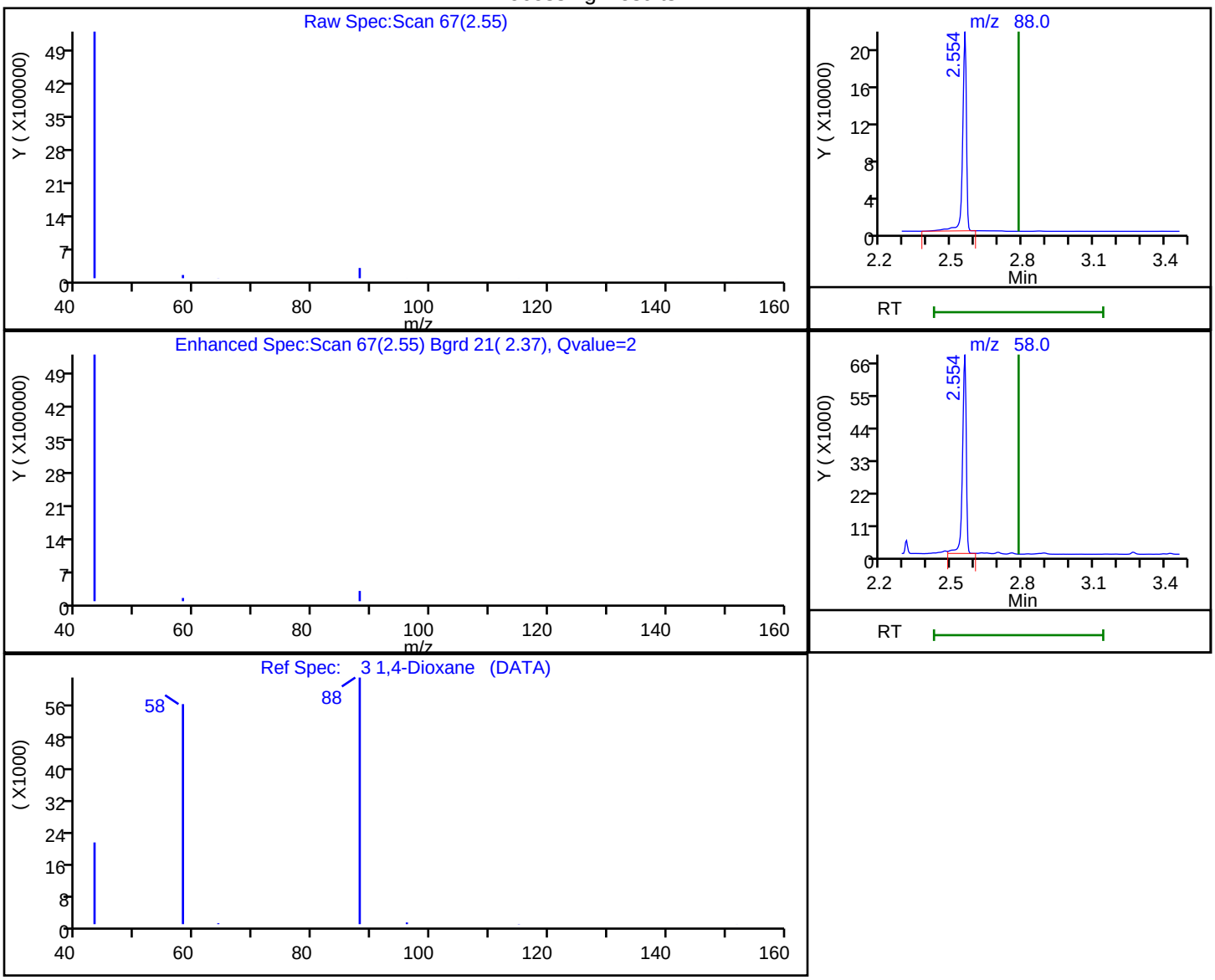
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314354.D				
Injection Date:	18-Dec-2018 19:54:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-8-A	Lab Sample ID:	480-162184-8		
Client ID:	MW-22R				
Operator ID:	DR	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.55	88.00	242596	21.494683
2.55	58.00	75301	

Reviewer: richardsd, 26-Dec-2018 11:53:19

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-24S
Lab Sample ID: 680-162184-9
Matrix: Water
Lab File ID: U3314355.D
Analysis Method: 8270D SIM ID
Date Collected: 12/12/2018 13:08
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 800(mL)
Date Analyzed: 12/18/2018 20:19
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.25	U *	0.25	0.13

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	26		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314355.D
Lims ID: 680-162184-A-9-A
Client ID: MW-24S
Sample Type: Client
Inject. Date: 18-Dec-2018 20:19:30 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-020
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:53:27

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.823	2.741	0.082	93	106762	2.56	25.6	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.948	5.944	0.004	99	348287	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

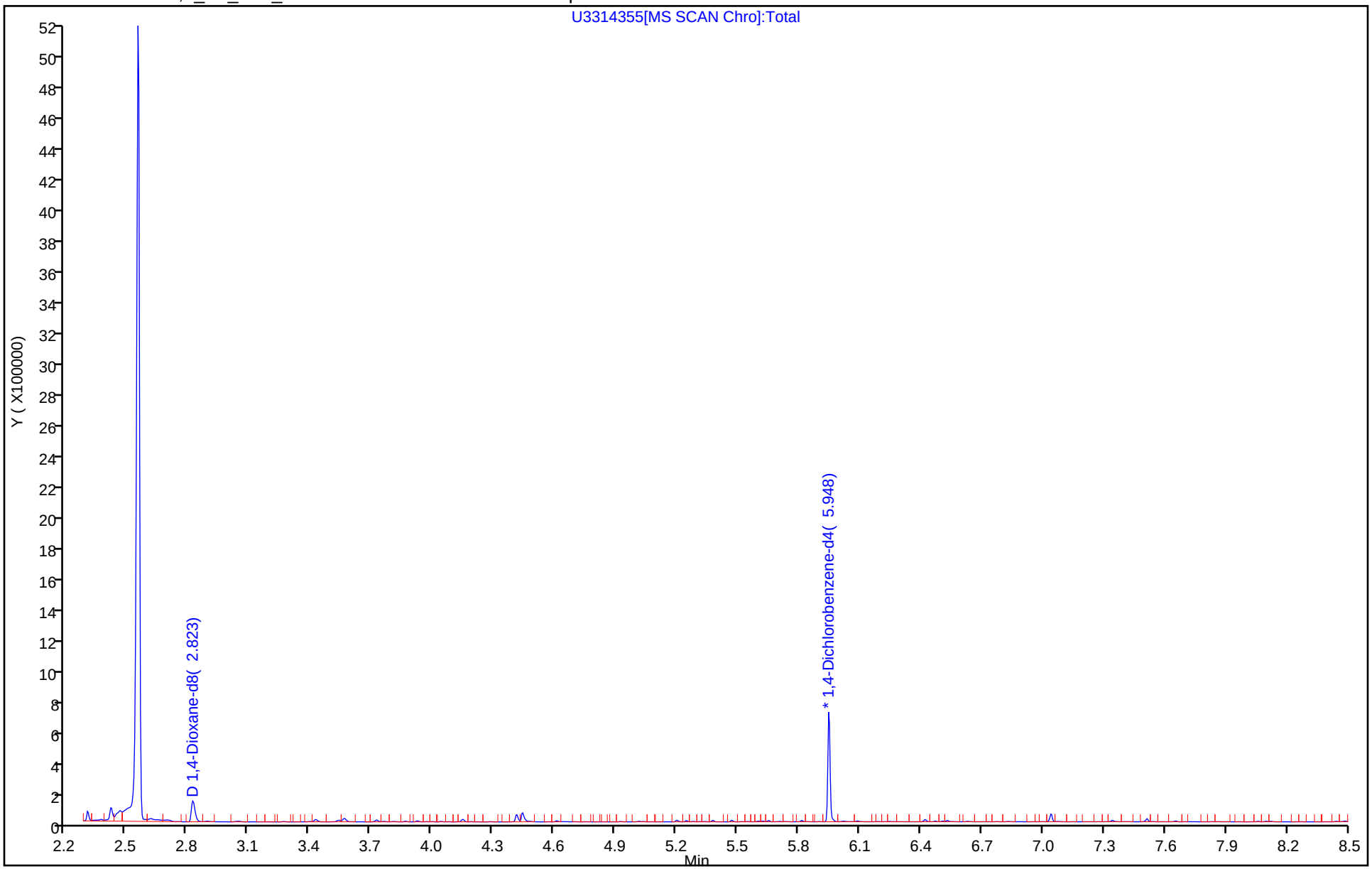
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:33 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314355.D				
Injection Date:	18-Dec-2018 20:19:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-9-A	Lab Sample ID:	480-162184-9	Worklist Smp#:	20
Client ID:	MW-24S				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

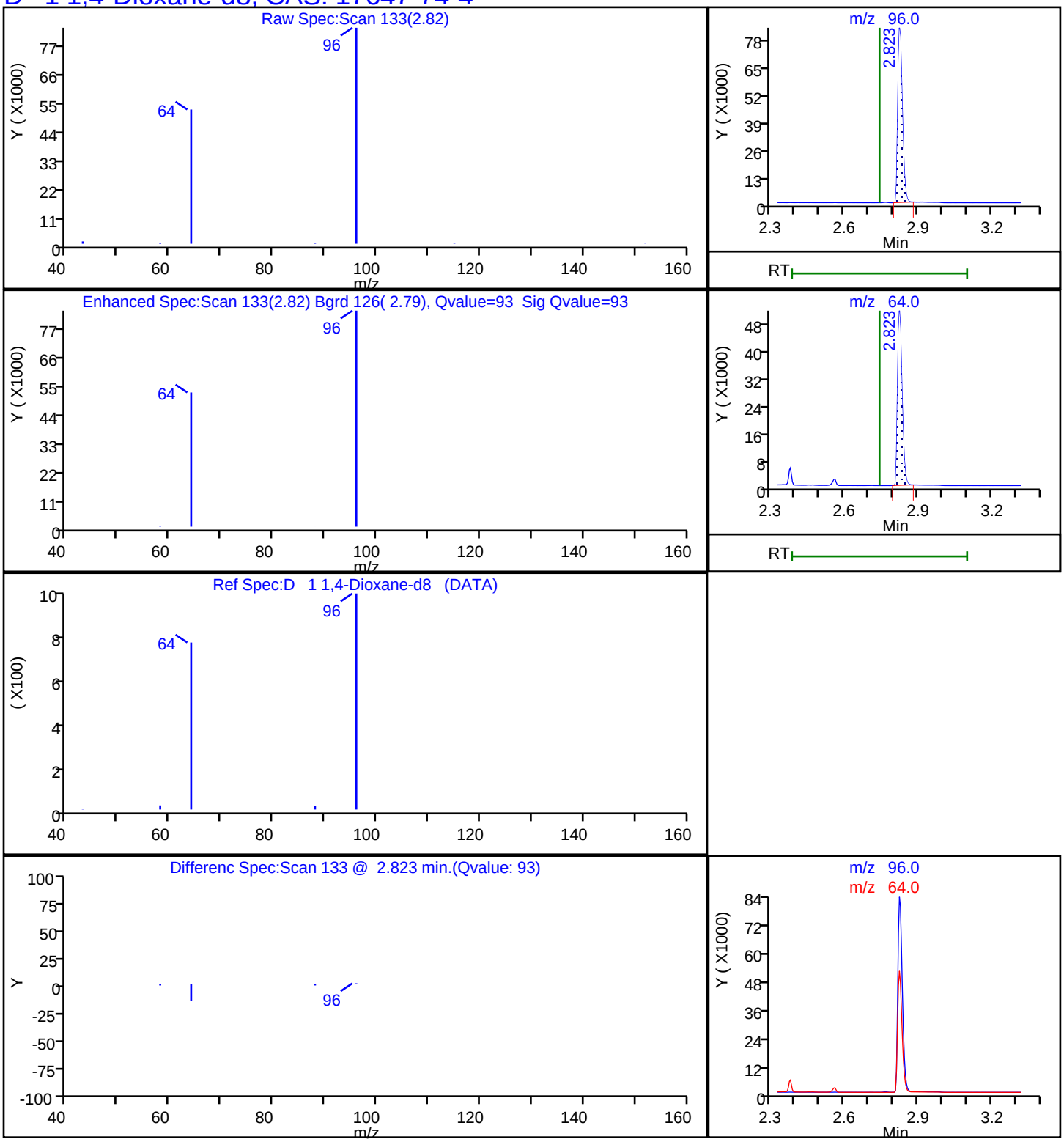


Report Date: 26-Dec-2018 11:55:33 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314355.D				
Injection Date:	18-Dec-2018 20:19:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-9-A	Lab Sample ID:	480-162184-9		
Client ID:	MW-24S				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



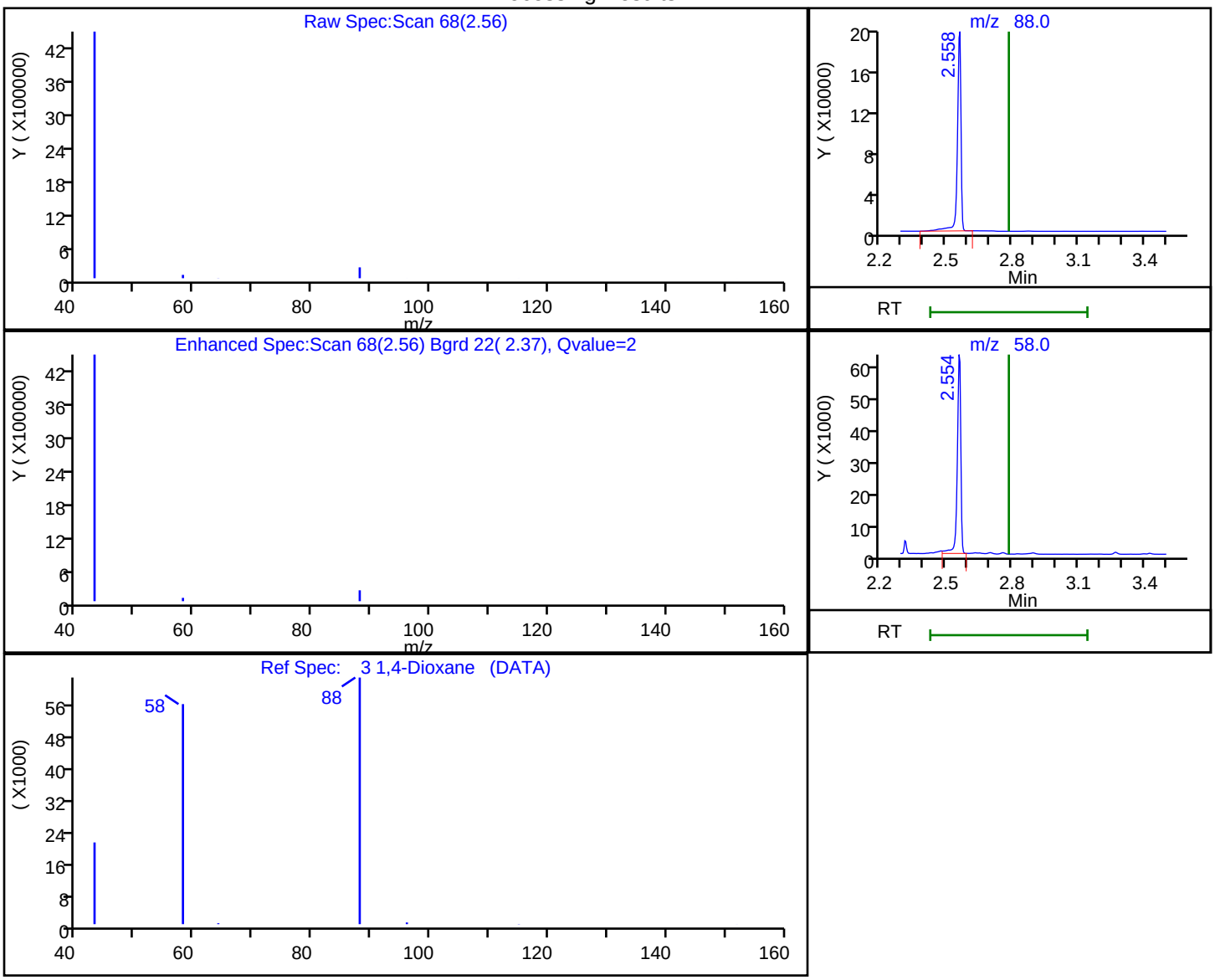
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314355.D				
Injection Date:	18-Dec-2018 20:19:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-9-A	Lab Sample ID:	480-162184-9		
Client ID:	MW-24S				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.56	88.00	224980	19.823882
2.55	58.00	69985	

Reviewer: richardsd, 26-Dec-2018 11:53:25

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-25S
Lab Sample ID: 680-162184-11
Matrix: Water
Lab File ID: U3314356.D
Analysis Method: 8270D SIM ID
Date Collected: 12/12/2018 12:23
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 850(mL)
Date Analyzed: 12/18/2018 20:44
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.24	U *	0.24	0.12

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314356.D
Lims ID: 680-162184-A-11-A
Client ID: MW-25S
Sample Type: Client
Inject. Date: 18-Dec-2018 20:44:30 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-021
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:53:40

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.827	2.741	0.086	89	108938	2.50	25.0	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.948	5.944	0.004	99	363625	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

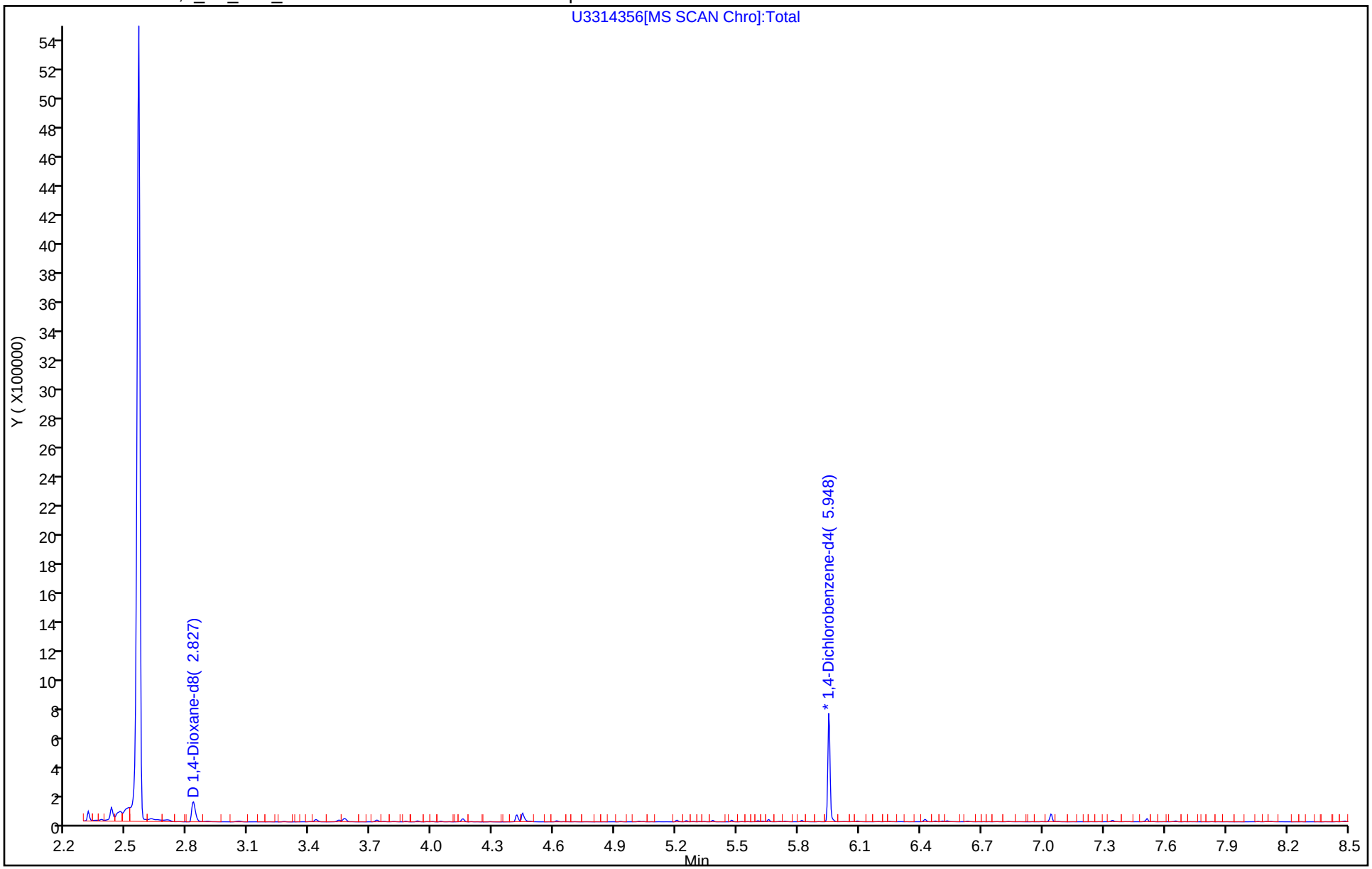
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:34 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314356.D				
Injection Date:	18-Dec-2018 20:44:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-11-A	Lab Sample ID:	480-162184-11	Worklist Smp#:	21
Client ID:	MW-25S				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

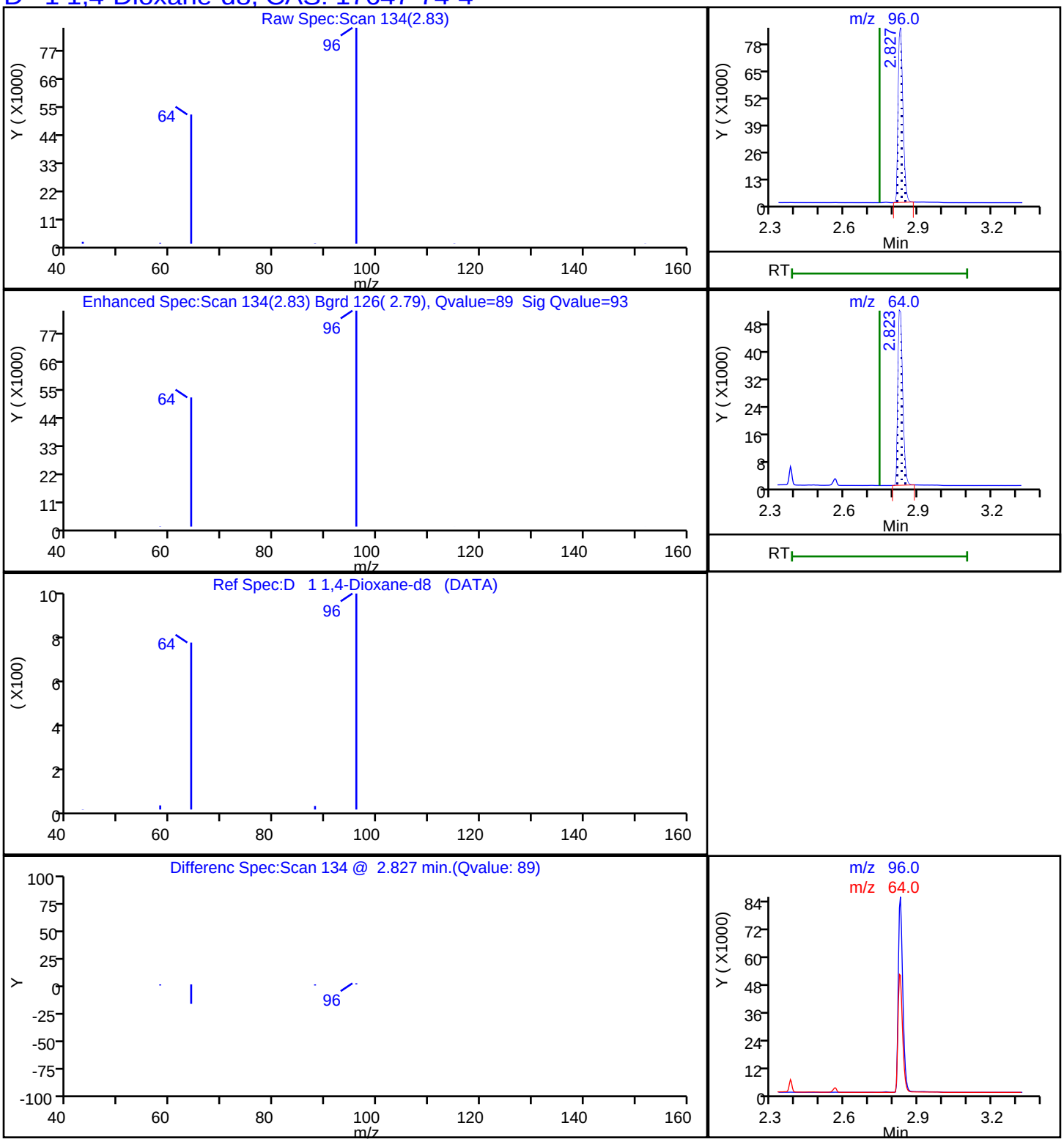


Report Date: 26-Dec-2018 11:55:34 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314356.D				
Injection Date:	18-Dec-2018 20:44:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-11-A	Lab Sample ID:	480-162184-11		
Client ID:	MW-25S				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



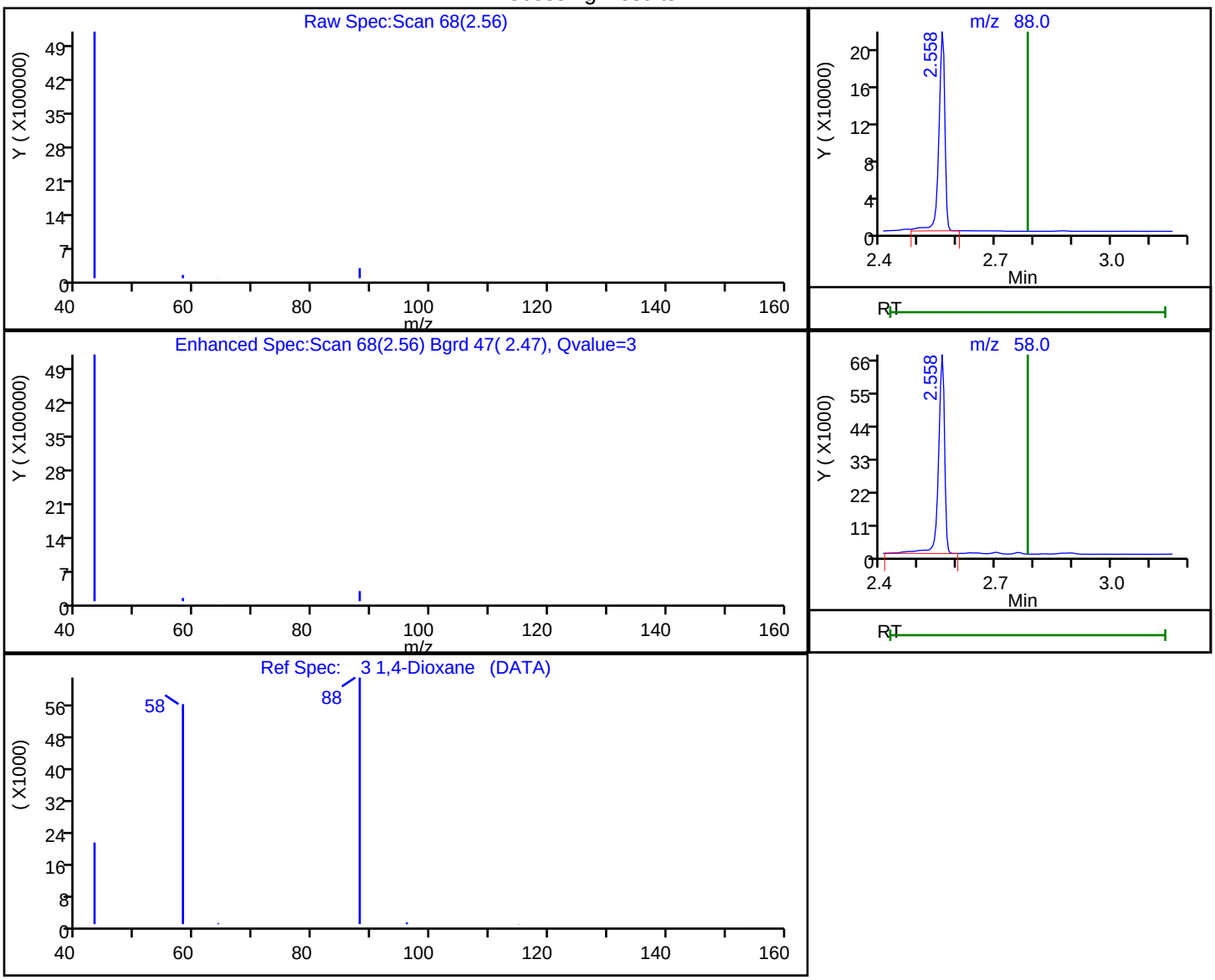
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314356.D				
Injection Date:	18-Dec-2018 20:44:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-11-A	Lab Sample ID:	480-162184-11		
Client ID:	MW-25S				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.56	88.00	231307	19.974268
2.56	58.00	74809	

Reviewer: richardsd, 26-Dec-2018 11:53:39

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-26S
Lab Sample ID: 680-162184-12
Matrix: Water
Lab File ID: U3314357.D
Analysis Method: 8270D SIM ID
Date Collected: 12/12/2018 11:05
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 950(mL)
Date Analyzed: 12/18/2018 21:09
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U *	0.21	0.11

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314357.D
Lims ID: 680-162184-A-12-A
Client ID: MW-26S
Sample Type: Client
Inject. Date: 18-Dec-2018 21:09:30 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-022
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:54:42

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.827	2.741	0.086	90	103534	2.54	25.4	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	96	340850	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

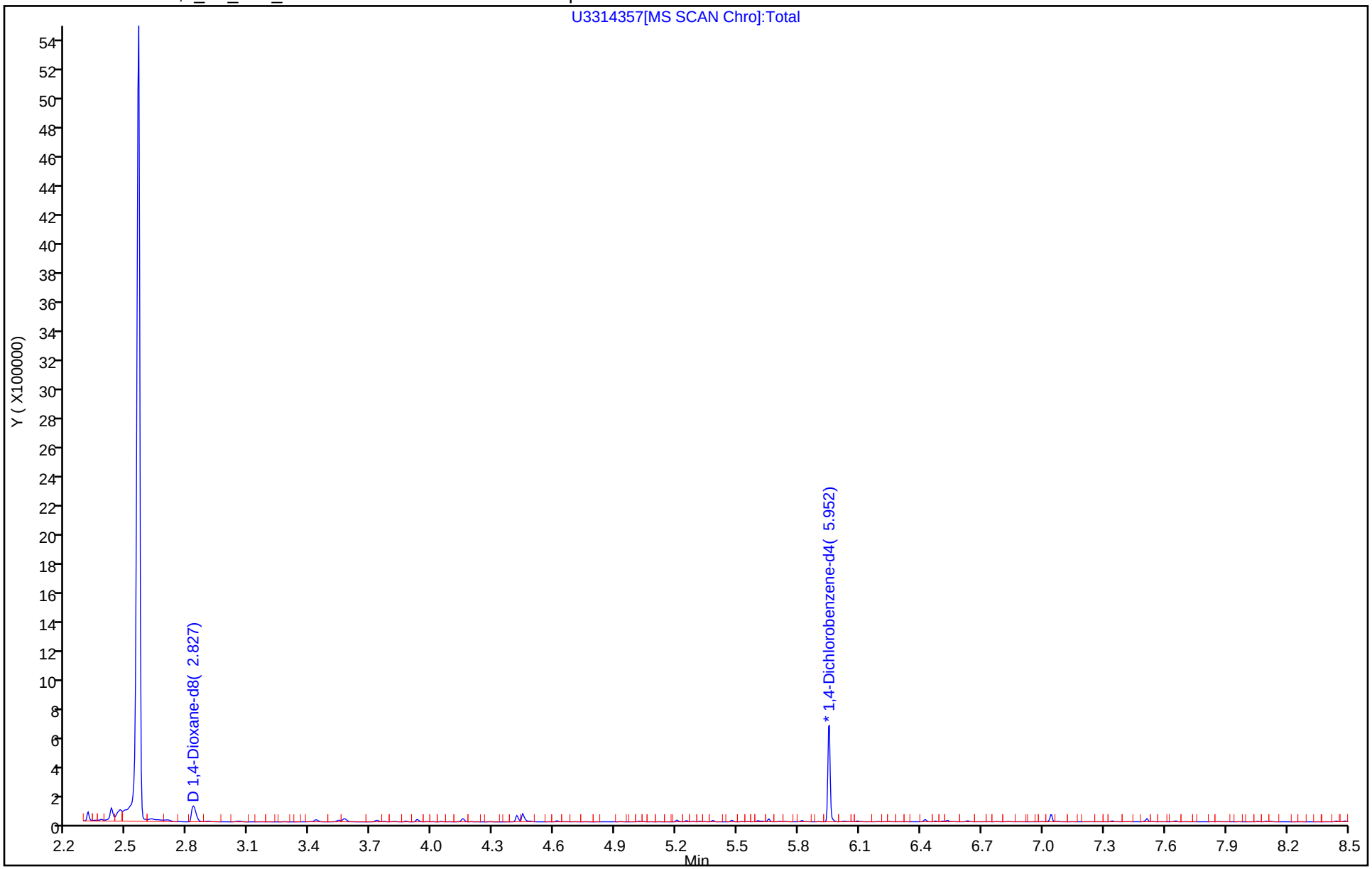
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:34 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314357.D				
Injection Date:	18-Dec-2018 21:09:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-12-A	Lab Sample ID:	480-162184-12	Worklist Smp#:	22
Client ID:	MW-26S				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

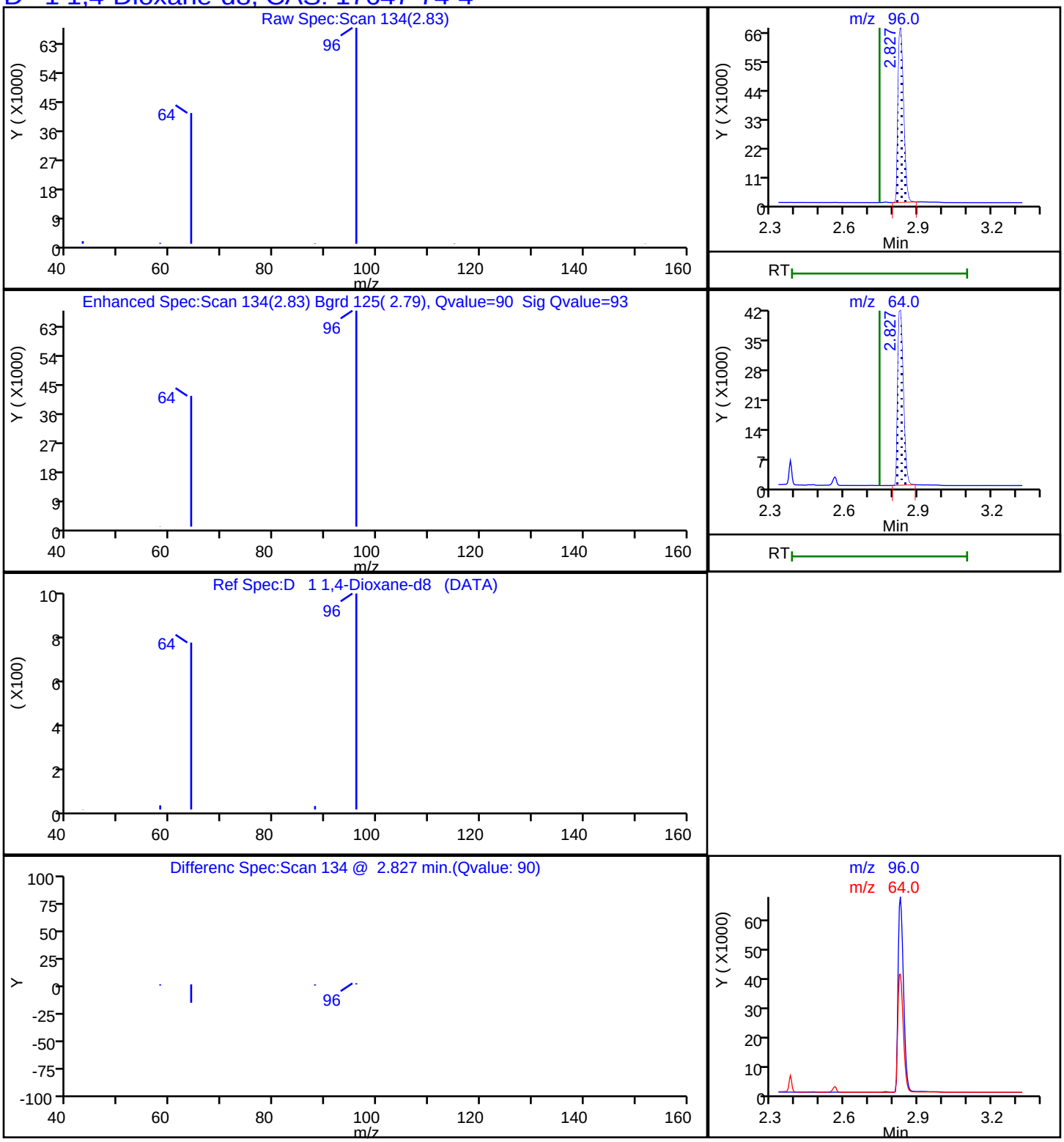


Report Date: 26-Dec-2018 11:55:34 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314357.D				
Injection Date:	18-Dec-2018 21:09:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-12-A	Lab Sample ID:	480-162184-12		
Client ID:	MW-26S				
Operator ID:	DR	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



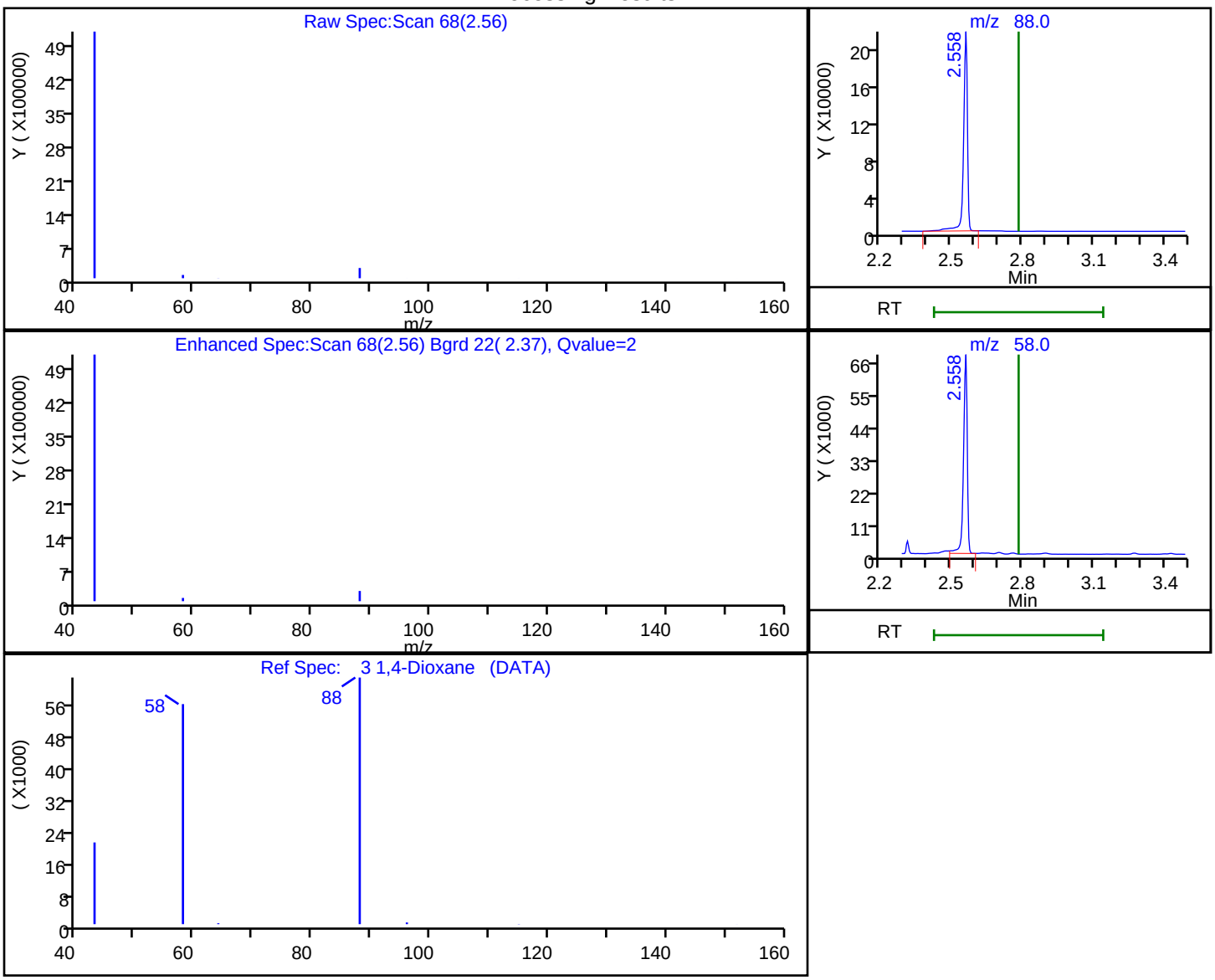
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314357.D				
Injection Date:	18-Dec-2018 21:09:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-12-A	Lab Sample ID:	480-162184-12		
Client ID:	MW-26S				
Operator ID:	DR	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.56	88.00	243018	22.080908
2.56	58.00	74841	

Reviewer: richardsd, 26-Dec-2018 11:54:41

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: EQUIP BLANK
Lab Sample ID: 680-162184-16
Matrix: Water
Lab File ID: U3314358.D
Analysis Method: 8270D SIM ID
Date Collected: 12/11/2018 16:35
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 21:33
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U *	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	24		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314358.D
Lims ID: 680-162184-A-16-A
Client ID: EQUIP BLANK
Sample Type: Client
Inject. Date: 18-Dec-2018 21:33:30 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-023
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:54:49

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.827	2.741	0.086	93	101761	2.37	23.7	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	97	357885	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

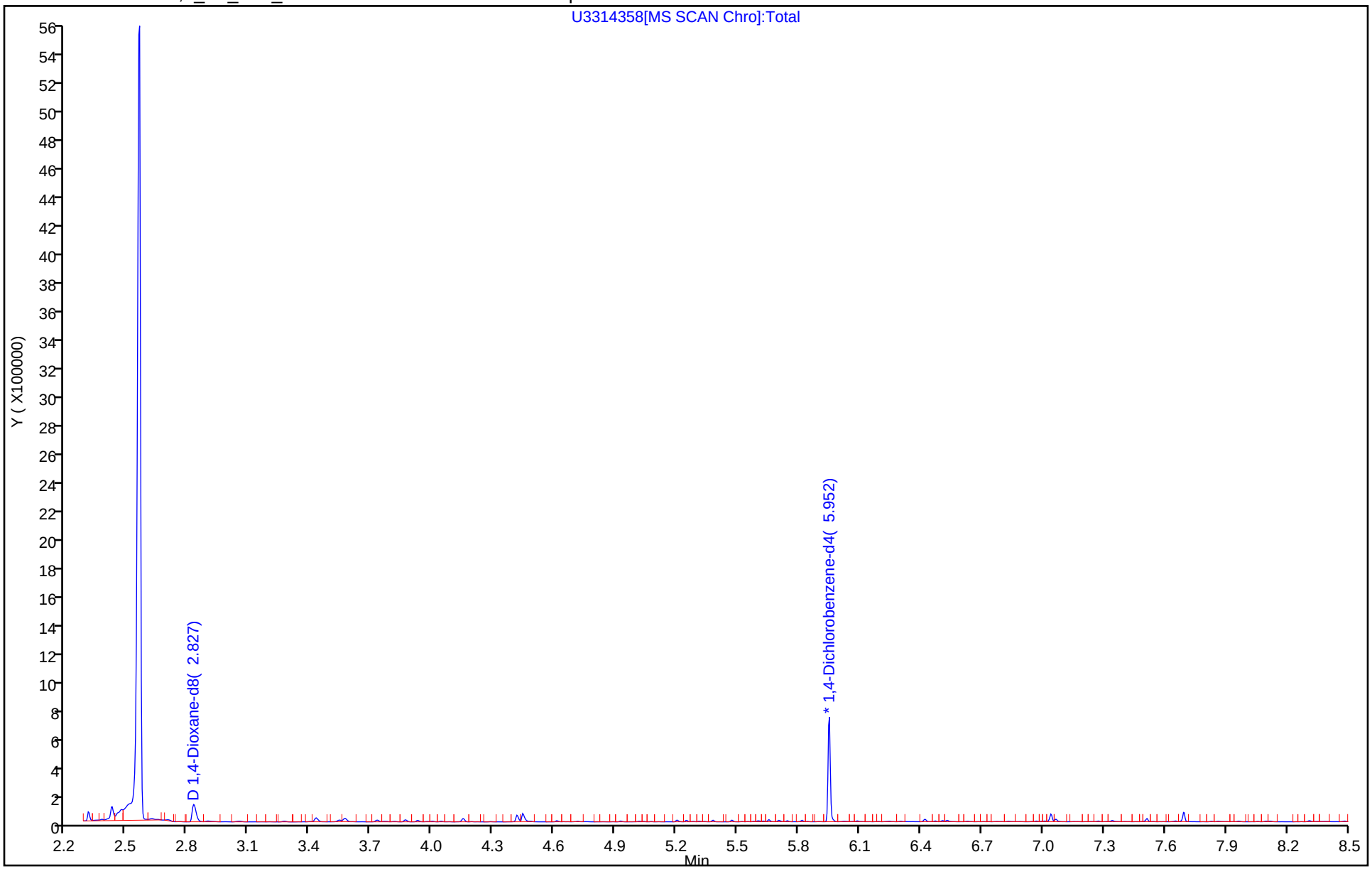
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:35 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314358.D				
Injection Date:	18-Dec-2018 21:33:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-16-A	Lab Sample ID:	480-162184-16	Worklist Smp#:	23
Client ID:	EQUIP BLANK				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

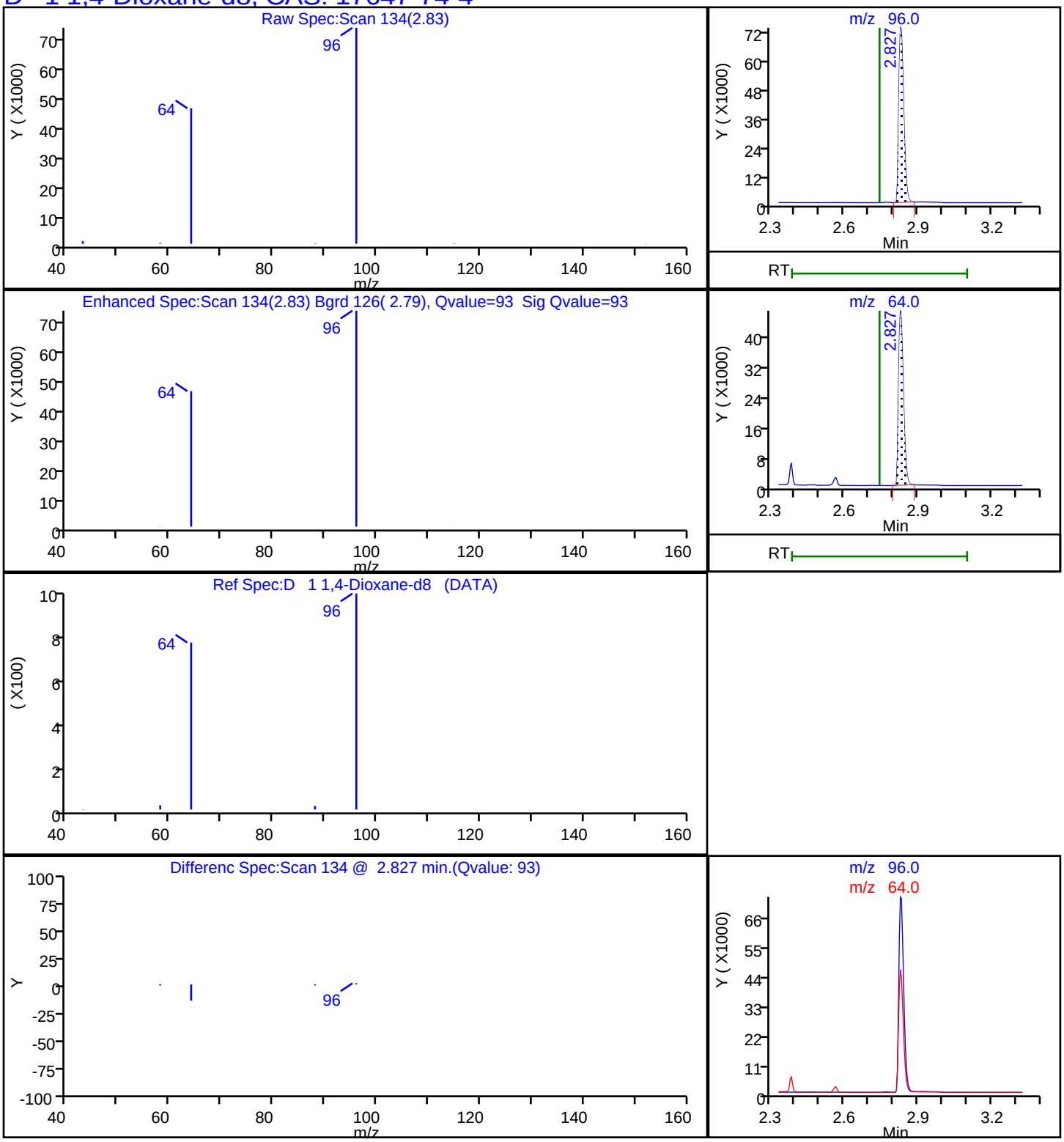


Report Date: 26-Dec-2018 11:55:35 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314358.D				
Injection Date:	18-Dec-2018 21:33:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-16-A	Lab Sample ID:	480-162184-16		
Client ID:	EQUIP BLANK				
Operator ID:	DR	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



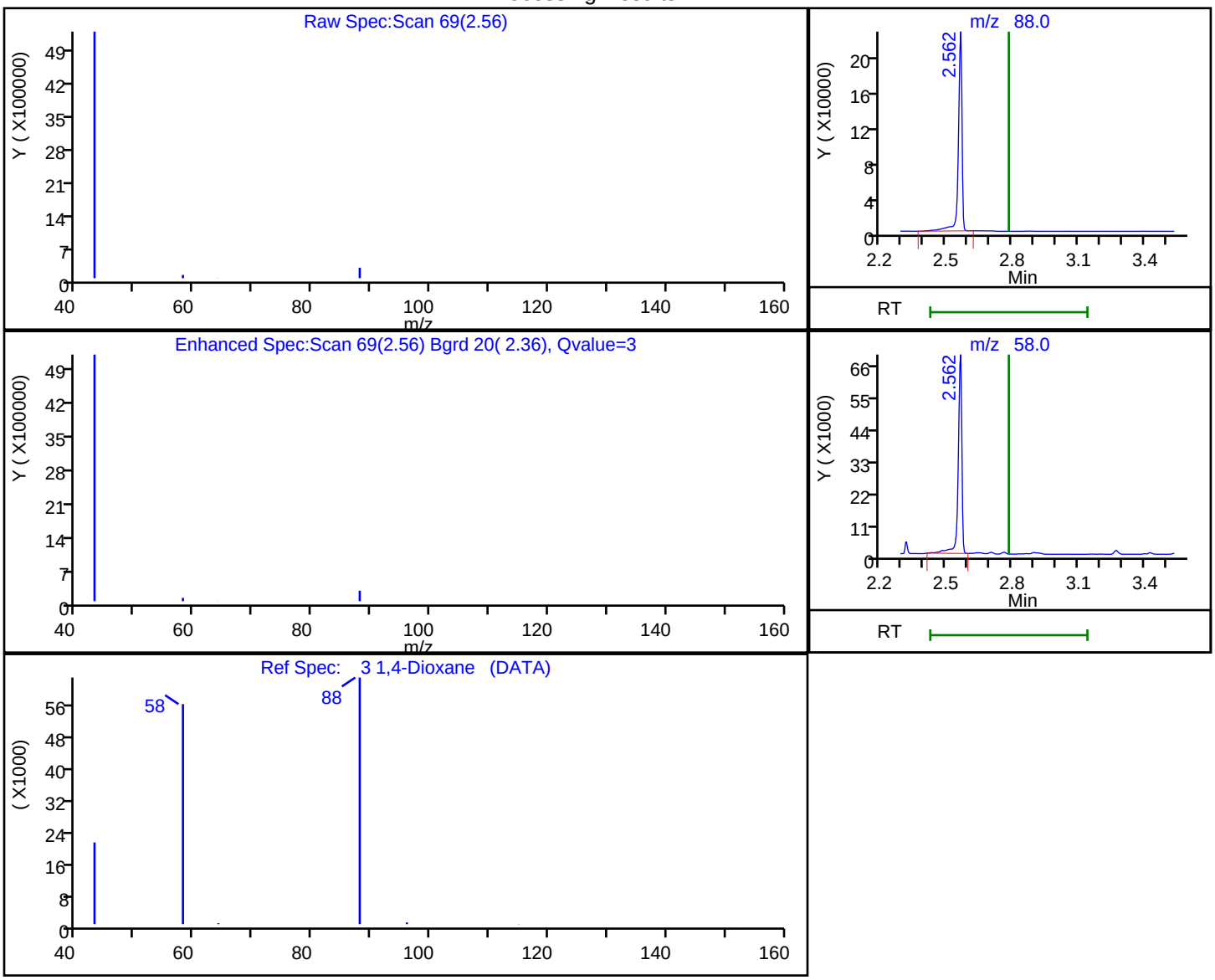
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314358.D				
Injection Date:	18-Dec-2018 21:33:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-16-A	Lab Sample ID:	480-162184-16		
Client ID:	EQUIP BLANK				
Operator ID:	DR	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.56	88.00	255287	23.599827
2.56	58.00	80192	

Reviewer: richardsd, 26-Dec-2018 11:54:48

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-10
Lab Sample ID: 680-162184-19
Matrix: Water
Lab File ID: U3314359.D
Analysis Method: 8270D SIM ID
Date Collected: 12/12/2018 14:21
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 21:58
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U *	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	27		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314359.D
Lims ID: 680-162184-A-19-A
Client ID: MW-10
Sample Type: Client
Inject. Date: 18-Dec-2018 21:58:30 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-024
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:54:53

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.835	2.741	0.094	92	115928	2.71	27.1	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	97	357248	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

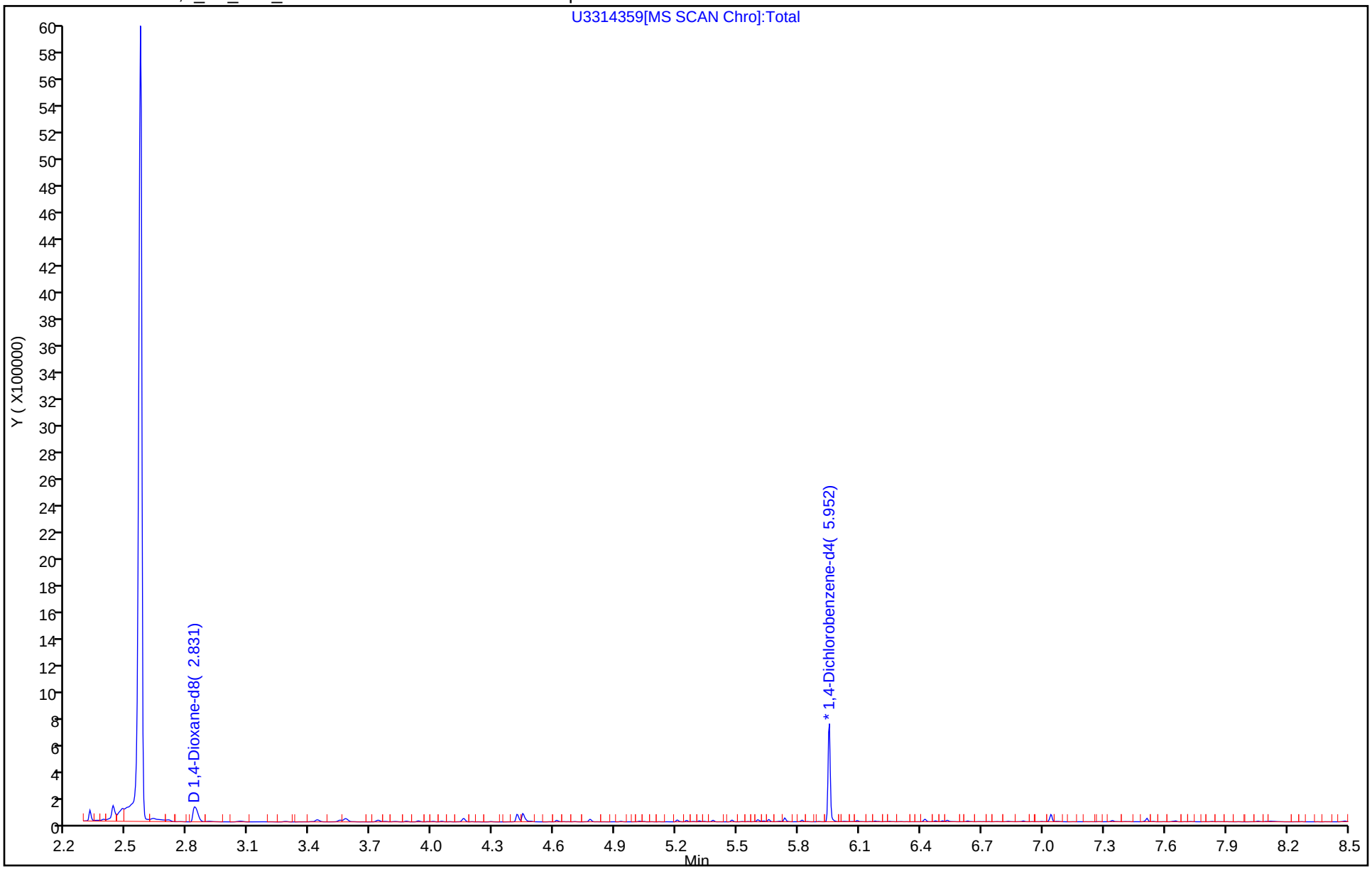
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:36 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314359.D				
Injection Date:	18-Dec-2018 21:58:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-19-A	Lab Sample ID:	480-162184-19	Worklist Smp#:	24
Client ID:	MW-10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

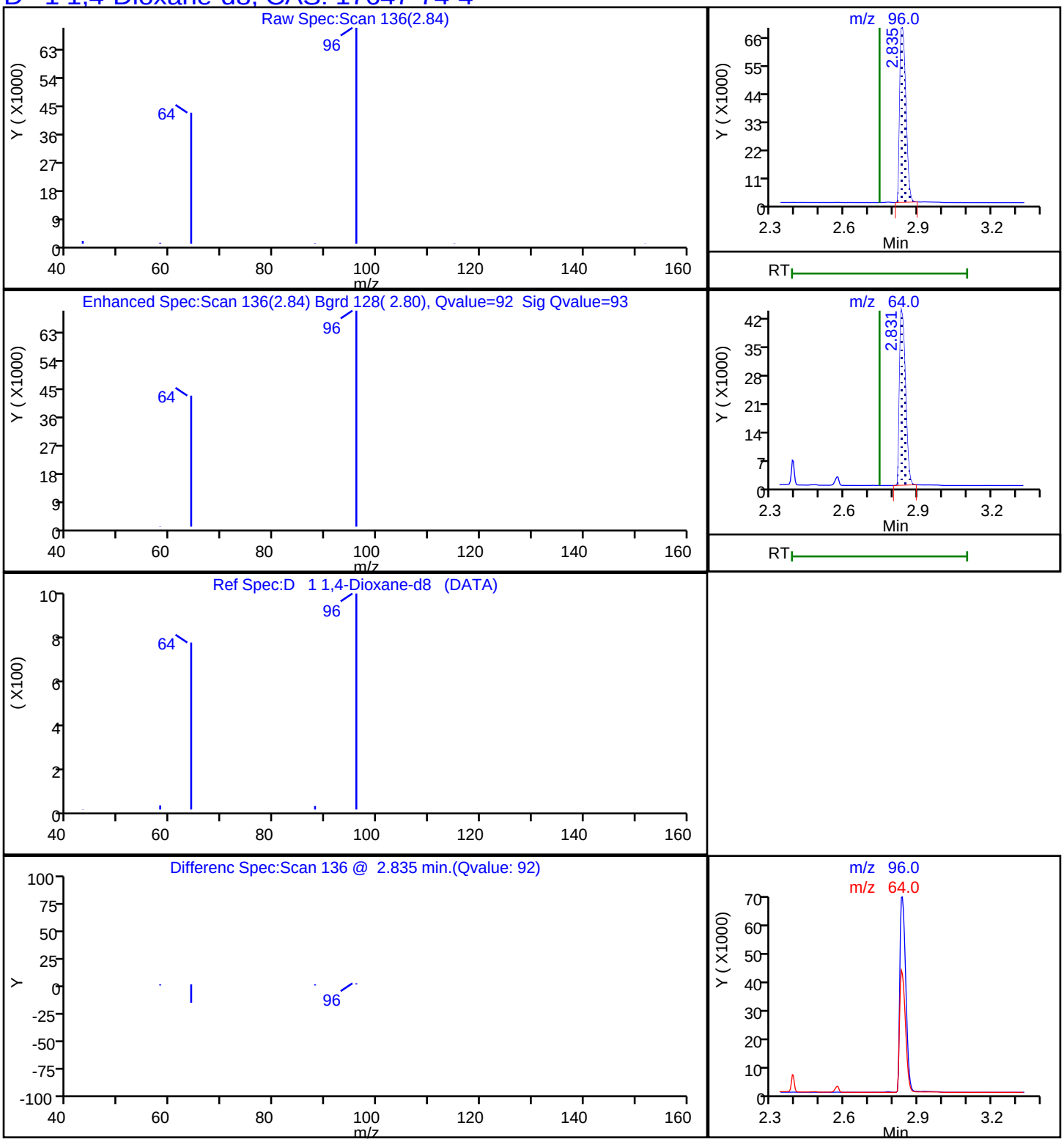


Report Date: 26-Dec-2018 11:55:36 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314359.D				
Injection Date:	18-Dec-2018 21:58:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-19-A	Lab Sample ID:	480-162184-19		
Client ID:	MW-10				
Operator ID:	DR	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



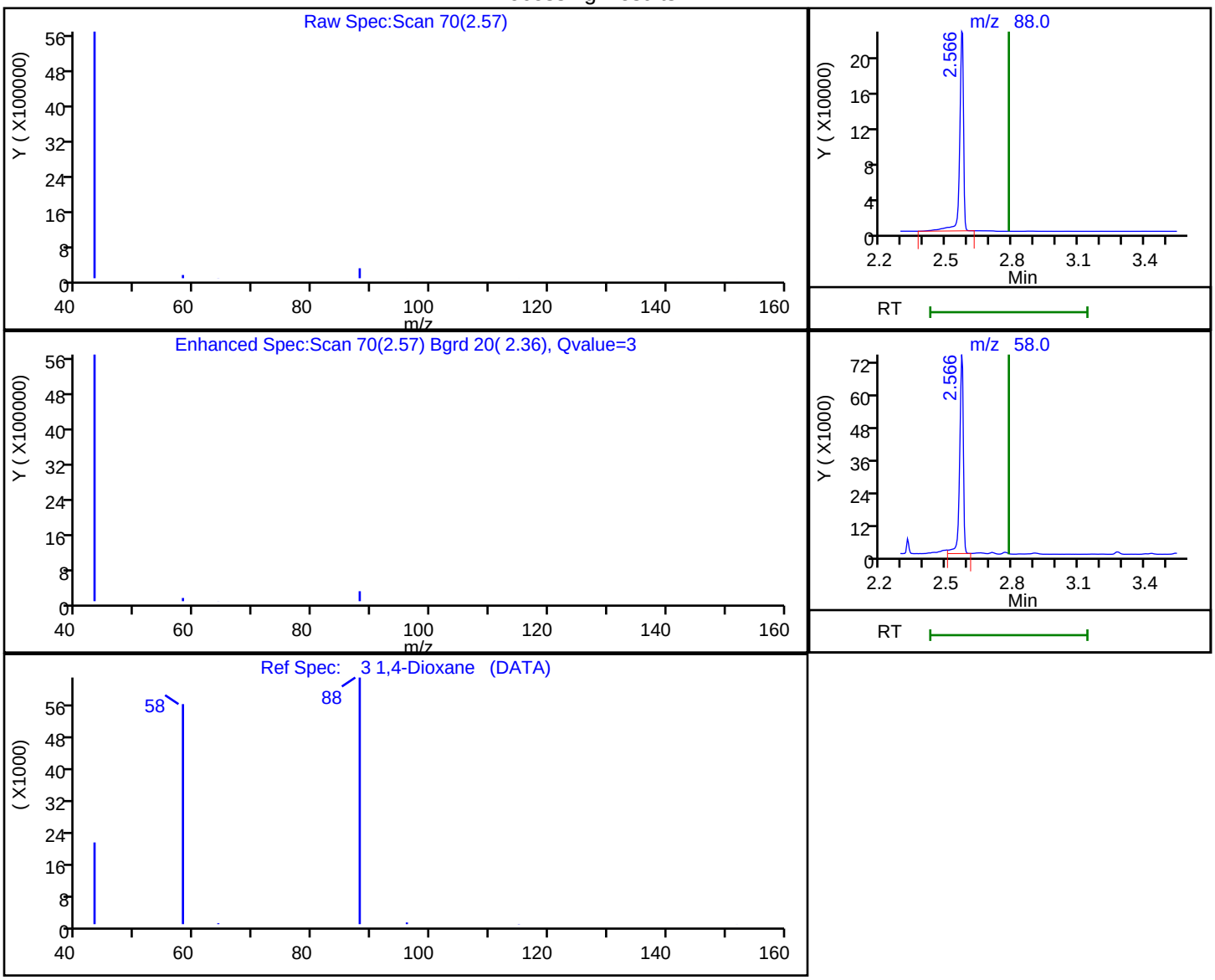
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314359.D				
Injection Date:	18-Dec-2018 21:58:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-19-A	Lab Sample ID:	480-162184-19		
Client ID:	MW-10				
Operator ID:	DR	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.57	88.00	281800	22.867260
2.57	58.00	85861	

Reviewer: richardsd, 26-Dec-2018 11:54:51

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-11D
Lab Sample ID: 680-162184-20
Matrix: Water
Lab File ID: U3314360.D
Analysis Method: 8270D SIM ID
Date Collected: 12/12/2018 15:59
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 22:23
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U *	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	23		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314360.D
Lims ID: 680-162184-A-20-A
Client ID: MW-11D
Sample Type: Client
Inject. Date: 18-Dec-2018 22:23:30 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-025
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:54:59

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.823	2.741	0.082	90	95834	2.31	23.1	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	96	346228	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

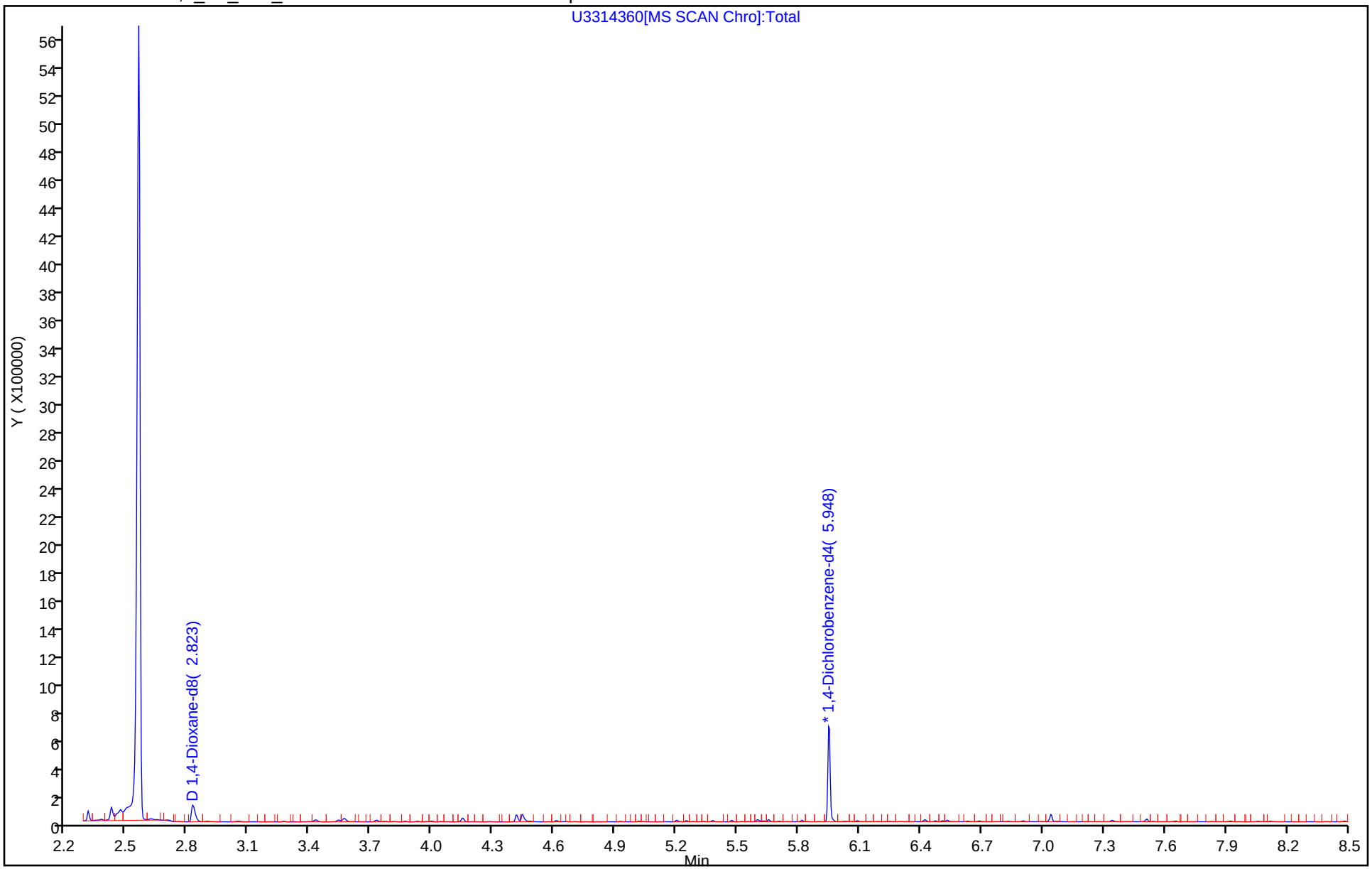
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:37 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314360.D				
Injection Date:	18-Dec-2018 22:23:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-20-A	Lab Sample ID:	480-162184-20	Worklist Smp#:	25
Client ID:	MW-11D				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

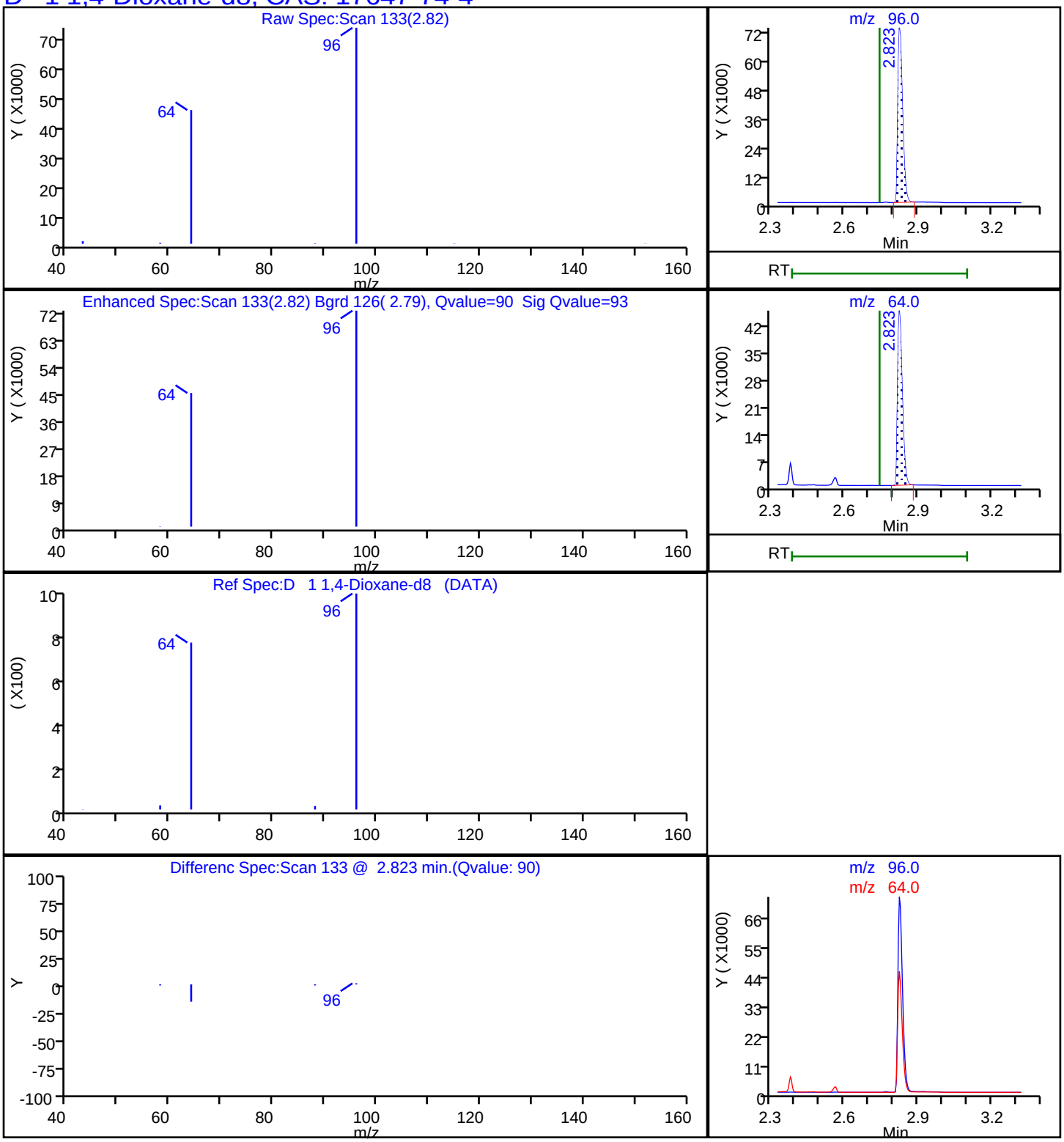


Report Date: 26-Dec-2018 11:55:37 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314360.D				
Injection Date:	18-Dec-2018 22:23:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-20-A	Lab Sample ID:	480-162184-20		
Client ID:	MW-11D				
Operator ID:	DR	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



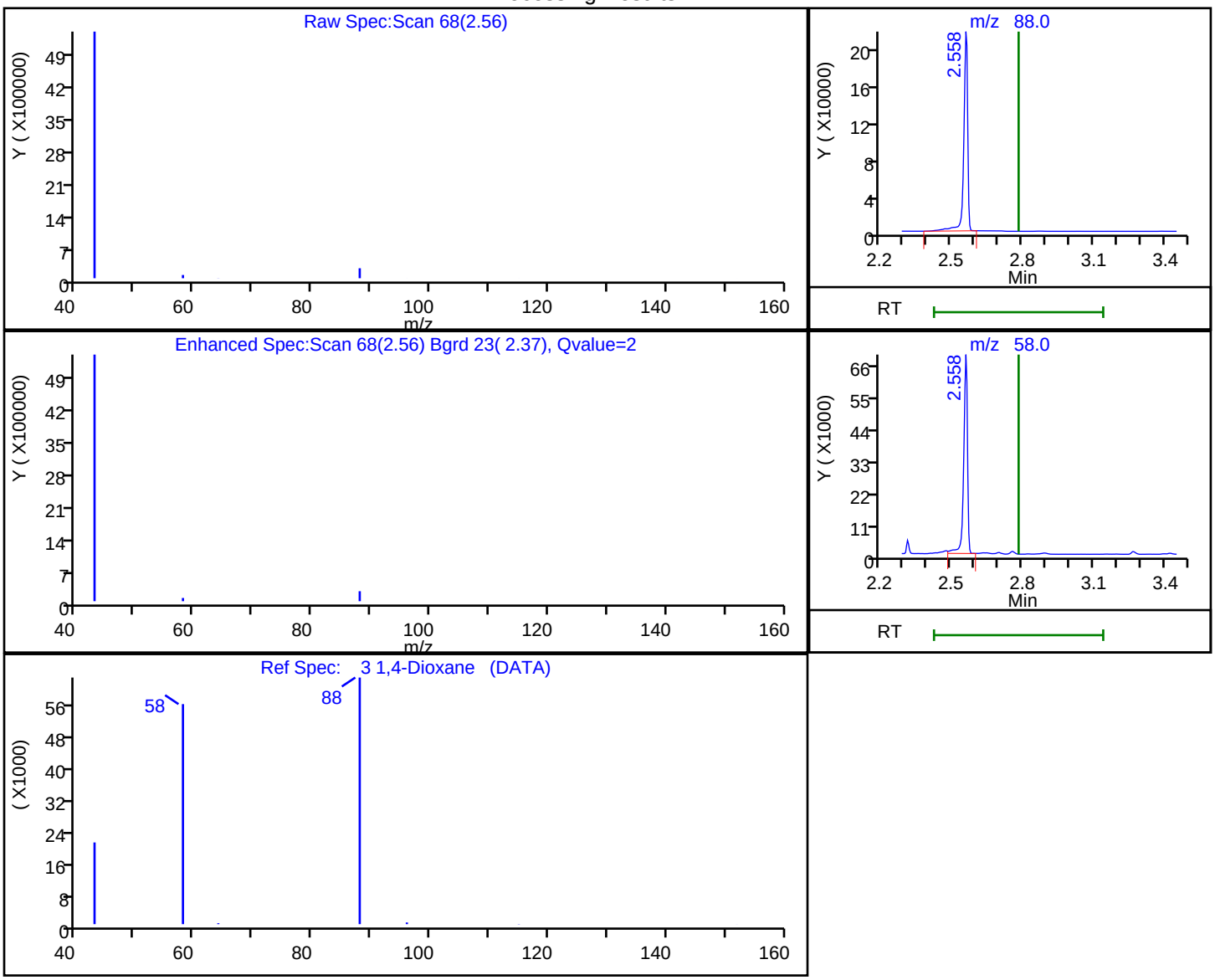
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314360.D				
Injection Date:	18-Dec-2018 22:23:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-20-A	Lab Sample ID:	480-162184-20		
Client ID:	MW-11D				
Operator ID:	DR	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.56	88.00	247888	24.333096
2.56	58.00	76718	

Reviewer: richardsd, 26-Dec-2018 11:54:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: PFASDUP_20181211
Lab Sample ID: 680-162184-21
Matrix: Water
Lab File ID: U3314361.D
Analysis Method: 8270D SIM ID
Date Collected: 12/11/2018 00:00
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 22:48
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U *	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	27		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314361.D
Lims ID: 680-162184-A-21-A
Client ID: PFASDUP_20181211
Sample Type: Client
Inject. Date: 18-Dec-2018 22:48:30 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-026
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:55:14

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	%Rec	Flags
D	1 1,4-Dioxane-d8	96	2.831	2.741	0.090	90	111191	2.74	27.4	
	3 1,4-Dioxane	88		2.782				ND		U
*	2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	96	339293	4.00		

QC Flag Legend

Review Flags
U - Marked Undetected

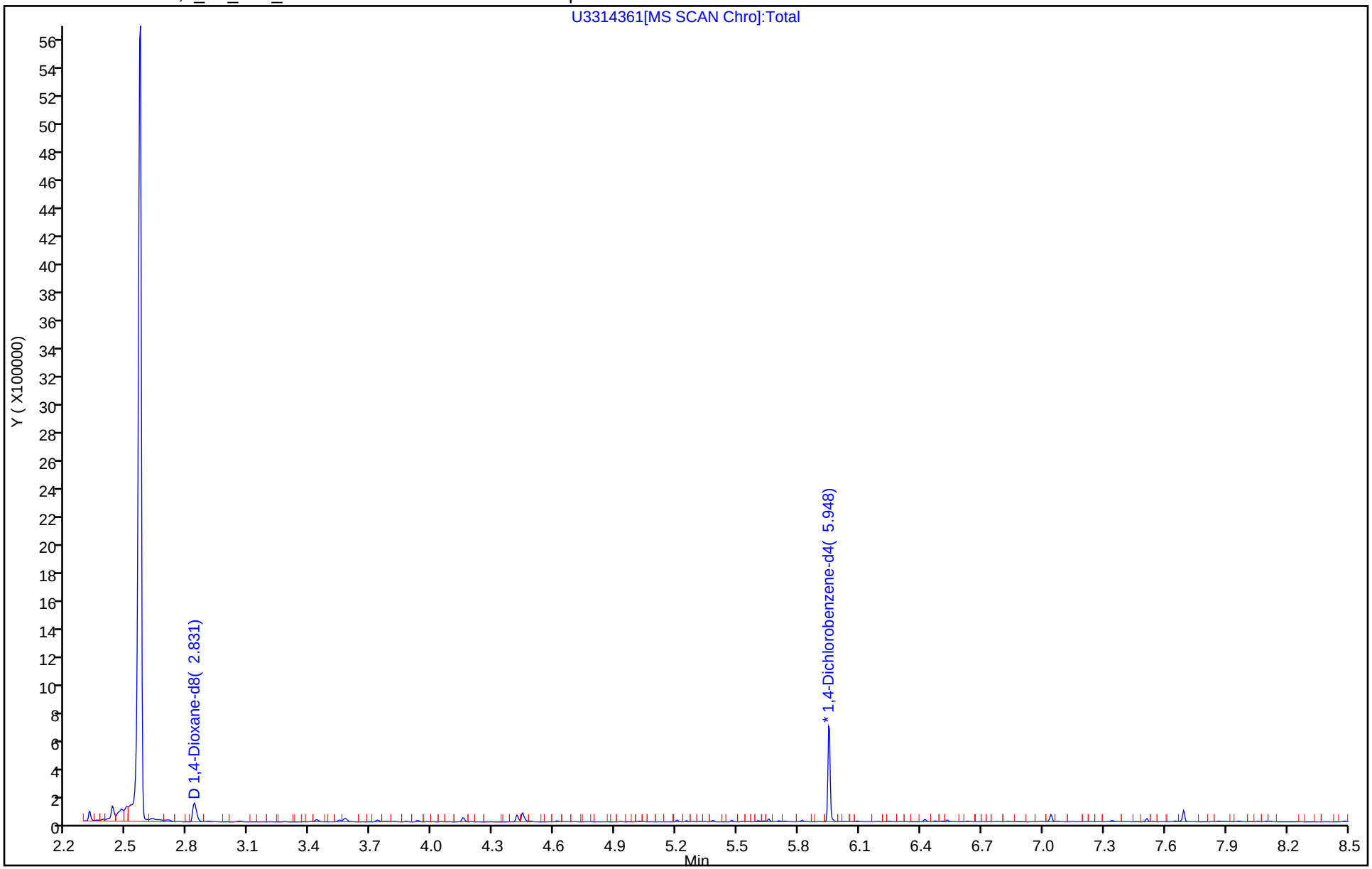
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:38 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314361.D				
Injection Date:	18-Dec-2018 22:48:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-21-A	Lab Sample ID:	480-162184-21	Worklist Smp#:	26
Client ID:	PFASDUP_20181211				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

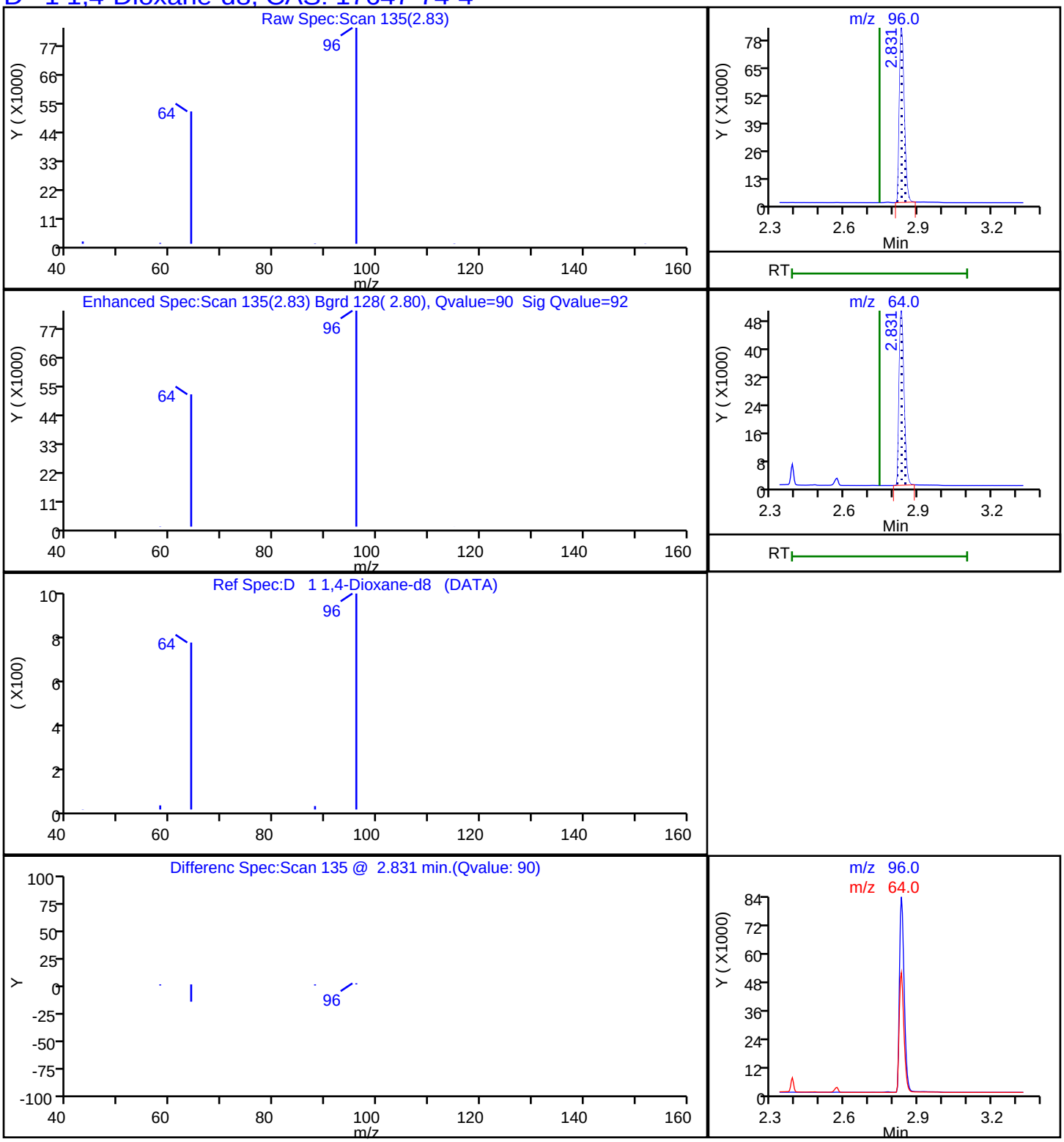


Report Date: 26-Dec-2018 11:55:38 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314361.D				
Injection Date:	18-Dec-2018 22:48:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-21-A	Lab Sample ID:	480-162184-21		
Client ID:	PFASDUP_20181211				
Operator ID:	DR	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



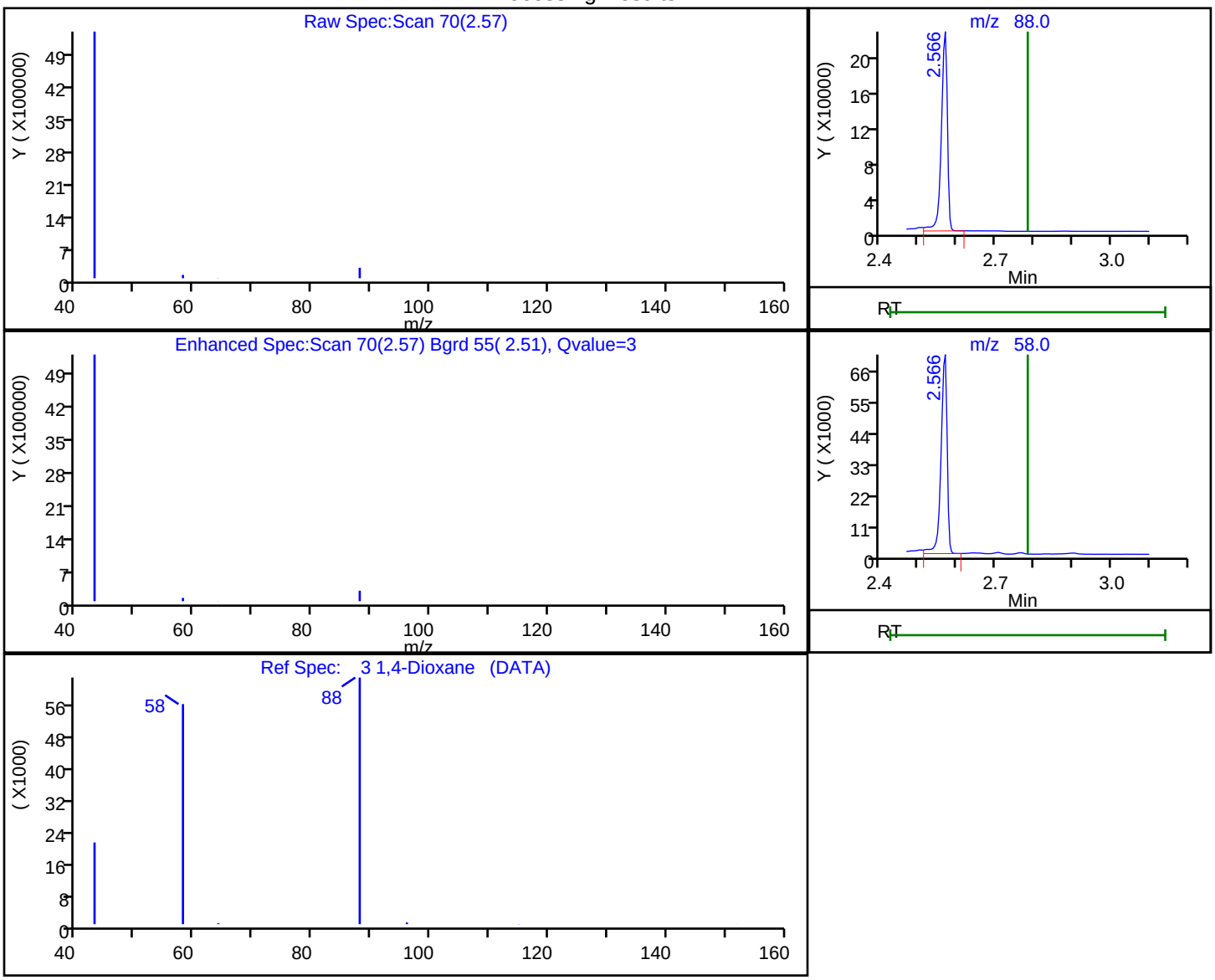
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314361.D				
Injection Date:	18-Dec-2018 22:48:30	Instrument ID:	HP5973U		
Lims ID:	680-162184-A-21-A	Lab Sample ID:	480-162184-21		
Client ID:	PFASDUP_20181211				
Operator ID:	DR	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.57	88.00	249262	21.088609
2.57	58.00	78982	

Reviewer: richardsd, 26-Dec-2018 11:55:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1 Analy Batch No.: 449428

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/07/2018 15:39 Calibration End Date: 12/07/2018 17:41 Calibration ID: 35518

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-449428/3	U3314030.D
Level 2	ICIS 480-449428/5	U3314032.D
Level 3	IC 480-449428/6	U3314033.D
Level 4	IC 480-449428/7	U3314034.D
Level 5	IC 480-449428/8	U3314035.D
Level 6	IC 480-449428/4	U3314031.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	1.0572 1.0842	1.0587	1.0635	1.0670	1.0474	AveID		1.0630			0.0100	1.2		20.0			
1,4-Dioxane-d8	0.4473 0.4701	0.4947	0.4843	0.4938	0.4844	Ave		0.4791			0.0100	3.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1 Analy Batch No.: 449428

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/07/2018 15:39 Calibration End Date: 12/07/2018 17:41 Calibration ID: 35518

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-449428/3	U3314030.D
Level 2	ICIS 480-449428/5	U3314032.D
Level 3	IC 480-449428/6	U3314033.D
Level 4	IC 480-449428/7	U3314034.D
Level 5	IC 480-449428/8	U3314035.D
Level 6	IC 480-449428/4	U3314031.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,4-Dioxane		AveID	6632 14705	28197	31329	39525	47932	0.200 0.400	0.600	0.800	1.00	1.20
1,4-Dioxane-d8	DCBd 4	Ave	62732 135626	266324	294594	370419	457627	2.00 4.00	6.00	8.00	10.0	12.0

Curve Type Legend:

Ave = Average ISTD
AveID = Average isotope dilution

TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314030.D				
Lims ID:	IC - SIM 0.2				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	07-Dec-2018 15:39:30	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	480-0077050-003				
Operator ID:	DR	Instrument ID:	HP5973U		
Sublist:	chrom-1,4_Dx_SIM_HP5973U*sub1				
Method:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\1,4_Dx_SIM_HP5973U.m				
Limit Group:	MB - 8270D SIM ID ICAL				
Last Update:	07-Dec-2018 17:57:47	Calib Date:	07-Dec-2018 17:41:30		
Integrator:	Picker	ID Type:	RT Order ID		
Quant Method:	Isotopic Dilution	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D				
Column 1 :			Det: MS SCAN		
Process Host:	CTX0318				
First Level Reviewer: richardsd		Date:	07-Dec-2018 16:23:06		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.746	2.746	0.000	99	62732	2.00	1.87	
3 1,4-Dioxane	88	2.786	2.786	0.000	94	6632	0.2000	0.1989	
* 2 1,4-Dichlorobenzene-d4	152	5.948	5.948	0.000	98	280522	4.00	4.00	

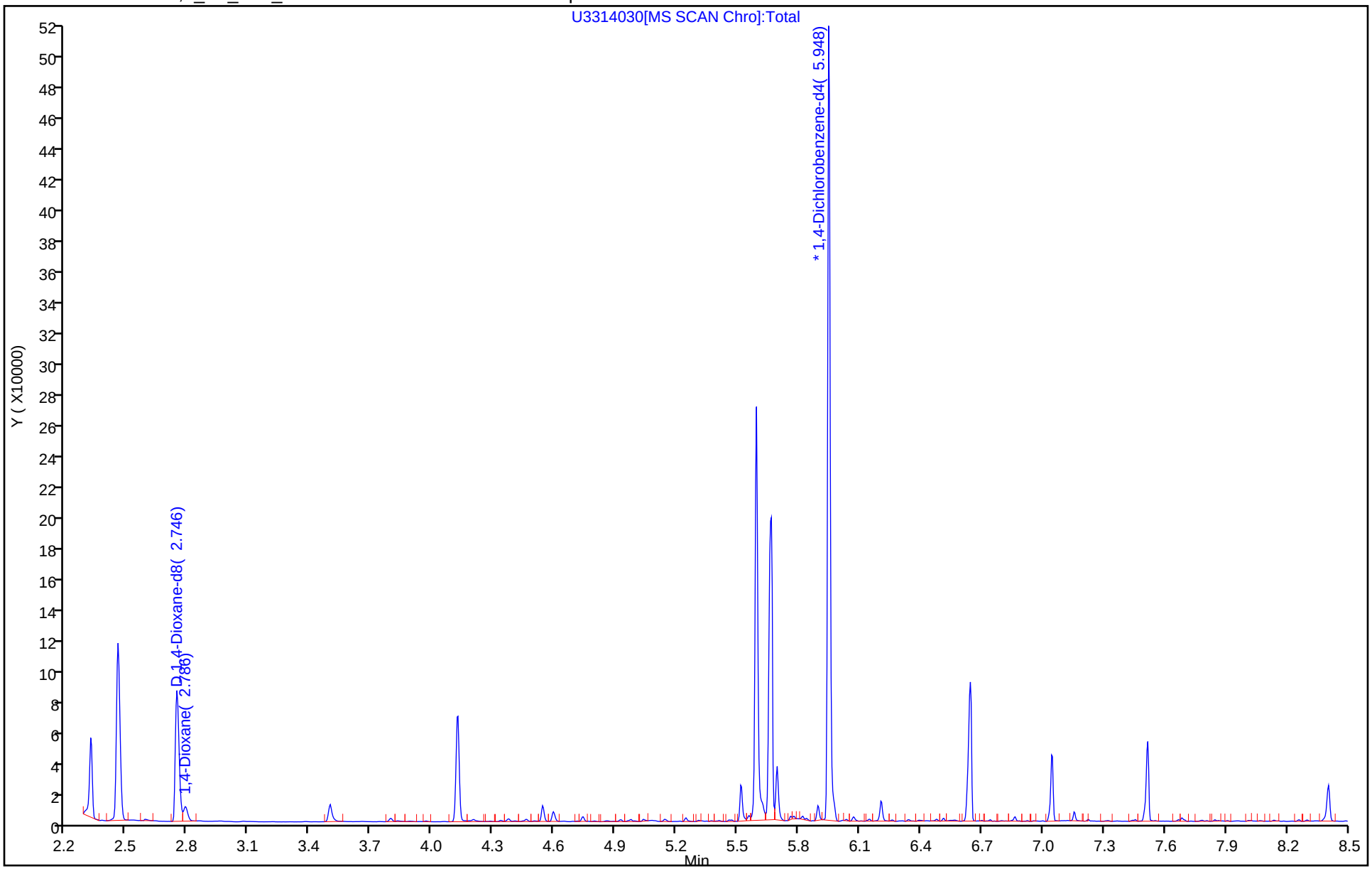
Reagents:

MB_1,4SIM_WRK_00060	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00159	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 07-Dec-2018 17:57:47 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314030.D				
Injection Date:	07-Dec-2018 15:39:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - SIM 0.2			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314031.D
Lims ID: IC - SIM 0.4
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Dec-2018 16:04:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077050-004
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1

Method: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 07-Dec-2018 17:57:48 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0318

First Level Reviewer: richardsd Date: 07-Dec-2018 16:28:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.741	2.746	-0.005	99	135626	4.00	3.93	
3 1,4-Dioxane	88	2.786	2.786	0.000	92	14705	0.4000	0.4080	
* 2 1,4-Dichlorobenzene-d4	152	5.948	5.948	0.000	97	288480	4.00	4.00	

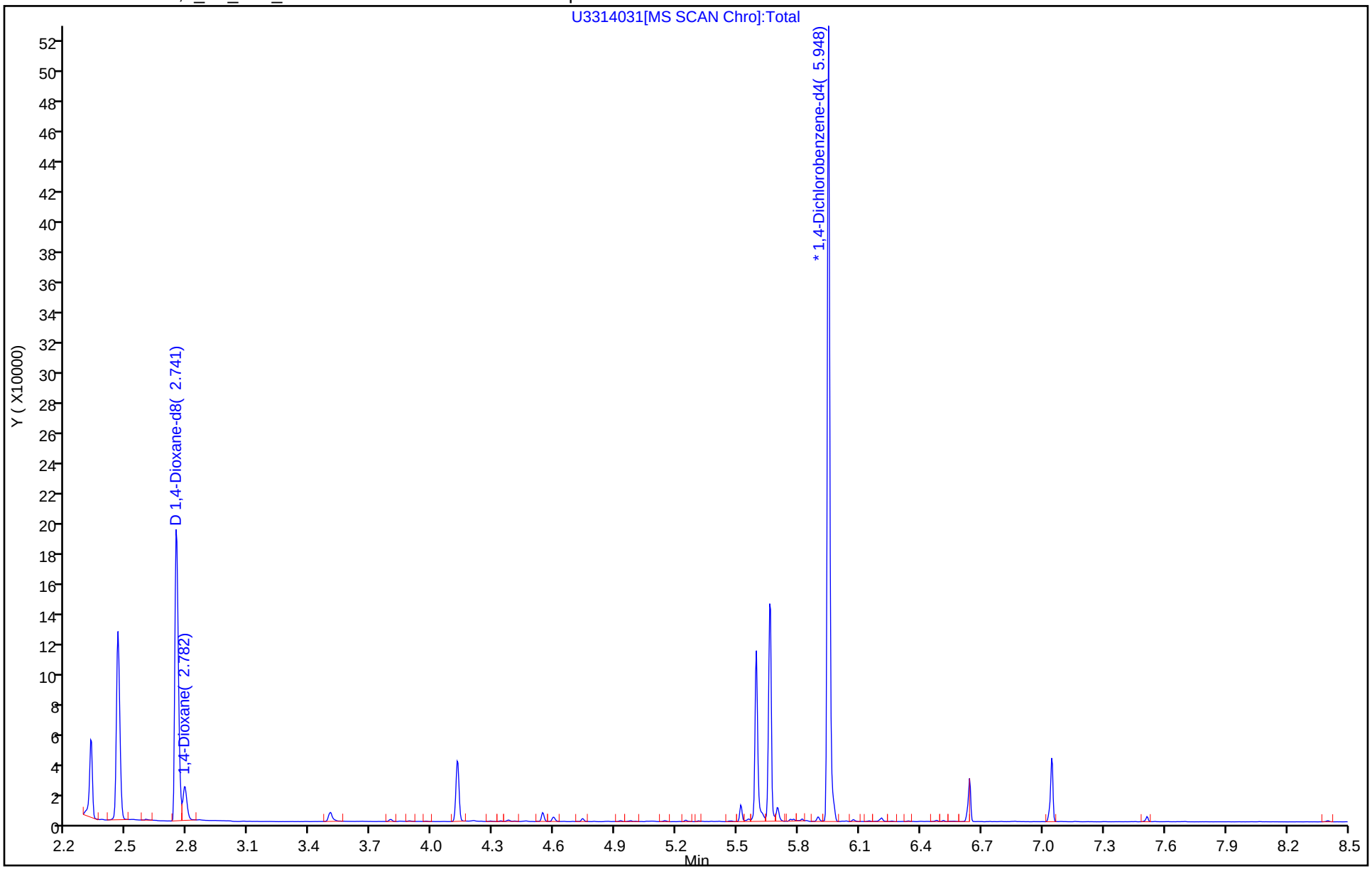
Reagents:

MB_1,4SIM_WRK_00061 Amount Added: 1.00 Units: mL
MB_LLIS_WRK_00159 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 07-Dec-2018 17:57:48 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314031.D				
Injection Date:	07-Dec-2018 16:04:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - SIM 0.4			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314032.D
Lims ID: ICIS - SIM 0.6
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 07-Dec-2018 16:28:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077050-005
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1

Method: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 07-Dec-2018 17:57:48 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0318

First Level Reviewer: richardsd Date: 07-Dec-2018 16:58:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.745	2.745	0.000	97	266324	6.00	6.20	
3 1,4-Dioxane	88	2.786	2.786	0.000	92	28197	0.6000	0.5976	
* 2 1,4-Dichlorobenzene-d4	152	5.948	5.948	0.000	97	358908	4.00	4.00	

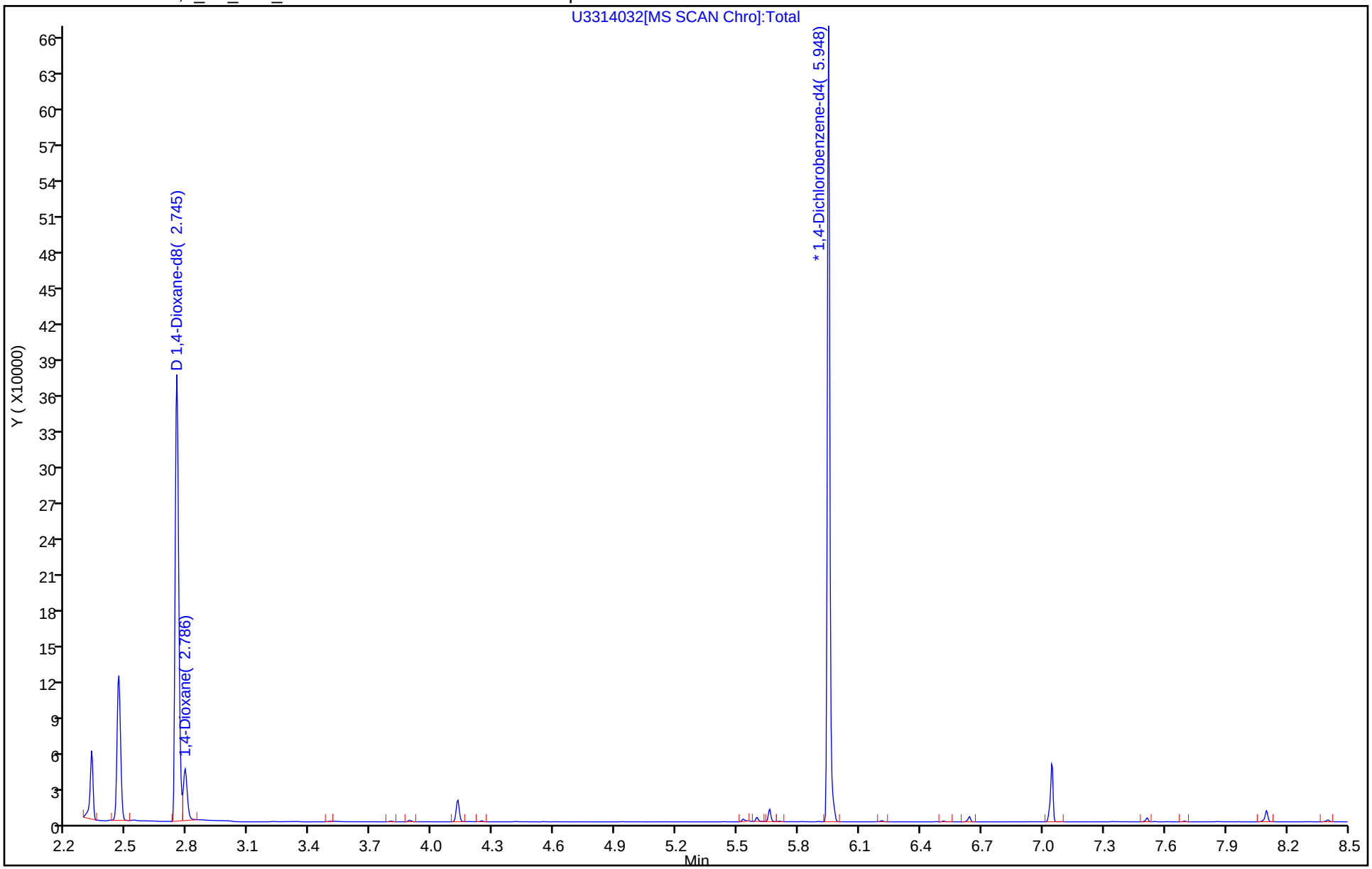
Reagents:

MB_1,4SIM_WRK_00062 Amount Added: 1.00 Units: mL
MB_LLIS_WRK_00159 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 07-Dec-2018 17:57:49 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314032.D				
Injection Date:	07-Dec-2018 16:28:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	ICIS - SIM 0.6			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314033.D				
Lims ID:	IC - SIM 0.8				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	07-Dec-2018 16:52:30	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	480-0077050-006				
Operator ID:	DR	Instrument ID:	HP5973U		
Sublist:	chrom-1,4_Dx_SIM_HP5973U*sub1				
Method:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\1,4_Dx_SIM_HP5973U.m				
Limit Group:	MB - 8270D SIM ID ICAL				
Last Update:	07-Dec-2018 17:57:49	Calib Date:	07-Dec-2018 17:41:30		
Integrator:	Picker	ID Type:	RT Order ID		
Quant Method:	Isotopic Dilution	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D				
Column 1 :			Det: MS SCAN		
Process Host:	CTX0318				
First Level Reviewer: richardsd		Date:	07-Dec-2018 17:40:49		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.746	2.745	0.001	95	294594	8.00	8.09	
3 1,4-Dioxane	88	2.786	2.786	0.000	91	31329	0.8000	0.8003	
* 2 1,4-Dichlorobenzene-d4	152	5.948	5.948	0.000	98	304160	4.00	4.00	

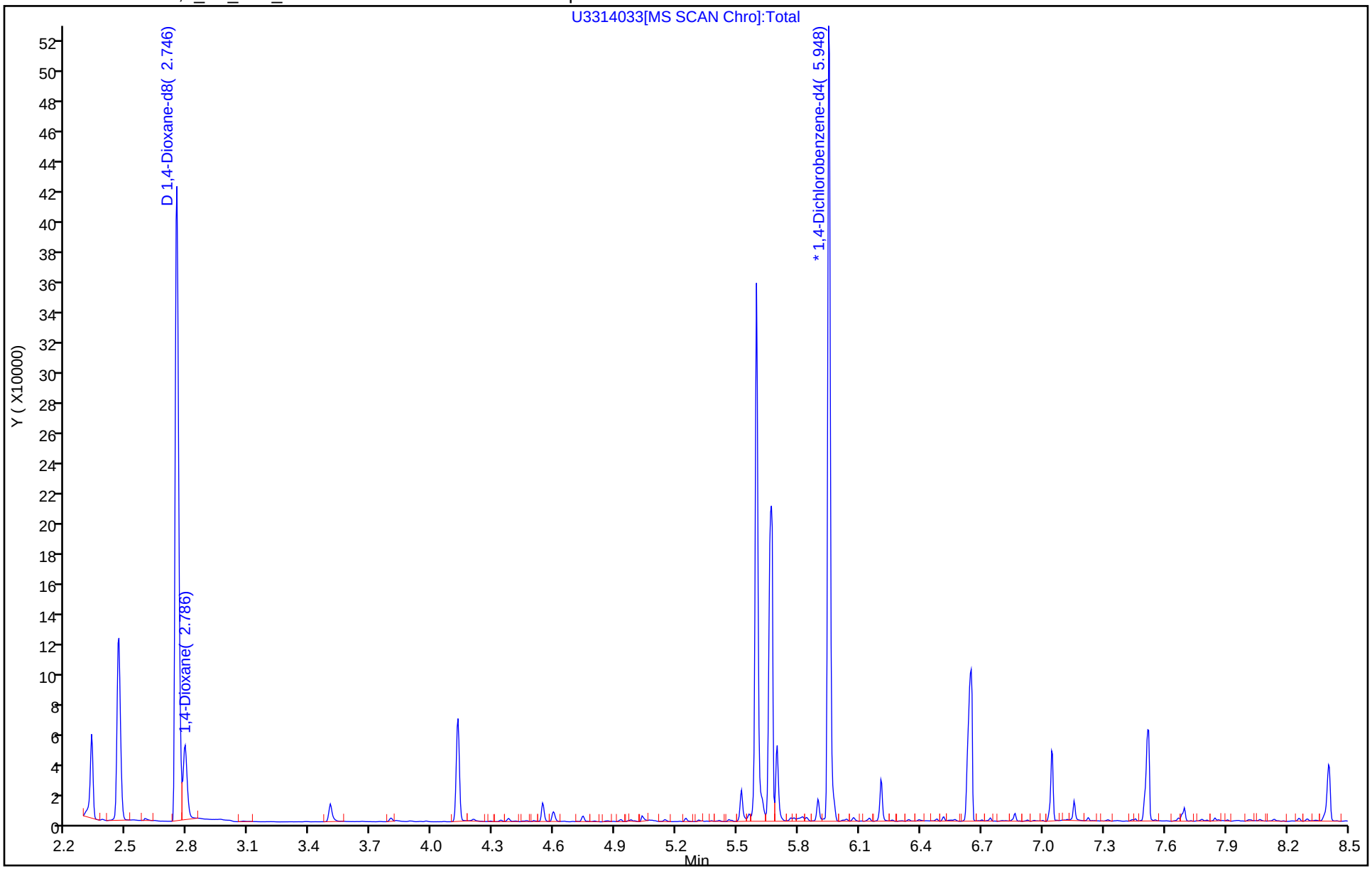
Reagents:

MB_1,4SIM_WRK_00063	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00159	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 07-Dec-2018 17:57:50 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314033.D				
Injection Date:	07-Dec-2018 16:52:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - SIM 0.8			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314034.D				
Lims ID:	IC - SIM 1.0				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	07-Dec-2018 17:17:30	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	480-0077050-007				
Operator ID:	DR	Instrument ID:	HP5973U		
Sublist:	chrom-1,4_Dx_SIM_HP5973U*sub1				
Method:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\1,4_Dx_SIM_HP5973U.m				
Limit Group:	MB - 8270D SIM ID ICAL				
Last Update:	07-Dec-2018 17:57:51	Calib Date:	07-Dec-2018 17:41:30		
Integrator:	Picker	ID Type:	RT Order ID		
Quant Method:	Isotopic Dilution	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D				
Column 1 :			Det: MS SCAN		
Process Host:	CTX0318				
First Level Reviewer: richardsd		Date:	07-Dec-2018 17:57:28		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.746	2.745	0.001	94	370419	10.0	10.3	
3 1,4-Dioxane	88	2.786	2.786	0.000	91	39525	1.00	1.00	
* 2 1,4-Dichlorobenzene-d4	152	5.948	5.948	0.000	98	300067	4.00	4.00	

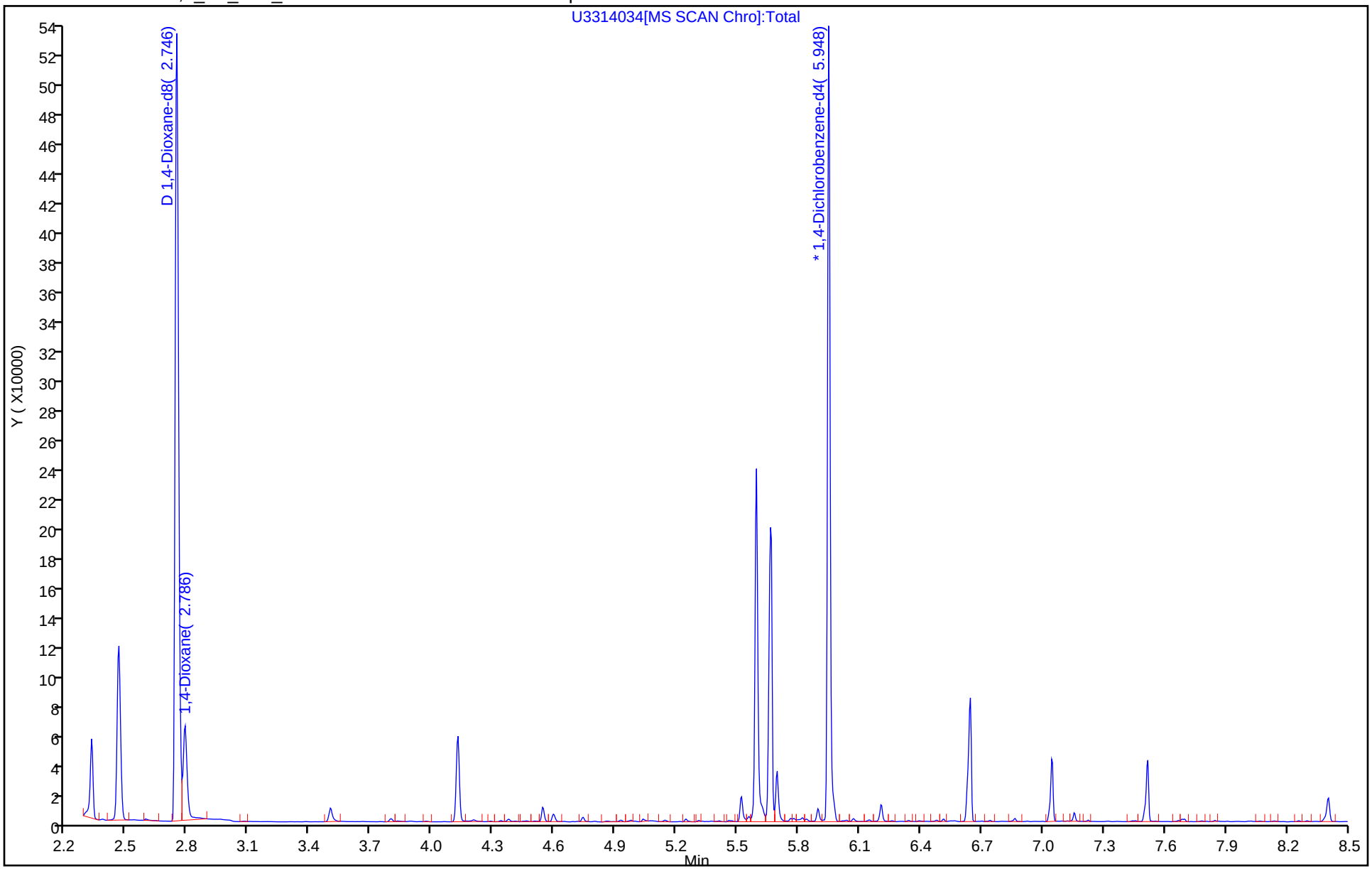
Reagents:

MB_1,4SIM_WRK_00064	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00159	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 07-Dec-2018 17:57:51 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314034.D				
Injection Date:	07-Dec-2018 17:17:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - SIM 1.0			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D				
Lims ID:	IC - SIM 1.2				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	07-Dec-2018 17:41:30	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	480-0077050-008				
Operator ID:	DR	Instrument ID:	HP5973U		
Sublist:	chrom-1,4_Dx_SIM_HP5973U*sub1				
Method:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\1,4_Dx_SIM_HP5973U.m				
Limit Group:	MB - 8270D SIM ID ICAL				
Last Update:	07-Dec-2018 17:57:52	Calib Date:	07-Dec-2018 17:41:30		
Integrator:	Picker	ID Type:	RT Order ID		
Quant Method:	Isotopic Dilution	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D				
Column 1 :			Det: MS SCAN		
Process Host:	CTX0318				
First Level Reviewer: richardsd		Date:	07-Dec-2018 17:57:42		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.746	2.745	0.001	95	457627	12.0	12.1	
3 1,4-Dioxane	88	2.786	2.786	0.000	92	47932	1.20	1.18	
* 2 1,4-Dichlorobenzene-d4	152	5.948	5.948	0.000	97	314900	4.00	4.00	

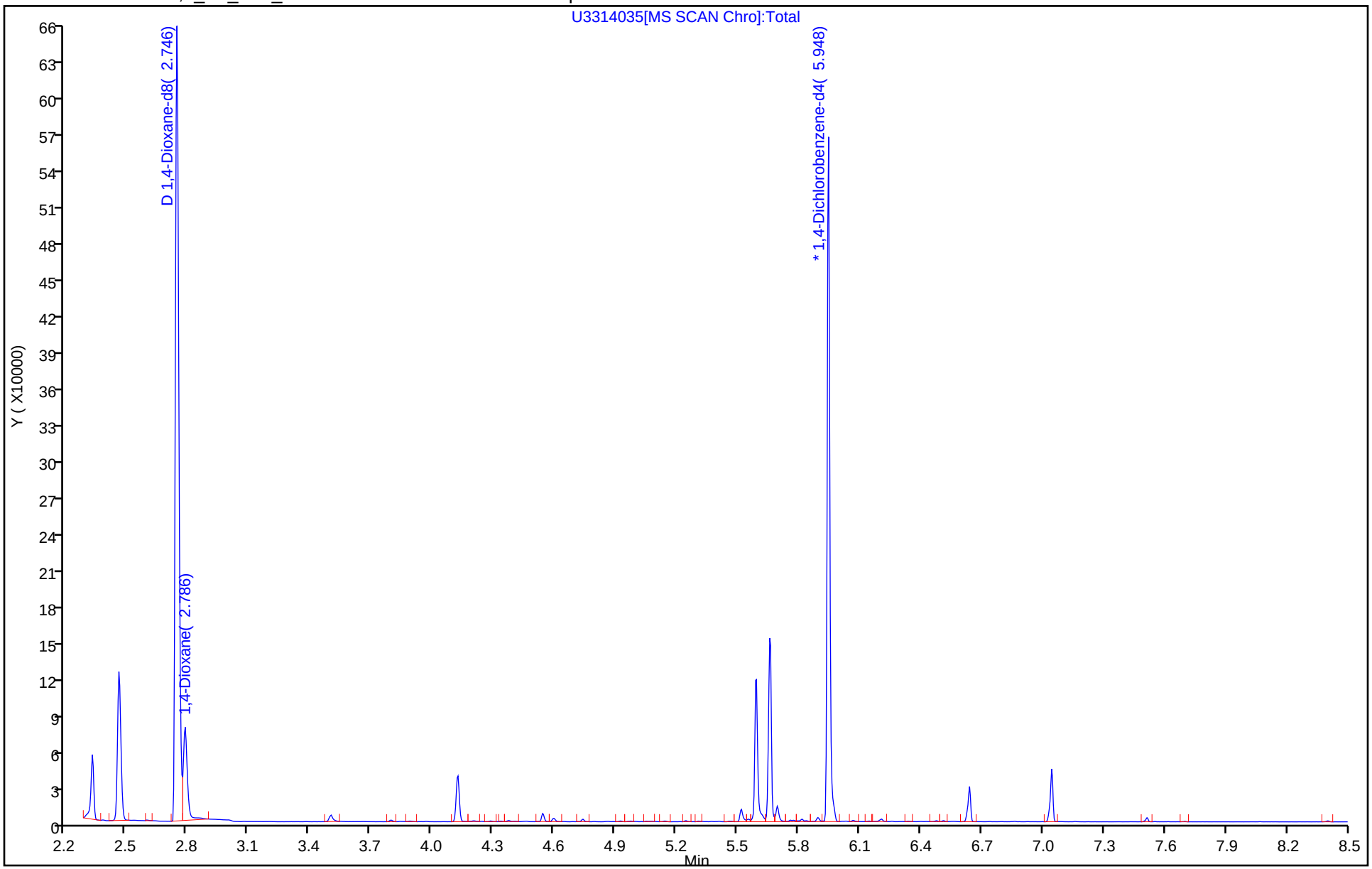
Reagents:

MB_1,4SIM_WRK_00065	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00159	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 07-Dec-2018 17:57:52 Chrom Revision: 2.3 21-Nov-2018 13:56:44

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D				
Injection Date:	07-Dec-2018 17:41:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - SIM 1.2			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 480-451416/3 Calibration Date: 12/18/2018 13:22

Instrument ID: HP5973U Calib Start Date: 12/07/2018 15:39

GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm) Calib End Date: 12/07/2018 17:41

Lab File ID: U3314338.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	AveID	1.063	1.007	0.0100	568	600	-5.3	20.0
1,4-Dioxane-d8	Ave	0.4791	0.4490	0.0100	5620	6000	-6.3	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314338.D				
Lims ID:	CCVIS				
Client ID:					
Sample Type:	CCVIS				
Inject. Date:	18-Dec-2018 13:22:30	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	480-0077400-003				
Operator ID:	DR	Instrument ID:	HP5973U		
Sublist:	chrom-1,4_Dx_SIM_HP5973U*sub1				
Method:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m				
Limit Group:	MB - 8270D SIM ID ICAL				
Last Update:	26-Dec-2018 11:55:20	Calib Date:	07-Dec-2018 17:41:30		
Integrator:	Picker	ID Type:	RT Order ID		
Quant Method:	Isotopic Dilution	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D				
Column 1 :			Det: MS SCAN		
Process Host:	CTX0301				
First Level Reviewer: richardsd		Date:	18-Dec-2018 14:39:56		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.742	2.741	0.001	90	238660	6.00	5.62	
3 1,4-Dioxane	88	2.782	2.782	0.000	88	24030	0.6000	0.5683	
* 2 1,4-Dichlorobenzene-d4	152	5.944	5.944	0.000	98	354380	4.00	4.00	

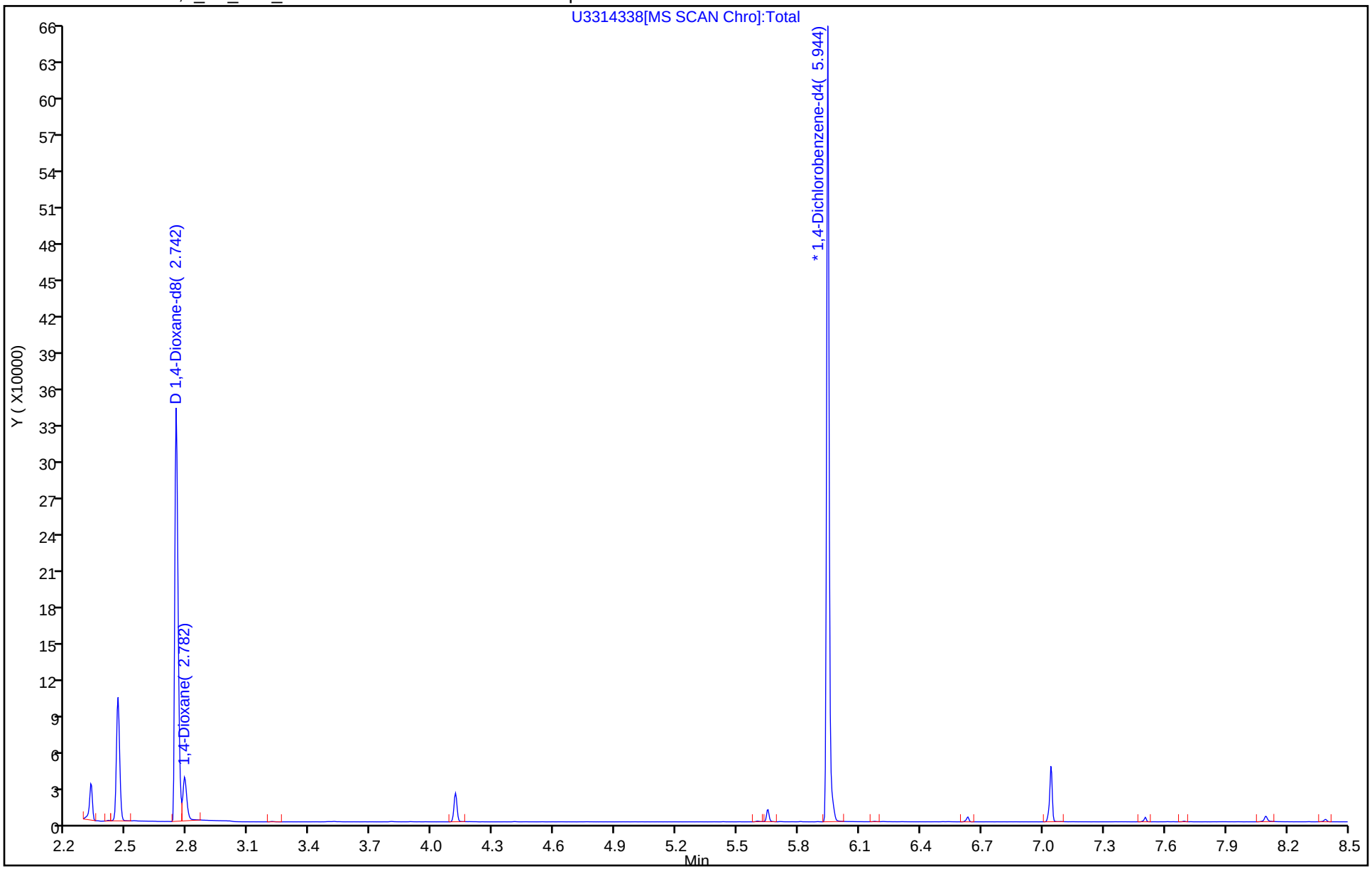
Reagents:

MB_1,4SIM_WRK_00062	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00158	Amount Added: 20.00	Units: uL	Run Reagent

Report Date: 26-Dec-2018 11:55:20 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314338.D				
Injection Date:	18-Dec-2018 13:22:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Lab Sample ID: CCVIS 480-452932/3 Calibration Date: 12/28/2018 14:24

Instrument ID: HP5973U Calib Start Date: 12/07/2018 15:39

GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm) Calib End Date: 12/07/2018 17:41

Lab File ID: U3314469.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	AveID	1.063	0.9924	0.0100	560	600	-6.6	20.0
1,4-Dioxane-d8	Ave	0.4791	0.5044	0.0100	6320	6000	5.3	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314469.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 28-Dec-2018 14:24:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077632-003
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-1,4_Dx_SIM_HP5973U*sub1

Method: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 28-Dec-2018 16:04:39 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: richardsd Date: 28-Dec-2018 14:45:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.746	2.741	0.005	89	197839	6.00	6.32	
3 1,4-Dioxane	88	2.786	2.786	0.000	87	19634	0.6000	0.5602	
* 2 1,4-Dichlorobenzene-d4	152	5.944	5.944	0.000	97	261508	4.00	4.00	

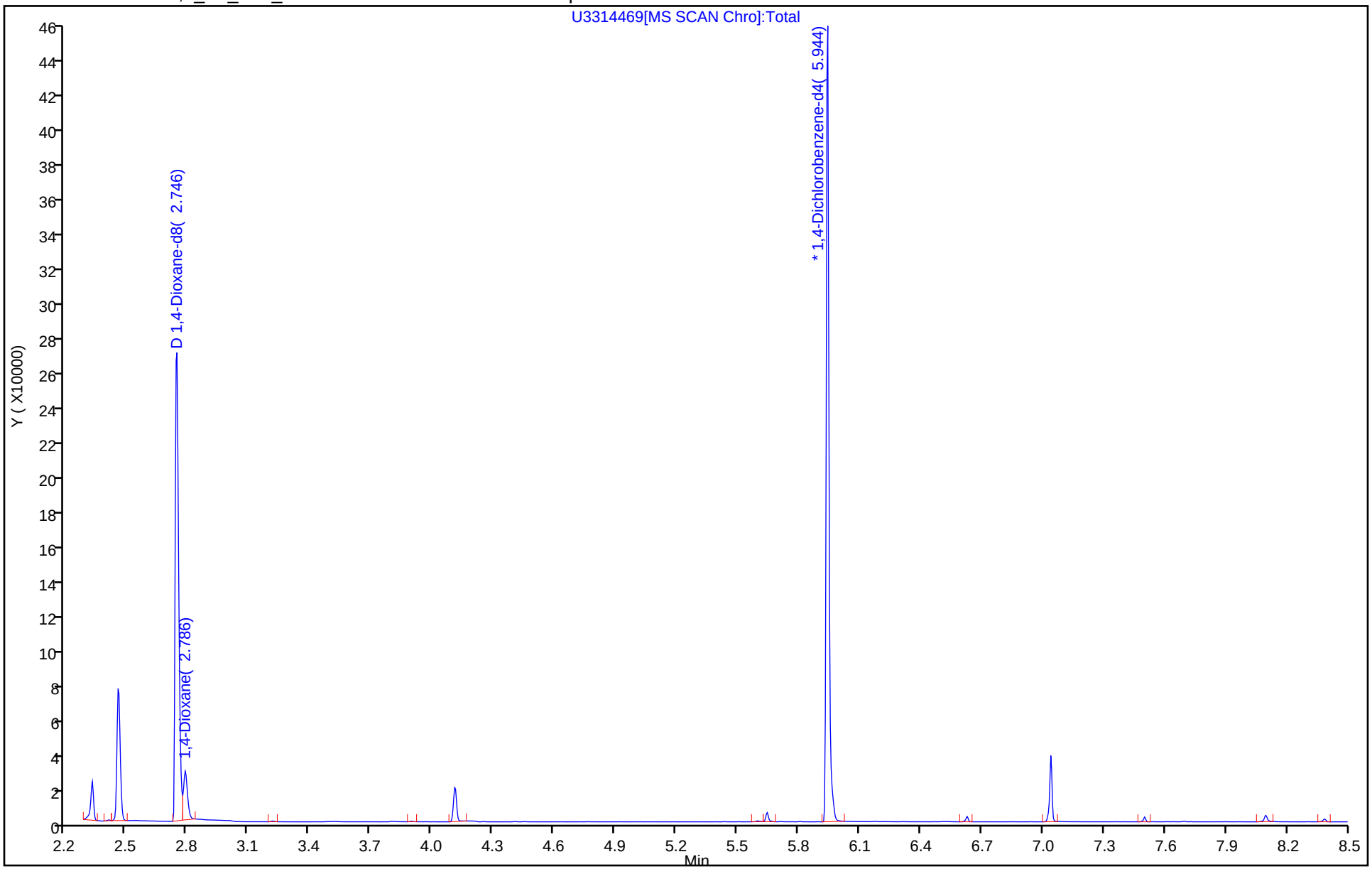
Reagents:

MB_1,4SIM_WRK_00062 Amount Added: 1.00 Units: mL
MB_LLIS_WRK_00160 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 28-Dec-2018 16:04:40 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314469.D				
Injection Date:	28-Dec-2018 14:24:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314029.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 07-Dec-2018 15:11:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077050-002
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 07-Dec-2018 17:57:46 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: Deconvolution ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0318

First Level Reviewer: richardsd Date: 07-Dec-2018 15:35:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 DFTPP									
7 4,4'-DDE	246	11.026	11.026	0.000	0	832		NR	
5 4,4'-DDD	235	11.325	11.325	0.000	92	3201		NR	
6 4,4'-DDT	235	11.608	11.608	0.000	97	517196	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

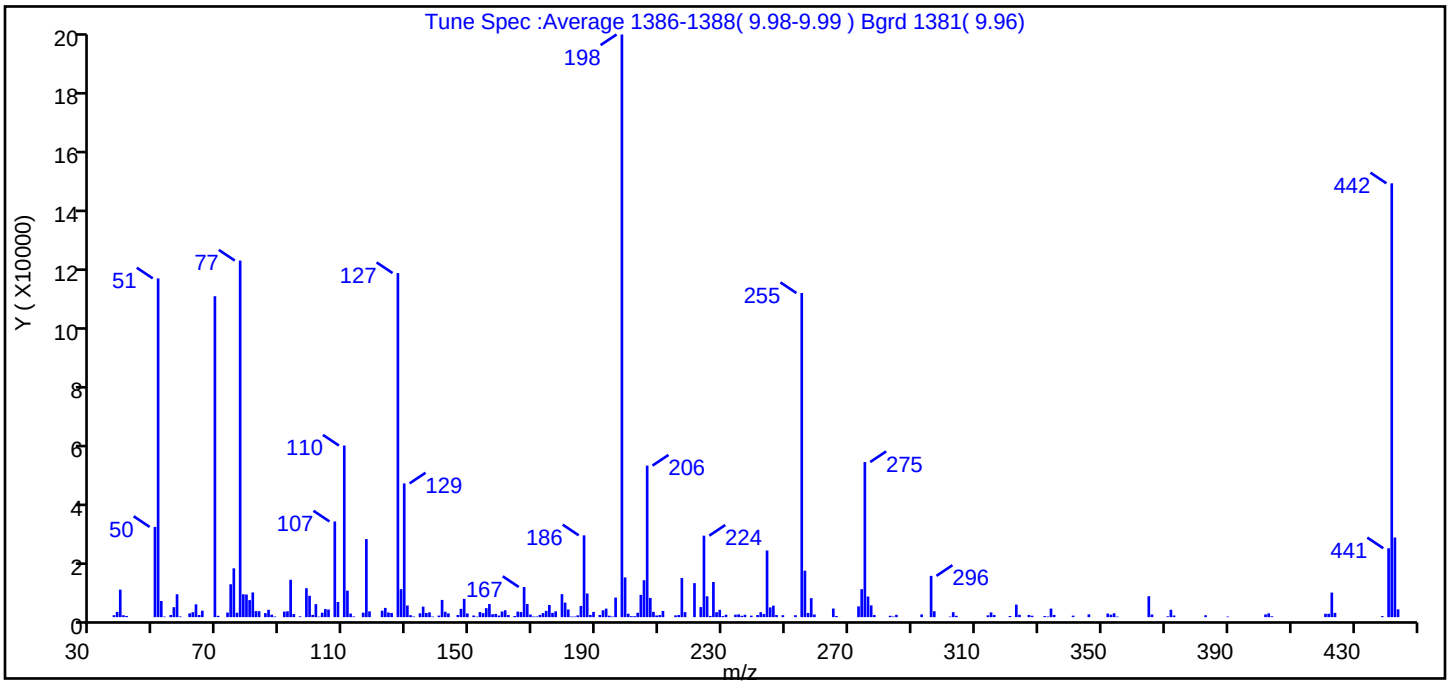
MB_DFTPP_WRK_00345 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314029.D				
Injection Date:	07-Dec-2018 15:11:30	Instrument ID:	HP5973U		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	DR	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Tune Method:	DFTPP Method 8270D, BP 198				

4 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (134.3)
51	10-80% of the base peak	58.1
68	<2% of mass 69	0.0 (0.0)
69	Present	55.1
70	<2% of mass 69	0.2 (0.4)
127	10-80% of the base peak	59.1
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.8
275	10-60% of the base peak	26.6
365	>1% of mass 198	3.6
441	present but <24% of mass 442	11.8 (15.9)
442	base peak, or >50% of 198	74.5
443	15-24% of mass 442	13.7 (18.4)

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314029.D\1,4_Dx_SIM_HP5973U.rslt\spec
Injection Date: 07-Dec-2018 15:11:30
Spectrum: Tune Spec :Average 1386-1388(9.98-9.99) Bgrd 1381(9.96)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 224

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	662	118.00	1979	185.00	3832	258.00	6478
38.00	1788	122.00	2192	186.00	27928	259.00	891
39.00	9381	123.00	3158	187.00	8078	265.00	2930
40.00	654	124.00	1582	188.00	726	266.00	392
41.00	407	125.00	1418	189.00	1780	273.00	3684
50.00	30800	127.00	117464	191.00	747	274.00	9552
51.00	115648	128.00	9549	192.00	2341	275.00	52952
52.00	5514	129.00	45648	193.00	2903	276.00	7040
53.00	193	130.00	3973	194.00	498	277.00	4018
55.00	739	131.00	676	195.00	214	278.00	700
56.00	3394	132.00	218	196.00	6670	283.00	470
57.00	7815	134.00	1312	198.00	198912	284.00	210
58.00	232	135.00	3584	199.00	13559	285.00	788
61.00	1297	136.00	1419	200.00	1174	293.00	922
62.00	1688	137.00	1636	201.00	335	296.00	14092
63.00	4369	138.00	200	202.00	337	297.00	2022
64.00	727	140.00	537	203.00	1483	302.00	177
65.00	2208	141.00	5877	204.00	7615	303.00	1691
69.00	109552	142.00	1846	205.00	12602	304.00	461
70.00	460	143.00	1276	206.00	51736	314.00	617
73.00	1575	146.00	736	207.00	6554	315.00	1620
74.00	11224	147.00	2839	208.00	1802	316.00	723
75.00	16664	148.00	6241	209.00	577	321.00	396
76.00	1498	149.00	1266	210.00	715	323.00	4276
77.00	121728	151.00	554	211.00	2109	324.00	799
78.00	7810	152.00	187	215.00	598	327.00	743
79.00	7717	153.00	1736	216.00	709	328.00	490
80.00	5816	154.00	1364	217.00	13349	332.00	361
81.00	8425	155.00	3064	218.00	1718	333.00	217
82.00	2064	156.00	4458	221.00	11608	334.00	2931
83.00	2042	157.00	982	223.00	3440	335.00	745
85.00	1372	158.00	1102	224.00	27816	341.00	520
86.00	2504	159.00	536	225.00	7108	346.00	957

Report Date: 07-Dec-2018 17:57:46 Chrom Revision: 2.3 21-Nov-2018 13:56:44
Data File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314029.D\1,4_Dx_SIM_HP5973U.rslt\spec
Injection Date: 07-Dec-2018 15:11:30
Spectrum: Tune Spec :Average 1386-1388(9.98-9.99) Bgrd 1381(9.96)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 224

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	850	160.00	1912	226.00	416	352.00	1223
88.00	228	161.00	2352	227.00	12003	353.00	831
91.00	1895	162.00	721	228.00	1683	354.00	1322
92.00	1994	164.00	386	229.00	2496	355.00	180
93.00	12761	165.00	1889	230.00	362	365.00	7144
94.00	1055	166.00	1726	231.00	839	366.00	916
96.00	262	167.00	10293	234.00	833	371.00	272
98.00	9884	168.00	4479	235.00	942	372.00	2515
99.00	7291	169.00	892	236.00	465	373.00	553
100.00	773	170.00	226	237.00	816	383.00	648
101.00	4433	171.00	221	239.00	516	390.00	201
102.00	172	172.00	761	241.00	726	402.00	931
103.00	1520	173.00	1379	242.00	1692	403.00	1295
104.00	2759	174.00	2145	243.00	1082	404.00	299
105.00	2599	175.00	4163	244.00	22752	421.00	1159
107.00	32664	176.00	1450	245.00	3321	422.00	1158
108.00	5179	177.00	1986	246.00	3929	423.00	8388
110.00	58576	179.00	7856	247.00	730	424.00	1448
111.00	9039	180.00	4937	249.00	658	439.00	345
112.00	1219	181.00	2609	253.00	663	441.00	23520
113.00	233	182.00	205	255.00	110640	442.00	148096
116.00	1524	183.00	208	256.00	15847	443.00	27184
117.00	26656	184.00	612	257.00	1427	444.00	2658

Breakdown Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314029.D				
Injection Date:	07-Dec-2018 15:11:30	Instrument ID:	HP5973U		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	DR	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

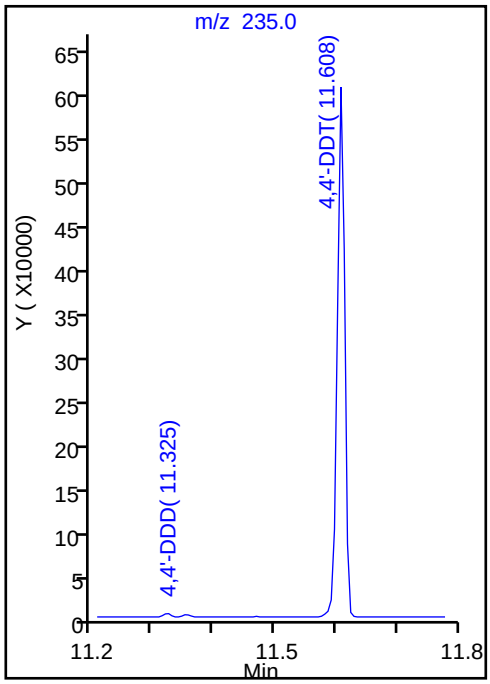
6 4,4'-DDT, Detector: MS SCAN

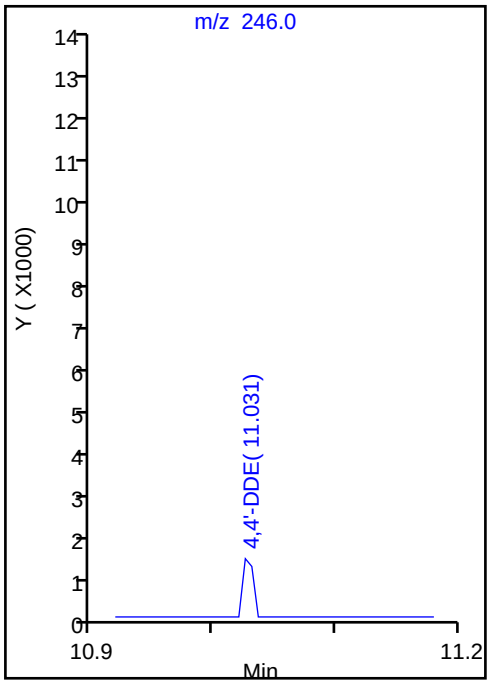
SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

6 4,4'-DDT, Area = 517196
5 4,4'-DDD, Area = 3201
7 4,4'-DDE, Area = 832

%Breakdown: 0.77%, <= 20.00%
Passed





TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314337.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 18-Dec-2018 12:53:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-002
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:19 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: Deconvolution ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 18-Dec-2018 14:39:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 DFTPP									
7 4,4'-DDE	246	11.020	11.020	0.000	0	898		NR	
5 4,4'-DDD	235	11.320	11.320	0.000	94	6831		NR	
6 4,4'-DDT	235	11.603	11.603	0.000	98	722249	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

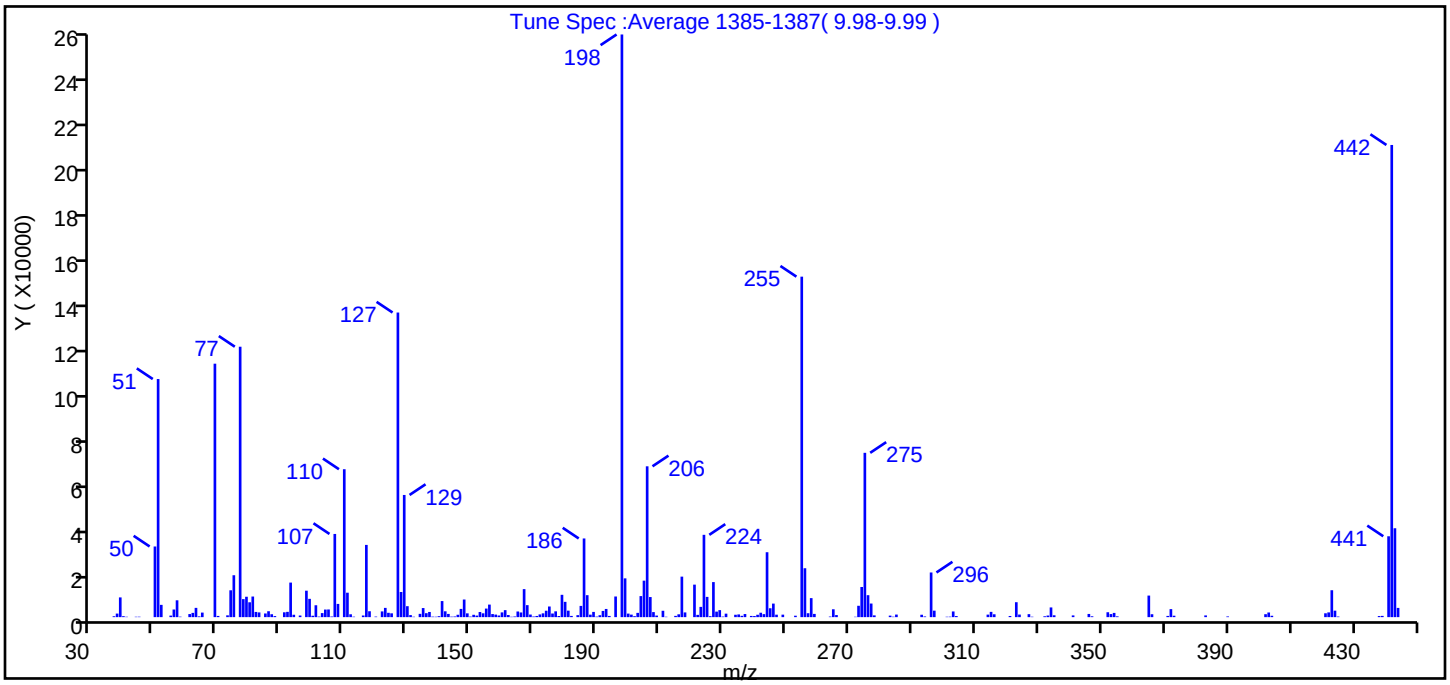
MB_DFTPP_WRK_00345 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314337.D
Injection Date: 18-Dec-2018 12:53:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Tune Method: DFTPP Method 8270D, BP 198

4 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (123.4)
51	10-80% of the base peak	40.9
68	<2% of mass 69	0.0 (0.0)
69	Present	43.5
70	<2% of mass 69	0.2 (0.5)
127	10-80% of the base peak	52.3
197	<2% of mass 198	0.0
199	5-9% of mass 198	6.7
275	10-60% of the base peak	28.2
365	>1% of mass 198	3.7
441	present but <24% of mass 442	13.9 (17.1)
442	base peak, or >50% of 198	81.0
443	15-24% of mass 442	15.3 (18.8)

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314337.D\1,4_Dx_SIM_HP5973U.rslt\spec
Injection Date: 18-Dec-2018 12:53:30
Spectrum: Tune Spec :Average 1385-1387(9.98-9.99)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 240

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	394	123.00	4080	186.00	34680	265.00	3473
38.00	1572	124.00	1913	187.00	9681	266.00	917
39.00	8700	125.00	1682	188.00	1093	272.00	172
40.00	422	127.00	134272	189.00	2304	273.00	5010
41.00	173	128.00	11083	190.00	227	274.00	13288
44.00	171	129.00	53856	191.00	843	275.00	72432
45.00	191	130.00	4829	192.00	2734	276.00	9679
50.00	31144	131.00	902	193.00	3609	277.00	5997
51.00	104952	132.00	174	194.00	531	278.00	780
52.00	5413	134.00	1451	196.00	9102	283.00	666
55.00	678	135.00	4004	198.00	256832	284.00	199
56.00	3369	136.00	1743	199.00	17096	285.00	1136
57.00	7426	137.00	2281	200.00	1558	293.00	1058
58.00	206	138.00	223	201.00	1112	294.00	302
61.00	1356	139.00	180	202.00	421	296.00	19688
62.00	1880	140.00	421	203.00	1882	297.00	2855
63.00	4086	141.00	7085	204.00	9281	301.00	176
64.00	337	142.00	2577	205.00	16084	302.00	210
65.00	2007	143.00	1420	206.00	66488	303.00	2506
69.00	111720	144.00	226	207.00	8857	304.00	477
70.00	534	145.00	291	208.00	2225	314.00	1111
73.00	799	146.00	1046	209.00	695	315.00	2329
74.00	11834	147.00	3630	211.00	2807	316.00	1261
75.00	18472	148.00	7767	212.00	173	321.00	508
77.00	119200	149.00	1669	215.00	559	323.00	6583
78.00	7944	150.00	246	216.00	1244	324.00	1142
79.00	8989	151.00	1036	217.00	17856	327.00	1318
80.00	6550	152.00	692	218.00	2081	328.00	189
81.00	9085	153.00	2256	221.00	14331	332.00	379
82.00	2294	154.00	1688	222.00	1002	333.00	702
83.00	2078	155.00	3779	223.00	4521	334.00	4280
85.00	1615	156.00	5535	224.00	36288	335.00	817
86.00	2606	157.00	1357	225.00	8926	341.00	763

Report Date: 26-Dec-2018 11:55:19 Chrom Revision: 2.3 13-Dec-2018 17:23:12
Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314337.D\1,4_Dx_SIM_HP5973U.rslt\spec
Injection Date: 18-Dec-2018 12:53:30
Spectrum: Tune Spec :Average 1385-1387(9.98-9.99)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 240

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	1281	158.00	1125	226.00	418	346.00	1410
88.00	467	159.00	719	227.00	15447	347.00	375
91.00	2133	160.00	2091	228.00	2433	352.00	2161
92.00	2331	161.00	3084	229.00	3091	353.00	1352
93.00	15232	162.00	932	230.00	244	354.00	1868
94.00	1053	163.00	170	231.00	1534	355.00	344
96.00	713	164.00	286	234.00	1053	365.00	9505
98.00	11657	165.00	2490	235.00	1197	366.00	1285
99.00	8066	166.00	2059	236.00	589	371.00	538
100.00	612	167.00	12351	237.00	1372	372.00	3537
101.00	5243	168.00	5287	239.00	535	373.00	624
102.00	238	169.00	1142	240.00	481	383.00	760
103.00	1782	170.00	271	241.00	1051	390.00	307
104.00	3346	171.00	518	242.00	1946	402.00	1299
105.00	3385	172.00	1204	243.00	1328	403.00	2048
106.00	271	173.00	1677	244.00	28616	404.00	605
107.00	36672	174.00	2829	245.00	3917	421.00	1699
108.00	5831	175.00	4695	246.00	5975	422.00	2090
110.00	65200	176.00	1600	247.00	1082	423.00	11865
111.00	10772	177.00	2556	249.00	1102	424.00	2849
112.00	1260	178.00	492	253.00	633	425.00	266
113.00	199	179.00	9842	255.00	150080	438.00	481
116.00	724	180.00	6744	256.00	21560	439.00	555
117.00	31840	181.00	2859	257.00	1726	441.00	35648
118.00	2598	182.00	543	258.00	8385	442.00	208128
120.00	245	184.00	879	259.00	1429	443.00	39184
122.00	2529	185.00	4955	264.00	255	444.00	4070

Breakdown Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314337.D				
Injection Date:	18-Dec-2018 12:53:30	Instrument ID:	HP5973U		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	DR	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

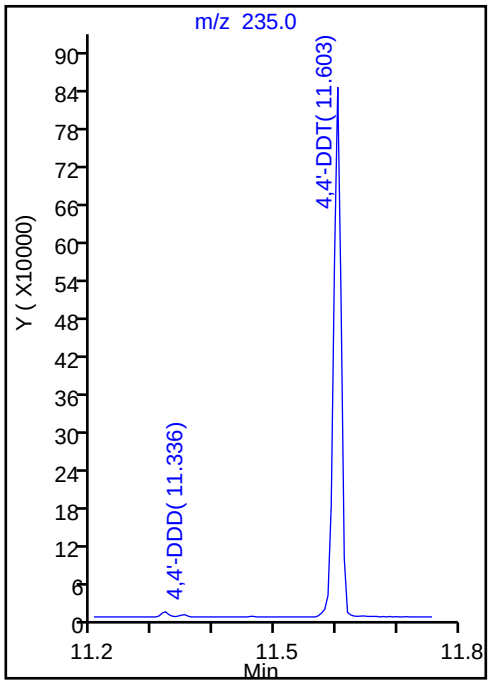
6 4,4'-DDT, Detector: MS SCAN

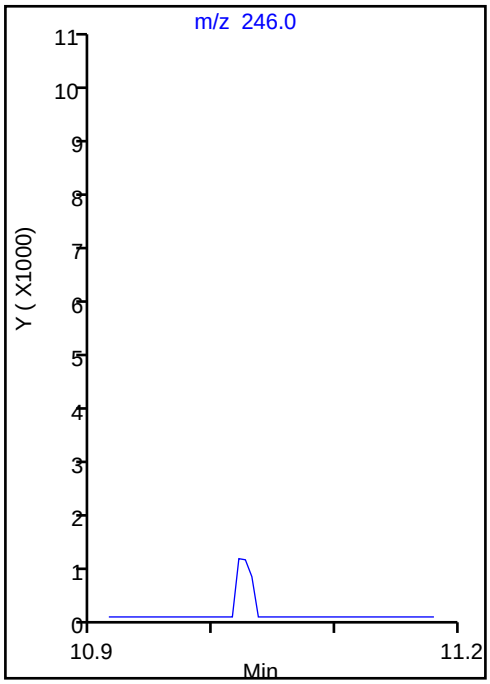
SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

6 4,4'-DDT, Area = 722249
5 4,4'-DDD, Area = 6831
7 4,4'-DDE, Area = 898

%Breakdown: 1.06%, <= 20.00%
Passed





TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314468.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 28-Dec-2018 13:55:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077632-002
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 28-Dec-2018 16:04:36 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: Deconvolution ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0316

First Level Reviewer: richardsd Date: 28-Dec-2018 14:22:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
4 DFTPP									
7 4,4'-DDE	246	11.021	11.021	0.000	0	507		NR	
5 4,4'-DDD	235	11.346	11.346	0.000	89	2537		NR	
6 4,4'-DDT	235	11.603	11.603	0.000	99	585836	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

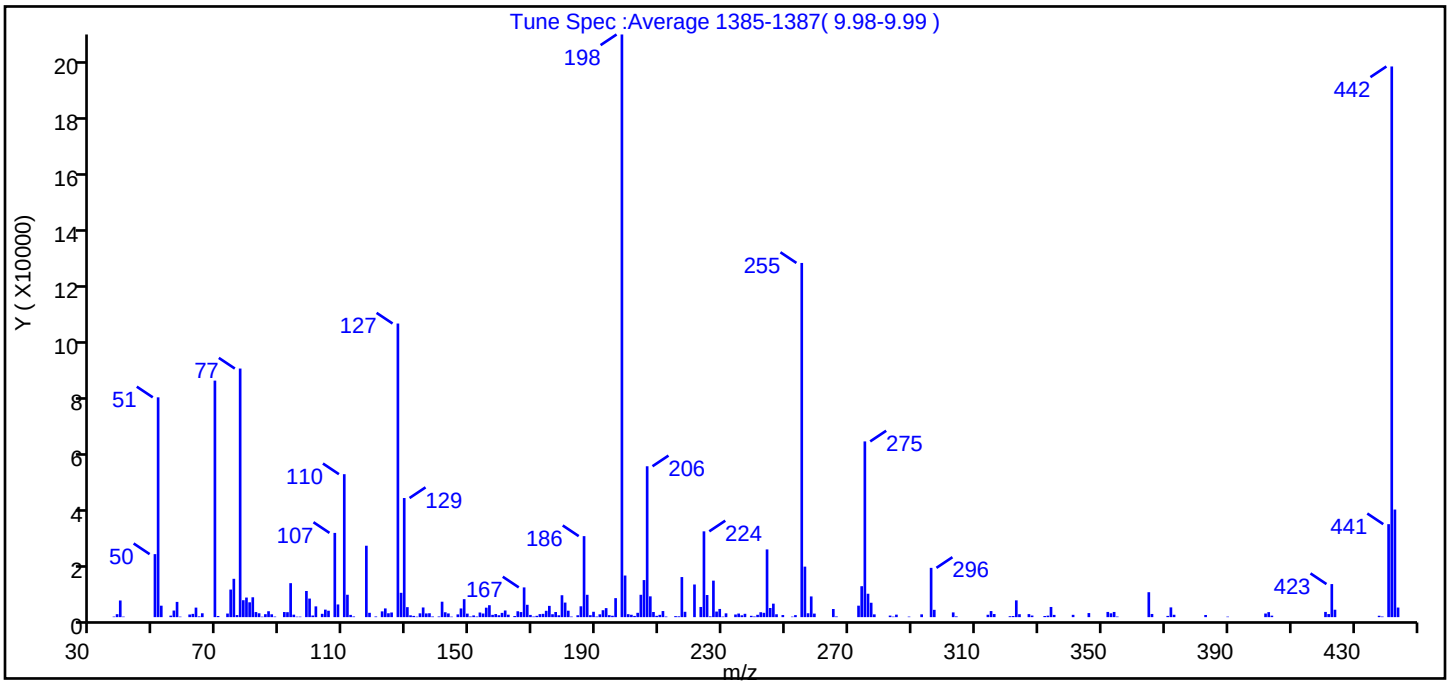
MB_DFTPP_WRK_00347 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314468.D
Injection Date: 28-Dec-2018 13:55:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: 1,4_Dx_SIM_HP5973U Limit Group: MB - 8270D SIM ID ICAL
Tune Method: DFTPP Method 8270D, BP 198

4 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (105.8)
51	10-80% of the base peak	37.7
68	<2% of mass 69	0.0 (0.0)
69	Present	40.6
70	<2% of mass 69	0.2 (0.5)
127	10-80% of the base peak	50.4
197	<2% of mass 198	0.0
199	5-9% of mass 198	7.1
275	10-60% of the base peak	30.2
365	>1% of mass 198	4.3
441	present but <24% of mass 442	16.0 (16.9)
442	base peak, or >50% of 198	94.5
443	15-24% of mass 442	18.5 (19.5)

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314468.D\1,4_Dx_SIM_HP5973U.rslt\spec
Injection Date: 28-Dec-2018 13:55:30
Spectrum: Tune Spec :Average 1385-1387(9.98-9.99)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 232

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	201	124.00	1373	187.00	7917	258.00	7336
38.00	1045	125.00	1648	188.00	690	259.00	1255
39.00	5900	127.00	103976	189.00	1902	265.00	2880
40.00	184	128.00	8613	190.00	202	266.00	243
50.00	22312	129.00	42184	191.00	1000	273.00	4062
51.00	77840	130.00	3535	192.00	2454	274.00	10957
52.00	4054	131.00	651	193.00	3194	275.00	62232
55.00	533	132.00	439	194.00	695	276.00	8285
56.00	2335	133.00	174	195.00	492	277.00	5095
57.00	5400	134.00	1348	196.00	6732	278.00	984
58.00	167	135.00	3425	198.00	206336	283.00	553
61.00	933	136.00	1315	199.00	14736	284.00	188
62.00	1157	137.00	1384	200.00	1053	285.00	886
63.00	3374	138.00	233	201.00	839	289.00	190
64.00	260	140.00	231	202.00	435	293.00	995
65.00	1373	141.00	5467	203.00	1534	296.00	17456
69.00	83760	142.00	1730	204.00	7918	297.00	2594
70.00	393	143.00	1307	205.00	13125	303.00	1682
73.00	1276	144.00	179	206.00	53432	304.00	262
74.00	9763	146.00	973	207.00	7365	314.00	847
75.00	13576	147.00	3080	208.00	1822	315.00	2156
76.00	736	148.00	6363	209.00	465	316.00	1102
77.00	88032	149.00	1248	210.00	814	321.00	329
78.00	5994	150.00	223	211.00	2157	322.00	396
79.00	6936	151.00	605	212.00	211	323.00	5940
80.00	5254	152.00	216	215.00	362	324.00	1041
81.00	7036	153.00	1639	216.00	283	327.00	1077
82.00	1798	154.00	1288	217.00	14194	328.00	565
83.00	1370	155.00	3351	218.00	1899	332.00	402
84.00	166	156.00	4227	221.00	11565	333.00	524
85.00	1046	157.00	815	223.00	3600	334.00	3602
86.00	2096	158.00	1091	224.00	30384	335.00	789
87.00	1011	159.00	666	225.00	7837	341.00	823

Report Date: 28-Dec-2018 16:04:38 Chrom Revision: 2.3 13-Dec-2018 17:23:12
Data File: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314468.D\1,4_Dx_SIM_HP5973U.rslt\spec
Injection Date: 28-Dec-2018 13:55:30
Spectrum: Tune Spec :Average 1385-1387(9.98-9.99)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 232

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	203	160.00	1507	226.00	267	346.00	1447
91.00	1807	161.00	2357	227.00	12928	352.00	1845
92.00	1754	162.00	869	228.00	1980	353.00	1368
93.00	12034	164.00	391	229.00	2903	354.00	1836
94.00	878	165.00	2089	230.00	194	355.00	204
95.00	169	166.00	1799	231.00	1350	365.00	8832
96.00	178	167.00	10532	234.00	936	366.00	1123
98.00	9261	168.00	4376	235.00	1275	371.00	442
99.00	6574	169.00	786	236.00	650	372.00	3455
100.00	571	170.00	209	237.00	1185	373.00	840
101.00	3813	171.00	466	239.00	476	383.00	758
103.00	1180	172.00	1069	240.00	232	390.00	181
104.00	2660	173.00	1165	241.00	827	402.00	1279
105.00	2263	174.00	2243	242.00	1741	403.00	1780
107.00	29832	175.00	3989	243.00	1523	404.00	526
108.00	4496	176.00	1032	244.00	23984	421.00	1850
110.00	50624	177.00	1819	245.00	3237	422.00	1093
111.00	7932	178.00	659	246.00	4779	423.00	11712
112.00	797	179.00	7759	247.00	1017	424.00	2629
113.00	239	180.00	5156	249.00	742	438.00	486
117.00	25288	181.00	2282	252.00	184	439.00	214
118.00	1536	182.00	201	253.00	713	441.00	32928
120.00	241	184.00	665	255.00	125432	442.00	195008
122.00	2044	185.00	3848	256.00	17888	443.00	38104
123.00	3088	186.00	28688	257.00	1374	444.00	3404

Breakdown Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314468.D				
Injection Date:	28-Dec-2018 13:55:30	Instrument ID:	HP5973U		
Lims ID:	DFTPP				
Client ID:					
Operator ID:	DR	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

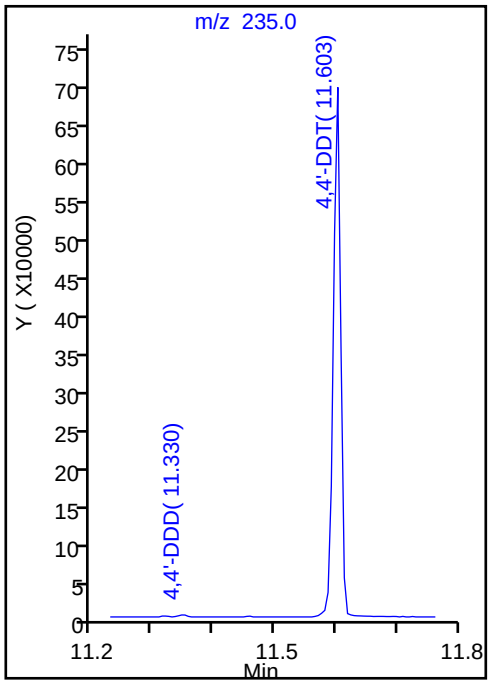
6 4,4'-DDT, Detector: MS SCAN

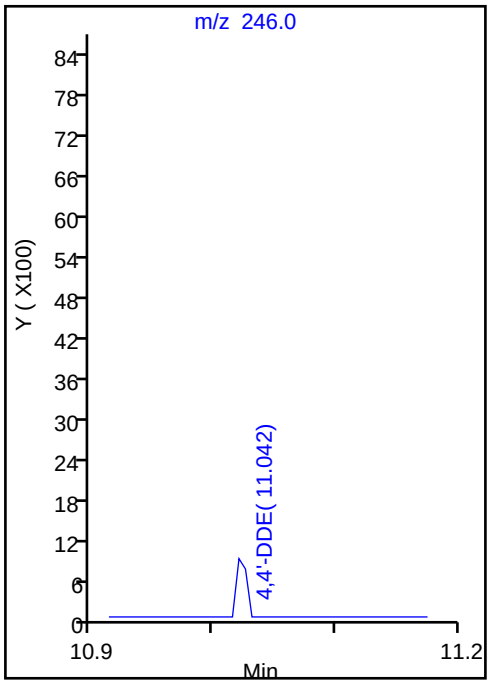
SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

6 4,4'-DDT, Area = 585836
5 4,4'-DDD, Area = 2537
7 4,4'-DDE, Area = 507

%Breakdown: 0.52%, <= 20.00%
Passed





FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 480-451231/1-A
Matrix: Water
Lab File ID: U3314342.D
Analysis Method: 8270D SIM ID
Date Collected:
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 15:00
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.218		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314342.D
Lims ID: MB 480-451231/1-A
Client ID:
Sample Type: MB
Inject. Date: 18-Dec-2018 15:00:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-007
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 18-Dec-2018 16:04:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.823	2.741	0.082	90	107247	10.0	2.54	
3 1,4-Dioxane	88	2.868	2.782	0.086	85	2486		0.2181	
* 2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	97	352423	4.00	4.00	

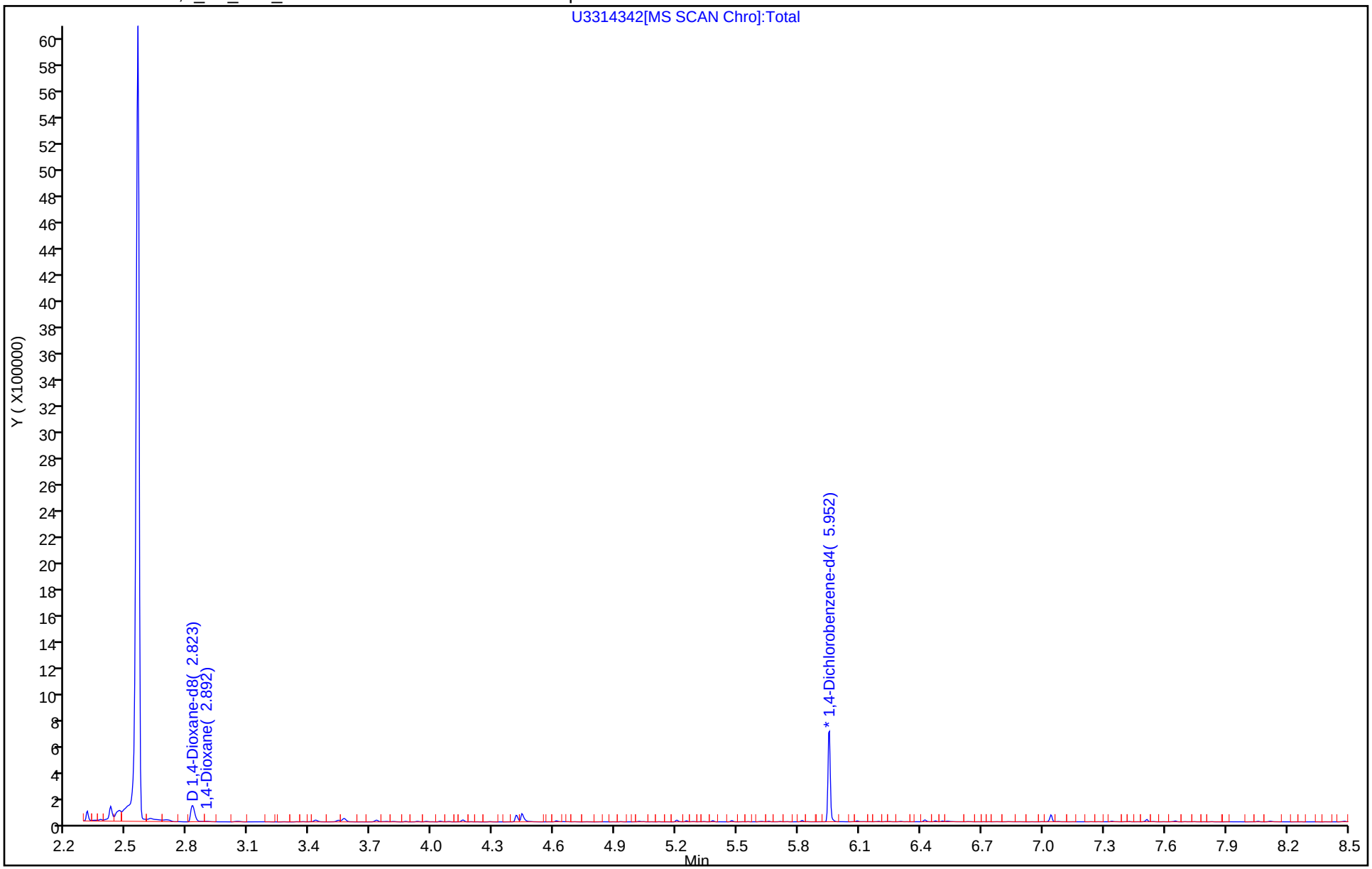
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:23 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314342.D				
Injection Date:	18-Dec-2018 15:00:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	MB 480-451231/1-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

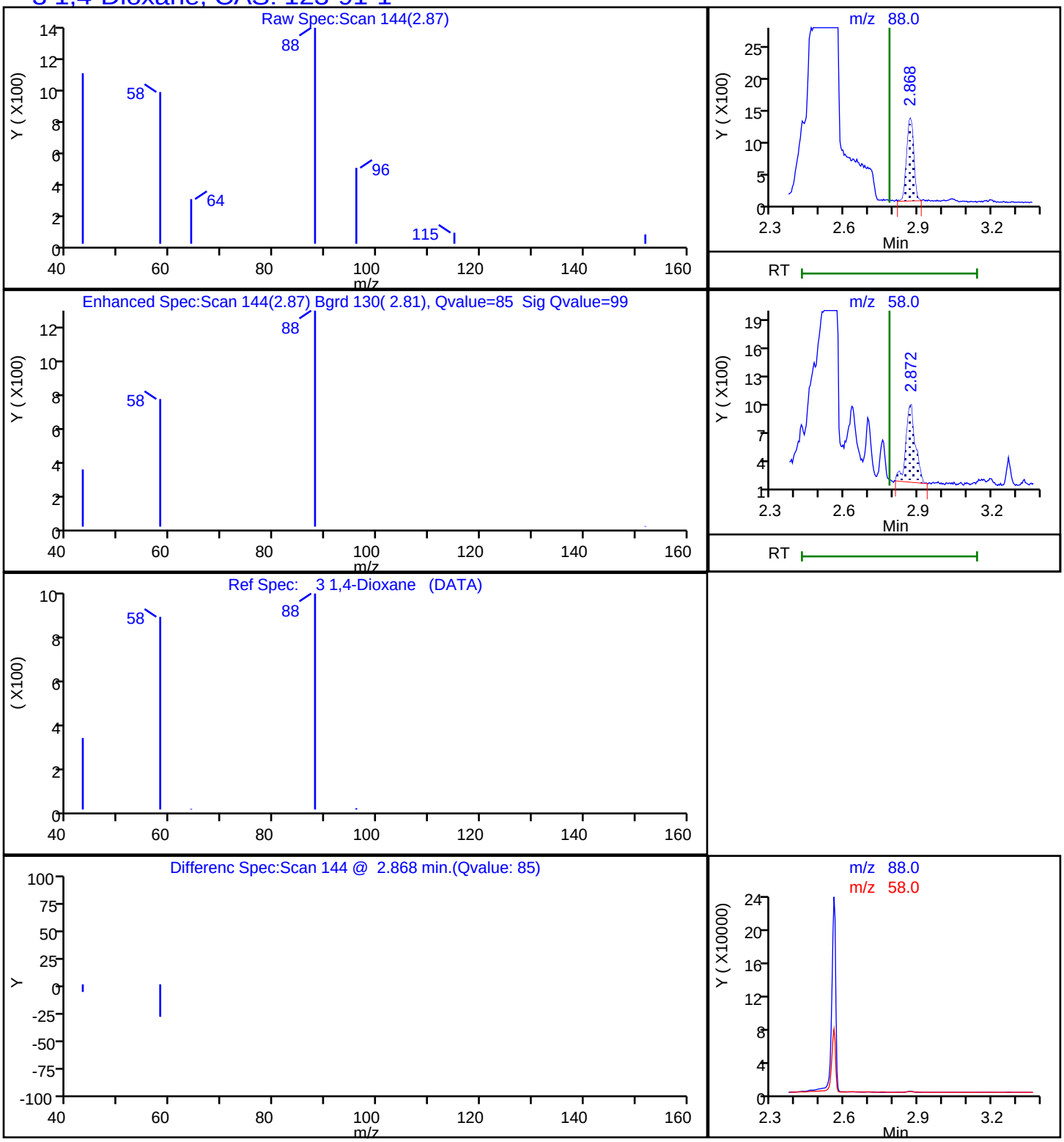


Report Date: 26-Dec-2018 11:55:23 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314342.D				
Injection Date:	18-Dec-2018 15:00:30	Instrument ID:	HP5973U		
Lims ID:	MB 480-451231/1-A				
Client ID:					
Operator ID:	DR	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

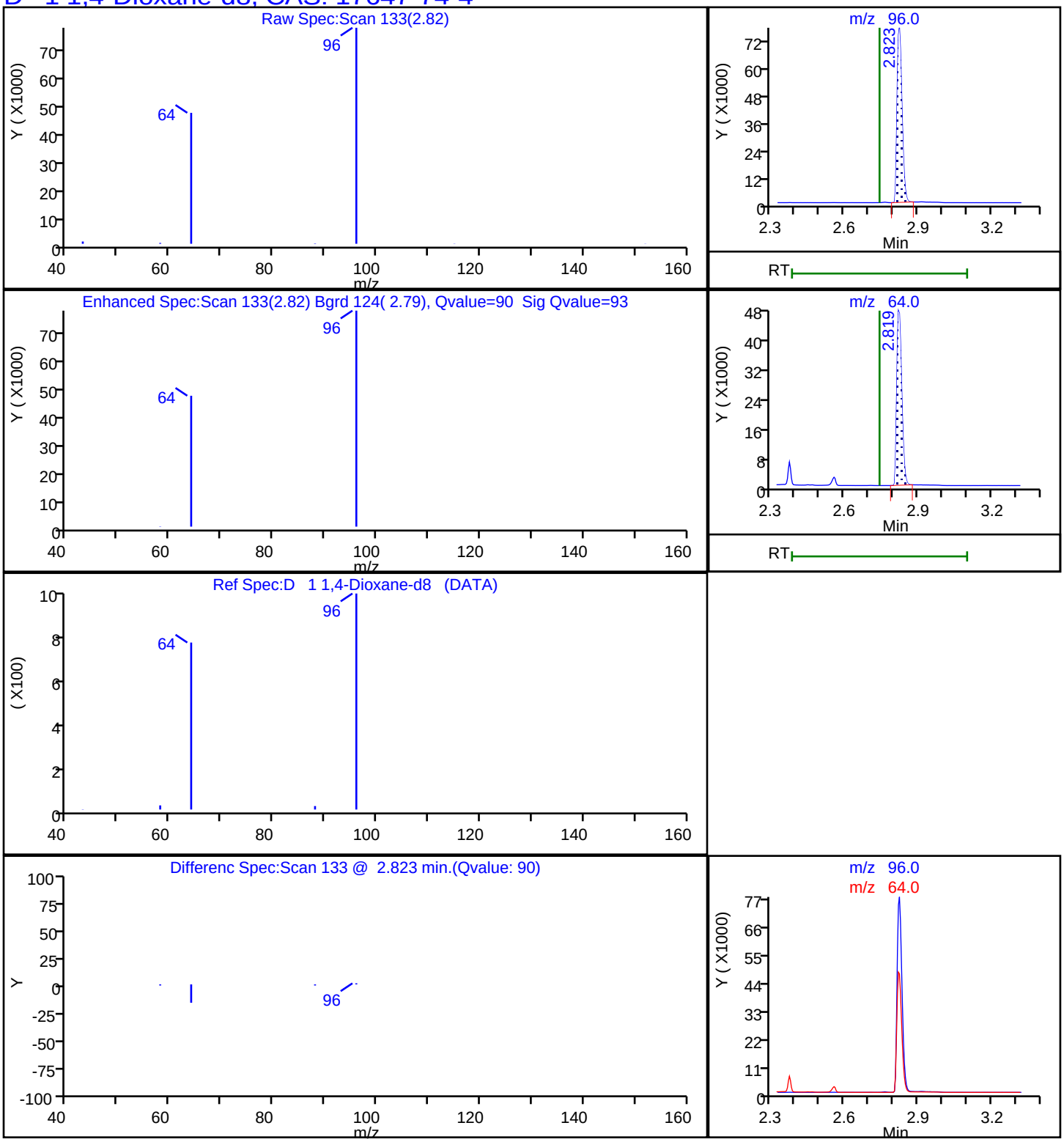


Report Date: 26-Dec-2018 11:55:23 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314342.D				
Injection Date:	18-Dec-2018 15:00:30	Instrument ID:	HP5973U		
Lims ID:	MB 480-451231/1-A				
Client ID:					
Operator ID:	DR	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 480-452766/1-A
Matrix: Water
Lab File ID: U3314475.D
Analysis Method: 8270D SIM ID
Date Collected:
Extract. Method: 3510C
Date Extracted: 12/27/2018 15:17
Sample wt/vol: 1000(mL)
Date Analyzed: 12/28/2018 16:54
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 452932
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.20	U	0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	32		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314475.D
Lims ID: MB 480-452766/1-A
Client ID:
Sample Type: MB
Inject. Date: 28-Dec-2018 16:54:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077632-009
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 28-Dec-2018 18:29:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX1013

First Level Reviewer: richardsd Date: 28-Dec-2018 17:18:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.835	2.741	0.094	89	97838	10.0	3.18	
3 1,4-Dioxane	88		2.786					ND	U
* 2 1,4-Dichlorobenzene-d4	152	5.948	5.944	0.004	99	256558	4.00	4.00	

QC Flag Legend

Review Flags
U - Marked Undetected

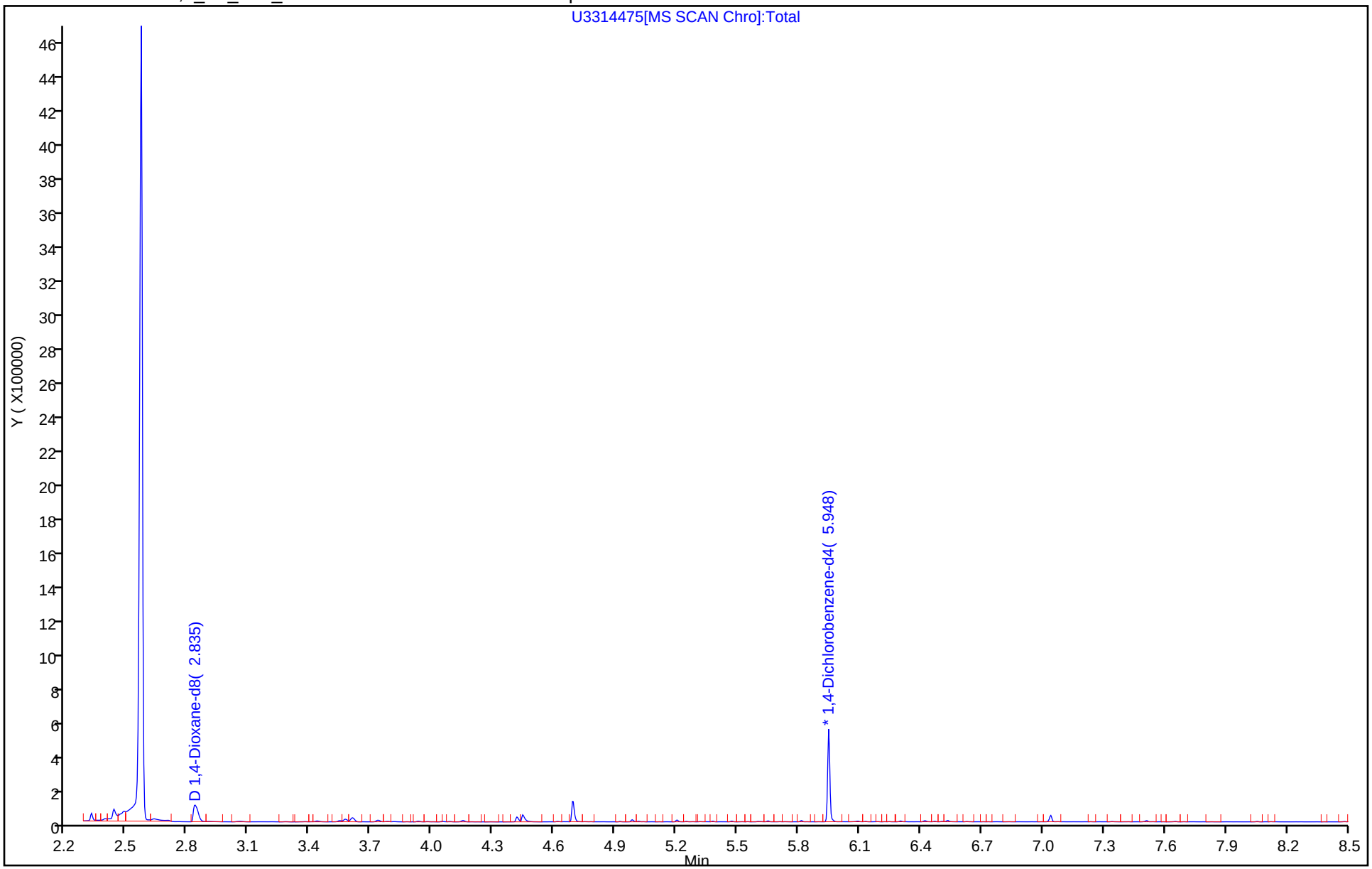
Reagents:

MB_LLIS_WRK_00160 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 31-Dec-2018 16:00:36 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314475.D				
Injection Date:	28-Dec-2018 16:54:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	MB 480-452766/1-A			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		

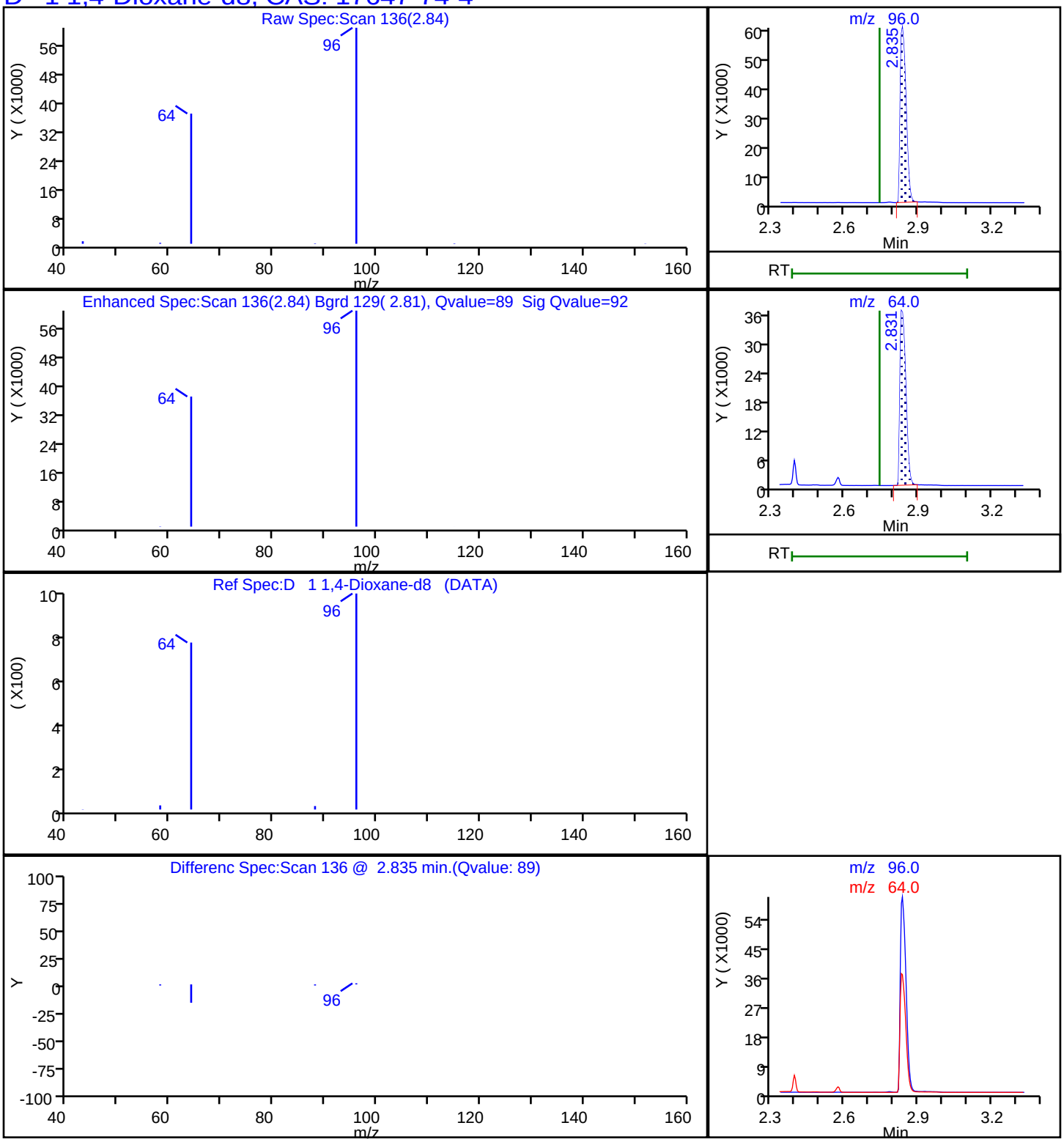


Report Date: 31-Dec-2018 16:00:36 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314475.D				
Injection Date:	28-Dec-2018 16:54:30	Instrument ID:	HP5973U		
Lims ID:	MB 480-452766/1-A				
Client ID:					
Operator ID:	DR	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

D 1 1,4-Dioxane-d8, CAS: 17647-74-4



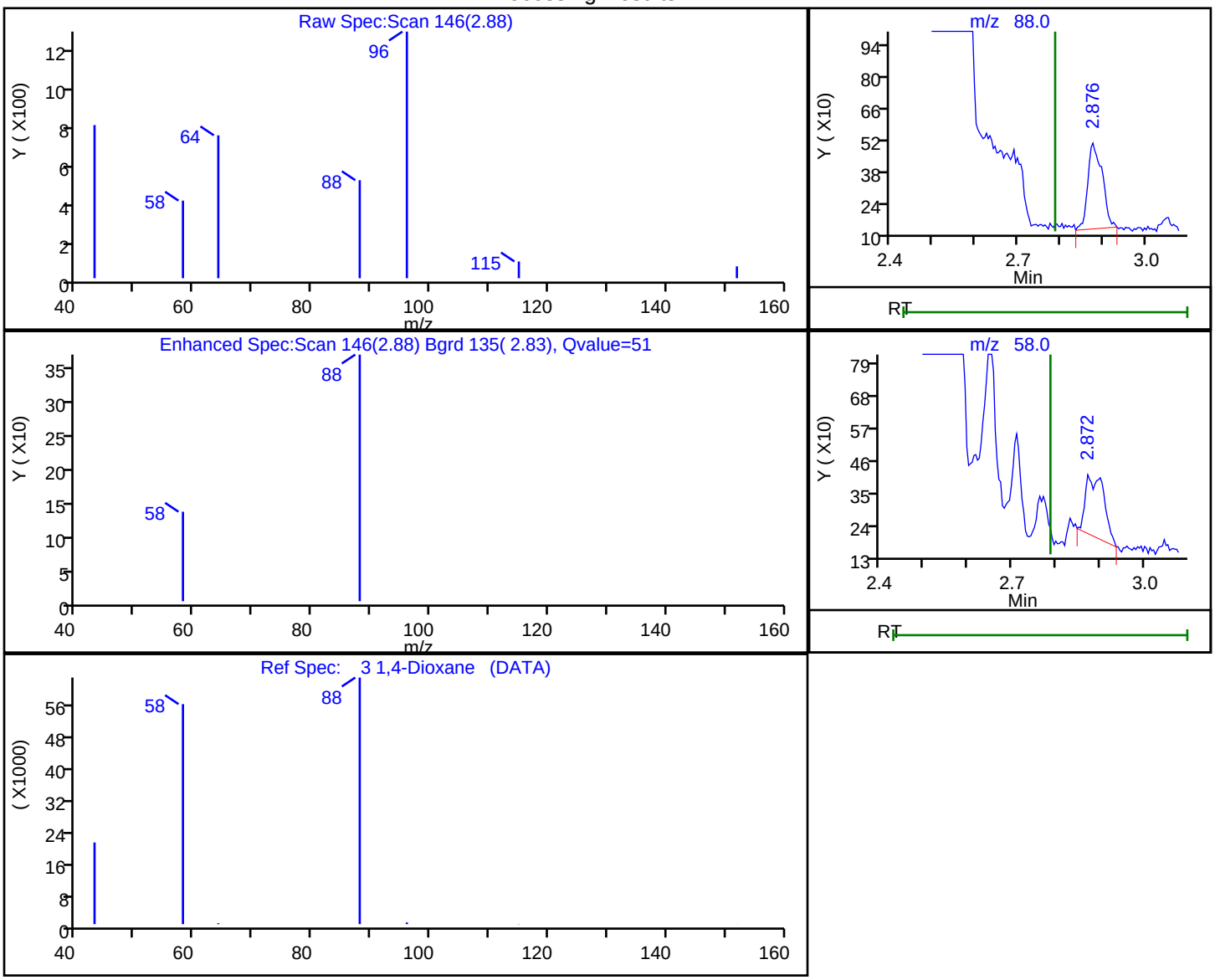
User Disabled Compound Report

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314475.D				
Injection Date:	28-Dec-2018 16:54:30	Instrument ID:	HP5973U		
Lims ID:	MB 480-452766/1-A				
Client ID:					
Operator ID:	DR	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		
Column:		Detector	MS SCAN		

3 1,4-Dioxane, CAS: 123-91-1

Processing Results



RT	Mass	Response	Amount
2.88	88.00	906	0.087113
2.87	58.00	615	

Reviewer: richardsd, 28-Dec-2018 17:18:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 480-451231/2-A
Matrix: Water
Lab File ID: U3314343.D
Analysis Method: 8270D SIM ID
Date Collected:
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 15:25
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.47		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	26		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314343.D
Lims ID: LCS 480-451231/2-A
Client ID:
Sample Type: LCS
Inject. Date: 18-Dec-2018 15:25:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-008
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 18-Dec-2018 16:35:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.876	2.741	0.135	92	111639	10.0	2.59	
3 1,4-Dioxane	88	2.917	2.782	0.135	87	17447	1.00	1.47	E
* 2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	98	359855	4.00	4.00	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount

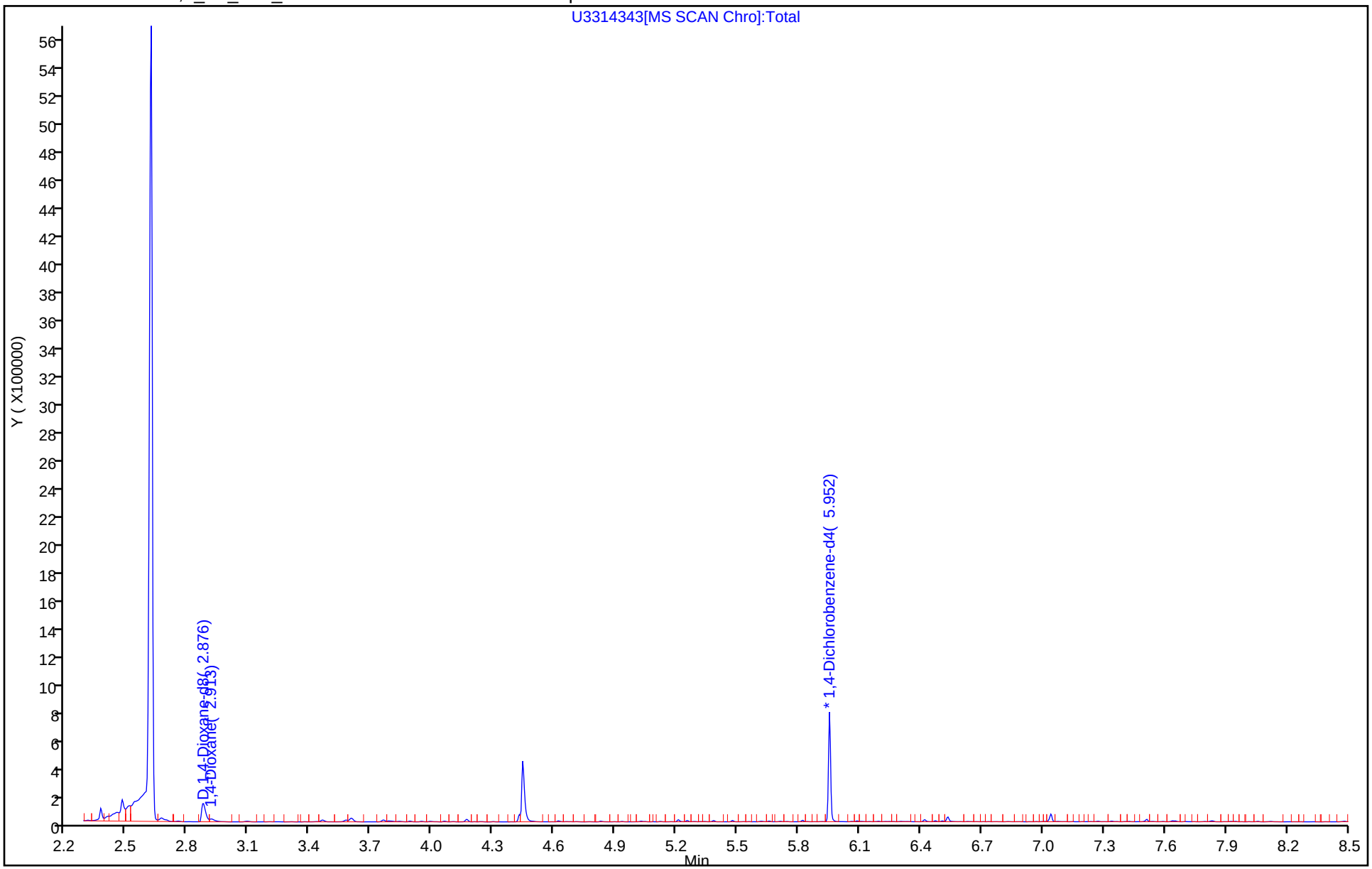
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:24 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314343.D				
Injection Date:	18-Dec-2018 15:25:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	LCS 480-451231/2-A			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 480-452766/2-A
Matrix: Water
Lab File ID: U3314476.D
Analysis Method: 8270D SIM ID
Date Collected:
Extract. Method: 3510C
Date Extracted: 12/27/2018 15:17
Sample wt/vol: 1000(mL)
Date Analyzed: 12/28/2018 17:19
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 452932
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.27		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	30		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314476.D				
Lims ID:	LCS 480-452766/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	28-Dec-2018 17:19:30	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	480-0077632-010				
Operator ID:	DR	Instrument ID:	HP5973U		
Method:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\1,4_Dx_SIM_HP5973U.m				
Limit Group:	MB - 8270D SIM ID ICAL				
Last Update:	28-Dec-2018 18:29:20	Calib Date:	07-Dec-2018 17:41:30		
Integrator:	Picker	ID Type:	RT Order ID		
Quant Method:	Isotopic Dilution	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D				
Column 1 :			Det: MS SCAN		
Process Host:	CTX1013				

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D	1 1,4-Dioxane-d8	96	2.876	2.741	0.135	92	93198	10.0	3.02	
	3 1,4-Dioxane	88	2.917	2.786	0.131	87	12561	1.00	1.27	E
*	2 1,4-Dichlorobenzene-d4	152	5.948	5.944	0.004	99	257605	4.00	4.00	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

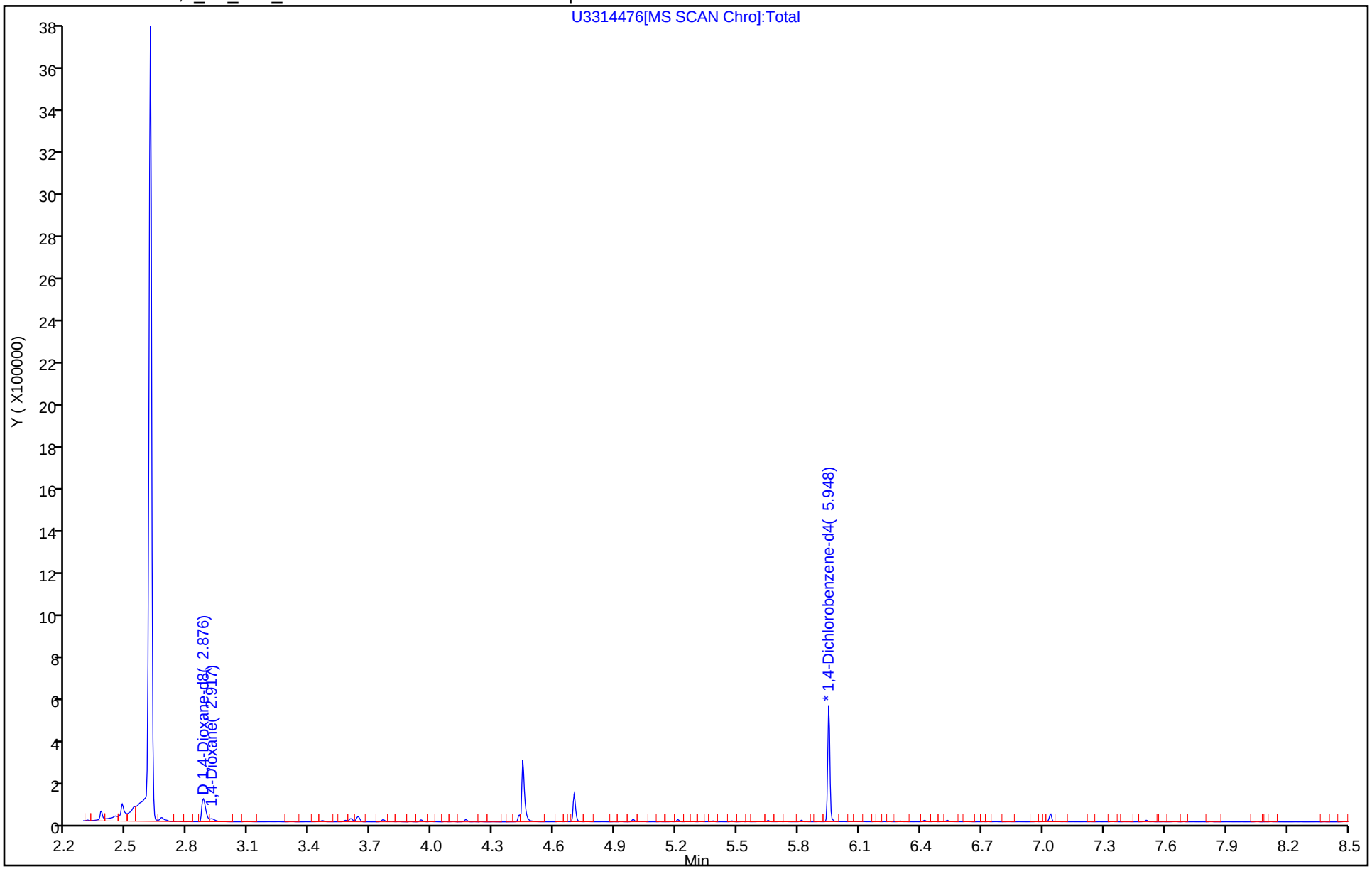
Reagents:

MB_LLIS_WRK_00160 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 31-Dec-2018 16:00:40 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181228-77632.b\U3314476.D				
Injection Date:	28-Dec-2018 17:19:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	LCS 480-452766/2-A			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-15S MS
Lab Sample ID: 680-162184-2 MS
Matrix: Water
Lab File ID: U3314346.D
Analysis Method: 8270D SIM ID
Date Collected: 12/11/2018 12:00
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 16:38
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.74		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	25		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314346.D
Lims ID: 680-162184-A-2-A MS
Client ID: MW-15S
Sample Type: MS
Inject. Date: 18-Dec-2018 16:38:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-011
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:51:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D 1 1,4-Dioxane-d8	96	2.872	2.741	0.131	92	103986	10.0	2.46	
3 1,4-Dioxane	88	2.913	2.782	0.131	88	19230	1.00	1.74	E
* 2 1,4-Dichlorobenzene-d4	152	5.952	5.944	0.008	99	352783	4.00	4.00	
7 4,4'-DDE	246		11.020					ND	
5 4,4'-DDD	235		11.320					ND	
6 4,4'-DDT	235		11.603					ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

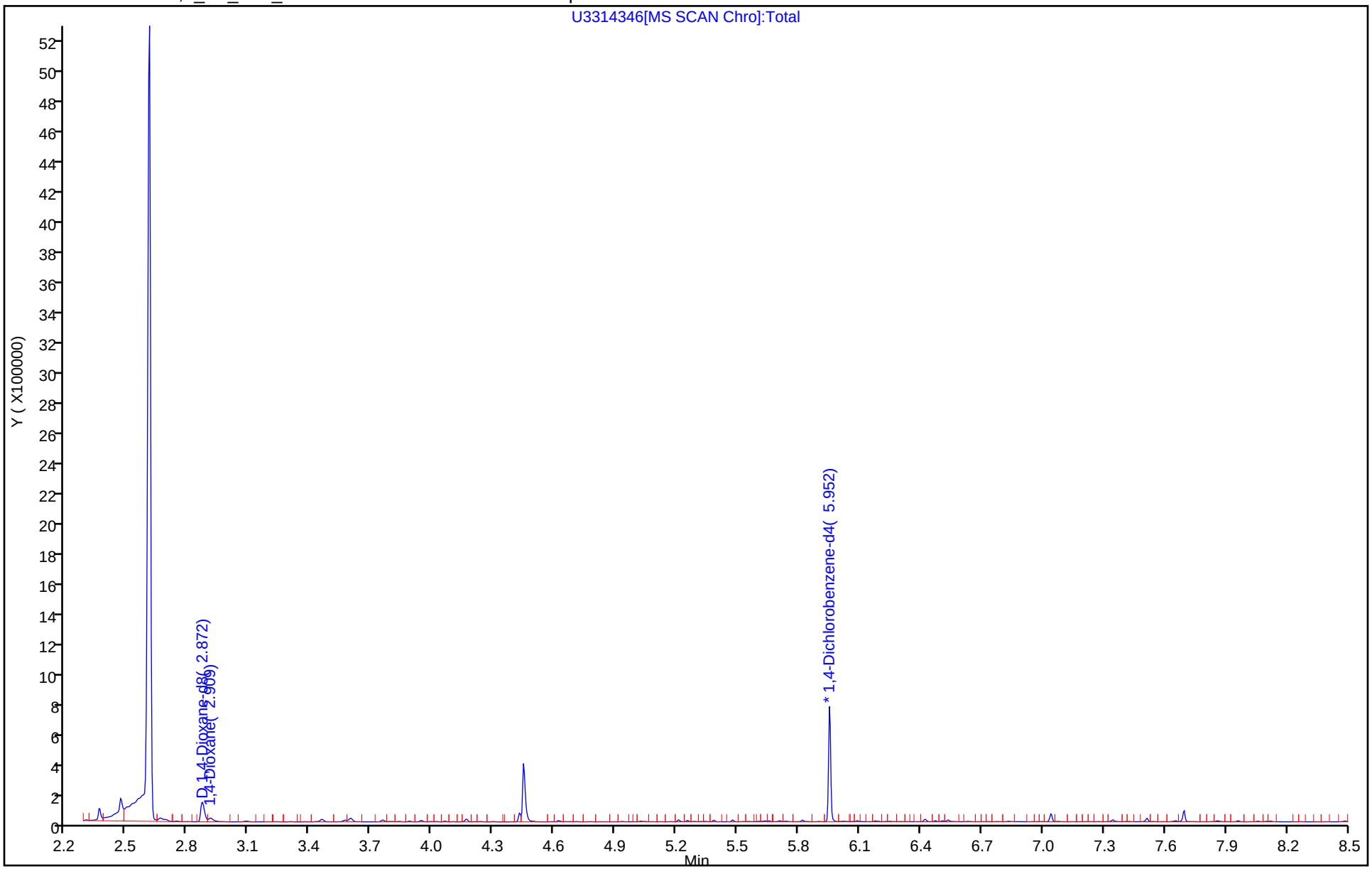
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:26 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314346.D				
Injection Date:	18-Dec-2018 16:38:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-2-A MS			Worklist Smp#:	11
Client ID:	MW-15S				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo
Job No.: 680-162184-1
SDG No.:
Client Sample ID: MW-15S MSD
Lab Sample ID: 680-162184-2 MSD
Matrix: Water
Lab File ID: U3314347.D
Analysis Method: 8270D SIM ID
Date Collected: 12/11/2018 12:00
Extract. Method: 3510C
Date Extracted: 12/17/2018 14:25
Sample wt/vol: 1000(mL)
Date Analyzed: 12/18/2018 17:02
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 451416
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	1.35		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	24		15-110

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314347.D
Lims ID: 680-162184-A-2-B MSD
Client ID: MW-15S
Sample Type: MSD
Inject. Date: 18-Dec-2018 17:02:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0077400-012
Operator ID: DR Instrument ID: HP5973U

Method: \\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\1,4_Dx_SIM_HP5973U.m
Limit Group: MB - 8270D SIM ID ICAL
Last Update: 26-Dec-2018 11:55:20 Calib Date: 07-Dec-2018 17:41:30
Integrator: Picker ID Type: RT Order ID
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973U\20181206-77050.b\U3314035.D

Column 1 : Det: MS SCAN
Process Host: CTX0301

First Level Reviewer: richardsd Date: 26-Dec-2018 11:52:21

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ul	OnCol Amt ng/ul	Flags
D	1 1,4-Dioxane-d8	96	2.868	2.741	0.127	91	102807	10.0	2.37	
	3 1,4-Dioxane	88	2.913	2.782	0.131	88	14730	1.00	1.35	E
*	2 1,4-Dichlorobenzene-d4	152	5.956	5.944	0.012	97	362159	4.00	4.00	
	7 4,4'-DDE	246		11.020					ND	
	5 4,4'-DDD	235		11.320					ND	
	6 4,4'-DDT	235		11.603					ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

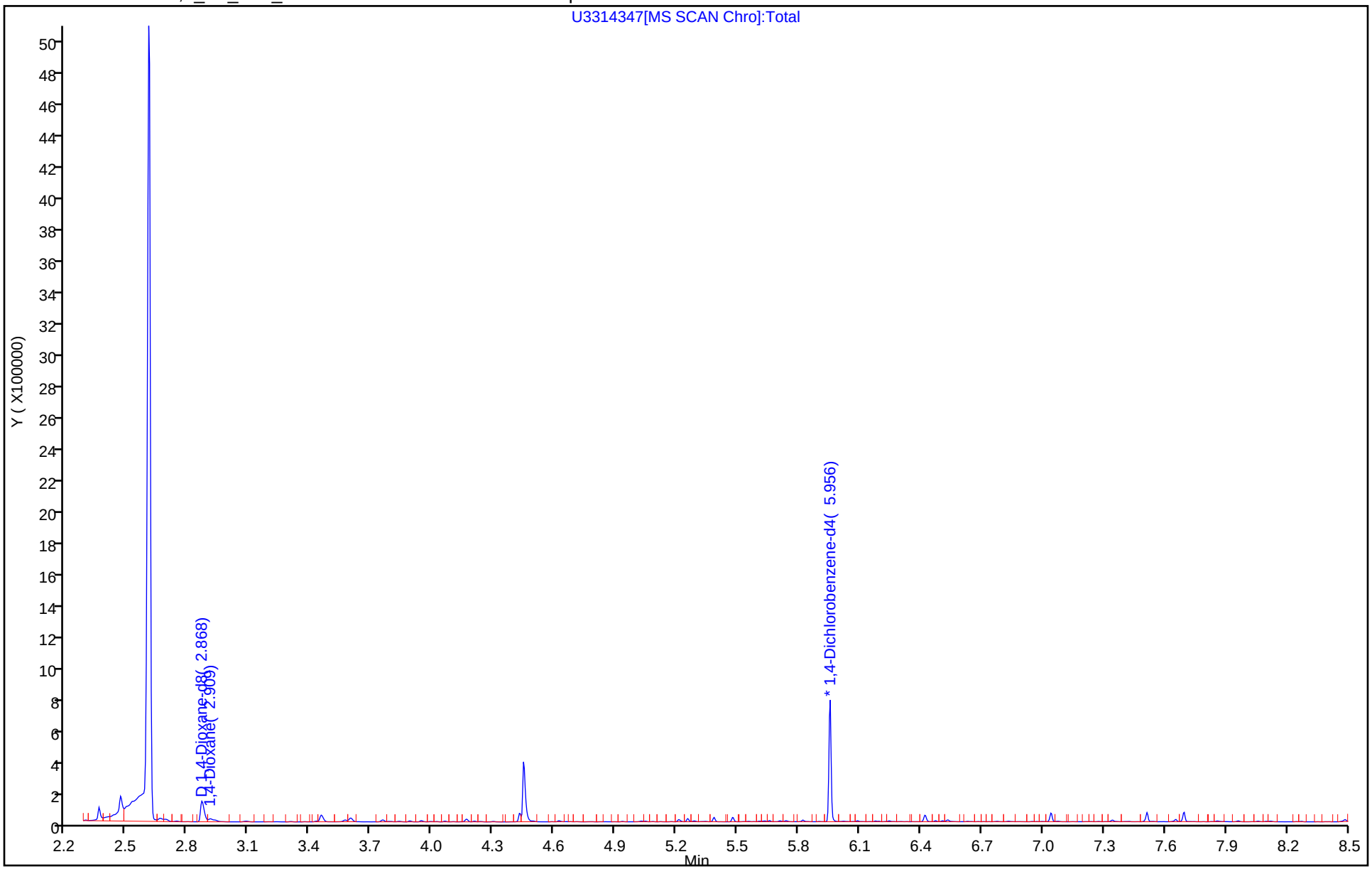
Reagents:

MB_LLIS_WRK_00158 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 26-Dec-2018 11:55:27 Chrom Revision: 2.3 13-Dec-2018 17:23:12

TestAmerica Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973U\20181218-77400.b\U3314347.D				
Injection Date:	18-Dec-2018 17:02:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	680-162184-A-2-B MSD			Worklist Smp#:	12
Client ID:	MW-15S				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	1,4_Dx_SIM_HP5973U	Limit Group:	MB - 8270D SIM ID ICAL		



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Instrument ID: HP5973U Start Date: 12/07/2018 15:11

Analysis Batch Number: 449428 End Date: 12/07/2018 18:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-449428/2		12/07/2018 15:11	1	U3314029.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-449428/3		12/07/2018 15:39	1	U3314030.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-449428/4		12/07/2018 16:04	1	U3314031.D	RXI-5Sil MS(0.5 0.25(mm)
ICIS 480-449428/5		12/07/2018 16:28	1	U3314032.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-449428/6		12/07/2018 16:52	1	U3314033.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-449428/7		12/07/2018 17:17	1	U3314034.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-449428/8		12/07/2018 17:41	1	U3314035.D	RXI-5Sil MS(0.5 0.25(mm)
ICV 480-449428/9		12/07/2018 18:05	1		RXI-5Sil MS(0.5 0.25(mm)

8270D SIM ID

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Instrument ID: HP5973U Start Date: 12/18/2018 12:53

Analysis Batch Number: 451416 End Date: 12/18/2018 22:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-451416/2		12/18/2018 12:53	1	U3314337.D	RXI-5Sil MS(0.5 0.25(mm)
CCVIS 480-451416/3		12/18/2018 13:22	1	U3314338.D	RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/18/2018 13:47	40		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/18/2018 14:11	40		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/18/2018 14:36	40		RXI-5Sil MS(0.5 0.25(mm)
MB 480-451231/1-A		12/18/2018 15:00	1	U3314342.D	RXI-5Sil MS(0.5 0.25(mm)
LCS 480-451231/2-A		12/18/2018 15:25	1	U3314343.D	RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/18/2018 15:49	5		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/18/2018 16:13	5		RXI-5Sil MS(0.5 0.25(mm)
680-162184-2 MS		12/18/2018 16:38	1	U3314346.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-2 MSD		12/18/2018 17:02	1	U3314347.D	RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/18/2018 17:27	5		RXI-5Sil MS(0.5 0.25(mm)
680-162184-2		12/18/2018 17:51	1	U3314349.D	RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/18/2018 18:16	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/18/2018 18:40	1		RXI-5Sil MS(0.5 0.25(mm)
680-162184-4		12/18/2018 19:05	1	U3314352.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-5		12/18/2018 19:30	1	U3314353.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-8		12/18/2018 19:54	1	U3314354.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-9		12/18/2018 20:19	1	U3314355.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-11		12/18/2018 20:44	1	U3314356.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-12		12/18/2018 21:09	1	U3314357.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-16		12/18/2018 21:33	1	U3314358.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-19		12/18/2018 21:58	1	U3314359.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-20		12/18/2018 22:23	1	U3314360.D	RXI-5Sil MS(0.5 0.25(mm)
680-162184-21		12/18/2018 22:48	1	U3314361.D	RXI-5Sil MS(0.5 0.25(mm)

8270D SIM ID

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Instrument ID: HP5973U Start Date: 12/28/2018 13:55

Analysis Batch Number: 452932 End Date: 12/28/2018 20:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-452932/2		12/28/2018 13:55	1	U3314468.D	RXI-5Sil MS(0.5 0.25(mm)
CCVIS 480-452932/3		12/28/2018 14:24	1	U3314469.D	RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 14:50	20		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 15:15	5		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 15:40	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 16:05	5		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 16:30	5		RXI-5Sil MS(0.5 0.25(mm)
MB 480-452766/1-A		12/28/2018 16:54	1	U3314475.D	RXI-5Sil MS(0.5 0.25(mm)
LCS 480-452766/2-A		12/28/2018 17:19	1	U3314476.D	RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 17:44	50		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 18:08	50		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 18:33	50		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 18:58	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 19:22	1		RXI-5Sil MS(0.5 0.25(mm)
680-162184-5 RE		12/28/2018 19:47	1	U3314482.D	RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		12/28/2018 20:12	5		RXI-5Sil MS(0.5 0.25(mm)

8270D SIM ID

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Batch Number: 451231 Batch Start Date: 12/17/18 14:24 Batch Analyst: Gruning, Anton T

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	OP_SIM_LCS 00005	OP_SimSurr 00012
MB 480-451231/1		3510C, 8270D SIM ID		1000 mL	1 mL	7 SU	<2 SU		1 mL
LCS 480-451231/2		3510C, 8270D SIM ID		1000 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
680-162184-A-2 MS	MW-15S	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
680-162184-A-2 MSD	MW-15S	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU	1 mL	1 mL
680-162184-A-2	MW-15S	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
680-162184-A-4	MW-16S	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
680-162184-A-5	MW-21R	3510C, 8270D SIM ID	T	1000 mL	1 mL	12 SU	<2 SU		1 mL
680-162184-A-8	MW-22R	3510C, 8270D SIM ID	T	950 mL	1 mL	7 SU	<2 SU		1 mL
680-162184-A-9	MW-24S	3510C, 8270D SIM ID	T	800 mL	1 mL	7 SU	<2 SU		1 mL
680-162184-A-11	MW-25S	3510C, 8270D SIM ID	T	850 mL	1 mL	7 SU	<2 SU		1 mL
680-162184-A-12	MW-26S	3510C, 8270D SIM ID	T	950 mL	1 mL	7 SU	<2 SU		1 mL
680-162184-A-16	EQUIP BLANK	3510C, 8270D SIM ID	T	1000 mL	1 mL	5 SU	<2 SU		1 mL
680-162184-A-19	MW-10	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
680-162184-A-20	MW-11D	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL
680-162184-A-21	PFASDUP_20181211	3510C, 8270D SIM ID	T	1000 mL	1 mL	7 SU	<2 SU		1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
MB 480-451231/1		3510C, 8270D SIM ID							
LCS 480-451231/2		3510C, 8270D SIM ID							
680-162184-A-2 MS	MW-15S	3510C, 8270D SIM ID	T						
680-162184-A-2 MSD	MW-15S	3510C, 8270D SIM ID	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Batch Number: 451231 Batch Start Date: 12/17/18 14:24 Batch Analyst: Gruning, Anton T

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
680-162184-A-2	MW-15S	3510C, 8270D SIM ID	T						
680-162184-A-4	MW-16S	3510C, 8270D SIM ID	T						
680-162184-A-5	MW-21R	3510C, 8270D SIM ID	T						
680-162184-A-8	MW-22R	3510C, 8270D SIM ID	T	insufficient recieved volume					
680-162184-A-9	MW-24S	3510C, 8270D SIM ID	T						
680-162184-A-11	MW-25S	3510C, 8270D SIM ID	T						
680-162184-A-12	MW-26S	3510C, 8270D SIM ID	T						
680-162184-A-16	EQUIP BLANK	3510C, 8270D SIM ID	T						
680-162184-A-19	MW-10	3510C, 8270D SIM ID	T						
680-162184-A-20	MW-11D	3510C, 8270D SIM ID	T						
680-162184-A-21	PFASDUP_20181211	3510C, 8270D SIM ID	T						

Batch Notes	
Acid Used for pH Adjustment ID	5019584
Analyst ID - Concentration	AP
Analyst ID - Extraction	AG, AP
Method/Fraction	3510C/8270D_SIM_MS_ID
Na2SO4 ID	5051453
Prep Solvent ID	5051235
Prep Solvent Volume Used	180 mL
Analyst ID - Spike Analyst	AP
Analyst ID - Spike Witness Analyst	AP
Sufficient Volume for Batch QC	yes
Vial Lot Number	1709111094

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Batch Number: 451231 Batch Start Date: 12/17/18 14:24 Batch Analyst: Gruning, Anton T

Batch Method: 3510C Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 680-162184-1

SDG No.:

Batch Number: 452766 Batch Start Date: 12/27/18 15:17 Batch Analyst: Pulera, Andrew A

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	SecondAdjustpH	OP_SIM_LCS 00005
MB 480-452766/1		3510C, 8270D SIM ID		1000 mL	1 mL	7 SU	<2 SU	>11 SU	
LCS 480-452766/2		3510C, 8270D SIM ID		1000 mL	1 mL	7 SU	<2 SU	>11 SU	1 mL
680-162184-B-5	MW-21R	3510C, 8270D SIM ID	T	1000 mL	1 mL	12 SU	<2 SU	>11 SU	

Lab Sample ID	Client Sample ID	Method Chain	Basis	OP_SimSurr 00012					
MB 480-452766/1		3510C, 8270D SIM ID		1 mL					
LCS 480-452766/2		3510C, 8270D SIM ID		1 mL					
680-162184-B-5	MW-21R	3510C, 8270D SIM ID	T	1 mL					

Batch Notes	
Acid Used for pH Adjustment ID	5019584
Analyst ID - Concentration	AP
Analyst ID - Extraction	AP
Method/Fraction	3510C/8270D_SIM_MS_ID
Na2SO4 ID	5051453
Prep Solvent ID	5074563
Prep Solvent Volume Used	180 mL
Analyst ID - Spike Analyst	AP
Analyst ID - Spike Witness Analyst	AP
Sufficient Volume for Batch QC	Yes
Vial Lot Number	1709111094

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG No.:

Project: Hercules Dyno - Port Ewen, NY

Client Sample ID	Lab Sample ID
MW-15S	680-162184-2
MW-15D	680-162184-3
MW-16S	680-162184-4
MW-24S	680-162184-9
MW-24D	680-162184-10
MW-26S	680-162184-12
MW-26D	680-162184-13
METDUP_20181211	680-162184-14
EQUIP BLANK	680-162184-16
SW-1	680-162184-18

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-15S
Lab Sample ID: 680-162184-2
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 12:00
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.017	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	75	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.021	0.050	0.017	mg/L	J		1	6010C
7440-09-7	Potassium	0.22	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	20	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.073	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	37	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.030	0.020	0.0099	mg/L			1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-15S
Lab Sample ID: 680-162184-2
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 12:00
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.015	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	72	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.050	0.050	0.017	mg/L	U		1	6010C
7440-09-7	Potassium	0.22	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	19	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.0035	0.010	0.0010	mg/L	J		1	6010C
7440-23-5	Sodium	36	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.039	0.020	0.0099	mg/L			1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-15D
Lab Sample ID: 680-162184-3
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 13:50
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.061	0.20	0.024	mg/L	J		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.11	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	50	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.13	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	4.4	1.0	0.017	mg/L			1	6010C
7439-95-4	Magnesium	12	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.016	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	6.9	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.33	0.020	0.0099	mg/L			1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U	F1	1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-15D
Lab Sample ID: 680-162184-3
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 13:50
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.098	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	44	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.050	0.050	0.017	mg/L	U		1	6010C
7440-09-7	Potassium	4.1	1.0	0.017	mg/L			1	6010C
7439-95-4	Magnesium	11	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.0072	0.010	0.0010	mg/L	J		1	6010C
7440-23-5	Sodium	6.6	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.35	0.020	0.0099	mg/L		F1	1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-16S
Lab Sample ID: 680-162184-4
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 15:45
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.036	0.20	0.024	mg/L	J		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.097	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	84	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.27	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	0.93	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	24	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.15	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	19	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.0079	0.020	0.0070	mg/L	J		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-16S
Lab Sample ID: 680-162184-4
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 15:45
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.095	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	82	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.16	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	0.92	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	24	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.088	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	18	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-24S
Lab Sample ID: 680-162184-9
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 13:08
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.041	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	86	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.093	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	0.58	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	25	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.019	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	16	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-24S
Lab Sample ID: 680-162184-9
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 13:08
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.036	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	81	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.050	0.050	0.017	mg/L	U		1	6010C
7440-09-7	Potassium	0.55	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	24	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.0083	0.010	0.0010	mg/L	J		1	6010C
7440-23-5	Sodium	15	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-24D
Lab Sample ID: 680-162184-10
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 13:55
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.15	0.20	0.024	mg/L	J		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.088	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	68	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.82	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	1.8	1.0	0.017	mg/L			1	6010C
7439-95-4	Magnesium	13	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.14	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	6.6	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-24D
Lab Sample ID: 680-162184-10
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 13:55
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.088	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	68	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.12	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	1.8	1.0	0.017	mg/L			1	6010C
7439-95-4	Magnesium	13	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.11	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	6.3	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-26S
Lab Sample ID: 680-162184-12
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 11:05
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.044	0.20	0.024	mg/L	J		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.025	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	58	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.052	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	0.50	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	21	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.069	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	24	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.012	0.020	0.0099	mg/L	J		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-26S
Lab Sample ID: 680-162184-12
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 11:05
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.023	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	60	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.0017	0.010	0.0016	mg/L	J		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.050	0.050	0.017	mg/L	U		1	6010C
7440-09-7	Potassium	0.54	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	23	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-23-5	Sodium	27	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-26D
Lab Sample ID: 680-162184-13
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 11:52
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.025	0.020	0.0062	mg/L			1	6010C
7440-39-3	Barium	0.048	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	44	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.12	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	0.65	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	7.2	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.022	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	9.7	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-26D
Lab Sample ID: 680-162184-13
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 11:52
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.023	0.020	0.0062	mg/L			1	6010C
7440-39-3	Barium	0.049	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	48	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.018	0.050	0.017	mg/L	J		1	6010C
7440-09-7	Potassium	0.72	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	8.1	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.0022	0.010	0.0010	mg/L	J		1	6010C
7440-23-5	Sodium	11	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: METDUP_20181211
Lab Sample ID: 680-162184-14
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 00:00
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.097	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	45	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.050	0.050	0.017	mg/L	U		1	6010C
7440-09-7	Potassium	4.0	1.0	0.017	mg/L			1	6010C
7439-95-4	Magnesium	12	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.0075	0.010	0.0010	mg/L	J		1	6010C
7440-23-5	Sodium	6.9	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.36	0.020	0.0099	mg/L			1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: METDUP_20181211
Lab Sample ID: 680-162184-14
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 00:00
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.062	0.20	0.024	mg/L	J		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.12	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	56	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.0019	0.020	0.0018	mg/L	J		1	6010C
7439-89-6	Iron	0.12	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	4.9	1.0	0.017	mg/L			1	6010C
7439-95-4	Magnesium	14	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.023	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	8.0	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.0051	0.010	0.0039	mg/L	J		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.38	0.020	0.0099	mg/L			1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.010	0.020	0.0070	mg/L	J		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: EQUIP BLANK
Lab Sample ID: 680-162184-16
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 16:35
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.010	0.010	0.0017	mg/L	U		1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	0.12	0.50	0.025	mg/L	J		1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.050	0.050	0.017	mg/L	U		1	6010C
7440-09-7	Potassium	0.017	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	0.50	0.50	0.033	mg/L	U		1	6010C
7439-96-5	Manganese	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-23-5	Sodium	1.0	1.0	0.48	mg/L	U		1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: EQUIP BLANK
Lab Sample ID: 680-162184-16
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/11/2018 16:35
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.20	0.20	0.024	mg/L	U		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.010	0.010	0.0017	mg/L	U		1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	0.12	0.50	0.025	mg/L	J		1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.020	0.020	0.0018	mg/L	U		1	6010C
7439-89-6	Iron	0.050	0.050	0.017	mg/L	U		1	6010C
7440-09-7	Potassium	0.017	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	0.50	0.50	0.033	mg/L	U		1	6010C
7439-96-5	Manganese	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-23-5	Sodium	1.0	1.0	0.48	mg/L	U		1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.020	0.020	0.0070	mg/L	U		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SW-1 | Lab Sample ID: 680-162184-18

Lab Name: TestAmerica Savannah | Job No.: 680-162184-1

SDG ID.:

Matrix: Water | Date Sampled: 12/12/2018 16:40

Reporting Basis: WET | Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.12	0.20	0.024	mg/L	J		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.033	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	43	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.022	0.020	0.0018	mg/L			1	6010C
7439-89-6	Iron	0.38	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	0.87	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	5.0	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.077	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	14	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.010	0.010	0.0039	mg/L	U		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.0096	0.020	0.0070	mg/L	J		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: SW-1
Lab Sample ID: 680-162184-18
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG ID.:
Matrix: Water
Date Sampled: 12/12/2018 16:40
Reporting Basis: WET
Date Received: 12/14/2018 09:49

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	0.010	0.010	0.00060	mg/L	U		1	6010C
7429-90-5	Aluminum	0.071	0.20	0.024	mg/L	J		1	6010C
7440-38-2	Arsenic	0.020	0.020	0.0062	mg/L	U		1	6010C
7440-39-3	Barium	0.038	0.010	0.0017	mg/L			1	6010C
7440-41-7	Beryllium	0.0040	0.0040	0.00010	mg/L	U		1	6010C
7440-70-2	Calcium	45	0.50	0.025	mg/L			1	6010C
7440-43-9	Cadmium	0.0050	0.0050	0.0010	mg/L	U		1	6010C
7440-48-4	Cobalt	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-47-3	Chromium	0.010	0.010	0.0016	mg/L	U		1	6010C
7440-50-8	Copper	0.028	0.020	0.0018	mg/L			1	6010C
7439-89-6	Iron	0.64	0.050	0.017	mg/L			1	6010C
7440-09-7	Potassium	0.88	1.0	0.017	mg/L	J		1	6010C
7439-95-4	Magnesium	5.1	0.50	0.033	mg/L			1	6010C
7439-96-5	Manganese	0.13	0.010	0.0010	mg/L			1	6010C
7440-23-5	Sodium	14	1.0	0.48	mg/L			1	6010C
7440-02-0	Nickel	0.040	0.040	0.0021	mg/L	U		1	6010C
7439-92-1	Lead	0.0040	0.010	0.0039	mg/L	J		1	6010C
7440-36-0	Antimony	0.020	0.020	0.0053	mg/L	U		1	6010C
7782-49-2	Selenium	0.020	0.020	0.0099	mg/L	U		1	6010C
7440-28-0	Thallium	0.025	0.025	0.0060	mg/L	U		1	6010C
7440-62-2	Vanadium	0.010	0.010	0.0010	mg/L	U		1	6010C
7440-66-6	Zinc	0.016	0.020	0.0070	mg/L	J		1	6010C
7439-97-6	Mercury	0.00020	0.00020	0.000080	mg/L	U		1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: P_ICV_wk_00351 Concentration Units: ug/L

CCV Source: ME ICP CCV_00002

Analyte	ICV 680-552039/4 12/15/2018 09:29				CCV 680-552039/119 12/15/2018 18:30				CCV 680-552039/131 12/15/2018 19:26			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	1010		1000	101	9890		10000	99	9920		10000	99
Antimony	1070		1000	107	504		500	101	506		500	101
Arsenic	959		1000	96	517		500	103	526		500	105
Barium	1030		1000	103	484		500	97	483		500	97
Beryllium	1020		1000	102	527		500	105	529		500	106
Cadmium	1040		1000	104	514		500	103	514		500	103
Calcium	1020		1000	102	10100		10000	101	10100		10000	101
Chromium	1020		1000	102	501		500	100	503		500	101
Cobalt	998		1000	100	507		500	101	509		500	102
Copper	1000		1000	100	505		500	101	508		500	102
Iron	1050		1000	105	10100		10000	101	10100		10000	101
Lead	1050		1000	105	516		500	103	527		500	105
Magnesium	1010		1000	101	10300		10000	103	10400		10000	104
Manganese	1010		1000	101	504		500	101	505		500	101
Nickel	1020		1000	102	513		500	103	515		500	103
Potassium	9750		10000	97	9940		10000	99	9990		10000	100
Selenium	1000		1000	100	515		500	103	535		500	107
Silver	998		1000	100	487		500	97	490		500	98
Sodium	10100		10000	101	10700		10000	107	10800		10000	108
Thallium	1010		1000	101	493		500	99	491		500	98
Vanadium	1030		1000	103	501		500	100	501		500	100
Zinc	1030		1000	103	1070		1000	107	1070		1000	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: P_ICV_wk_00351 Concentration Units: ug/L

CCV Source: ME ICP CCV_00002

Analyte	CCV 680-552039/143 12/15/2018 20:22											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	9930		10000	99								
Antimony	512		500	102								
Arsenic	525		500	105								
Barium	481		500	96								
Beryllium	532		500	106								
Cadmium	514		500	103								
Calcium	10100		10000	101								
Chromium	501		500	100								
Cobalt	508		500	102								
Copper	505		500	101								
Iron	10100		10000	101								
Lead	514		500	103								
Magnesium	10400		10000	104								
Manganese	504		500	101								
Nickel	513		500	103								
Potassium	10000		10000	100								
Selenium	521		500	104								
Silver	489		500	98								
Sodium	10400		10000	104								
Thallium	500		500	100								
Vanadium	500		500	100								
Zinc	1070		1000	107								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: P_ICV_wk_00351 Concentration Units: ug/L

CCV Source: ME ICP CCV_00002

Analyte	ICV 680-552495/4 12/18/2018 14:27				CCV 680-552495/78 12/18/2018 20:04				CCV 680-552495/88 12/18/2018 20:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	999		1000	100	9760		10000	98	9740		10000	97
Antimony	1050		1000	105	487		500	97	486		500	97
Arsenic	946		1000	95	489		500	98	496		500	99
Barium	1020		1000	102	492		500	98	490		500	98
Beryllium	1010		1000	101	512		500	102	513		500	103
Cadmium	1030		1000	103	505		500	101	506		500	101
Calcium	1000		1000	100	10000		10000	100	9990		10000	100
Chromium	1010		1000	101	500		500	100	500		500	100
Cobalt	990		1000	99	502		500	100	502		500	100
Copper	994		1000	99	483		500	97	483		500	97
Iron	1050		1000	105	9970		10000	100	9980		10000	100
Lead	1040		1000	104	497		500	99	498		500	100
Magnesium	1000		1000	100	9980		10000	100	10000		10000	100
Manganese	1000		1000	100	499		500	100	498		500	100
Nickel	1010		1000	101	497		500	99	497		500	99
Potassium	9780		10000	98	9720		10000	97	9680		10000	97
Selenium	976		1000	98	484		500	97	480		500	96
Silver	1010		1000	101	492		500	98	491		500	98
Sodium	9770		10000	98	9960		10000	100	10000		10000	100
Thallium	994		1000	99	489		500	98	497		500	99
Vanadium	1020		1000	102	495		500	99	494		500	99
Zinc	1030		1000	103	1010		1000	101	1000		1000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: P_ICV_wk_00351 Concentration Units: ug/L

CCV Source: ME ICP CCV_00002

Analyte	CCV 680-552495/100 12/18/2018 21:40				CCV 680-552495/112 12/18/2018 22:33				CCV 680-552495/124 12/18/2018 23:26			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	9750		10000	98	9720		10000	97	9730		10000	97
Antimony	483		500	97	480		500	96	486		500	97
Arsenic	497		500	99	498		500	100	497		500	99
Barium	490		500	98	487		500	97	488		500	98
Beryllium	514		500	103	516		500	103	517		500	103
Cadmium	507		500	101	508		500	102	509		500	102
Calcium	10000		10000	100	10000		10000	100	10000		10000	100
Chromium	501		500	100	501		500	100	501		500	100
Cobalt	503		500	101	501		500	100	503		500	101
Copper	483		500	97	481		500	96	481		500	96
Iron	9990		10000	100	10000		10000	100	10000		10000	100
Lead	494		500	99	495		500	99	494		500	99
Magnesium	10000		10000	100	10000		10000	100	10100		10000	101
Manganese	498		500	100	497		500	99	497		500	99
Nickel	497		500	99	497		500	99	501		500	100
Potassium	9680		10000	97	9630		10000	96	9610		10000	96
Selenium	491		500	98	482		500	96	479		500	96
Silver	491		500	98	491		500	98	490		500	98
Sodium	9840		10000	98	10100		10000	101	9960		10000	100
Thallium	487		500	97	490		500	98	486		500	97
Vanadium	494		500	99	492		500	98	493		500	99
Zinc	1010		1000	101	1000		1000	100	1010		1000	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: P_ICV_wk_00351 Concentration Units: ug/L

CCV Source: ME ICP CCV_00002

Analyte	CCV 680-552495/135 12/19/2018 00:14				CCV 680-552495/147 12/19/2018 01:07							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	9700		10000	97	9730		10000	97				
Antimony	481		500	96	482		500	96				
Arsenic	497		500	99	498		500	100				
Barium	486		500	97	483		500	97				
Beryllium	517		500	103	520		500	104				
Cadmium	509		500	102	509		500	102				
Calcium	9980		10000	100	10000		10000	100				
Chromium	502		500	100	503		500	101				
Cobalt	503		500	101	503		500	101				
Copper	485		500	97	485		500	97				
Iron	10000		10000	100	10000		10000	100				
Lead	500		500	100	494		500	99				
Magnesium	10100		10000	101	10100		10000	101				
Manganese	496		500	99	496		500	99				
Nickel	499		500	100	500		500	100				
Potassium	9580		10000	96	9580		10000	96				
Selenium	491		500	98	487		500	97				
Silver	491		500	98	491		500	98				
Sodium	9860		10000	99	9930		10000	99				
Thallium	487		500	97	488		500	98				
Vanadium	492		500	98	492		500	98				
Zinc	996		1000	100	1000		1000	100				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: hg_icvint_00172 Concentration Units: ug/L

CCV Source: Hg_Int_Cal_00177

Analyte	ICV 680-552696/7-A 12/21/2018 16:16				CCV 680-552696/11-A 12/21/2018 23:00				CCV 680-552696/11-A 12/21/2018 23:48			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	3.12		3.00	104	2.67		2.50	107	2.66		2.50	106

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: hg_icvint_00172 Concentration Units: ug/L

CCV Source: Hg_Int_Cal_00177

Analyte	ICV 680-552696/7-A 12/22/2018 09:10				CCV 680-552696/11-A 12/22/2018 09:28				CCV 680-552696/11-A 12/22/2018 10:16			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	3.14		3.00	105	2.62		2.50	105	2.50		2.50	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: hg_icvint_00172 Concentration Units: ug/L

CCV Source: Hg_Int_Cal_00177

Analyte	CCV 680-552696/11-A 12/22/2018 11:03				CCV 680-552696/11-A 12/22/2018 11:51							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.44		2.50	98	2.48		2.50	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICV Source: hg_icvint_00173 Concentration Units: ug/L

CCV Source: Hg_Int_Cal_00178

Analyte	ICV 680-553787/7-A 01/02/2019 10:28				CCV 680-553787/11-A 01/02/2019 11:00				CCV 680-553787/11-A 01/02/2019 11:47			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	3.05		3.00	102	2.64		2.50	105	2.61		2.50	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Method: 6010C Instrument ID: ICPE

Lab Sample ID: CRI 680-552039/6 Concentration Units: ug/L

CRQL Check Standard Source: P_RL_Int_00068

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	11.4		114	70-130
Aluminum	200	223		111	70-130
Arsenic	20.0	23.4		117	70-130
Barium	10.0	11.9		119	70-130
Beryllium	4.00	4.66		116	70-130
Calcium	500	585		117	70-130
Cadmium	5.00	5.81		116	70-130
Cobalt	10.0	11.1		111	70-130
Chromium	10.0	11.4		114	70-130
Copper	20.0	23.0		115	70-130
Iron	50.0	55.2		110	70-130
Potassium	1000	1100		110	70-130
Magnesium	500	575		115	70-130
Manganese	10.0	12.0		120	70-130
Sodium	1000	1090		109	70-130
Nickel	40.0	44.8		112	70-130
Lead	10.0	10.2		102	70-130
Antimony	20.0	23.9		120	70-130
Selenium	20.0	17.2	J	86	70-130
Thallium	25.0	26.9		108	70-130
Vanadium	10.0	11.7		117	70-130
Zinc	20.0	21.3		106	70-130

Lab Sample ID: CRI 680-552039/303 Concentration Units: ug/L

CRQL Check Standard Source: P_RL_Int_00068

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	11.1		111	70-130
Aluminum	200	215		107	70-130
Arsenic	20.0	17.9	J	89	70-130
Barium	10.0	12.0		120	70-130
Beryllium	4.00	4.32		108	70-130
Calcium	500	579		116	70-130
Cadmium	5.00	5.46		109	70-130
Cobalt	10.0	10.8		108	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Method: 6010C Instrument ID: ICPE

Lab Sample ID: CRI 680-552039/303 Concentration Units: ug/L

CRQL Check Standard Source: P_RL_Int_00068

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Chromium	10.0	11.3		113	70-130
Copper	20.0	21.4		107	70-130
Iron	50.0	62.4		125	70-130
Potassium	1000	1060		106	70-130
Magnesium	500	536		107	70-130
Manganese	10.0	11.8		118	70-130
Sodium	1000	982	J	98	70-130
Nickel	40.0	45.0		113	70-130
Lead	10.0	12.7		127	70-130
Antimony	20.0	23.3		116	70-130
Selenium	20.0	20.8		104	70-130
Thallium	25.0	21.5	J	86	70-130
Vanadium	10.0	11.4		114	70-130
Zinc	20.0	21.1		106	70-130

Lab Sample ID: CRI 680-552495/6 Concentration Units: ug/L

CRQL Check Standard Source: P_RL_Int_00068

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	11.3		113	70-130
Aluminum	200	221		110	70-130
Arsenic	20.0	18.5	J	93	70-130
Barium	10.0	10.9		109	70-130
Beryllium	4.00	4.45		111	70-130
Calcium	500	555		111	70-130
Cadmium	5.00	5.58		112	70-130
Cobalt	10.0	11.4		114	70-130
Chromium	10.0	10.9		109	70-130
Copper	20.0	22.7		113	70-130
Iron	50.0	54.4		109	70-130
Potassium	1000	1070		107	70-130
Magnesium	500	546		109	70-130
Manganese	10.0	11.3		113	70-130
Sodium	1000	1090		109	70-130
Nickel	40.0	42.5		106	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Method: 6010C Instrument ID: ICPE

Lab Sample ID: CRI 680-552495/6 Concentration Units: ug/L

CRQL Check Standard Source: P_RL_Int_00068

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Lead	10.0	11.1		111	70-130
Antimony	20.0	20.6		103	70-130
Selenium	20.0	20.2		101	70-130
Thallium	25.0	25.3		101	70-130
Vanadium	10.0	11.2		112	70-130
Zinc	20.0	22.3		111	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Method: 7470A Instrument ID: LEEMAN2

Lab Sample ID: CRA 680-552696/9-A Concentration Units: ug/L

CRQL Check Standard Source: Hg_Int_Cal_00177

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.219		110	50-150

Lab Sample ID: CRA 680-552696/9-A Concentration Units: ug/L

CRQL Check Standard Source: Hg_Int_Cal_00177

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.193	J	96	50-150

Lab Sample ID: CRA 680-553787/9-A Concentration Units: ug/L

CRQL Check Standard Source: Hg_Int_Cal_00178

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.212		106	50-150

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICBIS 680-552039/5 12/15/2018 09:34		CCB 680-552039/120 12/15/2018 18:34		CCB 680-552039/132 12/15/2018 19:31		CCB 680-552039/144 12/15/2018 20:27	
		Found	C	Found	C	Found	C	Found	C
Aluminum	200	200	U	200	U	200	U	200	U
Antimony	20	20	U	20	U	20	U	20	U
Arsenic	20	20	U	20	U	20	U	20	U
Barium	10	10	U	10	U	10	U	10	U
Beryllium	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	500	500	U	500	U	500	U	500	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	20	20	U	20	U	20	U	20	U
Iron	50	50	U	50	U	50	U	50	U
Lead	10	10	U	10	U	10	U	10	U
Magnesium	500	500	U	500	U	500	U	500	U
Manganese	10	10	U	10	U	10	U	10	U
Nickel	40	40	U	40	U	40	U	40	U
Potassium	1000	1000	U	1000	U	1000	U	1000	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Sodium	1000	1000	U	1000	U	1000	U	1000	U
Thallium	25	25	U	25	U	25	U	25	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICBIS 680-552495/5 12/18/2018 14:31		CCB 680-552495/79 12/18/2018 20:08		CCB 680-552495/89 12/18/2018 20:52		CCB 680-552495/101 12/18/2018 21:45	
		Found	C	Found	C	Found	C	Found	C
Aluminum	200	200	U	200	U	200	U	200	U
Antimony	20	20	U	20	U	20	U	20	U
Arsenic	20	20	U	20	U	20	U	20	U
Barium	10	10	U	10	U	10	U	10	U
Beryllium	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	500	500	U	500	U	500	U	500	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	20	20	U	20	U	20	U	20	U
Iron	50	50	U	50	U	50	U	50	U
Lead	10	10	U	10	U	10	U	10	U
Magnesium	500	500	U	500	U	500	U	500	U
Manganese	10	10	U	10	U	10	U	10	U
Nickel	40	40	U	40	U	40	U	40	U
Potassium	1000	1000	U	1000	U	1000	U	1000	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Sodium	1000	1000	U	1000	U	1000	U	1000	U
Thallium	25	25	U	25	U	25	U	25	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 680-552495/113 12/18/2018 22:38		CCB 680-552495/125 12/18/2018 23:30		CCB 680-552495/136 12/19/2018 00:19		CCB 680-552495/148 12/19/2018 01:12	
		Found	C	Found	C	Found	C	Found	C
Aluminum	200	200	U	200	U	200	U	200	U
Antimony	20	20	U	20	U	20	U	20	U
Arsenic	20	20	U	20	U	20	U	20	U
Barium	10	10	U	10	U	10	U	10	U
Beryllium	4.0	4.0	U	4.0	U	4.0	U	4.0	U
Cadmium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Calcium	500	500	U	500	U	500	U	500	U
Chromium	10	10	U	10	U	10	U	10	U
Cobalt	10	10	U	10	U	10	U	10	U
Copper	20	20	U	20	U	20	U	20	U
Iron	50	50	U	50	U	50	U	50	U
Lead	10	10	U	10	U	10	U	10	U
Magnesium	500	500	U	500	U	500	U	500	U
Manganese	10	10	U	10	U	10	U	10	U
Nickel	40	40	U	40	U	40	U	40	U
Potassium	1000	1000	U	1000	U	1000	U	1000	U
Selenium	20	20	U	20	U	20	U	20	U
Silver	10	10	U	10	U	10	U	10	U
Sodium	1000	1000	U	1000	U	1000	U	1000	U
Thallium	25	25	U	25	U	25	U	25	U
Vanadium	10	10	U	10	U	10	U	10	U
Zinc	20	20	U	20	U	20	U	20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 680-552696/8-A 12/21/2018 16:20		CCB 680-552696/12-A 12/21/2018 23:04		CCB 680-552696/12-A 12/21/2018 23:52			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 680-552696/8-A 12/22/2018 09:14		CCB 680-552696/12-A 12/22/2018 09:32		CCB 680-552696/12-A 12/22/2018 10:20		CCB 680-552696/12-A 12/22/2018 11:07	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 680-552696/12-A 12/22/2018 11:55							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 680-553787/8-A 01/02/2019 10:32		CCB 680-553787/12-A 01/02/2019 11:03		CCB 680-553787/12-A 01/02/2019 11:51			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 680-551755/1-A

Instrument Code: ICPE Batch No.: 552039

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.010	U		6010C
7429-90-5	Aluminum	0.20	U		6010C
7440-38-2	Arsenic	0.020	U		6010C
7440-39-3	Barium	0.010	U		6010C
7440-41-7	Beryllium	0.0040	U		6010C
7440-70-2	Calcium	0.50	U		6010C
7440-43-9	Cadmium	0.0050	U		6010C
7440-48-4	Cobalt	0.010	U		6010C
7440-47-3	Chromium	0.010	U		6010C
7440-50-8	Copper	0.020	U		6010C
7439-89-6	Iron	0.050	U		6010C
7440-09-7	Potassium	1.0	U		6010C
7439-95-4	Magnesium	0.50	U		6010C
7439-96-5	Manganese	0.010	U		6010C
7440-23-5	Sodium	1.0	U		6010C
7440-02-0	Nickel	0.040	U		6010C
7439-92-1	Lead	0.010	U		6010C
7440-36-0	Antimony	0.020	U		6010C
7782-49-2	Selenium	0.020	U		6010C
7440-28-0	Thallium	0.025	U		6010C
7440-62-2	Vanadium	0.010	U		6010C
7440-66-6	Zinc	0.020	U		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 680-551774/1-A

Instrument Code: ICPE Batch No.: 552495

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.010	U		6010C
7429-90-5	Aluminum	0.20	U		6010C
7440-38-2	Arsenic	0.020	U		6010C
7440-39-3	Barium	0.010	U		6010C
7440-41-7	Beryllium	0.0040	U		6010C
7440-70-2	Calcium	0.50	U		6010C
7440-43-9	Cadmium	0.0050	U		6010C
7440-48-4	Cobalt	0.010	U		6010C
7440-47-3	Chromium	0.010	U		6010C
7440-50-8	Copper	0.020	U		6010C
7439-89-6	Iron	0.050	U		6010C
7440-09-7	Potassium	1.0	U		6010C
7439-95-4	Magnesium	0.50	U		6010C
7439-96-5	Manganese	0.010	U		6010C
7440-23-5	Sodium	1.0	U		6010C
7440-02-0	Nickel	0.040	U		6010C
7439-92-1	Lead	0.010	U		6010C
7440-36-0	Antimony	0.020	U		6010C
7782-49-2	Selenium	0.020	U		6010C
7440-28-0	Thallium	0.025	U		6010C
7440-62-2	Vanadium	0.010	U		6010C
7440-66-6	Zinc	0.020	U		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 680-551775/1-A

Instrument Code: ICPE Batch No.: 552495

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.010	U		6010C
7429-90-5	Aluminum	0.20	U		6010C
7440-38-2	Arsenic	0.020	U		6010C
7440-39-3	Barium	0.010	U		6010C
7440-41-7	Beryllium	0.0040	U		6010C
7440-70-2	Calcium	0.50	U		6010C
7440-43-9	Cadmium	0.0050	U		6010C
7440-48-4	Cobalt	0.010	U		6010C
7440-47-3	Chromium	0.010	U		6010C
7440-50-8	Copper	0.020	U		6010C
7439-89-6	Iron	0.050	U		6010C
7440-09-7	Potassium	1.0	U		6010C
7439-95-4	Magnesium	0.50	U		6010C
7439-96-5	Manganese	0.010	U		6010C
7440-23-5	Sodium	1.0	U		6010C
7440-02-0	Nickel	0.040	U		6010C
7439-92-1	Lead	0.010	U		6010C
7440-36-0	Antimony	0.020	U		6010C
7782-49-2	Selenium	0.020	U		6010C
7440-28-0	Thallium	0.025	U		6010C
7440-62-2	Vanadium	0.010	U		6010C
7440-66-6	Zinc	0.020	U		6010C

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 680-551751/1-A

Instrument Code: ICPE Batch No.: 552495

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.010	U		6010C
7429-90-5	Aluminum	0.20	U		6010C
7440-38-2	Arsenic	0.020	U		6010C
7440-39-3	Barium	0.010	U		6010C
7440-41-7	Beryllium	0.0040	U		6010C
7440-70-2	Calcium	0.50	U		6010C
7440-43-9	Cadmium	0.0050	U		6010C
7440-48-4	Cobalt	0.010	U		6010C
7440-47-3	Chromium	0.010	U		6010C
7440-50-8	Copper	0.020	U		6010C
7439-89-6	Iron	0.050	U		6010C
7440-09-7	Potassium	1.0	U		6010C
7439-95-4	Magnesium	0.50	U		6010C
7439-96-5	Manganese	0.010	U		6010C
7440-23-5	Sodium	1.0	U		6010C
7440-02-0	Nickel	0.040	U		6010C
7439-92-1	Lead	0.010	U		6010C
7440-36-0	Antimony	0.020	U		6010C
7782-49-2	Selenium	0.020	U		6010C
7440-28-0	Thallium	0.025	U		6010C
7440-62-2	Vanadium	0.010	U		6010C
7440-66-6	Zinc	0.020	U		6010C

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 680-551782/1-A

Instrument Code: ICPE Batch No.: 552495

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	0.010	U		6010C
7429-90-5	Aluminum	0.20	U		6010C
7440-38-2	Arsenic	0.020	U		6010C
7440-39-3	Barium	0.010	U		6010C
7440-41-7	Beryllium	0.0040	U		6010C
7440-70-2	Calcium	0.50	U		6010C
7440-43-9	Cadmium	0.0050	U		6010C
7440-48-4	Cobalt	0.010	U		6010C
7440-47-3	Chromium	0.010	U		6010C
7440-50-8	Copper	0.020	U		6010C
7439-89-6	Iron	0.050	U		6010C
7440-09-7	Potassium	1.0	U		6010C
7439-95-4	Magnesium	0.50	U		6010C
7439-96-5	Manganese	0.010	U		6010C
7440-23-5	Sodium	1.0	U		6010C
7440-02-0	Nickel	0.040	U		6010C
7439-92-1	Lead	0.010	U		6010C
7440-36-0	Antimony	0.020	U		6010C
7782-49-2	Selenium	0.020	U		6010C
7440-28-0	Thallium	0.025	U		6010C
7440-62-2	Vanadium	0.010	U		6010C
7440-66-6	Zinc	0.020	U		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 680-552619/1-A

Instrument Code: LEEMAN2 Batch No.: 552922

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.00020	U		7470A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 680-552831/1-A

Instrument Code: LEEMAN2 Batch No.: 552999

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.00020	U		7470A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 680-553794/1-A

Instrument Code: LEEMAN2 Batch No.: 554062

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.00020	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICSA 680-552039/7 Instrument ID: ICPE

Lab File ID: E12152018ff.csv ICS Source: P_ICSA_wk_00071

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500000**	**537471**	**107**
Antimony		**3.30**	
Arsenic		**12.1**	
Barium		**-1.37**	
Beryllium		**-0.114**	
Cadmium		**0.669**	
Calcium	**500000**	**512952**	**103**
Chromium		**0.0229**	
Cobalt		**-1.42**	
Copper		**0.204**	
Iron	**200000**	**197632**	**99**
Lead		**9.86**	
Magnesium	**500000**	**532674**	**107**
Manganese		**-2.59**	
Nickel		**2.62**	
Potassium		**2.69**	
Selenium		**3.10**	
Silver		**0.405**	
Sodium		**-296**	
Thallium		**-12.0**	
Vanadium		**1.23**	
Zinc		**8.91**	
Boron		*13.5*	
Molybdenum		*1.36*	
Strontium		*7.76*	
Tin		*-0.804*	
Titanium		*3.04*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICSAB 680-552039/8 Instrument ID: ICPE

Lab File ID: E12152018ff.csv ICS Source: P_ICSAB_wk_00089

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500000**	**550460**	**110**
Antimony	**600**	**708**	**118**
Arsenic	**100**	**100**	**100**
Barium	**500**	**531**	**106**
Beryllium	**500**	**529**	**106**
Cadmium	**1000**	**1011**	**101**
Calcium	**500000**	**525619**	**105**
Chromium	**500**	**513**	**103**
Cobalt	**500**	**503**	**101**
Copper	**500**	**559**	**112**
Iron	**200000**	**201909**	**101**
Lead	**50.0**	**58.5**	**117**
Magnesium	**500000**	**544603**	**109**
Manganese	**500**	**519**	**104**
Nickel	**1000**	**1001**	**100**
Potassium		**2.21**	
Selenium	**50.0**	**48.7**	**97**
Silver	**200**	**226**	**113**
Sodium		**-552**	
Thallium	**100**	**95.4**	**95**
Vanadium	**500**	**527**	**105**
Zinc	**1000**	**987**	**99**
Boron		*14.7*	
Molybdenum	*1000*	*1073*	*107*
Strontium		*10.0*	
Tin	*1000*	*1031*	*103*
Titanium		*3.14*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICSA 680-552495/7 Instrument ID: ICPE

Lab File ID: E12182018ff.csv ICS Source: P_ICSA_wk_00071

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500000**	**561820**	**112**
Antimony		**-11.5**	
Arsenic		**-0.0560**	
Barium		**2.67**	
Beryllium		**-0.151**	
Cadmium		**0.316**	
Calcium	**500000**	**532868**	**107**
Chromium		**-0.114**	
Cobalt		**0.135**	
Copper		**1.000**	
Iron	**200000**	**205216**	**103**
Lead		**9.01**	
Magnesium	**500000**	**560550**	**112**
Manganese		**-2.92**	
Nickel		**4.00**	
Potassium		**2.05**	
Selenium		**8.39**	
Silver		**0.0426**	
Sodium		**-279**	
Thallium		**0.539**	
Vanadium		**2.13**	
Zinc		**5.39**	
Boron		*14.3*	
Molybdenum		*0.370*	
Strontium		*8.32*	
Tin		*-3.55*	
Titanium		*2.93*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Lab Sample ID: ICSAB 680-552495/8 Instrument ID: ICPE

Lab File ID: E12182018ff.csv ICS Source: P_ICSAB_wk_00089

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500000**	**521571**	**104**
Antimony	**600**	**667**	**111**
Arsenic	**100**	**103**	**103**
Barium	**500**	**499**	**100**
Beryllium	**500**	**503**	**101**
Cadmium	**1000**	**959**	**96**
Calcium	**500000**	**496514**	**99**
Chromium	**500**	**484**	**97**
Cobalt	**500**	**479**	**96**
Copper	**500**	**530**	**106**
Iron	**200000**	**190403**	**95**
Lead	**50.0**	**50.3**	**101**
Magnesium	**500000**	**519281**	**104**
Manganese	**500**	**489**	**98**
Nickel	**1000**	**943**	**94**
Potassium		**0.367**	
Selenium	**50.0**	**50.9**	**102**
Silver	**200**	**217**	**109**
Sodium		**-281**	
Thallium	**100**	**90.7**	**91**
Vanadium	**500**	**496**	**99**
Zinc	**1000**	**952**	**95**
Boron		*13.5*	
Molybdenum	*1000*	*1015*	*102*
Strontium		*9.12*	
Tin	*1000*	*990*	*99*
Titanium		*2.70*	

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: MW-15D MS

Lab ID: 680-162184-3 MS

Lab Name: TestAmerica Savannah

Job No.: 680-162184-1

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.0499		0.010	U	0.0500	100	75-125		6010C
Aluminum	4.84		0.061	J	5.00	96	75-125		6010C
Arsenic	0.0980		0.020	U	0.100	98	75-125		6010C
Barium	0.215		0.11		0.100	104	75-125		6010C
Beryllium	0.0504		0.0040	U	0.0500	101	75-125		6010C
Calcium	61.2		50		5.00	231	75-125	4	6010C
Cadmium	0.0500		0.0050	U	0.0500	100	75-125		6010C
Cobalt	0.0498		0.010	U	0.0500	100	75-125		6010C
Chromium	0.0997		0.010	U	0.100	100	75-125		6010C
Copper	0.0962		0.020	U	0.100	96	75-125		6010C
Iron	5.10		0.13		5.00	100	75-125		6010C
Potassium	12.3		4.4		8.00	99	75-125		6010C
Magnesium	17.5		12		5.00	108	75-125		6010C
Manganese	0.516		0.016		0.500	100	75-125		6010C
Sodium	12.2		6.9		5.00	106	75-125		6010C
Nickel	0.0979		0.040	U	0.100	98	75-125		6010C
Lead	0.483		0.010	U	0.500	97	75-125		6010C
Antimony	0.0460		0.020	U	0.0500	92	75-125		6010C
Selenium	0.450		0.33		0.100	124	75-125		6010C
Thallium	0.0366		0.025	U	0.0400	92	75-125		6010C
Vanadium	0.0983		0.010	U	0.100	98	75-125		6010C
Zinc	0.110		0.020	U	0.100	110	75-125		6010C
Mercury	0.000728		0.00020	U	0.00100	73	80-120	F1	7470A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW-15D MS
Lab ID: 680-162184-3 MS
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.0499		0.010	U	0.0500	100	75-125		6010C
Aluminum	4.80		0.20	U	5.00	96	75-125		6010C
Arsenic	0.0938		0.020	U	0.100	94	75-125		6010C
Barium	0.202		0.098		0.100	104	75-125		6010C
Beryllium	0.0503		0.0040	U	0.0500	101	75-125		6010C
Calcium	52.7		44		5.00	183	75-125	4	6010C
Cadmium	0.0505		0.0050	U	0.0500	101	75-125		6010C
Cobalt	0.0497		0.010	U	0.0500	99	75-125		6010C
Chromium	0.0993		0.010	U	0.100	99	75-125		6010C
Copper	0.0957		0.020	U	0.100	96	75-125		6010C
Iron	4.93		0.050	U	5.00	99	75-125		6010C
Potassium	12.3		4.1		8.00	102	75-125		6010C
Magnesium	17.1		11		5.00	114	75-125		6010C
Manganese	0.499		0.0072	J	0.500	98	75-125		6010C
Sodium	12.2		6.6		5.00	112	75-125		6010C
Nickel	0.0970		0.040	U	0.100	97	75-125		6010C
Lead	0.494		0.010	U	0.500	99	75-125		6010C
Antimony	0.0474		0.020	U	0.0500	95	75-125		6010C
Selenium	0.474		0.35		0.100	120	75-125		6010C
Thallium	0.0384		0.025	U	0.0400	96	75-125		6010C
Vanadium	0.0981		0.010	U	0.100	98	75-125		6010C
Zinc	0.0990		0.020	U	0.100	99	75-125		6010C
Mercury	0.000894		0.00020	U	0.00100	89	80-120		7470A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: METDUP_20181211 MS

Lab ID: 680-162184-14 MS

Lab Name: TestAmerica Savannah

Job No.: 680-162184-1

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.0510		0.010	U	0.0500	102	75-125		6010C
Aluminum	5.10		0.062	J	5.00	101	75-125		6010C
Arsenic	0.107		0.020	U	0.100	107	75-125		6010C
Barium	0.212		0.12		0.100	95	75-125		6010C
Beryllium	0.0538		0.0040	U	0.0500	108	75-125		6010C
Calcium	60.2		56		5.00	84	75-125	4	6010C
Cadmium	0.0529		0.0050	U	0.0500	106	75-125		6010C
Cobalt	0.0499		0.010	U	0.0500	100	75-125		6010C
Chromium	0.103		0.010	U	0.100	103	75-125		6010C
Copper	0.105		0.0019	J	0.100	104	75-125		6010C
Iron	5.25		0.12		5.00	103	75-125		6010C
Potassium	13.2		4.9		8.00	104	75-125		6010C
Magnesium	18.7		14		5.00	102	75-125		6010C
Manganese	0.536		0.023		0.500	103	75-125		6010C
Sodium	13.1		8.0		5.00	103	75-125		6010C
Nickel	0.104		0.040	U	0.100	104	75-125		6010C
Lead	0.529		0.0051	J	0.500	105	75-125		6010C
Antimony	0.0496		0.020	U	0.0500	99	75-125		6010C
Selenium	0.486		0.38		0.100	104	75-125		6010C
Thallium	0.0365		0.025	U	0.0400	91	75-125		6010C
Vanadium	0.101		0.010	U	0.100	101	75-125		6010C
Zinc	0.115		0.010	J	0.100	105	75-125		6010C

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: EQUIP BLANK MS
Lab ID: 680-162184-16 MS
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.0495		0.010	U	0.0500	99	75-125		6010C
Aluminum	4.76		0.20	U	5.00	95	75-125		6010C
Arsenic	0.0935		0.020	U	0.100	93	75-125		6010C
Barium	0.0956		0.010	U	0.100	96	75-125		6010C
Beryllium	0.0507		0.0040	U	0.0500	101	75-125		6010C
Calcium	4.98		0.12	J	5.00	97	75-125		6010C
Cadmium	0.0506		0.0050	U	0.0500	101	75-125		6010C
Cobalt	0.0493		0.010	U	0.0500	99	75-125		6010C
Chromium	0.0998		0.010	U	0.100	100	75-125		6010C
Copper	0.0957		0.020	U	0.100	96	75-125		6010C
Iron	4.96		0.050	U	5.00	99	75-125		6010C
Potassium	7.56		0.017	J	8.00	95	75-125		6010C
Magnesium	4.94		0.50	U	5.00	99	75-125		6010C
Manganese	0.490		0.010	U	0.500	98	75-125		6010C
Sodium	5.15		1.0	U	5.00	103	75-125		6010C
Nickel	0.0982		0.040	U	0.100	98	75-125		6010C
Lead	0.486		0.010	U	0.500	97	75-125		6010C
Antimony	0.0462		0.020	U	0.0500	92	75-125		6010C
Selenium	0.0984		0.020	U	0.100	98	75-125		6010C
Thallium	0.0406		0.025	U	0.0400	102	75-125		6010C
Vanadium	0.0967		0.010	U	0.100	97	75-125		6010C
Zinc	0.101		0.020	U	0.100	101	75-125		6010C

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: MW-15D MSD

Lab ID: 680-162184-3 MSD

Lab Name: TestAmerica Savannah

Job No.: 680-162184-1

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Silver	0.0500		0.0500	100	75-125	0	20		6010C
Aluminum	4.87		5.00	96	75-125	0	20		6010C
Arsenic	0.102		0.100	102	75-125	4	20		6010C
Barium	0.215		0.100	103	75-125	0	20		6010C
Beryllium	0.0502		0.0500	100	75-125	0	20		6010C
Calcium	62.2		5.00	251	75-125	2	20	4	6010C
Cadmium	0.0501		0.0500	100	75-125	0	20		6010C
Cobalt	0.0497		0.0500	99	75-125	0	20		6010C
Chromium	0.0997		0.100	100	75-125	0	20		6010C
Copper	0.0962		0.100	96	75-125	0	20		6010C
Iron	5.14		5.00	100	75-125	1	20		6010C
Potassium	12.2		8.00	98	75-125	1	20		6010C
Magnesium	17.5		5.00	107	75-125	0	20		6010C
Manganese	0.517		0.500	100	75-125	0	20		6010C
Sodium	12.0		5.00	103	75-125	1	20		6010C
Nickel	0.0970		0.100	97	75-125	1	20		6010C
Lead	0.491		0.500	98	75-125	2	20		6010C
Antimony	0.0444		0.0500	89	75-125	4	20		6010C
Selenium	0.450		0.100	124	75-125	0	20		6010C
Thallium	0.0343		0.0400	86	75-125	7	20		6010C
Vanadium	0.0975		0.100	98	75-125	1	20		6010C
Zinc	0.0991		0.100	99	75-125	10	20		6010C
Mercury	0.000723		0.00100	72	80-120	1	20	F1	7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW-15D MSD

Lab ID: 680-162184-3 MSD

Lab Name: TestAmerica Savannah

Job No.: 680-162184-1

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Silver	0.0511		0.0500	102	75-125	2	20		6010C
Aluminum	4.85		5.00	97	75-125	1	20		6010C
Arsenic	0.0970		0.100	97	75-125	3	20		6010C
Barium	0.201		0.100	103	75-125	0	20		6010C
Beryllium	0.0507		0.0500	101	75-125	1	20		6010C
Calcium	54.0		5.00	210	75-125	2	20	4	6010C
Cadmium	0.0507		0.0500	101	75-125	0	20		6010C
Cobalt	0.0503		0.0500	101	75-125	1	20		6010C
Chromium	0.100		0.100	100	75-125	1	20		6010C
Copper	0.0966		0.100	97	75-125	1	20		6010C
Iron	4.99		5.00	100	75-125	1	20		6010C
Potassium	12.4		8.00	104	75-125	1	20		6010C
Magnesium	17.3		5.00	117	75-125	1	20		6010C
Manganese	0.503		0.500	99	75-125	1	20		6010C
Sodium	12.3		5.00	114	75-125	1	20		6010C
Nickel	0.0973		0.100	97	75-125	0	20		6010C
Lead	0.496		0.500	99	75-125	0	20		6010C
Antimony	0.0477		0.0500	95	75-125	1	20		6010C
Selenium	0.488		0.100	134	75-125	3	20	F1	6010C
Thallium	0.0349		0.0400	87	75-125	10	20		6010C
Vanadium	0.0991		0.100	99	75-125	1	20		6010C
Zinc	0.102		0.100	102	75-125	3	20		6010C
Mercury	0.000877		0.00100	88	80-120	2	20		7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: METDUP_20181211 MSD

Lab ID: 680-162184-14 MSD

Lab Name: TestAmerica Savannah

Job No.: 680-162184-1

SDG No.:

Matrix: Water

Concentration Units: mg/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Silver	0.0511		0.0500	102	75-125	0	20		6010C
Aluminum	5.10		5.00	101	75-125	0	20		6010C
Arsenic	0.108		0.100	108	75-125	0	20		6010C
Barium	0.213		0.100	96	75-125	0	20		6010C
Beryllium	0.0538		0.0500	108	75-125	0	20		6010C
Calcium	60.8		5.00	95	75-125	1	20	4	6010C
Cadmium	0.0528		0.0500	106	75-125	0	20		6010C
Cobalt	0.0509		0.0500	102	75-125	2	20		6010C
Chromium	0.103		0.100	103	75-125	0	20		6010C
Copper	0.105		0.100	103	75-125	0	20		6010C
Iron	5.28		5.00	103	75-125	0	20		6010C
Potassium	13.3		8.00	105	75-125	0	20		6010C
Magnesium	18.8		5.00	104	75-125	1	20		6010C
Manganese	0.536		0.500	103	75-125	0	20		6010C
Sodium	13.2		5.00	105	75-125	1	20		6010C
Nickel	0.105		0.100	105	75-125	1	20		6010C
Lead	0.523		0.500	104	75-125	1	20		6010C
Antimony	0.0501		0.0500	100	75-125	1	20		6010C
Selenium	0.488		0.100	106	75-125	0	20		6010C
Thallium	0.0410		0.0400	103	75-125	12	20		6010C
Vanadium	0.101		0.100	101	75-125	0	20		6010C
Zinc	0.117		0.100	106	75-125	1	20		6010C

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: EQUIP BLANK MSD
Lab ID: 680-162184-16 MSD
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Silver	0.0511		0.0500	102	75-125	3	20		6010C
Aluminum	4.80		5.00	96	75-125	1	20		6010C
Arsenic	0.0948		0.100	95	75-125	1	20		6010C
Barium	0.0974		0.100	97	75-125	2	20		6010C
Beryllium	0.0514		0.0500	103	75-125	1	20		6010C
Calcium	5.04		5.00	98	75-125	1	20		6010C
Cadmium	0.0515		0.0500	103	75-125	2	20		6010C
Cobalt	0.0505		0.0500	101	75-125	2	20		6010C
Chromium	0.101		0.100	101	75-125	1	20		6010C
Copper	0.0976		0.100	98	75-125	2	20		6010C
Iron	5.03		5.00	101	75-125	1	20		6010C
Potassium	7.65		8.00	96	75-125	1	20		6010C
Magnesium	5.00		5.00	100	75-125	1	20		6010C
Manganese	0.495		0.500	99	75-125	1	20		6010C
Sodium	5.32		5.00	106	75-125	3	20		6010C
Nickel	0.0999		0.100	100	75-125	2	20		6010C
Lead	0.496		0.500	99	75-125	2	20		6010C
Antimony	0.0412		0.0500	82	75-125	11	20		6010C
Selenium	0.0922		0.100	92	75-125	6	20		6010C
Thallium	0.0376		0.0400	94	75-125	8	20		6010C
Vanadium	0.0984		0.100	98	75-125	2	20		6010C
Zinc	0.0991		0.100	99	75-125	2	20		6010C

SDR = Sample Duplicate Result

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

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: MW-15D PDS

Lab ID: 680-162184-3 PDS

Lab Name: TestAmerica Savannah

Job No.: 680-162184-1

SDG No.:

Matrix: Water

Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.0514		0.010	U	0.0500	103	80-120		6010C
Aluminum	5.12		0.061	J	5.00	101	80-120		6010C
Arsenic	0.103		0.020	U	0.100	103	80-120		6010C
Barium	0.212		0.11		0.100	101	80-120		6010C
Beryllium	0.0533		0.0040	U	0.0500	107	80-120		6010C
Calcium	54.7		50		5.00	101	80-120		6010C
Cadmium	0.0531		0.0050	U	0.0500	106	80-120		6010C
Cobalt	0.0523		0.010	U	0.0500	105	80-120		6010C
Chromium	0.106		0.010	U	0.100	106	80-120		6010C
Copper	0.102		0.020	U	0.100	102	80-120		6010C
Iron	5.36		0.13		5.00	105	80-120		6010C
Potassium	12.6		4.4		8.00	104	80-120		6010C
Magnesium	17.3		12		5.00	104	80-120		6010C
Manganese	0.536		0.016		0.500	104	80-120		6010C
Sodium	12.2		6.9		5.00	106	80-120		6010C
Nickel	0.103		0.040	U	0.100	103	80-120		6010C
Lead	0.513		0.010	U	0.500	103	80-120		6010C
Antimony	0.0496		0.020	U	0.0500	99	80-120		6010C
Selenium	0.438		0.33		0.100	112	80-120		6010C
Thallium	0.0377		0.025	U	0.0400	94	80-120		6010C
Vanadium	0.104		0.010	U	0.100	104	80-120		6010C
Zinc	0.110		0.020	U	0.100	110	80-120		6010C

SSR = Spiked Sample Result

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

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW-15D PDS
Lab ID: 680-162184-3 PDS
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG No.:
Matrix: Water
Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.0497		0.010	U	0.0500	99	80-120		6010C
Aluminum	4.97		0.20	U	5.00	99	80-120		6010C
Arsenic	0.0981		0.020	U	0.100	98	80-120		6010C
Barium	0.212		0.098		0.100	114	80-120		6010C
Beryllium	0.0520		0.0040	U	0.0500	104	80-120		6010C
Calcium	55.2		44		5.00	233	80-120	W	6010C
Cadmium	0.0519		0.0050	U	0.0500	104	80-120		6010C
Cobalt	0.0509		0.010	U	0.0500	102	80-120		6010C
Chromium	0.103		0.010	U	0.100	103	80-120		6010C
Copper	0.0984		0.020	U	0.100	98	80-120		6010C
Iron	5.08		0.050	U	5.00	102	80-120		6010C
Potassium	12.8		4.1		8.00	109	80-120		6010C
Magnesium	18.3		11		5.00	136	80-120	W	6010C
Manganese	0.515		0.0072	J	0.500	102	80-120		6010C
Sodium	12.9		6.6		5.00	125	80-120	W	6010C
Nickel	0.0994		0.040	U	0.100	99	80-120		6010C
Lead	0.499		0.010	U	0.500	100	80-120		6010C
Antimony	0.0486		0.020	U	0.0500	97	80-120		6010C
Selenium	0.486		0.35		0.100	132	80-120	W	6010C
Thallium	0.0354		0.025	U	0.0400	88	80-120		6010C
Vanadium	0.101		0.010	U	0.100	101	80-120		6010C
Zinc	0.105		0.020	U	0.100	105	80-120		6010C

SSR = Spiked Sample Result

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

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: METDUP_20181211 PDS
Lab ID: 680-162184-14 PDS
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG No.:
Matrix: Water
Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.0511		0.010	U	0.0500	102	80-120		6010C
Aluminum	5.13		0.062	J	5.00	101	80-120		6010C
Arsenic	0.109		0.020	U	0.100	109	80-120		6010C
Barium	0.213		0.12		0.100	96	80-120		6010C
Beryllium	0.0540		0.0040	U	0.0500	108	80-120		6010C
Calcium	60.1		56		5.00	NC	80-120		6010C
Cadmium	0.0531		0.0050	U	0.0500	106	80-120		6010C
Cobalt	0.0511		0.010	U	0.0500	102	80-120		6010C
Chromium	0.104		0.010	U	0.100	104	80-120		6010C
Copper	0.105		0.0019	J	0.100	104	80-120		6010C
Iron	5.31		0.12		5.00	104	80-120		6010C
Potassium	13.3		4.9		8.00	105	80-120		6010C
Magnesium	18.7		14		5.00	101	80-120		6010C
Manganese	0.538		0.023		0.500	103	80-120		6010C
Sodium	13.3		8.0		5.00	107	80-120		6010C
Nickel	0.106		0.040	U	0.100	106	80-120		6010C
Lead	0.529		0.0051	J	0.500	105	80-120		6010C
Antimony	0.0553		0.020	U	0.0500	111	80-120		6010C
Selenium	0.482		0.38		0.100	99	80-120		6010C
Thallium	0.0400		0.025	U	0.0400	100	80-120		6010C
Vanadium	0.102		0.010	U	0.100	102	80-120		6010C
Zinc	0.118		0.010	J	0.100	108	80-120		6010C

SSR = Spiked Sample Result

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

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: EQUIP BLANK PDS
Lab ID: 680-162184-16 PDS
Lab Name: TestAmerica Savannah
Job No.: 680-162184-1
SDG No.:
Matrix: Water
Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	0.0509		0.010	U	0.0500	102	80-120		6010C
Aluminum	5.01		0.20	U	5.00	100	80-120		6010C
Arsenic	0.0992		0.020	U	0.100	99	80-120		6010C
Barium	0.102		0.010	U	0.100	102	80-120		6010C
Beryllium	0.0534		0.0040	U	0.0500	107	80-120		6010C
Calcium	5.24		0.12	J	5.00	102	80-120		6010C
Cadmium	0.0534		0.0050	U	0.0500	107	80-120		6010C
Cobalt	0.0528		0.010	U	0.0500	106	80-120		6010C
Chromium	0.105		0.010	U	0.100	105	80-120		6010C
Copper	0.101		0.020	U	0.100	101	80-120		6010C
Iron	5.23		0.050	U	5.00	105	80-120		6010C
Potassium	7.96		0.017	J	8.00	100	80-120		6010C
Magnesium	5.16		0.50	U	5.00	103	80-120		6010C
Manganese	0.516		0.010	U	0.500	103	80-120		6010C
Sodium	5.31		1.0	U	5.00	106	80-120		6010C
Nickel	0.106		0.040	U	0.100	106	80-120		6010C
Lead	0.517		0.010	U	0.500	103	80-120		6010C
Antimony	0.0427		0.020	U	0.0500	85	80-120		6010C
Selenium	0.0959		0.020	U	0.100	96	80-120		6010C
Thallium	0.0379		0.025	U	0.0400	95	80-120		6010C
Vanadium	0.102		0.010	U	0.100	102	80-120		6010C
Zinc	0.104		0.020	U	0.100	104	80-120		6010C

SSR = Spiked Sample Result

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

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 680-551755/2-A

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

Sample Matrix: Water LCS Source: MS_Ag_LCS_SPK_00077

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	0.0500	0.0490		98	80	120		6010C
Aluminum	5.00	4.86		97	80	120		6010C
Arsenic	0.100	0.105		105	80	120		6010C
Barium	0.100	0.0951		95	80	120		6010C
Beryllium	0.0500	0.0518		104	80	120		6010C
Calcium	5.00	4.93		99	80	120		6010C
Cadmium	0.0500	0.0512		102	80	120		6010C
Cobalt	0.0500	0.0496		99	80	120		6010C
Chromium	0.100	0.0999		100	80	120		6010C
Copper	0.100	0.101		101	80	120		6010C
Iron	5.00	4.99		100	80	120		6010C
Potassium	8.00	7.88		98	80	120		6010C
Magnesium	5.00	5.08		102	80	120		6010C
Manganese	0.500	0.498		100	80	120		6010C
Sodium	5.00	5.19		104	80	120		6010C
Nickel	0.100	0.104		104	80	120		6010C
Lead	0.500	0.520		104	80	120		6010C
Antimony	0.0500	0.0547		109	80	120		6010C
Selenium	0.100	0.0975		97	80	120		6010C
Thallium	0.0400	0.0425		106	80	120		6010C
Vanadium	0.100	0.0978		98	80	120		6010C
Zinc	0.100	0.104		104	80	120		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 680-551751/2-A

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

Sample Matrix: Water LCS Source: MS_Ag_LCS_SPK_00077

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	0.0500	0.0508		102	80	120		6010C
Aluminum	5.00	4.88		98	80	120		6010C
Arsenic	0.100	0.0973		97	80	120		6010C
Barium	0.100	0.100		100	80	120		6010C
Beryllium	0.0500	0.0514		103	80	120		6010C
Calcium	5.00	4.99		100	80	120		6010C
Cadmium	0.0500	0.0519		104	80	120		6010C
Cobalt	0.0500	0.0512		102	80	120		6010C
Chromium	0.100	0.102		102	80	120		6010C
Copper	0.100	0.0981		98	80	120		6010C
Iron	5.00	5.04		101	80	120		6010C
Potassium	8.00	7.82		98	80	120		6010C
Magnesium	5.00	5.01		100	80	120		6010C
Manganese	0.500	0.504		101	80	120		6010C
Sodium	5.00	4.93		99	80	120		6010C
Nickel	0.100	0.0999		100	80	120		6010C
Lead	0.500	0.503		101	80	120		6010C
Antimony	0.0500	0.0444		89	80	120		6010C
Selenium	0.100	0.0957		96	80	120		6010C
Thallium	0.0400	0.0340		85	80	120		6010C
Vanadium	0.100	0.0999		100	80	120		6010C
Zinc	0.100	0.106		106	80	120		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 680-551774/2-A

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

Sample Matrix: Water LCS Source: MS_Ag_LCS_SPK_00077

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	0.0500	0.0486		97	80	120		6010C
Aluminum	5.00	4.63		93	80	120		6010C
Arsenic	0.100	0.0914		91	80	120		6010C
Barium	0.100	0.0947		95	80	120		6010C
Beryllium	0.0500	0.0490		98	80	120		6010C
Calcium	5.00	4.75		95	80	120		6010C
Cadmium	0.0500	0.0495		99	80	120		6010C
Cobalt	0.0500	0.0491		98	80	120		6010C
Chromium	0.100	0.0978		98	80	120		6010C
Copper	0.100	0.0934		93	80	120		6010C
Iron	5.00	4.83		97	80	120		6010C
Potassium	8.00	7.38		92	80	120		6010C
Magnesium	5.00	4.76		95	80	120		6010C
Manganese	0.500	0.480		96	80	120		6010C
Sodium	5.00	4.88		98	80	120		6010C
Nickel	0.100	0.0953		95	80	120		6010C
Lead	0.500	0.479		96	80	120		6010C
Antimony	0.0500	0.0450		90	80	120		6010C
Selenium	0.100	0.0886		89	80	120		6010C
Thallium	0.0400	0.0373		93	80	120		6010C
Vanadium	0.100	0.0951		95	80	120		6010C
Zinc	0.100	0.0988		99	80	120		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 680-551775/2-A

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

Sample Matrix: Water LCS Source: MS_Ag_LCS_SPK_00077

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	0.0500	0.0514		103	80	120		6010C
Aluminum	5.00	4.81		96	80	120		6010C
Arsenic	0.100	0.0976		98	80	120		6010C
Barium	0.100	0.0982		98	80	120		6010C
Beryllium	0.0500	0.0511		102	80	120		6010C
Calcium	5.00	4.94		99	80	120		6010C
Cadmium	0.0500	0.0512		102	80	120		6010C
Cobalt	0.0500	0.0500		100	80	120		6010C
Chromium	0.100	0.101		101	80	120		6010C
Copper	0.100	0.0969		97	80	120		6010C
Iron	5.00	5.02		100	80	120		6010C
Potassium	8.00	7.63		95	80	120		6010C
Magnesium	5.00	4.96		99	80	120		6010C
Manganese	0.500	0.498		100	80	120		6010C
Sodium	5.00	4.88		98	80	120		6010C
Nickel	0.100	0.0992		99	80	120		6010C
Lead	0.500	0.495		99	80	120		6010C
Antimony	0.0500	0.0429		86	80	120		6010C
Selenium	0.100	0.0931		93	80	120		6010C
Thallium	0.0400	0.0377		94	80	120		6010C
Vanadium	0.100	0.0986		99	80	120		6010C
Zinc	0.100	0.102		102	80	120		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 680-551782/2-A

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

Sample Matrix: Water LCS Source: MS_Ag_LCS_SPK_00077

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	0.0500	0.0510		102	80	120		6010C
Aluminum	5.00	4.86		97	80	120		6010C
Arsenic	0.100	0.0991		99	80	120		6010C
Barium	0.100	0.0980		98	80	120		6010C
Beryllium	0.0500	0.0519		104	80	120		6010C
Calcium	5.00	4.97		99	80	120		6010C
Cadmium	0.0500	0.0522		104	80	120		6010C
Cobalt	0.0500	0.0513		103	80	120		6010C
Chromium	0.100	0.102		102	80	120		6010C
Copper	0.100	0.0979		98	80	120		6010C
Iron	5.00	5.07		101	80	120		6010C
Potassium	8.00	7.70		96	80	120		6010C
Magnesium	5.00	5.05		101	80	120		6010C
Manganese	0.500	0.501		100	80	120		6010C
Sodium	5.00	5.00		100	80	120		6010C
Nickel	0.100	0.100		100	80	120		6010C
Lead	0.500	0.504		101	80	120		6010C
Antimony	0.0500	0.0438		88	80	120		6010C
Selenium	0.100	0.0947		95	80	120		6010C
Thallium	0.0400	0.0429		107	80	120		6010C
Vanadium	0.100	0.0994		99	80	120		6010C
Zinc	0.100	0.0980		98	80	120		6010C

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 680-552619/2-A

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

Sample Matrix: Water LCS Source: Hg_Int_Cal_00177

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.00250	0.00239		96	80	120		7470A

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 680-552831/2-A

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

Sample Matrix: Water LCS Source: Hg_Int_Cal_00177

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.00250	0.00254		102	80	120		7470A

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 680-553794/2-A

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

Sample Matrix: Water LCS Source: Hg_Int_Cal_00178

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.00250	0.00220		88	80	120		7470A

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 680-162184-3

SDG No:

Lab Name: TestAmerica Savannah Job No: 680-162184-1

Matrix: Water Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	0.010	U	0.050	U	NC		6010C
Aluminum	0.061	J	1.0	U	NC		6010C
Arsenic	0.020	U	0.10	U	NC		6010C
Barium	0.11		0.114		2.7		6010C
Beryllium	0.0040	U	0.020	U	NC		6010C
Calcium	50		51.0		2.8		6010C
Cadmium	0.0050	U	0.025	U	NC		6010C
Cobalt	0.010	U	0.050	U	NC		6010C
Chromium	0.010	U	0.050	U	NC		6010C
Copper	0.020	U	0.10	U	NC		6010C
Iron	0.13		0.0858	J	NC		6010C
Potassium	4.4		4.56	J	4.4		6010C
Magnesium	12		12.5		2.8		6010C
Manganese	0.016		0.0169	J	NC		6010C
Sodium	6.9		6.75		NC		6010C
Nickel	0.040	U	0.20	U	NC		6010C
Lead	0.010	U	0.050	U	NC		6010C
Antimony	0.020	U	0.10	U	NC		6010C
Selenium	0.33		0.334		NC		6010C
Thallium	0.025	U	0.13	U	NC		6010C
Vanadium	0.010	U	0.050	U	NC		6010C
Zinc	0.020	U	0.10	U	NC		6010C

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 680-162184-3

SDG No:

Lab Name: TestAmerica Savannah Job No: 680-162184-1

Matrix: Water Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	0.010	U	0.050	U	NC		6010C
Aluminum	0.20	U	1.0	U	NC		6010C
Arsenic	0.020	U	0.10	U	NC		6010C
Barium	0.098		0.116		19	V	6010C
Beryllium	0.0040	U	0.020	U	NC		6010C
Calcium	44		51.8		19	V	6010C
Cadmium	0.0050	U	0.025	U	NC		6010C
Cobalt	0.010	U	0.050	U	NC		6010C
Chromium	0.010	U	0.050	U	NC		6010C
Copper	0.020	U	0.10	U	NC		6010C
Iron	0.050	U	0.25	U	NC		6010C
Potassium	4.1		4.66	J	14	V	6010C
Magnesium	11		13.6		19	V	6010C
Manganese	0.0072	J	0.00910	J	NC		6010C
Sodium	6.6		7.37		NC		6010C
Nickel	0.040	U	0.20	U	NC		6010C
Lead	0.010	U	0.050	U	NC		6010C
Antimony	0.020	U	0.10	U	NC		6010C
Selenium	0.35		0.379		NC		6010C
Thallium	0.025	U	0.13	U	NC		6010C
Vanadium	0.010	U	0.050	U	NC		6010C
Zinc	0.020	U	0.10	U	NC		6010C

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 680-162184-14

SDG No:

Lab Name: TestAmerica Savannah Job No: 680-162184-1

Matrix: Water Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	0.010	U	0.050	U	NC		6010C
Aluminum	0.062	J	1.0	U	NC		6010C
Arsenic	0.020	U	0.10	U	NC		6010C
Barium	0.12		0.112		4.5		6010C
Beryllium	0.0040	U	0.020	U	NC		6010C
Calcium	56		55.4		1.1		6010C
Cadmium	0.0050	U	0.025	U	NC		6010C
Cobalt	0.010	U	0.050	U	NC		6010C
Chromium	0.010	U	0.050	U	NC		6010C
Copper	0.0019	J	0.10	U	NC		6010C
Iron	0.12		0.25	U	NC		6010C
Potassium	4.9		4.71	J	3.6		6010C
Magnesium	14		13.5		0.97		6010C
Manganese	0.023		0.0230	J	NC		6010C
Sodium	8.0		7.58		NC		6010C
Nickel	0.040	U	0.20	U	NC		6010C
Lead	0.0051	J	0.050	U	NC		6010C
Antimony	0.020	U	0.10	U	NC		6010C
Selenium	0.38		0.368		NC		6010C
Thallium	0.025	U	0.13	U	NC		6010C
Vanadium	0.010	U	0.050	U	NC		6010C
Zinc	0.010	J	0.10	U	NC		6010C

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 680-162184-16

SDG No:

Lab Name: TestAmerica Savannah Job No: 680-162184-1

Matrix: Water Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Silver	0.010	U	0.050	U	NC		6010C
Aluminum	0.20	U	1.0	U	NC		6010C
Arsenic	0.020	U	0.10	U	NC		6010C
Barium	0.010	U	0.050	U	NC		6010C
Beryllium	0.0040	U	0.020	U	NC		6010C
Calcium	0.12	J	2.5	U	NC		6010C
Cadmium	0.0050	U	0.025	U	NC		6010C
Cobalt	0.010	U	0.050	U	NC		6010C
Chromium	0.010	U	0.050	U	NC		6010C
Copper	0.020	U	0.10	U	NC		6010C
Iron	0.050	U	0.25	U	NC		6010C
Potassium	0.017	J	5.0	U	NC		6010C
Magnesium	0.50	U	2.5	U	NC		6010C
Manganese	0.010	U	0.050	U	NC		6010C
Sodium	1.0	U	5.0	U	NC		6010C
Nickel	0.040	U	0.20	U	NC		6010C
Lead	0.010	U	0.050	U	NC		6010C
Antimony	0.020	U	0.10	U	NC		6010C
Selenium	0.020	U	0.10	U	NC		6010C
Thallium	0.025	U	0.13	U	NC		6010C
Vanadium	0.010	U	0.050	U	NC		6010C
Zinc	0.020	U	0.10	U	NC		6010C

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG Number:

Matrix: Water Instrument ID: ICPE

Method: 6010C MDL Date: 06/13/2015 00:00

Prep Method: 3010A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Aluminum		200	24
Antimony		20	5.3
Arsenic		20	6.2
Barium		10	1.7
Beryllium		4	0.1
Cadmium		5	1
Calcium		500	25
Chromium		10	1.6
Cobalt		10	1
Copper		20	1.8
Iron		50	17
Lead		10	3.9
Magnesium		500	33
Manganese		10	1
Nickel		40	2.1
Potassium		1000	17
Selenium		20	9.9
Silver		10	0.6
Sodium		1000	480
Thallium		25	6
Vanadium		10	1
Zinc		20	7

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG Number:

Matrix: Water Instrument ID: ICPE

Method: 6010C XMDL Date: 06/12/2015 11:39

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum		200	24
Antimony		20	5.3
Arsenic		20	6.2
Barium		10	1.7
Beryllium		4	0.1
Cadmium		5	1
Calcium		500	25
Chromium		10	1.6
Cobalt		10	1
Copper		20	1.8
Iron		50	17
Lead		10	3.9
Magnesium		500	33
Manganese		10	1
Nickel		40	2.1
Potassium		1000	17
Selenium		20	9.9
Silver		10	0.6
Sodium		1000	480
Thallium		25	6
Vanadium		10	1
Zinc		20	7

FORM IX - IN

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG Number:

Matrix: Water Instrument ID: ICPE

Method: 6010C MDL Date: 06/13/2015 00:00

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Aluminum		200	24
Antimony		20	5.3
Arsenic		20	6.2
Barium		10	1.7
Beryllium		4	0.1
Cadmium		5	1
Calcium		500	25
Chromium		10	1.6
Cobalt		10	1
Copper		20	1.8
Iron		50	17
Lead		10	3.9
Magnesium		500	33
Manganese		10	1
Nickel		40	2.1
Potassium		1000	17
Selenium		20	9.9
Silver		10	0.6
Sodium		1000	480
Thallium		25	6
Vanadium		10	1
Zinc		20	7

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG Number:

Matrix: Water Instrument ID: ICPE

Method: 6010C XMDL Date: 06/12/2015 11:39

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum		200	24
Antimony		20	5.3
Arsenic		20	6.2
Barium		10	1.7
Beryllium		4	0.1
Cadmium		5	1
Calcium		500	25
Chromium		10	1.6
Cobalt		10	1
Copper		20	1.8
Iron		50	17
Lead		10	3.9
Magnesium		500	33
Manganese		10	1
Nickel		40	2.1
Potassium		1000	17
Selenium		20	9.9
Silver		10	0.6
Sodium		1000	480
Thallium		25	6
Vanadium		10	1
Zinc		20	7

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG Number:

Matrix: Water Instrument ID: LEEMAN2

Method: 7470A MDL Date: 04/30/2015 10:13

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury		0.2	0.08

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG Number:

Matrix: Water Instrument ID: LEEMAN2

Method: 7470A XMDL Date: 04/30/2015 10:13

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.08

FORM IX - IN

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG Number:

Matrix: Water Instrument ID: LEEMAN2

Method: 7470A MDL Date: 04/30/2015 10:13

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury		0.2	0.08

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG Number:

Matrix: Water Instrument ID: LEEMAN2

Method: 7470A XMDL Date: 04/30/2015 10:13

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.08

FORM IX - IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG No.:

ICP-AES Instrument ID: ICPE Date: 11/14/2018

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg
Aluminum	308.215									-0.001000			0.000016		
Antimony	206.834						0.000900				0.009900		0.000014		
Arsenic	188.980												-0.000010		
Barium	389.178												0.000039		0.000089
Beryllium	313.042														
Boron	249.678												-0.000181		
Cadmium	226.502		0.000003										0.000078		
Calcium	370.602												-0.002590		
Chromium	267.716								-0.000200				0.000005		
Cobalt	228.615										0.000200		-0.000011		
Copper	324.754												0.000006		
Iron	271.441									0.075500	0.001160				
Lead	220.353		-0.000012							-0.000500	0.000120		0.000015		
Magnesium	279.078		-0.000142												
Manganese	257.610												0.000014		0.000035
Molybdenum	202.032												-0.000007		
Nickel	231.604									-0.000800			0.000052		
Potassium	766.491														
Selenium	196.026												-0.000024		
Silicon	288.158														
Silver	328.068												-0.000006		
Sodium	330.237												-0.006002		
Strontium	216.596												0.000068		
Thallium	190.794									0.002530			-0.000095		
Tin	189.925														
Titanium	334.941														0.000030
Vanadium	292.401										-0.001640		0.000008		
Zinc	206.200										-0.002190		-0.000014		

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Savannah Job Number: 680-162184-1

SDG No.:

ICP-AES Instrument ID: ICPE Date: 11/14/2018

Analyte	Wave Length	Mn	Mo	Na	Ni	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	V	Zn
Aluminum	308.215		0.006600											0.017000	
Antimony	206.834		-0.007900							0.000200					
Arsenic	188.980		-0.000050												
Barium	389.178		0.000218											0.000095	
Beryllium	313.042		-0.000082											0.000130	
Boron	249.678						0.000200								
Cadmium	226.502											-0.000020			
Calcium	370.602	0.008900										0.012000		0.003040	
Chromium	267.716	0.000090										0.000040		-0.000100	
Cobalt	228.615		-0.001600							-0.000060		0.001900			
Copper	324.754		0.000550											-0.000200	
Iron	271.441		0.000760											0.006400	
Lead	220.353	0.000130	-0.000570									-0.000325			
Magnesium	279.078	-0.007600													
Manganese	257.610														
Molybdenum	202.032													-0.000100	
Nickel	231.604														
Potassium	766.491														
Selenium	196.026	0.000500													
Silicon	288.158		0.009000							0.008000					
Silver	328.068	0.000061									-0.000100	-0.000038		0.000038	
Sodium	330.237											-0.180000			-0.110000
Strontium	216.596		-0.002900		-0.002275										
Thallium	190.794	0.000466	-0.001500											0.001500	
Tin	189.925														
Titanium	334.941														
Vanadium	292.401		-0.007000									0.000395			
Zinc	206.200														

X-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 680-551751/1-A	12/14/2018 15:34	551751		50	50
LCS 680-551751/2-A	12/14/2018 15:34	551751		50	50
680-162184-18	12/14/2018 15:34	551751		50	50
680-162184-3	12/14/2018 15:34	551751		50	50
680-162184-3 MS	12/14/2018 15:34	551751		50	50
680-162184-3 MSD	12/14/2018 15:34	551751		50	50
680-162184-2	12/14/2018 15:34	551751		50	50
680-162184-4	12/14/2018 15:34	551751		50	50
680-162184-9	12/14/2018 15:34	551751		50	50
680-162184-10	12/14/2018 15:34	551751		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 680-551755/1-A	12/14/2018 15:39	551755		50	50
LCS 680-551755/2-A	12/14/2018 15:39	551755		50	50
680-162184-14	12/14/2018 15:39	551755		50	50
680-162184-14 MS	12/14/2018 15:39	551755		50	50
680-162184-14 MSD	12/14/2018 15:39	551755		50	50
680-162184-12	12/14/2018 15:39	551755		50	50
680-162184-13	12/14/2018 15:39	551755		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 680-551774/1-A	12/14/2018 17:07	551774		50	50
LCS 680-551774/2-A	12/14/2018 17:07	551774		50	50
680-162184-3	12/14/2018 17:07	551774		50	50
680-162184-3 MS	12/14/2018 17:07	551774		50	50
680-162184-3 MSD	12/14/2018 17:07	551774		50	50
680-162184-2	12/14/2018 17:07	551774		50	50
680-162184-4	12/14/2018 17:07	551774		50	50
680-162184-9	12/14/2018 17:07	551774		50	50
680-162184-10	12/14/2018 17:07	551774		50	50
680-162184-12	12/14/2018 17:07	551774		50	50
680-162184-13	12/14/2018 17:07	551774		50	50
680-162184-14	12/14/2018 17:07	551774		50	50
680-162184-18	12/14/2018 17:07	551774		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 680-551775/1-A	12/14/2018 17:07	551775		50	50
LCS 680-551775/2-A	12/14/2018 17:07	551775		50	50
680-162184-16	12/14/2018 17:07	551775		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 680-551782/1-A	12/14/2018 17:30	551782		50	50
LCS 680-551782/2-A	12/14/2018 17:30	551782		50	50
680-162184-16	12/14/2018 17:30	551782		50	50
680-162184-16 MS	12/14/2018 17:30	551782		50	50
680-162184-16 MSD	12/14/2018 17:30	551782		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 680-552619/1-A	12/20/2018 12:16	552619		50	50
LCS 680-552619/2-A	12/20/2018 12:16	552619		50	50
680-162184-3	12/20/2018 12:16	552619		50	50
680-162184-3 MS	12/20/2018 12:16	552619		50	50
680-162184-3 MSD	12/20/2018 12:16	552619		50	50
680-162184-2	12/20/2018 12:16	552619		50	50
680-162184-4	12/20/2018 12:16	552619		50	50
680-162184-12	12/20/2018 12:16	552619		50	50
680-162184-13	12/20/2018 12:16	552619		50	50
680-162184-9	12/20/2018 12:16	552619		50	50
680-162184-10	12/20/2018 12:16	552619		50	50
680-162184-16	12/20/2018 12:16	552619		50	50
680-162184-14	12/20/2018 12:18	552619		50	50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 680-552831/1-A	12/21/2018 13:16	552831		50	50
LCS 680-552831/2-A	12/21/2018 13:16	552831		50	50
680-162184-3	12/21/2018 13:16	552831		50	50
680-162184-3 MS	12/21/2018 13:16	552831		50	50
680-162184-3 MSD	12/21/2018 13:16	552831		50	50
680-162184-4	12/21/2018 13:16	552831		50	50
680-162184-14	12/21/2018 13:16	552831		50	50
680-162184-2	12/21/2018 13:16	552831		50	50
680-162184-12	12/21/2018 13:16	552831		50	50
680-162184-18	12/21/2018 13:16	552831		50	50
680-162184-9	12/21/2018 13:16	552831		50	50
680-162184-10	12/21/2018 13:16	552831		50	50
680-162184-16	12/21/2018 13:16	552831		50	50
680-162184-13	12/21/2018 13:16	552831		50	50

FORM XII-IN

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PREPARATION LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 680-553794/1-A	12/31/2018 10:53	553794		50	50
LCS 680-553794/2-A	12/31/2018 10:53	553794		50	50
680-162184-18	12/31/2018 15:16	553794		50	50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			09:15																				
ZZZZZZ			09:20																				
ZZZZZZ			09:25																				
ICV 680-552039/4	1		09:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICBIS 680-552039/5	1		09:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 680-552039/6	1		09:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 680-552039/7	1		09:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 680-552039/8	1		09:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:53																				
RINSE 680-552039/10			09:58																				
CCV 680-552039/11			10:02																				
CCB 680-552039/12			10:07																				
ZZZZZZ			10:12																				
ZZZZZZ			10:16																				
ZZZZZZ			10:21																				
ZZZZZZ			10:26																				
ZZZZZZ			10:30																				
ZZZZZZ			10:35																				
ZZZZZZ			10:40																				
ZZZZZZ			10:44																				
ZZZZZZ			10:49																				
ZZZZZZ			10:54																				
CCV 680-552039/23			10:58																				
CCB 680-552039/24			11:03																				
ZZZZZZ			11:08																				
ZZZZZZ			11:13																				
ZZZZZZ			11:17																				
ZZZZZZ			11:23																				
ZZZZZZ			11:27																				
ZZZZZZ			11:32																				
ZZZZZZ			11:37																				
ZZZZZZ			11:41																				
ZZZZZZ			11:46																				
ZZZZZZ			11:51																				
CCV 680-552039/35			11:55																				
CCB 680-552039/36			12:00																				
ZZZZZZ			12:05																				
ZZZZZZ			12:09																				
ZZZZZZ			12:14																				
ZZZZZZ			12:19																				
ZZZZZZ			12:24																				
ZZZZZZ			12:28																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			12:33																				
ZZZZZZ			12:38																				
ZZZZZZ			12:42																				
ZZZZZZ			12:47																				
CCV 680-552039/47			12:52																				
CCB 680-552039/48			12:56																				
ZZZZZZ			13:01																				
ZZZZZZ			13:06																				
ZZZZZZ			13:10																				
ZZZZZZ			13:15																				
ZZZZZZ			13:20																				
ZZZZZZ			13:24																				
ZZZZZZ			13:29																				
ZZZZZZ			13:34																				
ZZZZZZ			13:38																				
ZZZZZZ			13:43																				
CCV 680-552039/59			13:48																				
CCB 680-552039/60			13:53																				
ZZZZZZ			13:57																				
ZZZZZZ			14:02																				
ZZZZZZ			14:07																				
ZZZZZZ			14:11																				
ZZZZZZ			14:16																				
ZZZZZZ			14:21																				
ZZZZZZ			14:25																				
ZZZZZZ			14:30																				
ZZZZZZ			14:35																				
ZZZZZZ			14:39																				
CCV 680-552039/71			14:44																				
CCB 680-552039/72			14:49																				
ZZZZZZ			14:54																				
ZZZZZZ			14:58																				
ZZZZZZ			15:03																				
ZZZZZZ			15:08																				
ZZZZZZ			15:12																				
ZZZZZZ			15:17																				
ZZZZZZ			15:22																				
ZZZZZZ			15:26																				
ZZZZZZ			15:31																				
ZZZZZZ			15:36																				
CCV 680-552039/83			15:41																				
CCB 680-552039/84			15:45																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			15:50																				
ZZZZZZ			15:55																				
ZZZZZZ			15:59																				
ZZZZZZ			16:04																				
ZZZZZZ			16:09																				
ZZZZZZ			16:13																				
ZZZZZZ			16:18																				
ZZZZZZ			16:23																				
ZZZZZZ			16:27																				
ZZZZZZ			16:32																				
CCV 680-552039/95			16:37																				
CCB 680-552039/96			16:42																				
ZZZZZZ			16:46																				
ZZZZZZ			16:51																				
ZZZZZZ			16:56																				
ZZZZZZ			17:00																				
ZZZZZZ			17:05																				
ZZZZZZ			17:10																				
ZZZZZZ			17:14																				
ZZZZZZ			17:19																				
ZZZZZZ			17:24																				
ZZZZZZ			17:28																				
CCV 680-552039/107			17:33																				
CCB 680-552039/108			17:38																				
ZZZZZZ			17:43																				
ZZZZZZ			17:47																				
ZZZZZZ			17:52																				
ZZZZZZ			17:57																				
ZZZZZZ			18:01																				
ZZZZZZ			18:06																				
ZZZZZZ			18:11																				
ZZZZZZ			18:15																				
ZZZZZZ			18:20																				
ZZZZZZ			18:25																				
CCV 680-552039/119	1		18:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552039/120	1		18:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			18:39																				
ZZZZZZ			18:44																				
ZZZZZZ			18:48																				
ZZZZZZ			18:53																				
ZZZZZZ			18:58																				
ZZZZZZ			19:02																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			19:07																				
MB 680-551755/1-A	1	R	19:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 680-551755/2-A	1	R	19:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-14	1	D	19:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 680-552039/131	1		19:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552039/132	1		19:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-14 SD	5	D	19:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-14 PDS	1	D	19:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-14 MS	1	D	19:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-14 MSD	1	D	19:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-12	1	D	19:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-13	1	D	19:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			20:04																				
ZZZZZZ			20:08																				
ZZZZZZ			20:13																				
ZZZZZZ			20:18																				
CCV 680-552039/143	1		20:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552039/144	1		20:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			20:32																				
ZZZZZZ			20:36																				
ZZZZZZ			20:41																				
ZZZZZZ			20:46																				
ZZZZZZ			20:51																				
ZZZZZZ			20:55																				
ZZZZZZ			21:00																				
ZZZZZZ			21:05																				
ZZZZZZ			21:09																				
ZZZZZZ			21:14																				
CCV 680-552039/155			21:19																				
CCB 680-552039/156			21:23																				
ZZZZZZ			21:28																				
ZZZZZZ			21:33																				
ZZZZZZ			21:38																				
ZZZZZZ			21:42																				
ZZZZZZ			21:47																				
ZZZZZZ			21:52																				
ZZZZZZ			21:56																				
ZZZZZZ			22:01																				
ZZZZZZ			22:06																				
ZZZZZZ			22:11																				
CCV 680-552039/167			22:15																				
CCB 680-552039/168			22:20																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			22:25																				
ZZZZZZ			22:29																				
ZZZZZZ			22:34																				
ZZZZZZ			22:39																				
ZZZZZZ			22:44																				
ZZZZZZ			22:48																				
ZZZZZZ			22:53																				
ZZZZZZ			22:58																				
ZZZZZZ			23:02																				
ZZZZZZ			23:07																				
CCV 680-552039/179			23:12																				
CCB 680-552039/180			23:17																				
ZZZZZZ			23:21																				
ZZZZZZ			23:26																				
ZZZZZZ			23:31																				
ZZZZZZ			23:35																				
ZZZZZZ			23:40																				
ZZZZZZ			23:45																				
ZZZZZZ			23:49																				
ZZZZZZ			23:54																				
ZZZZZZ			23:59																				
ZZZZZZ			00:04																				
CCV 680-552039/191			00:08																				
CCB 680-552039/192			00:13																				
ZZZZZZ			00:18																				
ZZZZZZ			00:22																				
ZZZZZZ			00:27																				
ZZZZZZ			00:32																				
ZZZZZZ			00:37																				
ZZZZZZ			00:41																				
ZZZZZZ			00:46																				
ZZZZZZ			00:51																				
ZZZZZZ			00:55																				
ZZZZZZ			01:00																				
CCV 680-552039/203			01:05																				
CCB 680-552039/204			01:10																				
ZZZZZZ			01:14																				
ZZZZZZ			01:19																				
ZZZZZZ			01:24																				
ZZZZZZ			01:29																				
ZZZZZZ			01:33																				
ZZZZZZ			01:38																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			01:43																				
ZZZZZZ			01:47																				
ZZZZZZ			01:52																				
ZZZZZZ			01:57																				
CCV 680-552039/215			02:02																				
CCB 680-552039/216			02:06																				
ZZZZZZ			02:11																				
ZZZZZZ			02:16																				
ZZZZZZ			02:20																				
ZZZZZZ			02:25																				
ZZZZZZ			02:30																				
ZZZZZZ			02:35																				
ZZZZZZ			02:39																				
ZZZZZZ			02:44																				
ZZZZZZ			02:49																				
ZZZZZZ			02:54																				
CCV 680-552039/227			02:58																				
CCB 680-552039/228			03:03																				
ZZZZZZ			03:08																				
ZZZZZZ			03:12																				
ZZZZZZ			03:17																				
ZZZZZZ			03:22																				
ZZZZZZ			03:27																				
ZZZZZZ			03:31																				
ZZZZZZ			03:36																				
ZZZZZZ			03:41																				
ZZZZZZ			03:46																				
ZZZZZZ			03:50																				
CCV 680-552039/239			03:55																				
CCB 680-552039/240			04:00																				
ZZZZZZ			04:04																				
ZZZZZZ			04:09																				
ZZZZZZ			04:14																				
ZZZZZZ			04:19																				
ZZZZZZ			04:23																				
ZZZZZZ			04:28																				
ZZZZZZ			04:33																				
ZZZZZZ			04:38																				
ZZZZZZ			04:42																				
ZZZZZZ			04:47																				
CCV 680-552039/251			04:52																				
CCB 680-552039/252			04:57																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			05:01																				
ZZZZZZ			05:06																				
ZZZZZZ			05:11																				
ZZZZZZ			05:15																				
ZZZZZZ			05:20																				
ZZZZZZ			05:25																				
ZZZZZZ			05:30																				
ZZZZZZ			05:34																				
ZZZZZZ			05:39																				
ZZZZZZ			05:44																				
CCV 680-552039/263			05:49																				
CCB 680-552039/264			05:53																				
ZZZZZZ			05:58																				
ZZZZZZ			06:03																				
ZZZZZZ			06:08																				
ZZZZZZ			06:12																				
ZZZZZZ			06:17																				
CCV 680-552039/270			06:22																				
CCB 680-552039/271			06:27																				
CCV 680-552039/272			12:53																				
CCB 680-552039/273			12:58																				
ZZZZZZ			13:03																				
ZZZZZZ			13:08																				
ZZZZZZ			13:12																				
ZZZZZZ			13:17																				
ZZZZZZ			13:22																				
ZZZZZZ			13:26																				
ZZZZZZ			13:31																				
ZZZZZZ			13:36																				
ZZZZZZ			13:40																				
ZZZZZZ			13:45																				
CCV 680-552039/284			13:50																				
CCB 680-552039/285			13:54																				
ZZZZZZ			13:59																				
ZZZZZZ			14:04																				
ZZZZZZ			14:09																				
ZZZZZZ			14:13																				
ZZZZZZ			14:18																				
ZZZZZZ			14:23																				
ZZZZZZ			14:27																				
ZZZZZZ			14:32																				
ZZZZZZ			14:37																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			14:41																				
CCV 680-552039/296			14:46																				
CCB 680-552039/297			14:51																				
ZZZZZZ			14:55																				
ZZZZZZ			15:00																				
ZZZZZZ			15:05																				
ZZZZZZ			15:10																				
ZZZZZZ			15:14																				
CRI 680-552039/303	1		15:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			15:24																				
CCV 680-552039/305			15:28																				
CCB 680-552039/306			15:33																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			09:15																				
ZZZZZZ			09:20																				
ZZZZZZ			09:25																				
ICV 680-552039/4	1		09:29	X	X																		
ICBIS 680-552039/5	1		09:34	X	X																		
CRI 680-552039/6	1		09:39	X	X																		
ICSA 680-552039/7	1		09:43	X	X																		
ICSAB 680-552039/8	1		09:48	X	X																		
ZZZZZZ			09:53																				
RINSE 680-552039/10			09:58																				
CCV 680-552039/11			10:02																				
CCB 680-552039/12			10:07																				
ZZZZZZ			10:12																				
ZZZZZZ			10:16																				
ZZZZZZ			10:21																				
ZZZZZZ			10:26																				
ZZZZZZ			10:30																				
ZZZZZZ			10:35																				
ZZZZZZ			10:40																				
ZZZZZZ			10:44																				
ZZZZZZ			10:49																				
ZZZZZZ			10:54																				
CCV 680-552039/23			10:58																				
CCB 680-552039/24			11:03																				
ZZZZZZ			11:08																				
ZZZZZZ			11:13																				
ZZZZZZ			11:17																				
ZZZZZZ			11:23																				
ZZZZZZ			11:27																				
ZZZZZZ			11:32																				
ZZZZZZ			11:37																				
ZZZZZZ			11:41																				
ZZZZZZ			11:46																				
ZZZZZZ			11:51																				
CCV 680-552039/35			11:55																				
CCB 680-552039/36			12:00																				
ZZZZZZ			12:05																				
ZZZZZZ			12:09																				
ZZZZZZ			12:14																				
ZZZZZZ			12:19																				
ZZZZZZ			12:24																				
ZZZZZZ			12:28																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			12:33																				
ZZZZZZ			12:38																				
ZZZZZZ			12:42																				
ZZZZZZ			12:47																				
CCV 680-552039/47			12:52																				
CCB 680-552039/48			12:56																				
ZZZZZZ			13:01																				
ZZZZZZ			13:06																				
ZZZZZZ			13:10																				
ZZZZZZ			13:15																				
ZZZZZZ			13:20																				
ZZZZZZ			13:24																				
ZZZZZZ			13:29																				
ZZZZZZ			13:34																				
ZZZZZZ			13:38																				
ZZZZZZ			13:43																				
CCV 680-552039/59			13:48																				
CCB 680-552039/60			13:53																				
ZZZZZZ			13:57																				
ZZZZZZ			14:02																				
ZZZZZZ			14:07																				
ZZZZZZ			14:11																				
ZZZZZZ			14:16																				
ZZZZZZ			14:21																				
ZZZZZZ			14:25																				
ZZZZZZ			14:30																				
ZZZZZZ			14:35																				
ZZZZZZ			14:39																				
CCV 680-552039/71			14:44																				
CCB 680-552039/72			14:49																				
ZZZZZZ			14:54																				
ZZZZZZ			14:58																				
ZZZZZZ			15:03																				
ZZZZZZ			15:08																				
ZZZZZZ			15:12																				
ZZZZZZ			15:17																				
ZZZZZZ			15:22																				
ZZZZZZ			15:26																				
ZZZZZZ			15:31																				
ZZZZZZ			15:36																				
CCV 680-552039/83			15:41																				
CCB 680-552039/84			15:45																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			15:50																				
ZZZZZZ			15:55																				
ZZZZZZ			15:59																				
ZZZZZZ			16:04																				
ZZZZZZ			16:09																				
ZZZZZZ			16:13																				
ZZZZZZ			16:18																				
ZZZZZZ			16:23																				
ZZZZZZ			16:27																				
ZZZZZZ			16:32																				
CCV 680-552039/95			16:37																				
CCB 680-552039/96			16:42																				
ZZZZZZ			16:46																				
ZZZZZZ			16:51																				
ZZZZZZ			16:56																				
ZZZZZZ			17:00																				
ZZZZZZ			17:05																				
ZZZZZZ			17:10																				
ZZZZZZ			17:14																				
ZZZZZZ			17:19																				
ZZZZZZ			17:24																				
ZZZZZZ			17:28																				
CCV 680-552039/107			17:33																				
CCB 680-552039/108			17:38																				
ZZZZZZ			17:43																				
ZZZZZZ			17:47																				
ZZZZZZ			17:52																				
ZZZZZZ			17:57																				
ZZZZZZ			18:01																				
ZZZZZZ			18:06																				
ZZZZZZ			18:11																				
ZZZZZZ			18:15																				
ZZZZZZ			18:20																				
ZZZZZZ			18:25																				
CCV 680-552039/119	1		18:30	X	X																		
CCB 680-552039/120	1		18:34	X	X																		
ZZZZZZ			18:39																				
ZZZZZZ			18:44																				
ZZZZZZ			18:48																				
ZZZZZZ			18:53																				
ZZZZZZ			18:58																				
ZZZZZZ			19:02																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			19:07																				
MB 680-551755/1-A	1	R	19:12	X	X																		
LCS 680-551755/2-A	1	R	19:17	X	X																		
680-162184-14	1	D	19:21	X	X																		
CCV 680-552039/131	1		19:26	X	X																		
CCB 680-552039/132	1		19:31	X	X																		
680-162184-14 SD	5	D	19:35	X	X																		
680-162184-14 PDS	1	D	19:40	X	X																		
680-162184-14 MS	1	D	19:45	X	X																		
680-162184-14 MSD	1	D	19:49	X	X																		
680-162184-12	1	D	19:54	X	X																		
680-162184-13	1	D	19:59	X	X																		
ZZZZZZ			20:04																				
ZZZZZZ			20:08																				
ZZZZZZ			20:13																				
ZZZZZZ			20:18																				
CCV 680-552039/143	1		20:22	X	X																		
CCB 680-552039/144	1		20:27	X	X																		
ZZZZZZ			20:32																				
ZZZZZZ			20:36																				
ZZZZZZ			20:41																				
ZZZZZZ			20:46																				
ZZZZZZ			20:51																				
ZZZZZZ			20:55																				
ZZZZZZ			21:00																				
ZZZZZZ			21:05																				
ZZZZZZ			21:09																				
ZZZZZZ			21:14																				
CCV 680-552039/155			21:19																				
CCB 680-552039/156			21:23																				
ZZZZZZ			21:28																				
ZZZZZZ			21:33																				
ZZZZZZ			21:38																				
ZZZZZZ			21:42																				
ZZZZZZ			21:47																				
ZZZZZZ			21:52																				
ZZZZZZ			21:56																				
ZZZZZZ			22:01																				
ZZZZZZ			22:06																				
ZZZZZZ			22:11																				
CCV 680-552039/167			22:15																				
CCB 680-552039/168			22:20																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			22:25																				
ZZZZZZ			22:29																				
ZZZZZZ			22:34																				
ZZZZZZ			22:39																				
ZZZZZZ			22:44																				
ZZZZZZ			22:48																				
ZZZZZZ			22:53																				
ZZZZZZ			22:58																				
ZZZZZZ			23:02																				
ZZZZZZ			23:07																				
CCV 680-552039/179			23:12																				
CCB 680-552039/180			23:17																				
ZZZZZZ			23:21																				
ZZZZZZ			23:26																				
ZZZZZZ			23:31																				
ZZZZZZ			23:35																				
ZZZZZZ			23:40																				
ZZZZZZ			23:45																				
ZZZZZZ			23:49																				
ZZZZZZ			23:54																				
ZZZZZZ			23:59																				
ZZZZZZ			00:04																				
CCV 680-552039/191			00:08																				
CCB 680-552039/192			00:13																				
ZZZZZZ			00:18																				
ZZZZZZ			00:22																				
ZZZZZZ			00:27																				
ZZZZZZ			00:32																				
ZZZZZZ			00:37																				
ZZZZZZ			00:41																				
ZZZZZZ			00:46																				
ZZZZZZ			00:51																				
ZZZZZZ			00:55																				
ZZZZZZ			01:00																				
CCV 680-552039/203			01:05																				
CCB 680-552039/204			01:10																				
ZZZZZZ			01:14																				
ZZZZZZ			01:19																				
ZZZZZZ			01:24																				
ZZZZZZ			01:29																				
ZZZZZZ			01:33																				
ZZZZZZ			01:38																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			01:43																				
ZZZZZZ			01:47																				
ZZZZZZ			01:52																				
ZZZZZZ			01:57																				
CCV 680-552039/215			02:02																				
CCB 680-552039/216			02:06																				
ZZZZZZ			02:11																				
ZZZZZZ			02:16																				
ZZZZZZ			02:20																				
ZZZZZZ			02:25																				
ZZZZZZ			02:30																				
ZZZZZZ			02:35																				
ZZZZZZ			02:39																				
ZZZZZZ			02:44																				
ZZZZZZ			02:49																				
ZZZZZZ			02:54																				
CCV 680-552039/227			02:58																				
CCB 680-552039/228			03:03																				
ZZZZZZ			03:08																				
ZZZZZZ			03:12																				
ZZZZZZ			03:17																				
ZZZZZZ			03:22																				
ZZZZZZ			03:27																				
ZZZZZZ			03:31																				
ZZZZZZ			03:36																				
ZZZZZZ			03:41																				
ZZZZZZ			03:46																				
ZZZZZZ			03:50																				
CCV 680-552039/239			03:55																				
CCB 680-552039/240			04:00																				
ZZZZZZ			04:04																				
ZZZZZZ			04:09																				
ZZZZZZ			04:14																				
ZZZZZZ			04:19																				
ZZZZZZ			04:23																				
ZZZZZZ			04:28																				
ZZZZZZ			04:33																				
ZZZZZZ			04:38																				
ZZZZZZ			04:42																				
ZZZZZZ			04:47																				
CCV 680-552039/251			04:52																				
CCB 680-552039/252			04:57																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			05:01																				
ZZZZZZ			05:06																				
ZZZZZZ			05:11																				
ZZZZZZ			05:15																				
ZZZZZZ			05:20																				
ZZZZZZ			05:25																				
ZZZZZZ			05:30																				
ZZZZZZ			05:34																				
ZZZZZZ			05:39																				
ZZZZZZ			05:44																				
CCV 680-552039/263			05:49																				
CCB 680-552039/264			05:53																				
ZZZZZZ			05:58																				
ZZZZZZ			06:03																				
ZZZZZZ			06:08																				
ZZZZZZ			06:12																				
ZZZZZZ			06:17																				
CCV 680-552039/270			06:22																				
CCB 680-552039/271			06:27																				
CCV 680-552039/272			12:53																				
CCB 680-552039/273			12:58																				
ZZZZZZ			13:03																				
ZZZZZZ			13:08																				
ZZZZZZ			13:12																				
ZZZZZZ			13:17																				
ZZZZZZ			13:22																				
ZZZZZZ			13:26																				
ZZZZZZ			13:31																				
ZZZZZZ			13:36																				
ZZZZZZ			13:40																				
ZZZZZZ			13:45																				
CCV 680-552039/284			13:50																				
CCB 680-552039/285			13:54																				
ZZZZZZ			13:59																				
ZZZZZZ			14:04																				
ZZZZZZ			14:09																				
ZZZZZZ			14:13																				
ZZZZZZ			14:18																				
ZZZZZZ			14:23																				
ZZZZZZ			14:27																				
ZZZZZZ			14:32																				
ZZZZZZ			14:37																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/15/2018 09:15 End Date: 12/16/2018 15:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			14:41																				
CCV 680-552039/296			14:46																				
CCB 680-552039/297			14:51																				
ZZZZZZ			14:55																				
ZZZZZZ			15:00																				
ZZZZZZ			15:05																				
ZZZZZZ			15:10																				
ZZZZZZ			15:14																				
CRI 680-552039/303	1		15:19	X	X																		
ZZZZZZ			15:24																				
CCV 680-552039/305			15:28																				
CCB 680-552039/306			15:33																				

Prep Types
D = Dissolved
R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			14:15																				
ZZZZZZ			14:19																				
ZZZZZZ			14:23																				
ICV 680-552495/4	1		14:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICBIS 680-552495/5	1		14:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 680-552495/6	1		14:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 680-552495/7	1		14:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 680-552495/8	1		14:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			14:47																				
RINSE 680-552495/10			14:51																				
CCV 680-552495/11			14:55																				
CCB 680-552495/12			14:59																				
ZZZZZZ			15:26																				
ZZZZZZ			15:30																				
ZZZZZZ			15:34																				
ZZZZZZ			15:38																				
ZZZZZZ			15:42																				
ZZZZZZ			15:46																				
ZZZZZZ			15:51																				
ZZZZZZ			15:55																				
ZZZZZZ			15:59																				
ZZZZZZ			16:03																				
CCV 680-552495/23			16:07																				
CCB 680-552495/24			16:11																				
ZZZZZZ			16:15																				
ZZZZZZ			16:19																				
ZZZZZZ			16:23																				
ZZZZZZ			16:27																				
ZZZZZZ			16:31																				
ZZZZZZ			16:35																				
ZZZZZZ			16:39																				
ZZZZZZ			16:43																				
ZZZZZZ			16:47																				
ZZZZZZ			16:51																				
CCV 680-552495/35			16:55																				
CCB 680-552495/36			16:59																				
ZZZZZZ			17:03																				
ZZZZZZ			17:07																				
ZZZZZZ			17:11																				
ZZZZZZ			17:15																				
ZZZZZZ			17:19																				
ZZZZZZ			17:23																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			17:27																				
ZZZZZZ			17:31																				
ZZZZZZ			17:35																				
ZZZZZZ			17:39																				
CCV 680-552495/47			17:43																				
CCB 680-552495/48			17:47																				
ZZZZZZ			17:51																				
ZZZZZZ			18:01																				
ZZZZZZ			18:05																				
ZZZZZZ			18:09																				
ZZZZZZ			18:13																				
ZZZZZZ			18:19																				
ZZZZZZ			18:23																				
ZZZZZZ			18:27																				
ZZZZZZ			18:32																				
ZZZZZZ			18:36																				
CCV 680-552495/59			18:41																				
CCB 680-552495/60			18:45																				
ZZZZZZ			18:49																				
ZZZZZZ			18:54																				
ZZZZZZ			18:58																				
ZZZZZZ			19:02																				
ZZZZZZ			19:07																				
ZZZZZZ			19:11																				
ZZZZZZ			19:16																				
ZZZZZZ			19:20																				
ZZZZZZ			19:24																				
ZZZZZZ			19:29																				
CCV 680-552495/71			19:33																				
CCB 680-552495/72			19:38																				
ZZZZZZ			19:42																				
ZZZZZZ			19:46																				
ZZZZZZ			19:51																				
ZZZZZZ			19:55																				
ZZZZZZ			19:59																				
CCV 680-552495/78	1		20:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552495/79	1		20:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 680-551751/1-A	1	R	20:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 680-551751/2-A	1	R	20:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-18	1	D	20:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3	1	D	20:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3 SD	5	D	20:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
680-162184-3 PDS	1	D	20:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3 MS	1	D	20:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3 MSD	1	D	20:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 680-552495/88	1		20:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552495/89	1		20:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-2	1	D	20:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-4	1	D	21:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-9	1	D	21:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-10	1	D	21:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			21:14																				
MB 680-551774/1-A	1	T	21:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 680-551774/2-A	1	T	21:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3	1	T	21:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3 SD	5	T	21:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3 PDS	1	T	21:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 680-552495/100	1		21:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552495/101	1		21:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3 MS	1	T	21:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-3 MSD	1	T	21:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-2	1	T	21:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-4	1	T	22:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-9	1	T	22:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-10	1	T	22:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-12	1	T	22:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-13	1	T	22:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-14	1	T	22:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-18	1	T	22:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 680-552495/112	1		22:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552495/113	1		22:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			22:42																				
ZZZZZZ			22:46																				
ZZZZZZ			22:51																				
MB 680-551775/1-A	1	T	22:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 680-551775/2-A	1	T	23:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			23:04																				
ZZZZZZ			23:08																				
ZZZZZZ			23:13																				
ZZZZZZ			23:17																				
ZZZZZZ			23:22																				
CCV 680-552495/124	1		23:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552495/125	1		23:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			23:35																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			23:39																				
ZZZZZZ			23:44																				
ZZZZZZ			23:48																				
ZZZZZZ			23:52																				
ZZZZZZ			23:57																				
ZZZZZZ			00:01																				
680-162184-16	1	T	00:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			00:10																				
CCV 680-552495/135	1		00:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552495/136	1		00:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 680-551782/1-A	1	R	00:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 680-551782/2-A	1	R	00:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-16	1	D	00:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-16 SD	5	D	00:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-16 PDS	1	D	00:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-16 MS	1	D	00:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
680-162184-16 MSD	1	D	00:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			00:54																				
ZZZZZZ			00:58																				
ZZZZZZ			01:03																				
CCV 680-552495/147	1		01:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 680-552495/148	1		01:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			01:16																				
ZZZZZZ			01:21																				
ZZZZZZ			01:25																				
ZZZZZZ			01:29																				
ZZZZZZ			01:34																				
ZZZZZZ			01:38																				
ZZZZZZ			01:43																				
ZZZZZZ			01:47																				
ZZZZZZ			01:51																				
ZZZZZZ			01:56																				
CCV 680-552495/159			02:00																				
CCB 680-552495/160			02:05																				
ZZZZZZ			02:09																				
ZZZZZZ			02:13																				
ZZZZZZ			02:18																				
ZZZZZZ			02:22																				
ZZZZZZ			02:27																				
ZZZZZZ			02:31																				
ZZZZZZ			02:36																				
ZZZZZZ			02:40																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			02:44																				
ZZZZZZ			02:49																				
CCV 680-552495/171			02:53																				
CCB 680-552495/172			02:58																				
ZZZZZZ			03:02																				
ZZZZZZ			03:06																				
ZZZZZZ			03:11																				
ZZZZZZ			03:15																				
ZZZZZZ			03:20																				
ZZZZZZ			03:24																				
ZZZZZZ			03:28																				
ZZZZZZ			03:33																				
ZZZZZZ			03:37																				
ZZZZZZ			03:42																				
CCV 680-552495/183			03:46																				
CCB 680-552495/184			03:51																				
ZZZZZZ			03:55																				
ZZZZZZ			03:59																				
ZZZZZZ			04:04																				
ZZZZZZ			04:08																				
ZZZZZZ			04:13																				
ZZZZZZ			04:17																				
ZZZZZZ			04:21																				
ZZZZZZ			04:26																				
ZZZZZZ			04:30																				
ZZZZZZ			04:35																				
CCV 680-552495/195			04:39																				
CCB 680-552495/196			04:44																				
ZZZZZZ			04:48																				
ZZZZZZ			04:52																				
ZZZZZZ			04:57																				
ZZZZZZ			05:01																				
ZZZZZZ			05:06																				
ZZZZZZ			05:10																				
ZZZZZZ			05:15																				
ZZZZZZ			05:19																				
ZZZZZZ			05:23																				
ZZZZZZ			05:28																				
CCV 680-552495/207			05:32																				
CCB 680-552495/208			05:37																				
ZZZZZZ			05:41																				
ZZZZZZ			05:45																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			05:50																				
ZZZZZZ			05:54																				
ZZZZZZ			05:59																				
ZZZZZZ			06:03																				
ZZZZZZ			06:08																				
ZZZZZZ			06:12																				
ZZZZZZ			06:17																				
ZZZZZZ			06:21																				
CCV 680-552495/219			06:25																				
CCB 680-552495/220			06:30																				
ZZZZZZ			06:34																				
ZZZZZZ			06:39																				
ZZZZZZ			06:43																				
ZZZZZZ			06:47																				
ZZZZZZ			06:52																				
ZZZZZZ			06:56																				
ZZZZZZ			07:01																				
ZZZZZZ			07:05																				
ZZZZZZ			07:10																				
ZZZZZZ			07:14																				
CCV 680-552495/231			07:19																				
CCB 680-552495/232			07:23																				
ZZZZZZ			07:27																				
ZZZZZZ			07:32																				
ZZZZZZ			07:36																				
ZZZZZZ			07:41																				
ZZZZZZ			07:45																				
ZZZZZZ			07:50																				
ZZZZZZ			07:54																				
ZZZZZZ			07:58																				
ZZZZZZ			08:03																				
ZZZZZZ			08:07																				
CCV 680-552495/243			08:12																				
CCB 680-552495/244			08:16																				
ZZZZZZ			08:21																				
ZZZZZZ			08:25																				
ZZZZZZ			08:29																				
ZZZZZZ			08:34																				
ZZZZZZ			08:38																				
ZZZZZZ			08:43																				
ZZZZZZ			08:47																				
ZZZZZZ			08:52																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			08:56																				
ZZZZZZ			09:01																				
CCV 680-552495/255			09:05																				
CCB 680-552495/256			09:09																				
ZZZZZZ			09:14																				
ZZZZZZ			09:18																				
ZZZZZZ			09:23																				
ZZZZZZ			09:27																				
ZZZZZZ			09:36																				
ZZZZZZ			09:40																				
ZZZZZZ			09:45																				
ZZZZZZ			09:49																				
ZZZZZZ			09:54																				
ZZZZZZ			09:59																				
CCV 680-552495/267			10:03																				
CCB 680-552495/268			10:08																				
ZZZZZZ			10:12																				
ZZZZZZ			10:17																				
ZZZZZZ			10:21																				
ZZZZZZ			10:26																				
ZZZZZZ			10:30																				
ZZZZZZ			10:34																				
ZZZZZZ			10:39																				
CCV 680-552495/276			10:43																				
CCB 680-552495/277			10:48																				
ZZZZZZ			10:52																				
ZZZZZZ			10:56																				
ZZZZZZ			11:01																				
ZZZZZZ			11:05																				
ZZZZZZ			11:10																				
ZZZZZZ			11:15																				
ZZZZZZ			11:19																				
ZZZZZZ			11:23																				
ZZZZZZ			11:27																				
ZZZZZZ			11:31																				
CCV 680-552495/288			11:35																				
CCB 680-552495/289			11:38																				
ZZZZZZ			11:42																				
ZZZZZZ			11:46																				
ZZZZZZ			11:50																				
ZZZZZZ			11:54																				
ZZZZZZ			11:58																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			12:02																				
ZZZZZZ			12:06																				
ZZZZZZ			12:09																				
ZZZZZZ			12:13																				
ZZZZZZ			12:17																				
CCV 680-552495/300			12:21																				
CCB 680-552495/301			12:25																				
ZZZZZZ			12:29																				
ZZZZZZ			12:33																				
ZZZZZZ			12:37																				
ZZZZZZ			12:41																				
ZZZZZZ			12:45																				
ZZZZZZ			12:48																				
ZZZZZZ			12:52																				
ZZZZZZ			12:56																				
ZZZZZZ			13:00																				
ZZZZZZ			13:04																				
CCV 680-552495/312			13:08																				
CCB 680-552495/313			13:12																				
ZZZZZZ			13:16																				
ZZZZZZ			13:20																				
ZZZZZZ			13:23																				
ZZZZZZ			13:27																				
ZZZZZZ			13:31																				
ZZZZZZ			13:35																				
ZZZZZZ			13:39																				
ZZZZZZ			13:43																				
ZZZZZZ			13:47																				
ZZZZZZ			13:51																				
CCV 680-552495/324			13:55																				
CCB 680-552495/325			13:59																				
ZZZZZZ			14:02																				
ZZZZZZ			14:06																				
ZZZZZZ			14:10																				
ZZZZZZ			14:14																				
ZZZZZZ			14:18																				
ZZZZZZ			14:22																				
ZZZZZZ			14:26																				
ZZZZZZ			14:30																				
ZZZZZZ			14:34																				
ZZZZZZ			14:37																				
CCV 680-552495/336			14:41																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
CCB 680-552495/337			14:45																				
ZZZZZZ			14:51																				
ZZZZZZ			14:55																				
ZZZZZZ			14:58																				
ZZZZZZ			15:02																				
ZZZZZZ			15:06																				
ZZZZZZ			15:10																				
ZZZZZZ			15:14																				
ZZZZZZ			15:18																				
ZZZZZZ			15:22																				
ZZZZZZ			15:26																				
CCV 680-552495/348			15:30																				
CCB 680-552495/349			15:34																				
ZZZZZZ			15:37																				
ZZZZZZ			15:41																				
ZZZZZZ			15:45																				
ZZZZZZ			15:49																				
ZZZZZZ			15:53																				
ZZZZZZ			15:57																				
ZZZZZZ			16:01																				
ZZZZZZ			16:05																				
ZZZZZZ			16:09																				
ZZZZZZ			16:12																				
CCV 680-552495/360			16:16																				
CCB 680-552495/361			16:20																				
ZZZZZZ			16:26																				
ZZZZZZ			16:31																				

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			14:15																				
ZZZZZZ			14:19																				
ZZZZZZ			14:23																				
ICV 680-552495/4	1		14:27	X	X																		
ICBIS 680-552495/5	1		14:31	X	X																		
CRI 680-552495/6	1		14:35	X	X																		
ICSA 680-552495/7	1		14:39	X	X																		
ICSAB 680-552495/8	1		14:43	X	X																		
ZZZZZZ			14:47																				
RINSE 680-552495/10			14:51																				
CCV 680-552495/11			14:55																				
CCB 680-552495/12			14:59																				
ZZZZZZ			15:26																				
ZZZZZZ			15:30																				
ZZZZZZ			15:34																				
ZZZZZZ			15:38																				
ZZZZZZ			15:42																				
ZZZZZZ			15:46																				
ZZZZZZ			15:51																				
ZZZZZZ			15:55																				
ZZZZZZ			15:59																				
ZZZZZZ			16:03																				
CCV 680-552495/23			16:07																				
CCB 680-552495/24			16:11																				
ZZZZZZ			16:15																				
ZZZZZZ			16:19																				
ZZZZZZ			16:23																				
ZZZZZZ			16:27																				
ZZZZZZ			16:31																				
ZZZZZZ			16:35																				
ZZZZZZ			16:39																				
ZZZZZZ			16:43																				
ZZZZZZ			16:47																				
ZZZZZZ			16:51																				
CCV 680-552495/35			16:55																				
CCB 680-552495/36			16:59																				
ZZZZZZ			17:03																				
ZZZZZZ			17:07																				
ZZZZZZ			17:11																				
ZZZZZZ			17:15																				
ZZZZZZ			17:19																				
ZZZZZZ			17:23																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			17:27																				
ZZZZZZ			17:31																				
ZZZZZZ			17:35																				
ZZZZZZ			17:39																				
CCV 680-552495/47			17:43																				
CCB 680-552495/48			17:47																				
ZZZZZZ			17:51																				
ZZZZZZ			18:01																				
ZZZZZZ			18:05																				
ZZZZZZ			18:09																				
ZZZZZZ			18:13																				
ZZZZZZ			18:19																				
ZZZZZZ			18:23																				
ZZZZZZ			18:27																				
ZZZZZZ			18:32																				
ZZZZZZ			18:36																				
CCV 680-552495/59			18:41																				
CCB 680-552495/60			18:45																				
ZZZZZZ			18:49																				
ZZZZZZ			18:54																				
ZZZZZZ			18:58																				
ZZZZZZ			19:02																				
ZZZZZZ			19:07																				
ZZZZZZ			19:11																				
ZZZZZZ			19:16																				
ZZZZZZ			19:20																				
ZZZZZZ			19:24																				
ZZZZZZ			19:29																				
CCV 680-552495/71			19:33																				
CCB 680-552495/72			19:38																				
ZZZZZZ			19:42																				
ZZZZZZ			19:46																				
ZZZZZZ			19:51																				
ZZZZZZ			19:55																				
ZZZZZZ			19:59																				
CCV 680-552495/78	1		20:04	X	X																		
CCB 680-552495/79	1		20:08	X	X																		
MB 680-551751/1-A	1	R	20:13	X	X																		
LCS 680-551751/2-A	1	R	20:17	X	X																		
680-162184-18	1	D	20:21	X	X																		
680-162184-3	1	D	20:26	X	X																		
680-162184-3 SD	5	D	20:30	X	X																		

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ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
680-162184-3 PDS	1	D	20:35	X	X																		
680-162184-3 MS	1	D	20:39	X	X																		
680-162184-3 MSD	1	D	20:43	X	X																		
CCV 680-552495/88	1		20:48	X	X																		
CCB 680-552495/89	1		20:52	X	X																		
680-162184-2	1	D	20:57	X	X																		
680-162184-4	1	D	21:01	X	X																		
680-162184-9	1	D	21:05	X	X																		
680-162184-10	1	D	21:10	X	X																		
ZZZZZZ			21:14																				
MB 680-551774/1-A	1	T	21:19	X	X																		
LCS 680-551774/2-A	1	T	21:23	X	X																		
680-162184-3	1	T	21:27	X	X																		
680-162184-3 SD	5	T	21:32	X	X																		
680-162184-3 PDS	1	T	21:36	X	X																		
CCV 680-552495/100	1		21:40	X	X																		
CCB 680-552495/101	1		21:45	X	X																		
680-162184-3 MS	1	T	21:49	X	X																		
680-162184-3 MSD	1	T	21:54	X	X																		
680-162184-2	1	T	21:58	X	X																		
680-162184-4	1	T	22:02	X	X																		
680-162184-9	1	T	22:07	X	X																		
680-162184-10	1	T	22:11	X	X																		
680-162184-12	1	T	22:16	X	X																		
680-162184-13	1	T	22:20	X	X																		
680-162184-14	1	T	22:24	X	X																		
680-162184-18	1	T	22:29	X	X																		
CCV 680-552495/112	1		22:33	X	X																		
CCB 680-552495/113	1		22:38	X	X																		
ZZZZZZ			22:42																				
ZZZZZZ			22:46																				
ZZZZZZ			22:51																				
MB 680-551775/1-A	1	T	22:55	X	X																		
LCS 680-551775/2-A	1	T	23:00	X	X																		
ZZZZZZ			23:04																				
ZZZZZZ			23:08																				
ZZZZZZ			23:13																				
ZZZZZZ			23:17																				
ZZZZZZ			23:22																				
CCV 680-552495/124	1		23:26	X	X																		
CCB 680-552495/125	1		23:30	X	X																		
ZZZZZZ			23:35																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			23:39																				
ZZZZZZ			23:44																				
ZZZZZZ			23:48																				
ZZZZZZ			23:52																				
ZZZZZZ			23:57																				
ZZZZZZ			00:01																				
680-162184-16	1	T	00:06	X	X																		
ZZZZZZ			00:10																				
CCV 680-552495/135	1		00:14	X	X																		
CCB 680-552495/136	1		00:19	X	X																		
MB 680-551782/1-A	1	R	00:23	X	X																		
LCS 680-551782/2-A	1	R	00:28	X	X																		
680-162184-16	1	D	00:32	X	X																		
680-162184-16 SD	5	D	00:36	X	X																		
680-162184-16 PDS	1	D	00:41	X	X																		
680-162184-16 MS	1	D	00:45	X	X																		
680-162184-16 MSD	1	D	00:50	X	X																		
ZZZZZZ			00:54																				
ZZZZZZ			00:58																				
ZZZZZZ			01:03																				
CCV 680-552495/147	1		01:07	X	X																		
CCB 680-552495/148	1		01:12	X	X																		
ZZZZZZ			01:16																				
ZZZZZZ			01:21																				
ZZZZZZ			01:25																				
ZZZZZZ			01:29																				
ZZZZZZ			01:34																				
ZZZZZZ			01:38																				
ZZZZZZ			01:43																				
ZZZZZZ			01:47																				
ZZZZZZ			01:51																				
ZZZZZZ			01:56																				
CCV 680-552495/159			02:00																				
CCB 680-552495/160			02:05																				
ZZZZZZ			02:09																				
ZZZZZZ			02:13																				
ZZZZZZ			02:18																				
ZZZZZZ			02:22																				
ZZZZZZ			02:27																				
ZZZZZZ			02:31																				
ZZZZZZ			02:36																				
ZZZZZZ			02:40																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			02:44																				
ZZZZZZ			02:49																				
CCV 680-552495/171			02:53																				
CCB 680-552495/172			02:58																				
ZZZZZZ			03:02																				
ZZZZZZ			03:06																				
ZZZZZZ			03:11																				
ZZZZZZ			03:15																				
ZZZZZZ			03:20																				
ZZZZZZ			03:24																				
ZZZZZZ			03:28																				
ZZZZZZ			03:33																				
ZZZZZZ			03:37																				
ZZZZZZ			03:42																				
CCV 680-552495/183			03:46																				
CCB 680-552495/184			03:51																				
ZZZZZZ			03:55																				
ZZZZZZ			03:59																				
ZZZZZZ			04:04																				
ZZZZZZ			04:08																				
ZZZZZZ			04:13																				
ZZZZZZ			04:17																				
ZZZZZZ			04:21																				
ZZZZZZ			04:26																				
ZZZZZZ			04:30																				
ZZZZZZ			04:35																				
CCV 680-552495/195			04:39																				
CCB 680-552495/196			04:44																				
ZZZZZZ			04:48																				
ZZZZZZ			04:52																				
ZZZZZZ			04:57																				
ZZZZZZ			05:01																				
ZZZZZZ			05:06																				
ZZZZZZ			05:10																				
ZZZZZZ			05:15																				
ZZZZZZ			05:19																				
ZZZZZZ			05:23																				
ZZZZZZ			05:28																				
CCV 680-552495/207			05:32																				
CCB 680-552495/208			05:37																				
ZZZZZZ			05:41																				
ZZZZZZ			05:45																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			05:50																				
ZZZZZZ			05:54																				
ZZZZZZ			05:59																				
ZZZZZZ			06:03																				
ZZZZZZ			06:08																				
ZZZZZZ			06:12																				
ZZZZZZ			06:17																				
ZZZZZZ			06:21																				
CCV 680-552495/219			06:25																				
CCB 680-552495/220			06:30																				
ZZZZZZ			06:34																				
ZZZZZZ			06:39																				
ZZZZZZ			06:43																				
ZZZZZZ			06:47																				
ZZZZZZ			06:52																				
ZZZZZZ			06:56																				
ZZZZZZ			07:01																				
ZZZZZZ			07:05																				
ZZZZZZ			07:10																				
ZZZZZZ			07:14																				
CCV 680-552495/231			07:19																				
CCB 680-552495/232			07:23																				
ZZZZZZ			07:27																				
ZZZZZZ			07:32																				
ZZZZZZ			07:36																				
ZZZZZZ			07:41																				
ZZZZZZ			07:45																				
ZZZZZZ			07:50																				
ZZZZZZ			07:54																				
ZZZZZZ			07:58																				
ZZZZZZ			08:03																				
ZZZZZZ			08:07																				
CCV 680-552495/243			08:12																				
CCB 680-552495/244			08:16																				
ZZZZZZ			08:21																				
ZZZZZZ			08:25																				
ZZZZZZ			08:29																				
ZZZZZZ			08:34																				
ZZZZZZ			08:38																				
ZZZZZZ			08:43																				
ZZZZZZ			08:47																				
ZZZZZZ			08:52																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			08:56																				
ZZZZZZ			09:01																				
CCV 680-552495/255			09:05																				
CCB 680-552495/256			09:09																				
ZZZZZZ			09:14																				
ZZZZZZ			09:18																				
ZZZZZZ			09:23																				
ZZZZZZ			09:27																				
ZZZZZZ			09:36																				
ZZZZZZ			09:40																				
ZZZZZZ			09:45																				
ZZZZZZ			09:49																				
ZZZZZZ			09:54																				
ZZZZZZ			09:59																				
CCV 680-552495/267			10:03																				
CCB 680-552495/268			10:08																				
ZZZZZZ			10:12																				
ZZZZZZ			10:17																				
ZZZZZZ			10:21																				
ZZZZZZ			10:26																				
ZZZZZZ			10:30																				
ZZZZZZ			10:34																				
ZZZZZZ			10:39																				
CCV 680-552495/276			10:43																				
CCB 680-552495/277			10:48																				
ZZZZZZ			10:52																				
ZZZZZZ			10:56																				
ZZZZZZ			11:01																				
ZZZZZZ			11:05																				
ZZZZZZ			11:10																				
ZZZZZZ			11:15																				
ZZZZZZ			11:19																				
ZZZZZZ			11:23																				
ZZZZZZ			11:27																				
ZZZZZZ			11:31																				
CCV 680-552495/288			11:35																				
CCB 680-552495/289			11:38																				
ZZZZZZ			11:42																				
ZZZZZZ			11:46																				
ZZZZZZ			11:50																				
ZZZZZZ			11:54																				
ZZZZZZ			11:58																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			12:02																				
ZZZZZZ			12:06																				
ZZZZZZ			12:09																				
ZZZZZZ			12:13																				
ZZZZZZ			12:17																				
CCV 680-552495/300			12:21																				
CCB 680-552495/301			12:25																				
ZZZZZZ			12:29																				
ZZZZZZ			12:33																				
ZZZZZZ			12:37																				
ZZZZZZ			12:41																				
ZZZZZZ			12:45																				
ZZZZZZ			12:48																				
ZZZZZZ			12:52																				
ZZZZZZ			12:56																				
ZZZZZZ			13:00																				
ZZZZZZ			13:04																				
CCV 680-552495/312			13:08																				
CCB 680-552495/313			13:12																				
ZZZZZZ			13:16																				
ZZZZZZ			13:20																				
ZZZZZZ			13:23																				
ZZZZZZ			13:27																				
ZZZZZZ			13:31																				
ZZZZZZ			13:35																				
ZZZZZZ			13:39																				
ZZZZZZ			13:43																				
ZZZZZZ			13:47																				
ZZZZZZ			13:51																				
CCV 680-552495/324			13:55																				
CCB 680-552495/325			13:59																				
ZZZZZZ			14:02																				
ZZZZZZ			14:06																				
ZZZZZZ			14:10																				
ZZZZZZ			14:14																				
ZZZZZZ			14:18																				
ZZZZZZ			14:22																				
ZZZZZZ			14:26																				
ZZZZZZ			14:30																				
ZZZZZZ			14:34																				
ZZZZZZ			14:37																				
CCV 680-552495/336			14:41																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: ICPE Method: 6010C

Start Date: 12/18/2018 14:15 End Date: 12/19/2018 16:31

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
CCB 680-552495/337			14:45																				
ZZZZZZ			14:51																				
ZZZZZZ			14:55																				
ZZZZZZ			14:58																				
ZZZZZZ			15:02																				
ZZZZZZ			15:06																				
ZZZZZZ			15:10																				
ZZZZZZ			15:14																				
ZZZZZZ			15:18																				
ZZZZZZ			15:22																				
ZZZZZZ			15:26																				
CCV 680-552495/348			15:30																				
CCB 680-552495/349			15:34																				
ZZZZZZ			15:37																				
ZZZZZZ			15:41																				
ZZZZZZ			15:45																				
ZZZZZZ			15:49																				
ZZZZZZ			15:53																				
ZZZZZZ			15:57																				
ZZZZZZ			16:01																				
ZZZZZZ			16:05																				
ZZZZZZ			16:09																				
ZZZZZZ			16:12																				
CCV 680-552495/360			16:16																				
CCB 680-552495/361			16:20																				
ZZZZZZ			16:26																				
ZZZZZZ			16:31																				

Prep Types
D = Dissolved
R = Total Recoverable
T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 12/21/2018 15:53 End Date: 12/22/2018 08:32

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
IC 680-552696/1-A			15:53	X																			
IC 680-552696/2-A			15:57	X																			
IC 680-552696/3-A			16:01	X																			
IC 680-552696/4-A			16:05	X																			
IC 680-552696/5-A			16:08	X																			
IC 680-552696/6-A			16:12	X																			
ICV 680-552696/7-A	1		16:16	X																			
ICB 680-552696/8-A	1		16:20	X																			
CRA 680-552696/9-A	1		16:24	X																			
CCV 680-552696/11-A			16:28																				
CCB 680-552696/12-A			16:32																				
CCV 680-552696/11-A			16:34																				
CCB 680-552696/12-A			16:38																				
ZZZZZZ			16:42																				
ZZZZZZ			16:46																				
ZZZZZZ			16:50																				
ZZZZZZ			16:54																				
ZZZZZZ			16:57																				
ZZZZZZ			17:01																				
ZZZZZZ			17:05																				
CCV 680-552696/11-A			17:28																				
CCB 680-552696/12-A			17:32																				
ZZZZZZ			17:36																				
ZZZZZZ			17:40																				
ZZZZZZ			17:44																				
ZZZZZZ			17:48																				
ZZZZZZ			17:51																				
ZZZZZZ			17:55																				
ZZZZZZ			17:59																				
ZZZZZZ			18:03																				
ZZZZZZ			18:07																				
ZZZZZZ			18:11																				
CCV 680-552696/11-A			18:15																				
CCB 680-552696/12-A			18:19																				
ZZZZZZ			18:23																				
ZZZZZZ			18:27																				
ZZZZZZ			18:31																				
ZZZZZZ			18:35																				
ZZZZZZ			18:39																				
ZZZZZZ			18:43																				
ZZZZZZ			18:47																				
ZZZZZZ			18:51																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 12/21/2018 15:53 End Date: 12/22/2018 08:32

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			18:55																				
ZZZZZZ			18:59																				
CCV 680-552696/11-A			19:03																				
CCB 680-552696/12-A			19:07																				
ZZZZZZ			19:11																				
ZZZZZZ			19:15																				
ZZZZZZ			19:18																				
ZZZZZZ			19:22																				
ZZZZZZ			19:26																				
ZZZZZZ			19:30																				
ZZZZZZ			19:34																				
ZZZZZZ			19:38																				
ZZZZZZ			19:42																				
ZZZZZZ			19:46																				
CCV 680-552696/11-A			19:50																				
CCB 680-552696/12-A			19:54																				
ZZZZZZ			19:58																				
ZZZZZZ			20:02																				
ZZZZZZ			20:06																				
ZZZZZZ			20:10																				
ZZZZZZ			20:14																				
ZZZZZZ			20:18																				
ZZZZZZ			20:22																				
ZZZZZZ			20:26																				
ZZZZZZ			20:30																				
ZZZZZZ			20:34																				
CCV 680-552696/11-A			20:38																				
CCB 680-552696/12-A			20:42																				
ZZZZZZ			20:45																				
ZZZZZZ			20:49																				
ZZZZZZ			20:53																				
ZZZZZZ			20:57																				
ZZZZZZ			21:01																				
ZZZZZZ			21:05																				
ZZZZZZ			21:09																				
ZZZZZZ			21:13																				
ZZZZZZ			21:17																				
ZZZZZZ			21:21																				
CCV 680-552696/11-A			21:25																				
CCB 680-552696/12-A			21:29																				
ZZZZZZ			21:33																				
ZZZZZZ			21:37																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 12/21/2018 15:53 End Date: 12/22/2018 08:32

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			21:41																				
ZZZZZZ			21:45																				
ZZZZZZ			21:49																				
ZZZZZZ			21:53																				
ZZZZZZ			21:57																				
ZZZZZZ			22:01																				
ZZZZZZ			22:05																				
ZZZZZZ			22:09																				
CCV 680-552696/11-A			22:13																				
CCB 680-552696/12-A			22:17																				
ZZZZZZ			22:20																				
ZZZZZZ			22:24																				
ZZZZZZ			22:28																				
MB 680-552619/1-A	1	T	22:32	X																			
LCS 680-552619/2-A	1	T	22:36	X																			
ZZZZZZ			22:40																				
ZZZZZZ			22:44																				
ZZZZZZ			22:48																				
ZZZZZZ			22:52																				
ZZZZZZ			22:56																				
CCV 680-552696/11-A	1		23:00	X																			
CCB 680-552696/12-A	1		23:04	X																			
ZZZZZZ			23:08																				
ZZZZZZ			23:12																				
ZZZZZZ			23:16																				
ZZZZZZ			23:20																				
ZZZZZZ			23:24																				
ZZZZZZ			23:28																				
ZZZZZZ			23:32																				
680-162184-3	1	D	23:36	X																			
680-162184-3 MS	1	D	23:40	X																			
680-162184-3 MSD	1	D	23:44	X																			
CCV 680-552696/11-A	1		23:48	X																			
CCB 680-552696/12-A	1		23:52	X																			
ZZZZZZ			23:56																				
ZZZZZZ			23:59																				
ZZZZZZ			00:03																				
ZZZZZZ			00:07																				
ZZZZZZ			00:11																				
ZZZZZZ			00:15																				
ZZZZZZ			00:19																				
ZZZZZZ			00:23																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 12/21/2018 15:53 End Date: 12/22/2018 08:32

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			00:27																				
ZZZZZZ			00:31																				
CCV 680-552696/11-A			00:35																				
CCB 680-552696/12-A			00:39																				
ZZZZZZ			00:43																				
ZZZZZZ			00:47																				
ZZZZZZ			00:51																				
ZZZZZZ			00:55																				
ZZZZZZ			00:59																				
ZZZZZZ			01:03																				
ZZZZZZ			01:07																				
ZZZZZZ			01:11																				
ZZZZZZ			01:15																				
ZZZZZZ			01:19																				
CCV 680-552696/11-A			01:23																				
CCB 680-552696/12-A			01:27																				
ZZZZZZ			01:31																				
ZZZZZZ			01:35																				
ZZZZZZ			01:39																				
ZZZZZZ			01:43																				
ZZZZZZ			01:47																				
ZZZZZZ			01:51																				
ZZZZZZ			01:54																				
ZZZZZZ			01:58																				
ZZZZZZ			02:02																				
ZZZZZZ			02:06																				
CCV 680-552696/11-A			02:10																				
CCB 680-552696/12-A			02:14																				
ZZZZZZ			02:18																				
ZZZZZZ			02:22																				
ZZZZZZ			02:26																				
ZZZZZZ			02:29																				
CCV 680-552696/11-A			08:20																				
CCB 680-552696/12-A			08:24																				
CCV 680-552696/11-A			08:28																				
CCB 680-552696/12-A			08:32																				

Prep Types

D = Dissolved

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 12/22/2018 08:41 End Date: 12/22/2018 13:34

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
IC 680-552696/2-A			08:41	X																			
IC 680-552696/1-A			08:44	X																			
IC 680-552696/3-A			08:48	X																			
IC 680-552696/4-A			08:52	X																			
IC 680-552696/5-A			08:56	X																			
IC 680-552696/6-A			09:00	X																			
ZZZZZZ			09:04																				
ZZZZZZ			09:08																				
ICV 680-552696/7-A	1		09:10	X																			
ICB 680-552696/8-A	1		09:14	X																			
CRA 680-552696/9-A	1		09:18	X																			
CCV 680-552696/11-A			09:22																				
CCB 680-552696/12-A			09:26																				
CCV 680-552696/11-A	1		09:28	X																			
CCB 680-552696/12-A	1		09:32	X																			
680-162184-2	1	D	09:36	X																			
680-162184-4	1	D	09:40	X																			
680-162184-12	1	D	09:44	X																			
680-162184-13	1	D	09:48	X																			
680-162184-9	1	D	09:52	X																			
680-162184-10	1	D	09:56	X																			
680-162184-16	1	D	10:00	X																			
680-162184-14	1	D	10:04	X																			
MB 680-552831/1-A	1	T	10:08	X																			
LCS 680-552831/2-A	1	T	10:12	X																			
CCV 680-552696/11-A	1		10:16	X																			
CCB 680-552696/12-A	1		10:20	X																			
ZZZZZZ			10:24																				
680-162184-3	1	T	10:28	X																			
680-162184-3 MS	1	T	10:32	X																			
680-162184-3 MSD	1	T	10:36	X																			
680-162184-4	1	T	10:40	X																			
680-162184-14	1	T	10:44	X																			
680-162184-2	1	T	10:48	X																			
680-162184-12	1	T	10:52	X																			
680-162184-18	1	T	10:55	X																			
680-162184-9	1	T	10:59	X																			
CCV 680-552696/11-A	1		11:03	X																			
CCB 680-552696/12-A	1		11:07	X																			
680-162184-10	1	T	11:11	X																			
680-162184-16	1	T	11:15	X																			
680-162184-13	1	T	11:19	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 12/22/2018 08:41 End Date: 12/22/2018 13:34

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			11:23																				
ZZZZZZ			11:27																				
ZZZZZZ			11:31																				
ZZZZZZ			11:35																				
ZZZZZZ			11:39																				
ZZZZZZ			11:43																				
ZZZZZZ			11:47																				
CCV 680-552696/11-A	1		11:51	X																			
CCB 680-552696/12-A	1		11:55	X																			
ZZZZZZ			11:59																				
ZZZZZZ			12:03																				
ZZZZZZ			12:07																				
ZZZZZZ			12:11																				
ZZZZZZ			12:15																				
ZZZZZZ			12:19																				
ZZZZZZ			12:23																				
ZZZZZZ			12:27																				
ZZZZZZ			12:31																				
ZZZZZZ			12:35																				
CCV 680-552696/11-A			12:39																				
CCB 680-552696/12-A			12:43																				
ZZZZZZ			12:46																				
CCV 680-552696/11-A			12:50																				
CCB 680-552696/12-A			12:54																				
CCV 680-552696/11-A			13:18																				
CCB 680-552696/12-A			13:22																				
ZZZZZZ			13:26																				
CCV 680-552696/11-A			13:30																				
CCB 680-552696/12-A			13:34																				

Prep Types

D = Dissolved

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 01/02/2019 10:04 End Date: 01/03/2019 07:08

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
IC 680-553787/1-A			10:04	X																			
IC 680-553787/2-A			10:08	X																			
IC 680-553787/3-A			10:12	X																			
IC 680-553787/4-A			10:16	X																			
IC 680-553787/5-A			10:20	X																			
IC 680-553787/6-A			10:24	X																			
ICV 680-553787/7-A	1		10:28	X																			
ICB 680-553787/8-A	1		10:32	X																			
CRA 680-553787/9-A	1		10:36	X																			
CCV 680-553787/11-A			10:40																				
CCB 680-553787/12-A			10:44																				
ZZZZZZ			10:48																				
ZZZZZZ			10:52																				
ZZZZZZ			10:56																				
CCV 680-553787/11-A	1		11:00	X																			
CCB 680-553787/12-A	1		11:03	X																			
MB 680-553794/1-A	1	T	11:07	X																			
LCS 680-553794/2-A	1	T	11:11	X																			
680-162184-18	1	D	11:15	X																			
ZZZZZZ			11:19																				
ZZZZZZ			11:23																				
ZZZZZZ			11:27																				
ZZZZZZ			11:31																				
ZZZZZZ			11:35																				
ZZZZZZ			11:39																				
ZZZZZZ			11:43																				
CCV 680-553787/11-A	1		11:47	X																			
CCB 680-553787/12-A	1		11:51	X																			
ZZZZZZ			11:55																				
ZZZZZZ			11:59																				
ZZZZZZ			12:03																				
ZZZZZZ			12:07																				
ZZZZZZ			12:11																				
ZZZZZZ			12:15																				
ZZZZZZ			12:18																				
ZZZZZZ			12:22																				
CCV 680-553787/11-A			12:26																				
CCB 680-553787/12-A			12:30																				
ZZZZZZ			12:40																				
ZZZZZZ			12:43																				
ZZZZZZ			12:47																				
ZZZZZZ			12:51																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 01/02/2019 10:04 End Date: 01/03/2019 07:08

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			12:55																				
ZZZZZZ			12:59																				
ZZZZZZ			13:03																				
ZZZZZZ			13:07																				
ZZZZZZ			13:11																				
ZZZZZZ			13:15																				
ZZZZZZ			13:19																				
ZZZZZZ			13:22																				
CCV 680-553787/11-A			13:37																				
CCB 680-553787/12-A			13:41																				
ZZZZZZ			13:44																				
ZZZZZZ			14:00																				
ZZZZZZ			14:04																				
ZZZZZZ			14:08																				
ZZZZZZ			14:12																				
ZZZZZZ			14:16																				
ZZZZZZ			14:20																				
ZZZZZZ			14:24																				
CCV 680-553787/11-A			14:28																				
CCB 680-553787/12-A			14:32																				
ZZZZZZ			14:38																				
ZZZZZZ			14:42																				
ZZZZZZ			14:46																				
ZZZZZZ			14:50																				
ZZZZZZ			14:54																				
ZZZZZZ			14:58																				
ZZZZZZ			15:02																				
ZZZZZZ			15:06																				
ZZZZZZ			15:10																				
ZZZZZZ			15:14																				
CCV 680-553787/11-A			15:18																				
CCB 680-553787/12-A			15:22																				
ZZZZZZ			15:26																				
ZZZZZZ			15:30																				
ZZZZZZ			15:33																				
ZZZZZZ			15:37																				
ZZZZZZ			15:41																				
ZZZZZZ			15:45																				
ZZZZZZ			15:49																				
ZZZZZZ			15:53																				
ZZZZZZ			15:57																				
ZZZZZZ			16:01																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 01/02/2019 10:04 End Date: 01/03/2019 07:08

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
CCV 680-553787/11-A			16:05																				
CCB 680-553787/12-A			16:09																				
ZZZZZZ			16:13																				
ZZZZZZ			16:17																				
ZZZZZZ			16:21																				
ZZZZZZ			16:25																				
ZZZZZZ			16:29																				
ZZZZZZ			16:33																				
ZZZZZZ			16:37																				
ZZZZZZ			16:41																				
ZZZZZZ			16:45																				
ZZZZZZ			16:49																				
CCV 680-553787/11-A			16:53																				
CCB 680-553787/12-A			16:56																				
ZZZZZZ			17:00																				
ZZZZZZ			17:04																				
ZZZZZZ			17:08																				
ZZZZZZ			17:12																				
ZZZZZZ			17:16																				
ZZZZZZ			17:20																				
ZZZZZZ			17:24																				
ZZZZZZ			17:28																				
ZZZZZZ			17:32																				
ZZZZZZ			17:36																				
CCV 680-553787/11-A			17:40																				
CCB 680-553787/12-A			17:44																				
ZZZZZZ			17:48																				
ZZZZZZ			17:52																				
ZZZZZZ			17:56																				
ZZZZZZ			18:00																				
ZZZZZZ			18:04																				
ZZZZZZ			18:08																				
ZZZZZZ			18:12																				
ZZZZZZ			18:16																				
ZZZZZZ			18:20																				
ZZZZZZ			18:23																				
CCV 680-553787/11-A			18:27																				
CCB 680-553787/12-A			18:31																				
ZZZZZZ			18:35																				
ZZZZZZ			18:39																				
ZZZZZZ			18:43																				
ZZZZZZ			18:47																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7470A

Start Date: 01/02/2019 10:04 End Date: 01/03/2019 07:08

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			18:51																				
ZZZZZZ			18:55																				
ZZZZZZ			18:59																				
ZZZZZZ			19:03																				
ZZZZZZ			19:07																				
ZZZZZZ			19:11																				
CCV 680-553787/11-A			19:15																				
CCB 680-553787/12-A			19:19																				
ZZZZZZ			19:23																				
ZZZZZZ			19:27																				
ZZZZZZ			19:31																				
ZZZZZZ			19:35																				
ZZZZZZ			19:39																				
ZZZZZZ			19:43																				
ZZZZZZ			19:47																				
ZZZZZZ			07:08																				

Prep Types

D = Dissolved

T = Total/NA

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICP Instrument ID: ICPE Start Date: 12/15/2018 End Date: 12/16/2018

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICV 680-552039/4	09:29										
ICBIS 680-552039/5	09:34										
CRI 680-552039/6	09:39	100									
ICSA 680-552039/7	09:43	92									
ICSAB 680-552039/8	09:48	92									
CCV 680-552039/119	18:30	93									
CCB 680-552039/120	18:34	94									
MB 680-551755/1-A	19:12	93									
LCS 680-551755/2-A	19:17	94									
680-162184-14	19:21	93									
CCV 680-552039/131	19:26	92									
CCB 680-552039/132	19:31	93									
680-162184-14 SD	19:35	93									
680-162184-14 PDS	19:40	93									
680-162184-14 MS	19:45	92									
680-162184-14 MSD	19:49	92									
680-162184-12	19:54	92									
680-162184-13	19:59	92									
CCV 680-552039/143	20:22	92									
CCB 680-552039/144	20:27	92									
CRI 680-552039/303	15:19	111									

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICP Instrument ID: ICPE Start Date: 12/18/2018 End Date: 12/19/2018

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICV 680-552495/4	14:27										
ICBIS 680-552495/5	14:31										
CRI 680-552495/6	14:35	101									
ICSA 680-552495/7	14:39	93									
ICSAB 680-552495/8	14:43	93									
CCV 680-552495/78	20:04	102									
CCB 680-552495/79	20:08	102									
MB 680-551751/1-A	20:13	102									
LCS 680-551751/2-A	20:17	102									
680-162184-18	20:21	102									
680-162184-3	20:26	101									
680-162184-3 SD	20:30	102									
680-162184-3 PDS	20:35	101									
680-162184-3 MS	20:39	101									
680-162184-3 MSD	20:43	101									
CCV 680-552495/88	20:48	101									
CCB 680-552495/89	20:52	102									
680-162184-2	20:57	101									
680-162184-4	21:01	101									
680-162184-9	21:05	101									
680-162184-10	21:10	101									
MB 680-551774/1-A	21:19	102									
LCS 680-551774/2-A	21:23	101									
680-162184-3	21:27	101									
680-162184-3 SD	21:32	102									
680-162184-3 PDS	21:36	101									
CCV 680-552495/100	21:40	101									
CCB 680-552495/101	21:45	101									
680-162184-3 MS	21:49	101									
680-162184-3 MSD	21:54	100									
680-162184-2	21:58	100									
680-162184-4	22:02	100									
680-162184-9	22:07	100									
680-162184-10	22:11	101									
680-162184-12	22:16	100									
680-162184-13	22:20	101									
680-162184-14	22:24	101									
680-162184-18	22:29	100									
CCV 680-552495/112	22:33	101									
CCB 680-552495/113	22:38	102									
MB 680-551775/1-A	22:55	101									

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

ICP Instrument ID: ICPE Start Date: 12/18/2018 End Date: 12/19/2018

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
LCS 680-551775/2-A	23:00	101									
CCV 680-552495/124	23:26	101									
CCB 680-552495/125	23:30	102									
680-162184-16	00:06	100									
CCV 680-552495/135	00:14	100									
CCB 680-552495/136	00:19	101									
MB 680-551782/1-A	00:23	101									
LCS 680-551782/2-A	00:28	101									
680-162184-16	00:32	100									
680-162184-16 SD	00:36	102									
680-162184-16 PDS	00:41	100									
680-162184-16 MS	00:45	101									
680-162184-16 MSD	00:50	100									
CCV 680-552495/147	01:07	100									
CCB 680-552495/148	01:12	101									

Blank (Blk) **12/15/2018, 9:15:45 AM** **Rack S, Tube 1**

Label	Replicates	Concentration	
Ag 328.068	0.0681	-0.3006	0.2325
Al 308.215	-1.0245	1.8072	-0.7827
As 188.980	-1.5926	0.3010	1.2916
B 249.678	0.1615	-0.3519	0.1904
Ba 389.178	-0.7491	0.3502	0.3990
Be 313.042	-0.0021	0.0039	-0.0018
Ca 370.602	-4.046	0.3229	3.723
Cd 226.502	-0.1152	0.1083	0.0068
Co 228.615	0.3332	-0.2012	-0.1320
Cr 267.716	0.2763	-0.1726	-0.1037
Cu 324.754	-0.0829	-0.1279	0.2108
Fe 271.441	2.5046	0.8153	-3.3199
K 766.491	-0.2762	0.0661	0.2101
Mg 279.078	-3.7749	-1.3561	5.1310
Mn 257.610	-0.0200	0.0225	-0.0025
Mo 202.032	-0.2286	0.2576	-0.0289
Na 330.237	145.633	-91.3082	-54.3243
Ni 231.604	-0.1292	0.7369	-0.6077
Pb 220.353	2.3799	-1.5996	-0.7803
Sb 206.834	-0.1478	-3.4031	3.5509
Se 196.026	-4.5844	9.8932	-5.3089
Si 288.158	1.3895	-0.9445	-0.4450
Sn 189.925	4.5319	0.1006	-4.6325
Sr 216.596	0.9978	-0.3242	-0.6736
Ti 334.941	-0.1035	0.0368	0.0668
Tl 190.794	-1.2533	-1.1273	2.3805
V 292.401	-0.0021	0.2701	-0.2680
Zn 206.200	-0.1952	-0.6709	0.8661

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Ag 328.068	0.0000	ppb	9.485	32.0	-29.6231
Al 308.215	0.0000	ppb	3.702	2.4	154.985
As 188.980	0.0000	ppb	0.371	38.4	0.9639
B 249.678	0.0000	ppb	2.009	3.0	-66.9372
Ba 389.178	0.0000	ppb	6.210	12.4	-50.0591
Be 313.042	0.0000	ppb	2.745	1.5	-183.892
Ca 370.602	0.0000	ppb	8.127	29.6	27.48
Cd 226.502	0.0000	ppb	1.704	29.2	5.8370
Co 228.615	0.0000	ppb	1.351	18.1	-7.4622
Cr 267.716	0.0000	ppb	5.212	26.5	19.6972
Cu 324.754	0.0000	ppb	6.671	3.0	224.358
Fe 271.441	0.0000	ppb	2.249	12.7	17.6447
K 766.491	0.0000	ppb	6.181	2.5	246.391
Mg 279.078	0.0000	ppb	6.347	33.2	19.1182
Mn 257.610	0.0000	ppb	2.064	6.9	29.8844
Mo 202.032	0.0000	ppb	0.508	18.7	2.7160
Na 330.237	0.0000	ppb	3.133	6.9	45.5106
Ni 231.604	0.0000	ppb	0.877	55.9	-1.5671
Pb 220.353	0.0000	ppb	1.094	17.9	6.1187
Sb 206.834	0.0000	ppb	1.438	25.1	5.7220
Se 196.026	0.0000	ppb	1.556	134.6	-1.1567
Si 288.158	0.0000	ppb	5.802	1.7	337.123
Sn 189.925	0.0000	ppb	1.363	659.5	-0.2066

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Sr 216.596	0.0000	ppb	3.371	60.7	5.5509
Ti 334.941	0.0000	ppb	9.980	27.4	-36.4787
Tl 190.794	0.0000	ppb	0.568	13.1	-4.3507
V 292.401	0.0000	ppb	3.526	158.0	-2.2318
Zn 206.200	0.0000	ppb	0.443	83.7	0.5285

HIGH STD (Std) **12/15/2018, 9:20:27 AM** **Rack S, Tube 2**

Label	Replicates Concentration		
Ag 328.068	1004.93	990.465	1004.60
Al 308.215	19979.3	20024.2	19996.6
As 188.980	1005.56	995.911	998.530
B 249.678	998.299	1001.03	1000.67
Ba 389.178	1000.60	1000.41	998.985
Be 313.042	999.744	998.845	1001.41
Ca 370.602	19984	20001	20015
Cd 226.502	998.767	1001.05	1000.18
Co 228.615	998.246	1000.46	1001.29
Cr 267.716	997.978	1000.20	1001.82
Cu 324.754	1008.30	989.231	1002.47
Fe 271.441	19968.9	20023.5	20037.6
K 766.491	20027.4	20011.0	19961.5
Mg 279.078	19978.5	20011.0	20010.5
Mn 257.610	999.408	1001.14	999.448
Mo 202.032	998.318	1000.22	1001.47
Na 330.237	19822.1	19931.5	20246.5
Ni 231.604	1002.40	1000.47	997.137
Pb 220.353	1001.01	1005.80	993.185
Sb 206.834	995.991	1006.73	997.275
Se 196.026	1012.57	990.116	997.317
Si 288.158	9992.33	10004.9	10002.8
Sn 189.925	993.271	1017.74	988.987
Sr 216.596	1000.52	1002.42	997.063
Ti 334.941	998.534	1000.45	1001.02
Tl 190.794	990.563	1011.44	997.997
V 292.401	998.856	1001.67	999.473
Zn 206.200	1995.61	2004.81	1999.58

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Ag 328.068	1000.00	ppb	286.931	0.8	34712.7
Al 308.215	20000.0	ppb	53.404	0.1	47320.1
As 188.980	1000.00	ppb	1.262	0.5	253.858
B 249.678	1000.00	ppb	9.777	0.1	6518.28
Ba 389.178	1000.00	ppb	8.454	0.1	9515.48
Be 313.042	1000.00	ppb	1059.719	0.1	813988
Ca 370.602	20000	ppb	31.543	0.1	41761
Cd 226.502	1000.00	ppb	17.544	0.1	15226.1
Co 228.615	1000.00	ppb	7.316	0.2	4639.70
Cr 267.716	1000.00	ppb	41.576	0.2	21578.6
Cu 324.754	1000.00	ppb	354.300	1.0	36488.5
Fe 271.441	20010.0	ppb	27.217	0.2	15032.9
K 766.491	20000.0	ppb	848.965	0.2	495110
Mg 279.078	20000.0	ppb	25.625	0.1	27583.4
Mn 257.610	1000.00	ppb	95.754	0.1	96705.2

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Mo 202.032	1000.00	ppb	3.293	0.2	2080.39
Na 330.237	20000.0	ppb	5.415	1.0	537.041
Ni 231.604	1000.00	ppb	3.422	0.3	1284.54
Pb 220.353	1000.00	ppb	3.316	0.6	526.630
Sb 206.834	1000.00	ppb	2.425	0.6	419.132
Se 196.026	1000.00	ppb	2.081	1.2	180.348
Si 288.158	10000.0	ppb	31.726	0.1	47544.8
Sn 189.925	1000.00	ppb	4.613	1.6	297.137
Sr 216.596	1000.00	ppb	10.381	0.3	3829.26
Ti 334.941	1000.00	ppb	142.813	0.1	109733
Tl 190.794	1000.00	ppb	2.915	1.1	271.099
V 292.401	1000.00	ppb	19.379	0.1	13100.2
Zn 206.200	2000.00	ppb	2.594	0.2	1125.47

Ag 328.068 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-29.6231	0.0000	0.0000	-	-
HIGH STD		34712.7	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 34.7 x + -29.6

Al 308.215 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		154.985	0.0000	0.0000	-	-
HIGH STD		47320.1	20000.0	20000.0	0.0020	0.0

Curve Type: Linear Equation: y = 2.4 x + 155.0

As 188.980 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		0.9639	0.0000	0.0000	-	-
HIGH STD		253.858	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.3 x + 1.0

B 249.678 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-66.9372	0.0000	0.0000	-	-
HIGH STD		6518.28	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 6.6 x + -66.9

Ba 389.178 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-50.0591	0.0000	0.0000	-	-
HIGH STD		9515.48	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 9.6 x + -50.1

Be 313.042 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-183.892	0.0000	0.0000	-	-
HIGH STD		813988	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 814.2 x + -183.9

Ca 370.602 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		27.48	0.0000	0.0000	-	-
HIGH STD		41761	20000	20000	-0.0020	0.0

Curve Type: Linear Equation: y = 2.1 x + 27.5

Cd 226.502 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		5.8370	0.0000	0.0000	-	-
HIGH STD		15226.1	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 15.2 x + 5.8

Co 228.615 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-7.4622	0.0000	0.0000	-	-
HIGH STD		4639.70	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: y = 4.6 x + -7.5

Cr 267.716 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		19.6972	0.0000	0.0000	-	-
HIGH STD		21578.6	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 21.6 x + 19.7

Cu 324.754 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		224.358	0.0000	0.0000	-	-
HIGH STD		36488.5	1000.00	1000.000	-0.0002	0.0

Curve Type: Linear Equation: y = 36.3 x + 224.4

Fe 271.441 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		17.6447	0.0000	0.0000	-	-
HIGH STD		15032.9	20010.0	20010.0	0.0000	0.0

Curve Type: Linear Equation: y = 0.8 x + 17.6

K 766.491 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		246.391	0.0000	0.0000	-	-
HIGH STD		495110	20000.0	20000.0	-0.0020	0.0

Curve Type: Linear Equation: y = 24.7 x + 246.4

Mg 279.078 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		19.1182	0.0000	0.0000	-	-
HIGH STD		27583.4	20000.0	20000.0	-0.0020	0.0

Curve Type: Linear Equation: y = 1.4 x + 19.1

Mn 257.610 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		29.8844	0.0000	0.0000	-	-
HIGH STD		96705.2	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 96.7 x + 29.9

Mo 202.032 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		2.7160	0.0000	0.0000	-	-
HIGH STD		2080.39	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 2.1 x + 2.7

Na 330.237 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		45.5106	0.0000	0.0000	-	-
HIGH STD		537.041	20000.0	20000.0	0.0000	0.0

Curve Type: Linear Equation: y = 0.0 x + 45.5

Ni 231.604 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-1.5671	0.0000	0.0000	-	-
HIGH STD		1284.54	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 1.3 x + -1.6

Pb 220.353 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		6.1187	0.0000	0.0000	-	-
HIGH STD		526.630	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: y = 0.5 x + 6.1

Sb 206.834 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		5.7220	0.0000	0.0000	-	-
HIGH STD		419.132	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.4 x + 5.7

Se 196.026 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-1.1567	0.0000	0.0000	-	-
HIGH STD		180.348	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: y = 0.2 x + -1.2

Si 288.158 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		337.123	0.0000	0.0000	-	-
HIGH STD		47544.8	10000.0	10000.0	0.0000	0.0

Curve Type: Linear Equation: y = 4.7 x + 337.1

Sn 189.925 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-0.2066	0.0000	0.0000	-	-
HIGH STD		297.137	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.3 x + -0.2

Sr 216.596 Calibration (ppb) 12/15/2018, 9:20:27 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		5.5509	0.0000	0.0000	-	-
HIGH STD		3829.26	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 3.8 x + 5.6

Ti 334.941 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-36.4787	0.0000	0.0000	-	-
HIGH STD		109733	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 109.8 x + -36.5

Tl 190.794 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-4.3507	0.0000	0.0000	-	-
HIGH STD		271.099	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.3 x + -4.4

V 292.401 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-2.2318	0.0000	0.0000	-	-
HIGH STD		13100.2	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 13.1 x + -2.2

Zn 206.200 Calibration (ppb) **12/15/2018, 9:20:27 AM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		0.5285	0.0000	0.0000	-	-
HIGH STD		1125.47	2000.00	2000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.6 x + 0.5

Lab Control Sample (LCS) **12/15/2018, 9:25:07 AM** **Rack S, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	992.811	993.472	989.710
Al 308.215	19933.1	19930.0	19924.3
As 188.980	995.040	1011.72	1009.70
B 249.678	1000.63	1002.11	1001.82
Ba 389.178	996.599	995.725	994.815
Be 313.042	993.854	994.374	993.634
Ca 370.602	19971	19967	19908
Cd 226.502	998.227	997.022	996.083
Co 228.615	992.270	995.389	998.609
Cr 267.716	997.323	996.557	995.449
Cu 324.754	994.409	996.597	988.612
Fe 271.441	19890.2	19907.1	19887.5
K 766.491	19907.0	19883.9	19895.0
Mg 279.078	19919.2	19938.8	19919.5
Mn 257.610	997.405	998.757	996.823
Mo 202.032	996.500	1002.96	998.376
Na 330.237	20104.4	20438.0	20059.6
Ni 231.604	1005.57	1001.11	998.546

Label	Replicates Concentration		
Pb 220.353	996.072	1009.88	1004.13
Sb 206.834	997.306	1013.95	1020.82
Se 196.026	1007.38	988.543	993.891
Si 288.158	9923.13	9927.42	9930.59
Sn 189.925	1001.66	1007.23	1008.19
Sr 216.596	1004.62	1002.15	1001.57
Ti 334.941	999.612	999.651	998.841
Tl 190.794	983.233	1007.51	994.566
V 292.401	1003.84	1002.95	1001.14
Zn 206.200	2007.31	2008.14	1995.62

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	991.998	ppb	2.0084	0.2	34429.1	99.19978
Al 308.215	19929.2	ppb	4.4373	0.0	47197.6	99.64580
As 188.980	1005.49	ppb	9.1041	0.9	255.009	100.54877
B 249.678	1001.52	ppb	0.7857	0.1	6508.47	100.15190
Ba 389.178	995.713	ppb	0.8922	0.1	9503.96	99.57130
Be 313.042	993.954	ppb	0.3800	0.0	809025	99.39543
Ca 370.602	19949	ppb	34.82	0.2	41662	99.74293
Cd 226.502	997.111	ppb	1.0751	0.1	15197.3	99.71105
Co 228.615	995.423	ppb	3.1694	0.3	4617.78	99.54225
Cr 267.716	996.443	ppb	0.9421	0.1	21505.0	99.64430
Cu 324.754	993.206	ppb	4.1266	0.4	36259.2	99.32060
Fe 271.441	19894.9	ppb	10.6237	0.1	15008.5	99.42480
K 766.491	19895.3	ppb	11.5443	0.1	492519	99.47642
Mg 279.078	19925.8	ppb	11.2763	0.1	27466.8	99.62908
Mn 257.610	997.662	ppb	0.9925	0.1	96604.5	99.76618
Mo 202.032	999.279	ppb	3.3238	0.3	2078.39	99.92795
Na 330.237	20200.7	ppb	206.726	1.0	534.325	101.00341
Ni 231.604	1001.74	ppb	3.5538	0.4	1285.76	100.17409
Pb 220.353	1003.36	ppb	6.9339	0.7	527.648	100.33585
Sb 206.834	1010.69	ppb	12.0890	1.2	419.316	101.06913
Se 196.026	996.604	ppb	9.7060	1.0	179.884	99.66042
Si 288.158	9927.04	ppb	3.7463	0.0	47469.5	99.27045
Sn 189.925	1005.69	ppb	3.5283	0.4	298.832	100.56920
Sr 216.596	1002.78	ppb	1.6219	0.2	3822.75	100.27770
Ti 334.941	999.368	ppb	0.4567	0.0	109729	99.93681
Tl 190.794	995.103	ppb	12.1473	1.2	270.266	99.51035
V 292.401	1002.64	ppb	1.3744	0.1	13050.7	100.26433
Zn 206.200	2003.69	ppb	6.9995	0.3	1126.71	100.18464

Initial Calib Verif (ICV) **12/15/2018, 9:29:47 AM** **Rack S, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	999.505	1006.30x	989.422
Al 308.215	1014.59	1009.26	1003.97
As 188.980	963.813	955.189	957.846
B 249.678	1017.29	1022.16	1018.34
Ba 389.178	1026.75	1031.46	1028.35
Be 313.042	1016.42x	1016.03x	1014.55x
Ca 370.602	1011	1015	1021
Cd 226.502	1041.98x	1041.22x	1038.39x
Co 228.615	998.964	1000.43	995.764

Label	Replicates Concentration		
Cr 267.716	1018.02	1018.87	1016.49
Cu 324.754	1006.41	1011.80	996.617
Fe 271.441	1044.00	1044.90	1051.22
K 766.491	9756.53	9751.00	9742.04
Mg 279.078	1016.82	1013.31	1009.06
Mn 257.610	1014.18	1015.10	1013.18
Mo 202.032	1016.33x	1015.14x	1013.38x
Na 330.237	10083.9	9848.73	10273.4
Ni 231.604	1017.05	1020.25	1017.48
Pb 220.353	1054.74	1057.02	1049.77
Sb 206.834	1079.70	1069.23	1074.35
Se 196.026	991.700	1008.51	1012.82
Si 288.158	582.369	581.124	579.776
Sn 189.925	4905.05	4924.09	4909.96
Sr 216.596	5012.40x	5012.13x	5002.80
Ti 334.941	1014.40	1015.83	1013.46
Tl 190.794	1003.98	1018.43	1007.63
V 292.401	1030.49	1033.67	1031.16
Zn 206.200	1029.33	1024.56	1030.06

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	998.408xb	ppb	8.4908	0.9	34642.0	99.84082
Al 308.215	1009.27b	ppb	5.3074	0.5	2580.06	100.92726
As 188.980	958.949b	ppb	4.4162	0.5	243.196	95.89494
B 249.678	1019.26b	ppb	2.5635	0.3	6644.02	101.92629
Ba 389.178	1028.85b	ppb	2.3936	0.2	9795.91	102.88548
Be 313.042	1015.67xb	ppb	0.9899	0.1	826700	101.56666
Ca 370.602	1015b	ppb	5.028	0.5	2195	101.54322
Cd 226.502	1040.53xb	ppb	1.8891	0.2	15843.5	104.05302
Co 228.615	998.386b	ppb	2.3861	0.2	4629.91	99.83862
Cr 267.716	1017.79b	ppb	1.2041	0.1	21963.0	101.77919
Cu 324.754	1004.94b	ppb	7.6978	0.8	36680.9	100.49440
Fe 271.441	1046.70b	ppb	3.9353	0.4	865.301	104.67043
K 766.491	9749.86b	ppb	7.3136	0.1	241489	97.49856
Mg 279.078	1013.06b	ppb	3.8850	0.4	1404.52	101.30640
Mn 257.610	1014.15b	ppb	0.9594	0.1	98098.6	101.41518
Mo 202.032	1014.95xb	ppb	1.4852	0.1	2111.22	101.49489
Na 330.237	10068.7b	ppb	212.735	2.1	289.363	100.68667
Ni 231.604	1018.26b	ppb	1.7366	0.2	1307.00	101.82584
Pb 220.353	1053.84b	ppb	3.7041	0.4	554.048	105.38416
Sb 206.834	1074.43b	ppb	5.2367	0.5	445.753	107.44267Q
Se 196.026	1004.34b	ppb	11.1604	1.1	181.232	100.43436
Si 288.158	581.089b	ppb	1.2969	0.2	3685.61	116.21788Q
Sn 189.925	4913.03b	ppb	9.8843	0.2	1460.65	98.26065
Sr 216.596	5009.11xb	ppb	5.4664	0.1	19137.1	100.18215
Ti 334.941	1014.56b	ppb	1.1912	0.1	111335	101.45646
Tl 190.794	1010.01b	ppb	7.5096	0.7	275.160	101.00147
V 292.401	1031.77b	ppb	1.6783	0.2	13426.9	103.17722
Zn 206.200	1027.98b	ppb	2.9882	0.3	578.148	102.79816

Initial Calib Blank (ICB) **12/15/2018, 9:34:28 AM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1920	-0.1366u	0.1677
Al 308.215	-2.4135u	-4.7328u	-6.5673u
As 188.980	1.3261	3.8942	10.2885
B 249.678	7.9789	7.5439	6.7562
Ba 389.178	-0.5272u	-0.4061u	0.2902
Be 313.042	0.0179	0.0190	0.0294
Ca 370.602	-2.353u	-3.530u	0.2031
Cd 226.502	0.2879	0.2383	-0.1574u
Co 228.615	-0.6112u	-1.3198u	-0.6029u
Cr 267.716	-0.2814u	0.0177	0.2486
Cu 324.754	-0.4079u	-0.0110u	-0.3979u
Fe 271.441	-10.7897u	-4.6484u	12.1428
K 766.491	0.3356	0.0734	0.0686
Mg 279.078	6.3299	2.5114	-1.0062u
Mn 257.610	-0.0907u	-0.1091u	-0.0575u
Mo 202.032	0.3274	1.0114	1.2874
Na 330.237	-381.346u	-25.3223u	-222.886u
Ni 231.604	-0.7008u	2.1560	-0.5603u
Pb 220.353	-3.8509u	-3.2952u	2.8356
Sb 206.834	1.3433	-6.8464u	0.8734
Se 196.026	0.6649	7.7520	-7.6216u
Si 288.158	2.8803	1.1586	2.1584
Sn 189.925	-2.4026u	-2.1564u	-3.7395u
Sr 216.596	-1.3520u	0.3384	-0.3231u
Ti 334.941	0.3611	0.1432	0.2394
Tl 190.794	-0.8432u	-5.2834u	3.6115
V 292.401	-0.3224u	-0.4234u	-0.0860u
Zn 206.200	0.5456	-0.7859u	-0.6089u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0744	ppb	0.1831	246.3	-27.0405	0.07437
Al 308.215	-4.5712	ppb	2.0816	45.5	144.212	-4.57119
As 188.980	5.1696	ppb	4.6153	89.3	2.2712	5.16961
B 249.678	7.4263	ppb	0.6198	8.3	-18.0307	7.42634
Ba 389.178	-0.2144	ppb	0.4411	205.8	-52.1056	-0.21437
Be 313.042	0.0221	ppb	0.0063	28.7	-165.968	0.02210
Ca 370.602	-1.893	ppb	1.909	100.8	23.54	-1.89322
Cd 226.502	0.1229	ppb	0.2441	198.6	7.7057	0.12292
Co 228.615	-0.8446	ppb	0.4115	48.7	-11.3960	-0.84464
Cr 267.716	-0.0050	ppb	0.2657	5274.2	19.5882	-0.00504
Cu 324.754	-0.2723	ppb	0.2263	83.1	214.505	-0.27227
Fe 271.441	-1.0984	ppb	11.8713	1080.8	16.7626	-1.09841
K 766.491	0.1592	ppb	0.1528	96.0	250.331	0.15923
Mg 279.078	2.6117	ppb	3.6691	140.5	22.7204	2.61171
Mn 257.610	-0.0858	ppb	0.0261	30.5	21.6075	-0.08577
Mo 202.032	0.8754	ppb	0.4942	56.5	4.5350	0.87542
Na 330.237	-209.851	ppb	178.370	85.0	40.3532	-209.85136
Ni 231.604	0.2983	ppb	1.6103	539.8	-1.1825	0.29830
Pb 220.353	-1.4368	ppb	3.7105	258.2	5.3709	-1.43682
Sb 206.834	-1.5432	ppb	4.5987	298.0	5.0759	-1.54325
Se 196.026	0.2651	ppb	7.6946	2902.7	-1.1086	0.26508
Si 288.158	2.0658	ppb	0.8646	41.9	347.173	2.06576

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	-2.7662	ppb	0.8519	30.8	-1.0292	-2.76619
Sr 216.596	-0.4456	ppb	0.8518	191.2	3.8358	-0.44556
Ti 334.941	0.2479	ppb	0.1092	44.1	-9.2545	0.24790
Tl 190.794	-0.8384	ppb	4.4475	530.5	-4.5848	-0.83838
V 292.401	-0.2773	ppb	0.1732	62.5	-5.9284	-0.27728
Zn 206.200	-0.2830	ppb	0.7231	255.5	0.3694	-0.28304

CRI (CRI) **12/15/2018, 9:39:09 AM** **Rack S, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.3477	11.4001	11.4864
Al 308.215	222.019	221.570	224.552
As 188.980	22.0532	24.9069	23.2284
B 249.678	116.382	115.899	117.903
Ba 389.178	12.0802	11.4653	12.2204
Be 313.042	4.6528	4.6725	4.6506
Ca 370.602	582.3	588.3	585.5
Cd 226.502	5.8151	5.6167	5.9871
Co 228.615	11.7580	10.6326	10.8085
Cr 267.716	11.7479	11.3692	11.2200
Cu 324.754	22.7201	23.6091	22.6897
Fe 271.441	61.6629	53.1851	50.7075
K 766.491	1098.12	1098.24	1096.28
Mg 279.078	571.682	579.233	573.602
Mn 257.610	12.0588	12.1237	11.9545
Mo 202.032	11.4177	11.0285	10.2631
Na 330.237	1194.12	913.840	1151.77
Ni 231.604	43.3687	45.8546	45.1952
Pb 220.353	8.9985	10.9543	10.5667
Sb 206.834	27.0992	23.5811	21.0956
Se 196.026	20.2327	16.4627	14.8723
Si 288.158	119.113	120.804	117.472
Sn 189.925	63.1941	64.4571	55.9143
Sr 216.596	11.8273	12.6875	11.8411
Ti 334.941	11.7301	11.6389	11.5110
Tl 190.794	20.7351	26.7767	33.2076
V 292.401	11.5978	11.7023	11.7261
Zn 206.200	20.9773	22.6858	20.1334

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	11.4114	ppb	0.0700	0.6	366.800	114.11388
Al 308.215	222.714	ppb	1.6078	0.7	680.712	111.35694
As 188.980	23.3962	ppb	1.4342	6.1	6.8776	116.98087
B 249.678	116.728	ppb	1.0461	0.9	701.688	116.72802
Ba 389.178	11.9220	ppb	0.4016	3.4	64.6361	119.21968
Be 313.042	4.6586	ppb	0.0121	0.3	3608.55	116.46600
Ca 370.602	585.4	ppb	2.992	0.5	1249	117.07668
Cd 226.502	5.8063	ppb	0.1854	3.2	94.2570	116.12548
Co 228.615	11.0663	ppb	0.6054	5.5	43.9401	110.66338
Cr 267.716	11.4457	ppb	0.2721	2.4	266.479	114.45697
Cu 324.754	23.0063	ppb	0.5223	2.3	1058.82	115.03136
Fe 271.441	55.1852	ppb	5.7450	10.4	59.7386	110.37030
K 766.491	1097.55	ppb	1.1009	0.1	27403.2	109.75472

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	574.839	ppb	3.9245	0.7	811.200	114.96774
Mn 257.610	12.0457	ppb	0.0854	0.7	1197.19	120.45678R
Mo 202.032	10.9031	ppb	0.5874	5.4	25.3658	109.03080
Na 330.237	1086.57	ppb	151.084	13.9	72.1454	108.65749
Ni 231.604	44.8062	ppb	1.2878	2.9	56.0472	112.01546
Pb 220.353	10.1732	ppb	1.0356	10.2	11.4050	101.73190
Sb 206.834	23.9253	ppb	3.0166	12.6	15.5643	119.62636
Se 196.026	17.1893	ppb	2.7531	16.0	1.9645	85.94627
Si 288.158	119.129	ppb	1.6663	1.4	906.748	119.12941
Sn 189.925	61.1885	ppb	4.6110	7.5	17.9875	122.37704R
Sr 216.596	12.1186	ppb	0.4927	4.1	51.3587	121.18629R
Ti 334.941	11.6267	ppb	0.1101	0.9	1241.63	116.26664
Tl 190.794	26.9065	ppb	6.2373	23.2	3.0731	107.62587
V 292.401	11.6754	ppb	0.0682	0.6	149.732	116.75398
Zn 206.200	21.2655	ppb	1.3004	6.1	12.4824	106.32752

Interf Check A (ICSA) **12/15/2018, 9:43:51 AM** **Rack S, Tube 5**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.6807u	0.4052u	0.1286u
Al 308.215	538042	536716	537653
As 188.980	18.2960	21.2985	-3.3953u
B 249.678	13.4752u	14.0727u	12.9945u
Ba 389.178	-0.8554	-1.6327	-1.6135
Be 313.042	-0.1147u	-0.1096	-0.1180u
Ca 370.602	512113	513181	513560
Cd 226.502	0.5653	1.0095	0.4318
Co 228.615	-2.1336u	-1.6117u	-0.5148
Cr 267.716	0.2042	0.1701	-0.3056
Cu 324.754	-0.1697	0.6542	0.1261
Fe 271.441	197644	197565	197689
K 766.491	2.2242	2.0442	3.8116
Mg 279.078	532897	532776	532349
Mn 257.610	-2.5834	-2.6232	-2.5755
Mo 202.032	2.9703	0.0760u	1.0216u
Na 330.237	-597.429u	-249.274u	-41.0477u
Ni 231.604	3.6573	0.6542	3.5503
Pb 220.353	8.1865u	13.0776	8.3287u
Sb 206.834	14.1817	-3.5598	-0.7269
Se 196.026	10.5567	-4.9707u	3.7238
Si 288.158	21.5325	22.3811	19.5961
Sn 189.925	-4.1826u	4.9734	-3.2025u
Sr 216.596	7.9026	8.3766	7.0132
Ti 334.941	2.9954	3.1519	2.9608
Tl 190.794	-9.5923u	-14.9910u	-11.5128u
V 292.401	0.5947	1.6262	1.4557
Zn 206.200	10.9051	3.6630u	12.1571

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.4048	ppb	0.2761	68.2	-59.6318	0.40483
Al 308.215	537471	ppb	681.516	0.1	1267656	-
As 188.980	12.0664	ppb	13.4741	111.7	4.4139	12.06641
B 249.678	13.5141	ppb	0.5402	4.0	-173.897	13.51415

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	-1.3672	ppb	0.4433	32.4	551.396	-1.36720
Be 313.042	-0.1141	ppb	0.0042	3.7	-186.639	-0.11412
Ca 370.602	512952	ppb	750.3	0.1	1069991	-
Cd 226.502	0.6689	ppb	0.3025	45.2	187.286	0.66890
Co 228.615	-1.4200	ppb	0.8263	58.2	-8.4005	-1.42002
Cr 267.716	0.0229	ppb	0.2850	1244.9	43.8662	0.02289
Cu 324.754	0.2035	ppb	0.4174	205.1	274.588	0.20354
Fe 271.441	197632	ppb	62.9701	0.0	148319	-
K 766.491	2.6933	ppb	0.9726	36.1	313.033	2.69335
Mg 279.078	532674	ppb	287.473	0.1	734053	-
Mn 257.610	-2.5940	ppb	0.0256	1.0	2287.56	-2.59405
Mo 202.032	1.3560	ppb	1.4759	108.8	2.6664	1.35598
Na 330.237	-295.917	ppb	281.108	95.0	20.7722	-295.91684
Ni 231.604	2.6206	ppb	1.7038	65.0	1.9015	2.62058
Pb 220.353	9.8643	ppb	2.7837	28.2	6.0065	9.86426
Sb 206.834	3.2983	ppb	9.5312	289.0	9.0450	3.29833
Se 196.026	3.1033	ppb	7.7822	250.8	0.0168	3.10327
Si 288.158	21.1699	ppb	1.4275	6.7	438.624	21.16987
Sn 189.925	-0.8039	ppb	5.0272	625.4	-0.4458	-0.80387
Sr 216.596	7.7641	ppb	0.6922	8.9	80.4132	7.76411
Ti 334.941	3.0360	ppb	0.1018	3.4	2059.55	3.03603
Tl 190.794	-12.0320	ppb	2.7366	22.7	-15.7972	-12.03203
V 292.401	1.2255	ppb	0.5529	45.1	56.4122	1.22554
Zn 206.200	8.9084	ppb	4.5856	51.5	2.8781	8.90837

Interf Check AB (ICSAB) **12/15/2018, 9:48:33 AM** **Rack S, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	224.058	226.910	227.500
Al 308.215	550093	550418	550868
As 188.980	113.992	94.4157	92.8781
B 249.678	15.0119u	14.2708u	14.7084u
Ba 389.178	530.404	531.093	530.154
Be 313.042	528.642	528.351	528.837
Ca 370.602	525857	525272	525727
Cd 226.502	1011.72	1011.01	1009.29
Co 228.615	500.986	502.358	504.753
Cr 267.716	513.080	512.488	513.087
Cu 324.754	555.161	562.777	559.735
Fe 271.441	201952	201758	202018
K 766.491	2.3796	2.5089	1.7499
Mg 279.078	545005	544441	544362
Mn 257.610	518.710	518.836	519.029
Mo 202.032	1072.41	1074.13	1071.93
Na 330.237	-773.052u	-419.942u	-461.630u
Ni 231.604	1005.83	1000.08	997.294
Pb 220.353	58.6560	65.8731	50.9537
Sb 206.834	712.404	711.428	701.578
Se 196.026	59.8461	39.2750	47.1257
Si 288.158	-23.1664	-22.5601	-23.0864
Sn 189.925	1032.89	1021.85	1039.70
Sr 216.596	9.8374	8.1959	11.9693
Ti 334.941	3.1759	3.2494	2.9797

Label	Replicates Concentration		
Tl 190.794	93.3345	99.0811	93.6480
V 292.401	526.614	526.616	526.633
Zn 206.200	990.673	983.599	985.438

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	226.156	ppb	1.8408	0.8	7784.33	113.07801
Al 308.215	550460	ppb	389.459	0.1	1298319	110.09191
As 188.980	100.429	ppb	11.7716	11.7	26.5556	100.42875
B 249.678	14.6637	ppb	0.3726	2.5	-170.656	-
Ba 389.178	530.550	ppb	0.4864	0.1	5656.10	106.11000
Be 313.042	528.610	ppb	0.2447	0.0	430229	105.72197
Ca 370.602	525619	ppb	307.0	0.1	1096427	105.12373
Cd 226.502	1010.67	ppb	1.2499	0.1	15563.6	101.06734
Co 228.615	502.699	ppb	1.9064	0.4	2323.17	100.53972
Cr 267.716	512.885	ppb	0.3439	0.1	11101.0	102.57704
Cu 324.754	559.224	ppb	3.8337	0.7	20565.6	111.84485
Fe 271.441	201909	ppb	134.756	0.1	151560	100.95471
K 766.491	2.2128	ppb	0.4061	18.4	301.143	-
Mg 279.078	544603	ppb	350.705	0.1	750486	108.92059
Mn 257.610	518.858	ppb	0.1608	0.0	52756.0	103.77167
Mo 202.032	1072.83	ppb	1.1572	0.1	2228.66	107.28255
Na 330.237	-551.542	ppb	192.963	35.0	11.6975	-
Ni 231.604	1001.07	ppb	4.3538	0.4	1285.50	100.10696
Pb 220.353	58.4942	ppb	7.4610	12.8	30.8445	116.98847
Sb 206.834	708.470	ppb	5.9884	0.8	293.766	118.07833
Se 196.026	48.7489	ppb	10.3812	21.3	8.3624	97.49786
Si 288.158	-22.9376	ppb	0.3294	1.4	464.328	-
Sn 189.925	1031.48	ppb	9.0093	0.9	306.497	103.14793
Sr 216.596	10.0009	ppb	1.8920	18.9	67.3439	-
Ti 334.941	3.1350	ppb	0.1394	4.4	2110.44	-
Tl 190.794	95.3546	ppb	3.2311	3.4	13.5126	95.35457
V 292.401	526.621	ppb	0.0102	0.0	6853.00	105.32417
Zn 206.200	986.570	ppb	3.6700	0.4	552.435	98.65700

LRA1 (CCV) **12/15/2018, 9:53:16 AM** **Rack S, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0461	-0.1255u	0.0486
Al 308.215	55.1491	55.3105	57.9383
As 188.980	10288.7x	10225.4x	10247.3x
B 249.678	4909.26	4915.93	4922.64
Ba 389.178	0.9263	0.4486	-0.3581u
Be 313.042	0.0545	0.0610	0.0557
Ca 370.602	79.52	75.17	78.68
Cd 226.502	-0.1633u	0.2053	0.2299
Co 228.615	36.4081	37.5779	36.1160
Cr 267.716	-0.0659u	-0.3428u	-0.1831u
Cu 324.754	0.7120	0.5364	0.4227
Fe 271.441	33.8358	26.9798	32.6102
K 766.491	39048.4x	39001.4x	39065.6x
Mg 279.078	52.6038	48.2969	49.6887
Mn 257.610	115.288	115.302	114.811
Mo 202.032	-0.1615u	0.5610	0.7176

Label	Replicates Concentration		
Na 330.237	104902x	105631x	106259x
Ni 231.604	35.9283	34.4417	36.4864
Pb 220.353	20325.0x	20322.7x	20257.1x
Sb 206.834	0.0595	1.8270	0.2795
Se 196.026	16.1443	0.2102	-4.5873u
Si 288.158	34.9913	32.7786	34.7612
Sn 189.925	-2.0344u	3.5385	1.2067
Sr 216.596	0.5014	0.7295	0.0184u
Ti 334.941	82.4742	82.2280	82.1802
Tl 190.794	3.2350	0.5788	4.2182
V 292.401	0.3096	0.1281	0.5545
Zn 206.200	3.0294	1.9072	0.4458

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0102b	ppb	0.0998	974.0	-29.8533	-
Al 308.215	56.1326b	ppb	1.5658	2.8	287.295	-
As 188.980	10253.8xb	ppb	32.1532	0.3	2594.09	102.53804
B 249.678	4915.94b	ppb	6.6873	0.1	32305.6	98.31886
Ba 389.178	0.3389b	ppb	0.6492	191.5	-46.7517	-
Be 313.042	0.0571b	ppb	0.0034	6.0	-146.212	-
Ca 370.602	77.79b	ppb	2.309	3.0	193.9	-
Cd 226.502	0.0907b	ppb	0.2202	243.0	7.1291	-
Co 228.615	36.7007b	ppb	0.7736	2.1	163.821	-
Cr 267.716	-0.1972b	ppb	0.1390	70.5	16.5314	-
Cu 324.754	0.5570b	ppb	0.1458	26.2	244.578	-
Fe 271.441	31.1420b	ppb	3.6562	11.7	43.0790	-
K 766.491	39038.5xb	ppb	33.2292	0.1	966182	97.59615
Mg 279.078	50.1965b	ppb	2.1979	4.4	87.0838	-
Mn 257.610	115.134b	ppb	0.2800	0.2	11162.1	-
Mo 202.032	0.3724b	ppb	0.4689	125.9	3.4891	-
Na 330.237	105597xb	ppb	678.894	0.6	2640.63	105.59705
Ni 231.604	35.6188b	ppb	1.0569	3.0	44.2047	-
Pb 220.353	20301.6xb	ppb	38.5176	0.2	10573.3	101.50795
Sb 206.834	0.7220b	ppb	0.9633	133.4	6.0148	-
Se 196.026	3.9224b	ppb	10.8529	276.7	-0.4342	-
Si 288.158	34.1770b	ppb	1.2165	3.6	502.724	-
Sn 189.925	0.9036b	ppb	2.7988	309.7	0.0746	-
Sr 216.596	0.4165b	ppb	0.3631	87.2	6.8334	-
Ti 334.941	82.2942b	ppb	0.1578	0.2	8994.04	-
Tl 190.794	2.6773b	ppb	1.8827	70.3	-3.5264	-
V 292.401	0.3308b	ppb	0.2140	64.7	2.1165	-
Zn 206.200	1.7941b	ppb	1.2955	72.2	1.5372	-

rinse (Samp) **12/15/2018, 9:58:00 AM** **Rack S, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4273u	-0.1239u	0.7854
Al 308.215	6.3598	7.2788	5.3578
As 188.980	1.0209	-1.3753u	9.2227
B 249.678	23.6441	22.2317	20.2745
Ba 389.178	0.0458	-1.4507u	-0.5505u
Be 313.042	0.0171	0.0055	0.0092
Ca 370.602	5.818	15.06	10.32

Label	Replicates Concentration		
Cd 226.502	0.0312	0.0594	-0.1342u
Co 228.615	-0.7477u	-0.7534u	-1.0799u
Cr 267.716	0.3764	-0.0770u	-0.4894u
Cu 324.754	-0.2319u	-0.4503u	-0.2972u
Fe 271.441	-0.9618u	1.6929	10.7291
K 766.491	2.7896	4.3888	3.2143
Mg 279.078	5.8512	5.2725	7.5557
Mn 257.610	0.2498	0.2345	0.1741
Mo 202.032	-1.9661u	-0.5478u	0.8620
Na 330.237	47.1385	-185.348u	-7.6784u
Ni 231.604	2.0248	0.1683	-1.8008u
Pb 220.353	1.9568	-1.5738u	6.4990
Sb 206.834	-4.4235u	-10.9358u	-3.1793u
Se 196.026	5.9515	2.9745	-3.5173u
Si 288.158	8.7818	4.4345	6.1022
Sn 189.925	1.5464	-0.5382u	-1.4666u
Sr 216.596	-0.1570u	-0.1382u	1.2259
Ti 334.941	0.1402	0.1091	0.1148
Tl 190.794	-2.8787u	5.9772	-5.4069u
V 292.401	0.5102	0.0015	0.2268
Zn 206.200	-0.4696u	-3.1541u	-0.2739u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0780	ppb	0.6311	808.7	-26.9147
Al 308.215	6.3321	ppb	0.9608	15.2	169.925
As 188.980	2.9561	ppb	5.5577	188.0	1.7116
B 249.678	22.0501	ppb	1.6921	7.7	78.2584
Ba 389.178	-0.6518	ppb	0.7534	115.6	-56.2852
Be 313.042	0.0106	ppb	0.0059	56.0	-175.242
Ca 370.602	10.40	ppb	4.623	44.5	49.17
Cd 226.502	-0.0145	ppb	0.1045	719.4	5.6228
Co 228.615	-0.8603	ppb	0.1901	22.1	-11.4571
Cr 267.716	-0.0633	ppb	0.4331	683.9	18.3327
Cu 324.754	-0.3264	ppb	0.1121	34.3	212.515
Fe 271.441	3.8201	ppb	6.1289	160.4	20.4492
K 766.491	3.4642	ppb	0.8284	23.9	332.106
Mg 279.078	6.2265	ppb	1.1870	19.1	27.6966
Mn 257.610	0.2195	ppb	0.0400	18.2	51.1413
Mo 202.032	-0.5506	ppb	1.4141	256.8	1.5719
Na 330.237	-48.6292	ppb	121.533	249.9	44.3154
Ni 231.604	0.1308	ppb	1.9130	1462.8	-1.3978
Pb 220.353	2.2940	ppb	4.0469	176.4	7.3131
Sb 206.834	-6.1795	ppb	4.1658	67.4	3.1690
Se 196.026	1.8029	ppb	4.8419	268.6	-0.8294
Si 288.158	6.4395	ppb	2.1932	34.1	367.639
Sn 189.925	-0.1528	ppb	1.5430	1009.9	-0.2521
Sr 216.596	0.3103	ppb	0.7930	255.6	6.7463
Ti 334.941	0.1214	ppb	0.0166	13.6	-23.1347
Tl 190.794	-0.7695	ppb	5.9780	776.9	-4.5643
V 292.401	0.2462	ppb	0.2549	103.6	1.0163
Zn 206.200	-1.2992	ppb	1.6094	123.9	-0.2023

Cont Calib Verif (CCV) **12/15/2018, 10:02:44 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	489.795	487.548	491.944
Al 308.215	9850.29	9839.20	9849.32
As 188.980	498.925	495.387	506.641
B 249.678	502.339	503.459	502.849
Ba 389.178	494.792	493.730	494.307
Be 313.042	507.983	507.366	507.406
Ca 370.602	9989	9991	9977
Cd 226.502	497.439	499.542	498.141
Co 228.615	499.328	501.428	498.269
Cr 267.716	496.290	495.811	496.804
Cu 324.754	500.319	494.243	500.216
Fe 271.441	9968.00	9962.15	9934.00
K 766.491	9656.41	9628.83	9648.59
Mg 279.078	9943.72	9940.62	9957.79
Mn 257.610	500.025	500.909	499.969
Mo 202.032	496.902	494.630	493.496
Na 330.237	9693.06	9932.19	9690.96
Ni 231.604	500.861	498.633	500.343
Pb 220.353	503.044	496.773	511.962
Sb 206.834	501.251	506.691	498.386
Se 196.026	504.136	496.161	493.856
Si 288.158	4937.37	4939.58	4937.30
Sn 189.925	496.597	494.966	496.968
Sr 216.596	503.771	503.357	505.081
Ti 334.941	500.740	500.568	500.483
Tl 190.794	492.447	496.760	498.680
V 292.401	502.159	501.142	500.636
Zn 206.200	1015.92	1010.25	998.010

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	489.762	ppb	2.1981	0.4	16983.0	97.95240
Al 308.215	9846.27	ppb	6.1441	0.1	23397.2	98.46272
As 188.980	500.318	ppb	5.7549	1.2	127.374	100.06358
B 249.678	502.882	ppb	0.5611	0.1	3234.75	100.57648
Ba 389.178	494.276	ppb	0.5316	0.1	4692.67	98.85520
Be 313.042	507.585	ppb	0.3453	0.1	413058	101.51702
Ca 370.602	9986	ppb	7.846	0.1	20869	99.85644
Cd 226.502	498.374	ppb	1.0704	0.2	7598.82	99.67479
Co 228.615	499.675	ppb	1.6075	0.3	2314.33	99.93500
Cr 267.716	496.302	ppb	0.4967	0.1	10720.9	99.26035
Cu 324.754	498.259	ppb	3.4785	0.7	18301.8	99.65187
Fe 271.441	9954.72	ppb	18.1819	0.2	7518.62	99.49743
K 766.491	9644.61	ppb	14.2107	0.1	238885	96.44612
Mg 279.078	9947.38	ppb	9.1486	0.1	13721.6	99.47377
Mn 257.610	500.301	ppb	0.5274	0.1	48459.3	100.06020
Mo 202.032	495.009	ppb	1.7341	0.4	1030.93	99.00186
Na 330.237	9772.07	ppb	138.674	1.4	281.832	97.72073
Ni 231.604	499.945	ppb	1.1659	0.2	640.904	99.98906
Pb 220.353	503.926	ppb	7.6326	1.5	268.054	100.78523
Sb 206.834	502.109	ppb	4.2187	0.8	211.211	100.42189
Se 196.026	498.051	ppb	5.3943	1.1	89.3181	99.61015
Si 288.158	4938.08	ppb	1.2978	0.0	23782.5	98.76169

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	496.177	ppb	1.0651	0.2	147.330	99.23539
Sr 216.596	504.070	ppb	0.9000	0.2	1924.47	100.81395
Ti 334.941	500.597	ppb	0.1308	0.0	54946.3	100.11946
Tl 190.794	495.962	ppb	3.1920	0.6	132.528	99.19243
V 292.401	501.312	ppb	0.7753	0.2	6524.43	100.26243
Zn 206.200	1008.06	ppb	9.1520	0.9	567.116	100.80596

Cont Calib Blank (CCB) **12/15/2018, 10:07:27 AM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3545	-0.2603u	0.6778
Al 308.215	-5.5410u	-5.6307u	-1.4860u
As 188.980	-0.8765u	1.5026	-0.8341u
B 249.678	7.6352	7.4390	6.6856
Ba 389.178	-0.1776u	-0.0882u	0.1153
Be 313.042	0.0061	0.0145	0.0111
Ca 370.602	-7.068u	1.707	-7.735u
Cd 226.502	0.2489	-0.0376u	-0.0833u
Co 228.615	-1.3696u	-0.1531u	-0.8861u
Cr 267.716	-0.0387u	-0.1275u	-0.1671u
Cu 324.754	0.3309	-0.0344u	0.2423
Fe 271.441	-2.2620u	4.4657	-3.0943u
K 766.491	-0.3291u	0.1975	0.2224
Mg 279.078	2.9884	0.3405	3.0712
Mn 257.610	-0.0973u	-0.0539u	-0.0655u
Mo 202.032	0.3869	-0.7951u	-0.2038u
Na 330.237	-398.825u	-32.0179u	17.3947
Ni 231.604	0.2932	-1.6106u	-0.4760u
Pb 220.353	4.1293	5.5893	3.3357
Sb 206.834	1.7899	1.9141	-5.0067u
Se 196.026	8.0270	24.8831	1.6492
Si 288.158	2.1276	1.5770	2.2383
Sn 189.925	2.4506	-0.1453u	0.5037
Sr 216.596	0.2501	0.1967	0.1065
Ti 334.941	0.0376	0.1034	0.0106
Tl 190.794	4.6985	11.8692	2.7325
V 292.401	0.5648	0.2050	0.0612
Zn 206.200	1.3508	-1.5615u	-1.8492u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2574	ppb	0.4765	185.2	-20.6863	0.25736
Al 308.215	-4.2192	ppb	2.3675	56.1	145.044	-4.21922
As 188.980	-0.0693	ppb	1.3615	1964.2	0.9464	-0.06932
B 249.678	7.2533	ppb	0.5013	6.9	-19.1745	7.25325
Ba 389.178	-0.0502	ppb	0.1501	299.2	-50.5354	-0.05016
Be 313.042	0.0106	ppb	0.0042	39.9	-175.260	0.01059
Ca 370.602	-4.365	ppb	5.270	120.7	18.37	-4.36549
Cd 226.502	0.0426	ppb	0.1801	422.3	6.4870	0.04264
Co 228.615	-0.8029	ppb	0.6125	76.3	-11.1940	-0.80295
Cr 267.716	-0.1111	ppb	0.0657	59.2	17.3010	-0.11111
Cu 324.754	0.1796	ppb	0.1906	106.1	230.868	0.17957
Fe 271.441	-0.2969	ppb	4.1454	1396.3	17.3833	-0.29689
K 766.491	0.0303	ppb	0.3115	1028.2	247.140	0.03029

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	2.1334	ppb	1.5532	72.8	22.0608	2.13338
Mn 257.610	-0.0723	ppb	0.0224	31.1	22.9134	-0.07226
Mo 202.032	-0.2040	ppb	0.5910	289.7	2.2921	-0.20398
Na 330.237	-137.816	ppb	227.386	165.0	42.1223	-137.81580
Ni 231.604	-0.5978	ppb	0.9577	160.2	-2.3353	-0.59781
Pb 220.353	4.3514	ppb	1.1431	26.3	8.3839	4.35141
Sb 206.834	-0.4342	ppb	3.9603	912.1	5.5431	-0.43422
Se 196.026	11.5197	ppb	12.0043	104.2	0.9342	11.51975Z
Si 288.158	1.9810	ppb	0.3542	17.9	346.787	1.98097
Sn 189.925	0.9363	ppb	1.3509	144.3	0.0718	0.93632
Sr 216.596	0.1844	ppb	0.0726	39.4	6.2559	0.18443
Ti 334.941	0.0505	ppb	0.0477	94.5	-30.9205	0.05054
Tl 190.794	6.4334	ppb	4.8091	74.8	-2.5797	6.43338
V 292.401	0.2770	ppb	0.2594	93.6	1.4013	0.27702
Zn 206.200	-0.6866	ppb	1.7703	257.8	0.1423	-0.68664

FE 1000 (Samp) **12/15/2018, 10:12:07 AM** **Rack 1, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	3.1196u	2.2071u	2.5608u
Al 308.215	-24.9976u	-23.3495u	-29.9447u
As 188.980	-5.1658	1.1237	2.9178
B 249.678	60.4433u	62.2748u	58.5176u
Ba 389.178	-0.4173	-0.1022	1.4830
Be 313.042	0.0249	0.0116u	0.0158
Ca 370.602	8.545u	10.54u	18.15u
Cd 226.502	1.7484	1.3206	2.7309
Co 228.615	-2.5724	-3.4066	-2.1249
Cr 267.716	-2.5945	-2.7779	-2.8134
Cu 324.754	-1.9666	-3.4268	-0.9899
Fe 271.441	983906x	986065x	987414x
K 766.491	1.4787	1.7065	1.6937
Mg 279.078	40.2680	49.5353	37.4907
Mn 257.610	-8.1551	-8.1597	-7.8756
Mo 202.032	1.9443u	1.8411u	0.9359u
Na 330.237	-849.070u	-328.278u	-545.618u
Ni 231.604	-2.1688u	-0.5449u	0.7719
Pb 220.353	-18.4716u	2.2837	-10.6285u
Sb 206.834	2.5129	1.2951	-4.7429
Se 196.026	1.8708	-30.3086u	-3.9018
Si 288.158	-2.3747u	-2.6917u	-2.0019u
Sn 189.925	1.8615	8.6298	9.7303
Sr 216.596	1.0392	2.2734	1.0674
Ti 334.941	0.0601	0.0668	0.1089
Tl 190.794	4.5133u	-10.0519u	-0.3881u
V 292.401	1.9754	1.4903	0.8927
Zn 206.200	16.8579u	12.7382u	16.1418u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.6292b	ppb	0.4601	17.5	-143.778
Al 308.215	-26.0973b	ppb	3.4323	13.2	130.884
As 188.980	-0.3748b	ppb	4.2450	1132.7	2.8591
B 249.678	60.4119b	ppb	1.8788	3.1	-646.994

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.3212b	ppb	1.0185	317.1	225.975
Be 313.042	0.0174b	ppb	0.0068	39.1	-181.203
Ca 370.602	12.41b	ppb	5.066	40.8	-1999
Cd 226.502	1.9333b	ppb	0.7231	37.4	753.733
Co 228.615	-2.7013b	ppb	0.6505	24.1	7.4677
Cr 267.716	-2.7286b	ppb	0.1175	4.3	66.8149
Cu 324.754	-2.1278b	ppb	1.2264	57.6	360.951
Fe 271.441	985795xb	ppb	1769.70	0.2	739747
K 766.491	1.6263b	ppb	0.1280	7.9	286.630
Mg 279.078	42.4313b	ppb	6.3070	14.9	77.5817
Mn 257.610	-8.0634b	ppb	0.1627	2.0	201.321
Mo 202.032	1.5737b	ppb	0.5548	35.3	-8.3198
Na 330.237	-574.322b	ppb	261.580	45.5	-55.6233
Ni 231.604	-0.6473b	ppb	1.4730	227.6	-2.4060
Pb 220.353	-8.9388b	ppb	10.4803	117.2	6.0733
Sb 206.834	-0.3116b	ppb	3.8856	1246.9	15.4086
Se 196.026	-10.7799b	ppb	17.1569	159.2	-0.0787
Si 288.158	-2.3561uvb	ppb	0.3453	14.7	326.167
Sn 189.925	6.7405b	ppb	4.2610	63.2	1.7970
Sr 216.596	1.4600b	ppb	0.7046	48.3	236.841
Ti 334.941	0.0786b	ppb	0.0265	33.7	-27.2174
Tl 190.794	-1.9756b	ppb	7.4112	375.1	-45.4966
V 292.401	1.4528b	ppb	0.5424	37.3	223.350
Zn 206.200	15.2460b	ppb	2.2011	14.4	-4.1731

X (Samp) **12/15/2018, 10:16:47 AM** **Rack 1, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0436	-0.1510u	-0.2521u
Al 308.215	-0.7944u	-1.1671u	-0.1211u
As 188.980	-1.5811u	-2.2385u	1.5682
B 249.678	4.6329	3.0387	3.0671
Ba 389.178	-0.7578u	0.7221	-0.2496u
Be 313.042	-0.0021u	-0.0036u	0.0018
Ca 370.602	-1.147u	-1.568u	1.281
Cd 226.502	-0.2719u	0.0508	-0.3458u
Co 228.615	-1.8063u	-0.5558u	0.1277
Cr 267.716	0.0973	-0.0840u	-0.0011u
Cu 324.754	0.1224	0.1751	-0.1821u
Fe 271.441	36.5313	78.5878	136.216
K 766.491	-0.2972u	-0.2538u	-0.2185u
Mg 279.078	1.1346	2.1828	5.0935
Mn 257.610	-0.1020u	-0.0367u	-0.0549u
Mo 202.032	-0.7991u	-0.0391u	0.1033
Na 330.237	-50.3192u	-184.016u	-61.4576u
Ni 231.604	0.2748	-0.2805u	-0.8280u
Pb 220.353	-5.5280u	-0.2723u	2.4632
Sb 206.834	-4.1239u	-4.3855u	-4.8913u
Se 196.026	-13.4883u	-5.6507u	-12.2966u
Si 288.158	-1.2365u	-1.3935u	-0.9522u
Sn 189.925	3.7887	-8.8909u	3.9771
Sr 216.596	0.0976	-0.7530u	0.3608
Ti 334.941	-0.0124u	-0.0343u	0.0851

Label	Replicates Concentration		
Tl 190.794	-3.3711u	-2.5022u	-0.8929u
V 292.401	-0.0978u	0.0133	0.3069
Zn 206.200	-1.0184u	-3.6823u	-0.2848u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1198	ppb	0.1503	125.5	-33.8029
Al 308.215	-0.6942	ppb	0.5301	76.4	153.360
As 188.980	-0.7504	ppb	2.0348	271.1	0.7743
B 249.678	3.5796	ppb	0.9123	25.5	-43.4499
Ba 389.178	-0.0951	ppb	0.7519	790.7	-50.9452
Be 313.042	-0.0013	ppb	0.0028	220.9	-184.933
Ca 370.602	-0.4783	ppb	1.538	321.5	26.31
Cd 226.502	-0.1890	ppb	0.2109	111.6	3.0234
Co 228.615	-0.7448	ppb	0.9807	131.7	-10.9236
Cr 267.716	0.0040	ppb	0.0908	2254.7	19.7919
Cu 324.754	0.0385	ppb	0.1928	501.3	225.776
Fe 271.441	83.7785	ppb	50.0448	59.7	80.4649
K 766.491	-0.2565	ppb	0.0394	15.4	240.044
Mg 279.078	2.8036	ppb	2.0512	73.2	22.9833
Mn 257.610	-0.0645	ppb	0.0337	52.2	23.7239
Mo 202.032	-0.2450	ppb	0.4851	198.1	2.2058
Na 330.237	-98.5976	ppb	74.1839	75.2	43.0812
Ni 231.604	-0.2779	ppb	0.5514	198.4	-1.9237
Pb 220.353	-1.1124	ppb	4.0613	365.1	5.5403
Sb 206.834	-4.4669	ppb	0.3901	8.7	3.8740
Se 196.026	-10.4785	ppb	4.2233	40.3	-3.0583
Si 288.158	-1.1940uv	ppb	0.2237	18.7	331.496
Sn 189.925	-0.3750	ppb	7.3756	1966.6	-0.3182
Sr 216.596	-0.0982	ppb	0.5821	592.7	5.1927
Ti 334.941	0.0128	ppb	0.0635	497.0	-35.0742
Tl 190.794	-2.2554	ppb	1.2574	55.7	-4.9772
V 292.401	0.0742	ppb	0.2091	281.9	-1.2604
Zn 206.200	-1.6618	ppb	1.7878	107.6	-0.4074

MG 800 (Samp) **12/15/2018, 10:21:27 AM** **Rack 1, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2149	-0.1876u	0.4562
Al 308.215	35.6284	32.7193	32.8838
As 188.980	2.9995	2.1750	1.2114
B 249.678	2.9257	3.6797	2.5367
Ba 389.178	3.5568	0.8860	2.5238
Be 313.042	0.0048u	0.0196	0.0092u
Ca 370.602	-1.194u	-6.095u	-4.979u
Cd 226.502	-0.0848	-0.3811u	-0.0890
Co 228.615	-1.1914u	-0.7898u	-1.2540u
Cr 267.716	0.8507	0.5677	1.1318
Cu 324.754	1.5616	2.5170	1.6977
Fe 271.441	-1.0411u	2.8854	2.0926
K 766.491	0.1051	-0.5672u	0.2046
Mg 279.078	855805x	856440x	856662x
Mn 257.610	-6.5981	-6.6583	-6.5715
Mo 202.032	-0.4302u	-1.3835u	-1.4326u

Label	Replicates Concentration		
Na 330.237	-659.629u	-570.691u	-331.024u
Ni 231.604	4.3342	5.8337	2.8107
Pb 220.353	-5.6897u	2.9663	-0.8795u
Sb 206.834	-10.3723u	1.1053	-6.1050u
Se 196.026	-13.4260u	-3.9349u	-3.5928u
Si 288.158	0.7511	-2.5003u	-1.6105u
Sn 189.925	7.8274	-1.7024u	1.0962
Sr 216.596	0.0842	1.4651	0.2493
Ti 334.941	1.3092	1.4113	1.4247
Tl 190.794	3.3480	-10.9778u	1.2000
V 292.401	0.1534	0.3258	0.2555
Zn 206.200	5.9810	1.2707	0.1732

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1612b	ppb	0.3252	201.8	-30.0592
Al 308.215	33.7438b	ppb	1.6342	4.8	234.576
As 188.980	2.1286b	ppb	0.8949	42.0	1.5022
B 249.678	3.0474b	ppb	0.5811	19.1	-46.9111
Ba 389.178	2.3222b	ppb	1.3468	58.0	872.597
Be 313.042	0.0112b	ppb	0.0076	67.7	-188.574
Ca 370.602	-4.089b	ppb	2.569	62.8	20.14
Cd 226.502	-0.1849b	ppb	0.1699	91.8	7.4039
Co 228.615	-1.0784b	ppb	0.2519	23.4	-12.2244
Cr 267.716	0.8501b	ppb	0.2821	33.2	38.1087
Cu 324.754	1.9254b	ppb	0.5169	26.8	294.169
Fe 271.441	1.3123b	ppb	2.0763	158.2	18.5677
K 766.491	-0.0859b	ppb	0.4198	489.0	244.266
Mg 279.078	856302xb	ppb	444.936	0.1	1180188
Mn 257.610	-6.6093b	ppb	0.0445	0.7	3114.35
Mo 202.032	-1.0821b	ppb	0.5651	52.2	0.4670
Na 330.237	-520.448b	ppb	169.966	32.7	32.6834
Ni 231.604	4.3262b	ppb	1.5115	34.9	3.9980
Pb 220.353	-1.2010b	ppb	4.3370	361.1	5.4911
Sb 206.834	-5.1240b	ppb	5.8013	113.2	3.6169
Se 196.026	-6.9845b	ppb	5.5811	79.9	-2.4214
Si 288.158	-1.1199uvb	ppb	1.6803	150.0	333.288
Sn 189.925	2.4071b	ppb	4.8983	203.5	0.5090
Sr 216.596	0.5995b	ppb	0.7541	125.8	7.8262
Ti 334.941	1.3817b	ppb	0.0632	4.6	2933.27
Tl 190.794	-2.1433b	ppb	7.7260	360.5	-4.9351
V 292.401	0.2449b	ppb	0.0867	35.4	6.0461
Zn 206.200	2.4750b	ppb	3.0855	124.7	1.9190

X (Samp) **12/15/2018, 10:26:07 AM** **Rack 1, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0586	0.1571	-0.2251u
Al 308.215	-2.4022u	-3.3163u	-3.6584u
As 188.980	-2.1153u	-1.8868u	0.7843
B 249.678	2.5502	1.7506	1.8859
Ba 389.178	-0.0124u	-0.2287u	0.2778
Be 313.042	-0.0115u	-0.0049u	0.0072
Ca 370.602	-2.169u	0.1140	1.032

Label	Replicates Concentration		
Cd 226.502	0.1752	0.0852	-0.0092u
Co 228.615	-0.6223u	-1.3101u	0.1097
Cr 267.716	-0.2378u	-0.2002u	-0.5031u
Cu 324.754	-0.4738u	-0.1244u	0.0337
Fe 271.441	-0.3541u	8.4962	-1.8259u
K 766.491	-0.9037u	-1.2353u	-0.3854u
Mg 279.078	17.9315	42.3345	54.5010
Mn 257.610	-0.1482u	-0.0604u	-0.0914u
Mo 202.032	-0.3831u	1.0700	-0.6749u
Na 330.237	217.465	-107.280u	-130.257u
Ni 231.604	2.0199	0.4291	0.2815
Pb 220.353	-3.3323u	1.6984	2.6391
Sb 206.834	-2.0047u	-0.9459u	-4.0258u
Se 196.026	-2.1128u	-3.5918u	-4.4264u
Si 288.158	-5.0299u	-1.2112u	-2.1973u
Sn 189.925	1.8449	-3.9882u	2.5778
Sr 216.596	0.0483	0.3509	0.4607
Ti 334.941	0.1375	-0.0144u	-0.0089u
Tl 190.794	-6.1935u	-12.1013u	1.7081
V 292.401	0.1352	-0.2288u	-0.1741u
Zn 206.200	-0.4138u	-0.9079u	-1.5474u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0032	ppb	0.1984	6294.0	-29.7372
Al 308.215	-3.1257	ppb	0.6494	20.8	147.618
As 188.980	-1.0726	ppb	1.6122	150.3	0.6926
B 249.678	2.0622	ppb	0.4280	20.8	-53.3643
Ba 389.178	0.0122	ppb	0.2541	2075.6	-49.8994
Be 313.042	-0.0030	ppb	0.0095	310.9	-186.399
Ca 370.602	-0.3408	ppb	1.648	483.5	26.76
Cd 226.502	0.0837	ppb	0.0922	110.1	7.1167
Co 228.615	-0.6076	ppb	0.7100	116.9	-10.2893
Cr 267.716	-0.3137	ppb	0.1651	52.6	12.9350
Cu 324.754	-0.1882	ppb	0.2597	138.0	217.542
Fe 271.441	2.1054	ppb	5.5833	265.2	19.1788
K 766.491	-0.8415	ppb	0.4283	50.9	225.569
Mg 279.078	38.2557	ppb	18.6228	48.7	71.8452
Mn 257.610	-0.1000	ppb	0.0446	44.6	20.3905
Mo 202.032	0.0040	ppb	0.9347	23392.6	2.7242
Na 330.237	-6.6906	ppb	194.464	2906.5	45.3448
Ni 231.604	0.9102	ppb	0.9639	105.9	-0.3957
Pb 220.353	0.3351	ppb	3.2107	958.2	6.2933
Sb 206.834	-2.3255	ppb	1.5648	67.3	4.7583
Se 196.026	-3.3770	ppb	1.1716	34.7	-1.7696
Si 288.158	-2.8128uv	ppb	1.9823	70.5	324.130
Sn 189.925	0.1448	ppb	3.5980	2484.1	-0.1636
Sr 216.596	0.2866	ppb	0.2136	74.5	6.6373
Ti 334.941	0.0381	ppb	0.0862	226.5	-32.1774
Tl 190.794	-5.5289	ppb	6.9286	125.3	-5.8758
V 292.401	-0.0892	ppb	0.1963	220.0	-3.4211
Zn 206.200	-0.9564	ppb	0.5684	59.4	-0.0095

AL 800 (Samp) **12/15/2018, 10:30:47 AM** **Rack 1, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0638u	0.0411	-0.5084u
Al 308.215	775301x	775749x	775614x
As 188.980	6.6827	1.5642	4.9769
B 249.678	2.6609	1.8653	1.7897
Ba 389.178	2.1154	0.9736	1.2671
Be 313.042	-0.0672u	-0.0701u	-0.0608u
Ca 370.602	2.120	-6.079u	-0.3724u
Cd 226.502	-0.9741	-1.1819	-0.6132
Co 228.615	-1.1432u	-1.7886u	-1.1075u
Cr 267.716	-0.4293u	-0.3849u	-0.2202u
Cu 324.754	0.4170	0.8478	0.4599
Fe 271.441	-4.3882u	1.2556	8.9291
K 766.491	-0.0420u	-1.2978u	-0.6908u
Mg 279.078	26.1487u	24.0071u	19.7949u
Mn 257.610	0.8761	0.8210	0.8867
Mo 202.032	3.4708	-0.2204u	1.7760
Na 330.237	7.1865	-151.783u	30.4311
Ni 231.604	0.2382	-0.3417u	-0.6797u
Pb 220.353	8.8768u	8.6143u	5.3435u
Sb 206.834	10.0257	10.3245	3.2483
Se 196.026	-0.8045u	-24.8122u	-6.4785u
Si 288.158	-1.3041u	0.9586	-0.4350u
Sn 189.925	1.4579	-8.0765u	-9.7038u
Sr 216.596	2.1081	2.6979	1.6241
Ti 334.941	0.0441	-0.0493	-0.1540u
Tl 190.794	-0.7287u	11.2055	5.7578
V 292.401	-0.0780u	-0.4605u	0.2404
Zn 206.200	3.1388	3.2911	2.1315

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1770b	ppb	0.2917	164.8	-33.9259
Al 308.215	775554xb	ppb	229.723	0.0	1829112
As 188.980	4.4079b	ppb	2.6062	59.1	2.0784
B 249.678	2.1053b	ppb	0.4826	22.9	-53.0759
Ba 389.178	1.4520b	ppb	0.5929	40.8	-36.2590
Be 313.042	-0.0660b	ppb	0.0048	7.3	-205.327
Ca 370.602	-1.444b	ppb	4.204	291.1	24.48
Cd 226.502	-0.9231b	ppb	0.2877	31.2	27.1073
Co 228.615	-1.3465b	ppb	0.3834	28.5	-13.7429
Cr 267.716	-0.3448b	ppb	0.1101	31.9	15.7004
Cu 324.754	0.5749b	ppb	0.2373	41.3	245.253
Fe 271.441	1.9322b	ppb	6.6844	346.0	19.0167
K 766.491	-0.6768b	ppb	0.6280	92.8	229.643
Mg 279.078	23.3169b	ppb	3.2327	13.9	-100.134
Mn 257.610	0.8613b	ppb	0.0353	4.1	112.762
Mo 202.032	1.6755b	ppb	1.8476	110.3	6.1971
Na 330.237	-38.0553b	ppb	99.1747	260.6	44.5663
Ni 231.604	-0.2611b	ppb	0.4643	177.8	-1.7597
Pb 220.353	7.6116b	ppb	1.9686	25.9	1.2228
Sb 206.834	7.8662b	ppb	4.0020	50.9	8.9556
Se 196.026	-10.6984b	ppb	12.5478	117.3	-3.0984
Si 288.158	-0.2601uvb	ppb	1.1415	438.8	336.453

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-5.4408b	ppb	6.0296	110.8	-1.8244
Sr 216.596	2.1434b	ppb	0.5378	25.1	13.7209
Ti 334.941	-0.0530b	ppb	0.0991	186.8	-27.4671
Tl 190.794	5.4115b	ppb	5.9746	110.4	-2.8655
V 292.401	-0.0994b	ppb	0.3510	353.2	-6.3135
Zn 206.200	2.8538b	ppb	0.6302	22.1	2.1337

X (Samp) **12/15/2018, 10:35:28 AM** **Rack 1, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4685u	0.2092	-0.1018u
Al 308.215	15.3197	14.3266	15.5037
As 188.980	-2.8094u	2.8344	1.6303
B 249.678	1.5731	0.9405	1.4422
Ba 389.178	0.3471	-0.5490u	0.9009
Be 313.042	-0.0143u	-0.0017u	-0.0099u
Ca 370.602	-2.162u	-2.907u	-3.726u
Cd 226.502	0.3178	0.1747	-0.1648u
Co 228.615	-1.4602u	-0.7951u	-0.2179u
Cr 267.716	-0.0241u	0.0876	-0.2878u
Cu 324.754	0.0987	-0.5578u	-0.3608u
Fe 271.441	-3.3235u	-3.6252u	9.3688
K 766.491	-0.3484u	-1.1583u	-1.1054u
Mg 279.078	1.3426	1.4977	4.8216
Mn 257.610	-0.1859u	-0.0835u	-0.1135u
Mo 202.032	-0.5842u	0.0883	0.0659
Na 330.237	3.3381	-79.0892u	-0.1919u
Ni 231.604	1.4192	-1.2631u	0.3590
Pb 220.353	3.5714	-6.3233u	4.0108
Sb 206.834	-4.0601u	-7.7643u	-9.0522u
Se 196.026	-0.8858u	-5.4689u	4.0218
Si 288.158	-2.4653u	-3.3505u	-2.8194u
Sn 189.925	-5.6454u	0.3246	-4.2417u
Sr 216.596	0.3134	-0.2478u	1.0144
Ti 334.941	-0.0456u	0.0064	0.0639
Tl 190.794	5.7857	-7.2730u	-5.2027u
V 292.401	-0.0810u	0.1247	0.3948
Zn 206.200	-3.8255u	1.3438	-0.2504u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1204	ppb	0.3392	281.8	-33.8083
Al 308.215	15.0500	ppb	0.6332	4.2	190.479
As 188.980	0.5518	ppb	2.9725	538.7	1.1035
B 249.678	1.3186	ppb	0.3339	25.3	-58.2534
Ba 389.178	0.2330	ppb	0.7316	314.0	-47.8301
Be 313.042	-0.0086	ppb	0.0064	74.3	-190.904
Ca 370.602	-2.932	ppb	0.7825	26.7	21.37
Cd 226.502	0.1092	ppb	0.2479	226.9	7.4998
Co 228.615	-0.8244	ppb	0.6217	75.4	-11.2899
Cr 267.716	-0.0748	ppb	0.1928	257.8	18.0845
Cu 324.754	-0.2733	ppb	0.3369	123.3	214.437
Fe 271.441	0.8067	ppb	7.4166	919.4	18.2036
K 766.491	-0.8707	ppb	0.4531	52.0	224.846

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2.5540	ppb	1.9654	77.0	22.6368
Mn 257.610	-0.1276	ppb	0.0526	41.2	17.5504
Mo 202.032	-0.1433	ppb	0.3819	266.5	2.4182
Na 330.237	-25.3144	ppb	46.6039	184.1	44.8887
Ni 231.604	0.1717	ppb	1.3510	786.8	-1.3455
Pb 220.353	0.4197	ppb	5.8437	1392.5	6.3373
Sb 206.834	-6.9589	ppb	2.5917	37.2	2.8485
Se 196.026	-0.7776	ppb	4.7462	610.4	-1.2978
Si 288.158	-2.8784uv	ppb	0.4455	15.5	323.667
Sn 189.925	-3.1875	ppb	3.1215	97.9	-1.1544
Sr 216.596	0.3600	ppb	0.6324	175.7	6.9309
Ti 334.941	0.0082	ppb	0.0548	668.0	-35.5756
Tl 190.794	-2.2300	ppb	7.0186	314.7	-4.9657
V 292.401	0.1462	ppb	0.2386	163.3	-0.2904
Zn 206.200	-0.9107	ppb	2.6471	290.7	0.0162

MN 30 (Samp) **12/15/2018, 10:40:09 AM** **Rack 1, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-2.0326u	-1.7979u	-1.9915u
Al 308.215	5.4225	5.3447	7.7459
As 188.980	10.5879	-1.5810u	-0.5497u
B 249.678	0.4214	0.1957	0.8874
Ba 389.178	-0.6806u	0.1232	1.2083
Be 313.042	0.0040u	-0.0078u	0.0028u
Ca 370.602	-40.78	-44.71	-41.15
Cd 226.502	-0.0967u	-0.2393u	-0.5469u
Co 228.615	0.5621	-0.0853u	-1.0860u
Cr 267.716	-4.8254u	-5.2140u	-5.0358u
Cu 324.754	-0.4044u	-0.4698u	-0.3925u
Fe 271.441	-13.9328u	-3.1809u	-7.3890u
K 766.491	-0.3699u	-1.1112u	-0.6545u
Mg 279.078	56.8363u	60.6897u	58.3403u
Mn 257.610	28837.2x	28762.6x	28814.7x
Mo 202.032	-0.7775u	-0.4139u	-1.5733u
Na 330.237	102.646	-258.292u	149.653
Ni 231.604	-3.0335u	-1.7619u	-2.0976u
Pb 220.353	-4.9296u	3.0116	3.4949
Sb 206.834	-9.0601u	-3.6054u	-1.0681u
Se 196.026	-11.6470	9.6949	-3.9363
Si 288.158	4.2458	1.7109	1.7921
Sn 189.925	3.2691	-3.5983u	0.0814
Sr 216.596	0.3235	-0.1362u	1.4629
Ti 334.941	0.0215	0.0368	-0.0326u
Tl 190.794	15.3083	12.3583	11.8227
V 292.401	-1.0318u	-0.6741u	-1.0297u
Zn 206.200	-0.4199u	2.2323	2.5809

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.9406b	ppb	0.1253	6.5	-36.0366
Al 308.215	6.1711b	ppb	1.3644	22.1	169.503
As 188.980	2.8191b	ppb	6.7477	239.4	1.6769
B 249.678	0.5015b	ppb	0.3527	70.3	-63.6232

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.2170b	ppb	0.9479	436.9	-48.1787
Be 313.042	-0.0003b	ppb	0.0065	2171.6	-187.585
Ca 370.602	-42.21b	ppb	2.167	5.1	474.0
Cd 226.502	-0.2943b	ppb	0.2301	78.2	1.3484
Co 228.615	-0.2031b	ppb	0.8303	408.9	-8.4016
Cr 267.716	-5.0251b	ppb	0.1945	3.9	-32.7817
Cu 324.754	-0.4223b	ppb	0.0416	9.9	209.039
Fe 271.441	-8.1676b	ppb	5.4180	66.3	11.4877
K 766.491	-0.7119b	ppb	0.3740	52.5	228.776
Mg 279.078	58.6221b	ppb	1.9421	3.3	-201.610
Mn 257.610	28804.9xb	ppb	38.2936	0.1	2784748
Mo 202.032	-0.9216b	ppb	0.5930	64.3	0.8016
Na 330.237	-1.9975b	ppb	223.198	11173.7	45.4601
Ni 231.604	-2.2977b	ppb	0.6590	28.7	-4.5218
Pb 220.353	0.5256b	ppb	4.7305	900.0	8.3403
Sb 206.834	-4.5778b	ppb	4.0838	89.2	3.8341
Se 196.026	-1.9628b	ppb	10.8070	550.6	1.0995
Si 288.158	2.5829b	ppb	1.4406	55.8	349.533
Sn 189.925	-0.0826b	ppb	3.4366	4160.3	-0.2312
Sr 216.596	0.5501b	ppb	0.8233	149.7	7.6617
Ti 334.941	0.0086b	ppb	0.0364	425.4	-36.1371
Tl 190.794	13.1631b	ppb	1.8770	14.3	6.4110
V 292.401	-0.9119b	ppb	0.2059	22.6	-14.1478
Zn 206.200	1.4644b	ppb	1.6412	112.1	1.3523

X (Samp) **12/15/2018, 10:44:51 AM** **Rack 1, Tube 8**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1497	-0.2822u	-0.2034u
Al 308.215	-1.2084u	1.7088	-0.4164u
As 188.980	2.2348	1.3002	-1.9428u
B 249.678	0.5168	0.1582	0.7161
Ba 389.178	-0.2877u	-0.6094u	0.3704
Be 313.042	0.0137	-0.0144u	0.0001
Ca 370.602	-0.1870u	2.274	1.192
Cd 226.502	-0.0998u	-0.0625u	0.0506
Co 228.615	0.0069	-1.0889u	-0.3459u
Cr 267.716	0.1343	0.0553	0.0391
Cu 324.754	-0.0064u	0.8458	0.1058
Fe 271.441	-0.5797u	9.9757	2.6370
K 766.491	-1.2656u	-1.5387u	-0.8911u
Mg 279.078	5.4404	-1.3053u	2.3390
Mn 257.610	0.7315	0.6604	0.6830
Mo 202.032	0.4147	1.1578	-0.7649u
Na 330.237	-478.999u	114.555	166.187
Ni 231.604	3.0956	0.3834	0.4739
Pb 220.353	4.9424	4.5504	4.9823
Sb 206.834	-7.3551u	-2.6538u	3.1367
Se 196.026	-16.0848u	-5.3557u	-6.2933u
Si 288.158	-4.1547u	-1.7462u	-1.7970u
Sn 189.925	0.6154	-5.8021u	0.1144
Sr 216.596	0.7599	-0.6541u	0.5940
Ti 334.941	0.0387	-0.0795u	-0.0101u

Label	Replicates Concentration		
Tl 190.794	-6.7755u	-2.1860u	3.3059
V 292.401	-0.0713u	-0.2037u	-0.3254u
Zn 206.200	0.9947	0.1251	-0.0713u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1120	ppb	0.2300	205.5	-33.5140
Al 308.215	0.0280	ppb	1.5085	5388.4	155.054
As 188.980	0.5307	ppb	2.1925	413.1	1.0981
B 249.678	0.4637	ppb	0.2827	61.0	-63.8876
Ba 389.178	-0.1756	ppb	0.4994	284.5	-51.7349
Be 313.042	-0.0002	ppb	0.0141	6593.2	-184.092
Ca 370.602	1.093	ppb	1.233	112.9	29.77
Cd 226.502	-0.0372	ppb	0.0783	210.3	5.2729
Co 228.615	-0.4760	ppb	0.5594	117.5	-9.6787
Cr 267.716	0.0762	ppb	0.0509	66.8	21.3426
Cu 324.754	0.3151	ppb	0.4631	147.0	235.791
Fe 271.441	4.0110	ppb	5.4102	134.9	20.6292
K 766.491	-1.2318	ppb	0.3251	26.4	215.912
Mg 279.078	2.1580	ppb	3.3765	156.5	22.0854
Mn 257.610	0.6916	ppb	0.0364	5.3	96.7596
Mo 202.032	0.2692	ppb	0.9696	360.2	3.2753
Na 330.237	-66.0858	ppb	358.524	542.5	43.8844
Ni 231.604	1.3176	ppb	1.5404	116.9	0.1279
Pb 220.353	4.8250	ppb	0.2387	4.9	8.6303
Sb 206.834	-2.2907	ppb	5.2553	229.4	4.7722
Se 196.026	-9.2446	ppb	5.9423	64.3	-2.8345
Si 288.158	-2.5660uv	ppb	1.3761	53.6	325.330
Sn 189.925	-1.6907	ppb	3.5694	211.1	-0.7094
Sr 216.596	0.2333	ppb	0.7730	331.3	6.4308
Ti 334.941	-0.0170	ppb	0.0594	349.8	-38.3389
Tl 190.794	-1.8852	ppb	5.0474	267.7	-4.8713
V 292.401	-0.2001	ppb	0.1271	63.5	-4.8739
Zn 206.200	0.3495	ppb	0.5673	162.3	0.7251

CO 25 (Samp) **12/15/2018, 10:49:33 AM** **Rack 1, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4451u	-0.4201u	0.0840
Al 308.215	26.5076	26.1943	25.4501
As 188.980	6.6069	-1.3175u	7.5601
B 249.678	42.2889	41.9509	41.9787
Ba 389.178	-1.5021u	-3.0282u	-1.7715u
Be 313.042	-0.0242u	-0.0263u	-0.0147u
Ca 370.602	1.247u	5.303	3.901
Cd 226.502	-0.2407u	-0.4310u	-0.1494u
Co 228.615	25761.9x	24812.5x	24850.3x
Cr 267.716	-0.3543u	-0.1277u	0.0594
Cu 324.754	0.0408	0.6214	0.3743
Fe 271.441	-281.281	-254.021	-281.805
K 766.491	-0.7025u	-0.2174u	-0.6402u
Mg 279.078	-8.2387u	-6.8544u	-10.6703u
Mn 257.610	0.1007	0.1126	0.3154
Mo 202.032	0.6527	-0.0301u	-0.6512u

Label	Replicates Concentration		
Na 330.237	-29.8317u	87.8463	120.054
Ni 231.604	-9.3778u	-9.4914u	-7.7715u
Pb 220.353	-4.8775u	-0.5682u	-1.8664u
Sb 206.834	-1.6574u	-6.2569u	3.1519
Se 196.026	-2.0690u	9.2298	-12.7827u
Si 288.158	-3.5883u	-0.9404u	-0.0027
Sn 189.925	-1.1740u	7.0046	-3.2261u
Sr 216.596	0.9777	1.3542	-0.2092u
Ti 334.941	-0.2502u	-0.2261u	-0.2411u
Tl 190.794	20.8022	18.7417	23.5480
V 292.401	0.0386	0.3708	-0.5548u
Zn 206.200	1.8545	0.0149u	2.6651

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2604b	ppb	0.2985	114.6	-39.0221
Al 308.215	26.0507b	ppb	0.5432	2.1	157.216
As 188.980	4.2831b	ppb	4.8737	113.8	2.0505
B 249.678	42.0729b	ppb	0.1876	0.4	208.456
Ba 389.178	-2.1006b	ppb	0.8145	38.8	-69.6878
Be 313.042	-0.0217b	ppb	0.0062	28.5	-202.835
Ca 370.602	3.484b	ppb	2.060	59.1	31.26
Cd 226.502	-0.2737b	ppb	0.1437	52.5	2.8950
Co 228.615	25141.6xb	ppb	537.568	2.1	116830
Cr 267.716	-0.1409b	ppb	0.2072	147.1	16.8422
Cu 324.754	0.3455b	ppb	0.2914	84.3	236.969
Fe 271.441	-272.369b	ppb	15.8916	5.8	1227.58
K 766.491	-0.5200b	ppb	0.2639	50.7	233.523
Mg 279.078	-8.5878b	ppb	1.9317	22.5	7.2797
Mn 257.610	0.1762b	ppb	0.1207	68.5	48.5364
Mo 202.032	-0.0095b	ppb	0.6522	6842.2	2.6719
Na 330.237	59.3561b	ppb	78.8998	132.9	46.8175
Ni 231.604	-8.8802b	ppb	0.9619	10.8	-38.8443
Pb 220.353	-2.4374b	ppb	2.2107	90.7	-1.6824
Sb 206.834	-1.5875b	ppb	4.7048	296.4	5.0828
Se 196.026	-1.8740b	ppb	11.0075	587.4	-1.4916
Si 288.158	-1.5105uvb	ppb	1.8595	123.1	330.305
Sn 189.925	0.8682b	ppb	5.4124	623.4	0.0515
Sr 216.596	0.7076b	ppb	0.8160	115.3	8.6770
Ti 334.941	-0.2391b	ppb	0.0122	5.1	-62.7261
Tl 190.794	21.0306b	ppb	2.4113	11.5	42.9060
V 292.401	-0.0485b	ppb	0.4689	967.1	-2.5049
Zn 206.200	1.5115b	ppb	1.3580	89.8	1.3562

X (Samp) **12/15/2018, 10:54:15 AM** **Rack 1, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2599	0.0219	0.0188
Al 308.215	0.5275	0.8005	1.6800
As 188.980	10.1675	3.4380	0.8932
B 249.678	0.6962	0.1739	0.6471
Ba 389.178	-0.5517u	-1.2893u	0.8808
Be 313.042	0.0032	-0.0084u	0.0055
Ca 370.602	-0.9534u	5.231	-3.467u

Label	Replicates Concentration		
Cd 226.502	0.0104	0.1602	0.0608
Co 228.615	-0.3470u	0.8876	0.8928
Cr 267.716	0.4242	-0.2329u	-0.5105u
Cu 324.754	0.5360	-0.3903u	-0.7358u
Fe 271.441	2.3538	-7.8558u	-12.0641u
K 766.491	-0.6873u	-1.1947u	-1.3900u
Mg 279.078	0.3718	2.0305	1.2797
Mn 257.610	0.0170	-0.0028u	0.0186
Mo 202.032	-1.0675u	-0.1613u	0.0945
Na 330.237	-172.777u	8.3712	-88.0167u
Ni 231.604	1.0828	1.7890	1.4079
Pb 220.353	0.1385	-3.6664u	1.3754
Sb 206.834	-1.5143u	-7.4187u	-7.6471u
Se 196.026	-8.4599u	4.1803	-2.7571u
Si 288.158	-3.0611u	-0.7677u	-1.2843u
Sn 189.925	-4.4850u	7.5972	-1.3315u
Sr 216.596	0.3252	-0.0103u	-0.4569u
Ti 334.941	0.0564	-0.0489u	-0.0239u
Tl 190.794	-2.7301u	-10.8580u	-6.6371u
V 292.401	-0.2137u	-0.0189u	0.2229
Zn 206.200	1.1014	-1.8445u	-0.7745u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1002	ppb	0.1383	138.1	-26.1407
Al 308.215	1.0027	ppb	0.6022	60.1	157.343
As 188.980	4.8329	ppb	4.7919	99.2	2.1862
B 249.678	0.5057	ppb	0.2884	57.0	-63.6011
Ba 389.178	-0.3200	ppb	1.1034	344.8	-53.1207
Be 313.042	0.0001	ppb	0.0075	8670.5	-183.802
Ca 370.602	0.2702	ppb	4.476	1656.8	28.06
Cd 226.502	0.0771	ppb	0.0763	98.9	7.0067
Co 228.615	0.4778	ppb	0.7143	149.5	-5.2397
Cr 267.716	-0.1064	ppb	0.4800	451.2	17.4034
Cu 324.754	-0.1967	ppb	0.6577	334.3	217.218
Fe 271.441	-5.8554	ppb	7.4142	126.6	13.2611
K 766.491	-1.0907	ppb	0.3627	33.3	219.404
Mg 279.078	1.2273	ppb	0.8306	67.7	20.8093
Mn 257.610	0.0110	ppb	0.0119	108.9	30.9463
Mo 202.032	-0.3781	ppb	0.6106	161.5	1.9305
Na 330.237	-84.1409	ppb	90.6362	107.7	43.4424
Ni 231.604	1.4266	ppb	0.3535	24.8	0.2674
Pb 220.353	-0.7175	ppb	2.6276	366.2	5.7452
Sb 206.834	-5.5267	ppb	3.4767	62.9	3.4400
Se 196.026	-2.3456	ppb	6.3301	269.9	-1.5824
Si 288.158	-1.7044uv	ppb	1.2030	70.6	329.329
Sn 189.925	0.5936	ppb	6.2669	1055.8	-0.0301
Sr 216.596	-0.0473	ppb	0.3924	828.9	5.3653
Ti 334.941	-0.0054	ppb	0.0550	1011.0	-37.0697
Tl 190.794	-6.7417	ppb	4.0650	60.3	-6.2068
V 292.401	-0.0032	ppb	0.2187	6792.2	-2.2518
Zn 206.200	-0.5059	ppb	1.4912	294.8	0.2440

Cont Calib Verif (CCV) **12/15/2018, 10:58:58 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	486.799	489.315	489.084
Al 308.215	9903.06	9918.60	9927.35
As 188.980	508.666	498.999	491.927
B 249.678	500.253	503.247	502.002
Ba 389.178	493.166	494.297	493.620
Be 313.042	511.016	511.299	511.011
Ca 370.602	9990	10011	10003
Cd 226.502	500.303	499.049	499.621
Co 228.615	502.192	500.473	501.080
Cr 267.716	495.260	495.833	494.724
Cu 324.754	500.261	498.956	505.226
Fe 271.441	9976.47	9972.82	9953.08
K 766.491	9830.75	9828.31	9817.50
Mg 279.078	10038.3	10057.6	10053.0
Mn 257.610	501.030	501.449	501.512
Mo 202.032	495.774	494.482	496.807
Na 330.237	9929.79	9608.27	10185.6
Ni 231.604	502.328	502.917	501.484
Pb 220.353	512.776	517.038	500.984
Sb 206.834	504.063	521.114	509.453
Se 196.026	514.194	511.134	497.397
Si 288.158	4959.81	4960.73	4956.86
Sn 189.925	500.194	497.879	503.836
Sr 216.596	502.139	503.124	503.734
Ti 334.941	496.146	496.863	496.570
Tl 190.794	501.101	488.951	488.769
V 292.401	501.911	501.626	501.963
Zn 206.200	1019.06	1029.30	1036.06

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	488.399	ppb	1.3905	0.3	16935.7	97.67982
Al 308.215	9916.34	ppb	12.3042	0.1	23562.5	99.16336
As 188.980	499.864	ppb	8.4030	1.7	127.259	99.97276
B 249.678	501.834	ppb	1.5044	0.3	3227.82	100.36680
Ba 389.178	493.694	ppb	0.5696	0.1	4687.23	98.73887
Be 313.042	511.108	ppb	0.1650	0.0	415926	102.22168
Ca 370.602	10001	ppb	10.61	0.1	20901	100.01022
Cd 226.502	499.658	ppb	0.6278	0.1	7618.38	99.93153
Co 228.615	501.248	ppb	0.8717	0.2	2321.61	100.24969
Cr 267.716	495.272	ppb	0.5550	0.1	10698.7	99.05444
Cu 324.754	501.481	ppb	3.3083	0.7	18418.6	100.29618
Fe 271.441	9967.46	ppb	12.5848	0.1	7528.26	99.62478
K 766.491	9825.52	ppb	7.0496	0.1	243361	98.25519
Mg 279.078	10049.7	ppb	10.0652	0.1	13862.5	100.49654
Mn 257.610	501.330	ppb	0.2618	0.1	48559.2	100.26609
Mo 202.032	495.687	ppb	1.1648	0.2	1032.34	99.13748
Na 330.237	9907.90	ppb	289.304	2.9	285.129	99.07900
Ni 231.604	502.243	ppb	0.7200	0.1	643.858	100.44862
Pb 220.353	510.266	ppb	8.3163	1.6	271.355	102.05315
Sb 206.834	511.544	ppb	8.7155	1.7	215.109	102.30870
Se 196.026	507.575	ppb	8.9464	1.8	91.0470	101.51497
Si 288.158	4959.13	ppb	2.0187	0.0	23882.0	99.18269

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	500.636	ppb	3.0031	0.6	148.656	100.12724
Sr 216.596	502.999	ppb	0.8052	0.2	1920.36	100.59979
Ti 334.941	496.526	ppb	0.3603	0.1	54499.8	99.30527
Tl 190.794	492.940	ppb	7.0677	1.4	131.698	98.58806
V 292.401	501.833	ppb	0.1813	0.0	6531.28	100.36665
Zn 206.200	1028.14	ppb	8.5567	0.8	578.411	102.81390

Cont Calib Blank (CCB) **12/15/2018, 11:03:41 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0290	0.0373	0.2745
Al 308.215	2.0120	3.8984	0.1712
As 188.980	4.1721	-3.4034u	-3.1158u
B 249.678	3.7510	2.6573	2.5701
Ba 389.178	-0.0073u	-0.9860u	-1.2834u
Be 313.042	0.0193	0.0148	0.0012
Ca 370.602	4.851	1.429	-4.504u
Cd 226.502	0.0261	0.1741	0.0126
Co 228.615	-0.5930u	0.3128	-0.6675u
Cr 267.716	-0.2888u	0.3611	0.0611
Cu 324.754	-0.1846u	0.4284	0.5628
Fe 271.441	-7.7838u	-5.0449u	-1.3256u
K 766.491	0.5018	-0.2301u	-1.4936u
Mg 279.078	8.7201	0.8690	1.5689
Mn 257.610	-0.0308u	0.0283	-0.0125u
Mo 202.032	-0.2290u	0.0087	0.1081
Na 330.237	124.875	-30.3302u	-314.048u
Ni 231.604	-0.9178u	-0.8556u	1.6703
Pb 220.353	2.6826	-1.2123u	-1.1189u
Sb 206.834	-12.6949u	-3.3559u	4.0625
Se 196.026	-3.8274u	-10.7240u	-0.9366u
Si 288.158	0.4015	0.9212	0.8837
Sn 189.925	9.0287	-2.9010u	1.5110
Sr 216.596	-0.5261u	0.7212	0.0741
Ti 334.941	0.1640	0.1295	0.1266
Tl 190.794	0.5250	2.0294	-8.2000u
V 292.401	-0.1602u	-0.1110u	-0.0051u
Zn 206.200	2.0865	0.1912	0.0792

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1136	ppb	0.1394	122.7	-25.6779	0.11362
Al 308.215	2.0272	ppb	1.8636	91.9	159.766	2.02722
As 188.980	-0.7824	ppb	4.2931	548.7	0.7661	-0.78237
B 249.678	2.9928	ppb	0.6581	22.0	-47.2278	2.99281
Ba 389.178	-0.7589	ppb	0.6677	88.0	-57.3149	-0.75892
Be 313.042	0.0118	ppb	0.0094	80.0	-174.309	0.01177
Ca 370.602	0.5919	ppb	4.733	799.6	28.72	0.59195
Cd 226.502	0.0709	ppb	0.0896	126.3	6.9161	0.07093
Co 228.615	-0.3159	ppb	0.5457	172.8	-8.9312	-0.31587
Cr 267.716	0.0445	ppb	0.3252	731.6	20.6550	0.04445
Cu 324.754	0.2689	ppb	0.3984	148.2	234.109	0.26886
Fe 271.441	-4.7181	ppb	3.2415	68.7	14.0782	-4.71810
K 766.491	-0.4073	ppb	1.0094	247.8	236.313	-0.40729

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	3.7193	ppb	4.3449	116.8	24.2437	3.71933
Mn 257.610	-0.0050	ppb	0.0302	602.7	29.4176	-0.00502
Mo 202.032	-0.0374	ppb	0.1732	463.1	2.6383	-0.03741
Na 330.237	-73.1676	ppb	222.575	304.2	43.7080	-73.16762
Ni 231.604	-0.0344	ppb	1.4766	4295.4	-1.6109	-0.03438
Pb 220.353	0.1171	ppb	2.2223	1897.2	6.1797	0.11713
Sb 206.834	-3.9961	ppb	8.3970	210.1	4.0696	-3.99611
Se 196.026	-5.1626	ppb	5.0285	97.4	-2.0937	-5.16265
Si 288.158	0.7355	ppb	0.2898	39.4	341.132	0.73549
Sn 189.925	2.5462	ppb	6.0319	236.9	0.5505	2.54622
Sr 216.596	0.0897	ppb	0.6238	695.3	5.8946	0.08971
Ti 334.941	0.1401	ppb	0.0208	14.8	-21.0902	0.14005
Tl 190.794	-1.8818	ppb	5.5231	293.5	-4.8699	-1.88185
V 292.401	-0.0921	ppb	0.0793	86.1	-3.4365	-0.09210
Zn 206.200	0.7856	ppb	1.1280	143.6	0.9705	0.78562

CR 25 (Samp) **12/15/2018, 11:08:22 AM** **Rack 1, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1043u	-0.2460u	0.0254
Al 308.215	-3.4015u	2.0593	2.3457
As 188.980	16.1034	20.3413	16.3860
B 249.678	10.5225	11.4681	10.6066
Ba 389.178	1.5879	-0.9116u	0.3308
Be 313.042	0.0117	0.0140	0.0058
Ca 370.602	2.828	2.550	-2.039u
Cd 226.502	-0.1579u	-0.3993u	-0.0559u
Co 228.615	-5.7133u	-4.6350	-5.3279u
Cr 267.716	25108.2x	25155.4x	25134.5x
Cu 324.754	-0.5995u	0.1472	-0.0065
Fe 271.441	-8.8062	-4.8020	9.7280
K 766.491	-0.5173u	0.3836	-0.4765u
Mg 279.078	5.8236	4.2663	2.8362
Mn 257.610	0.0262	0.0274	0.1275
Mo 202.032	2.0401	-0.3329u	-0.0612u
Na 330.237	-144.026u	-196.498u	86.6524
Ni 231.604	-1.1348u	-1.2864u	0.7713
Pb 220.353	-0.1135	-5.4260u	-0.4199
Sb 206.834	-24.6124	-23.6786	-19.6718
Se 196.026	-18.7041u	5.9005	-6.6319u
Si 288.158	-10.0599u	-9.1117u	-10.3777u
Sn 189.925	-5.0402u	0.3252	-4.2962u
Sr 216.596	0.1843	-0.0311u	-0.3705u
Ti 334.941	5.7924	5.9090	5.8999
Tl 190.794	8.2490	14.9810	12.4099
V 292.401	-4.5632u	-4.5261u	-4.3704u
Zn 206.200	6.4330u	4.6846u	6.4347u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1083b	ppb	0.1358	125.4	-33.4619
Al 308.215	0.3345b	ppb	3.2386	968.2	154.360
As 188.980	17.6102b	ppb	2.3694	13.5	1.6052
B 249.678	10.8657b	ppb	0.5233	4.8	4.5845

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.3357b	ppb	1.2498	372.3	-46.8756
Be 313.042	0.0105b	ppb	0.0042	40.4	-176.568
Ca 370.602	1.113b	ppb	2.733	245.5	29.58
Cd 226.502	-0.2044b	ppb	0.1764	86.3	2.7472
Co 228.615	-5.2254b	ppb	0.5464	10.5	-8.3560
Cr 267.716	25132.7xb	ppb	23.6548	0.1	541855
Cu 324.754	-0.1529b	ppb	0.3943	257.8	219.175
Fe 271.441	-1.2934b	ppb	9.7526	754.0	38.2895
K 766.491	-0.2034b	ppb	0.5088	250.1	241.358
Mg 279.078	4.3087b	ppb	1.4941	34.7	25.0557
Mn 257.610	0.0604b	ppb	0.0582	96.3	35.8761
Mo 202.032	0.5487b	ppb	1.2987	236.7	3.8652
Na 330.237	-84.6237b	ppb	150.632	178.0	43.4994
Ni 231.604	-0.5500b	ppb	1.1467	208.5	-2.2646
Pb 220.353	-1.9864b	ppb	2.9827	150.2	6.6531
Sb 206.834	-22.6543b	ppb	2.6247	11.6	81.5181
Se 196.026	-6.4785b	ppb	12.3030	189.9	-2.3324
Si 288.158	-9.8497uvb	ppb	0.6586	6.7	291.230
Sn 189.925	-3.0037b	ppb	2.9069	96.8	-1.0998
Sr 216.596	-0.0724b	ppb	0.2797	386.1	5.2709
Ti 334.941	5.8671b	ppb	0.0649	1.1	607.561
Tl 190.794	11.8800b	ppb	3.3971	28.6	-1.1208
V 292.401	-4.4866b	ppb	0.1023	2.3	-600.906
Zn 206.200	5.8508b	ppb	1.0099	17.3	-10.3124

X (Samp) **12/15/2018, 11:13:05 AM** **Rack 1, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0039	-0.7262u	-0.5776u
Al 308.215	-2.2021u	-5.1173u	1.1167
As 188.980	1.6806	-0.9966u	0.5090
B 249.678	1.5708	0.3150	1.0411
Ba 389.178	-0.5945u	0.3765	-0.0183u
Be 313.042	-0.0044u	-0.0098u	-0.0107u
Ca 370.602	-3.641u	-2.942u	4.557
Cd 226.502	0.1577	0.1501	0.1567
Co 228.615	0.6358	0.1005	-0.4878u
Cr 267.716	0.3314	0.5626	0.5486
Cu 324.754	-0.1429u	-0.1503u	0.0791
Fe 271.441	1.7256	3.8141	-7.8915u
K 766.491	-0.8137u	-1.0715u	-2.4757u
Mg 279.078	1.2088	1.2096	-1.8845u
Mn 257.610	-0.0945u	-0.1134u	-0.0470u
Mo 202.032	-1.1787u	-0.0631u	-0.5810u
Na 330.237	-36.8007u	-203.129u	-370.122u
Ni 231.604	-0.1084u	-2.0559u	1.3449
Pb 220.353	-0.5203u	0.0789	2.7880
Sb 206.834	0.9529	3.2140	-2.4720u
Se 196.026	-5.3369u	9.5120	-14.0042u
Si 288.158	-0.7558u	-1.4291u	-0.6728u
Sn 189.925	0.9470	-0.6542u	1.9782
Sr 216.596	-0.7487u	0.6463	-0.8594u
Ti 334.941	0.0110	-0.0254u	0.0313

Label	Replicates Concentration		
Tl 190.794	0.0847	1.9319	-10.6578u
V 292.401	0.2394	0.1462	0.1666
Zn 206.200	-1.1206u	-0.5601u	-0.9032u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4333	ppb	0.3858	89.0	-44.6760
Al 308.215	-2.0676	ppb	3.1192	150.9	150.110
As 188.980	0.3976	ppb	1.3420	337.5	1.0644
B 249.678	0.9756	ppb	0.6304	64.6	-60.5105
Ba 389.178	-0.0788	ppb	0.4883	620.0	-50.8139
Be 313.042	-0.0083	ppb	0.0034	41.1	-190.623
Ca 370.602	-0.6755	ppb	4.545	672.8	26.08
Cd 226.502	0.1549	ppb	0.0041	2.7	8.1927
Co 228.615	0.0828	ppb	0.5620	678.4	-7.0742
Cr 267.716	0.4809	ppb	0.1296	27.0	30.0636
Cu 324.754	-0.0714	ppb	0.1304	182.7	221.761
Fe 271.441	-0.7839	ppb	6.2433	796.4	17.0533
K 766.491	-1.4536	ppb	0.8945	61.5	210.424
Mg 279.078	0.1780	ppb	1.7862	1003.6	19.3645
Mn 257.610	-0.0850	ppb	0.0342	40.2	21.6666
Mo 202.032	-0.6076	ppb	0.5583	91.9	1.4536
Na 330.237	-203.350	ppb	166.661	82.0	40.5136
Ni 231.604	-0.2731	ppb	1.7064	624.8	-1.9183
Pb 220.353	0.7822	ppb	1.7627	225.4	6.5260
Sb 206.834	0.5650	ppb	2.8628	506.7	5.9611
Se 196.026	-3.2764	ppb	11.8927	363.0	-1.7514
Si 288.158	-0.9526uv	ppb	0.4148	43.5	332.948
Sn 189.925	0.7570	ppb	1.3264	175.2	0.0184
Sr 216.596	-0.3206	ppb	0.8392	261.8	4.3318
Ti 334.941	0.0057	ppb	0.0287	507.9	-35.8581
Tl 190.794	-2.8804	ppb	6.7985	236.0	-5.1436
V 292.401	0.1840	ppb	0.0490	26.6	0.1885
Zn 206.200	-0.8613	ppb	0.2826	32.8	0.0437

MO 30 (Samp) **12/15/2018, 11:17:46 AM** **Rack 1, Tube 13**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5935u	0.1027	-0.3094u
Al 308.215	36.1178	40.1072	39.0313
As 188.980	17.8359	18.9795	15.5901
B 249.678	-0.8634u	-0.2494u	-0.6360u
Ba 389.178	0.0697	1.6853	-0.8863
Be 313.042	0.7469u	0.7548u	0.7593u
Ca 370.602	-3.080u	3.163	-1.153u
Cd 226.502	0.5084	0.1292	-0.0944u
Co 228.615	-0.1927u	-1.5750u	-0.7574u
Cr 267.716	-0.0529u	0.1642	0.3704
Cu 324.754	-4.9419	-4.8871	-4.9951
Fe 271.441	6.1777	7.3276	2.0546
K 766.491	-0.3991u	0.2723	-0.2337u
Mg 279.078	-2.6590u	7.0956	-1.1328u
Mn 257.610	0.0138	0.0578	-0.0007u
Mo 202.032	29260.4x	29261.3x	29260.8x

Label	Replicates Concentration		
Na 330.237	-488.110u	-373.753u	-516.670u
Ni 231.604	0.5813	-1.3841u	-0.4083u
Pb 220.353	-3.9198u	-3.3678u	4.9641u
Sb 206.834	25.3004u	21.5984u	17.7498u
Se 196.026	6.5027	7.9360	-8.0601u
Si 288.158	3417.49	3542.73	3636.39
Sn 189.925	-0.8098u	1.9219	-1.0964u
Sr 216.596	31.2790u	31.9348u	30.7066u
Ti 334.941	-1.1496u	-1.2273u	-1.2725u
Tl 190.794	18.1828u	23.4367u	32.3943u
V 292.401	-3.5660u	-4.9064u	-4.3737u
Zn 206.200	6.6652	4.7652	0.7104

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2667b	ppb	0.3500	131.2	-39.0938
Al 308.215	38.4187b	ppb	2.0640	5.4	695.759
As 188.980	17.4685b	ppb	1.7243	9.9	1.6825
B 249.678	-0.5829b	ppb	0.3104	53.3	-70.8022
Ba 389.178	0.2896b	ppb	1.2998	448.9	13.5634
Be 313.042	0.7537b	ppb	0.0063	0.8	-1527.61
Ca 370.602	-0.3567b	ppb	3.197	896.2	25.56
Cd 226.502	0.1811b	ppb	0.3047	168.3	8.6682
Co 228.615	-0.8417b	ppb	0.6950	82.6	-324.075
Cr 267.716	0.1605b	ppb	0.2117	131.9	23.5327
Cu 324.754	-4.9414b	ppb	0.0540	1.1	629.923
Fe 271.441	5.1866b	ppb	2.7727	53.5	34.0859
K 766.491	-0.1202b	ppb	0.3498	291.0	243.417
Mg 279.078	1.1012b	ppb	5.2470	476.5	20.6185
Mn 257.610	0.0236b	ppb	0.0305	129.1	32.1594
Mo 202.032	29260.8xb	ppb	0.4215	0.0	60797.1
Na 330.237	-459.511b	ppb	75.6289	16.5	34.2035
Ni 231.604	-0.4037b	ppb	0.9827	243.4	-2.0250
Pb 220.353	-0.7745b	ppb	4.9774	642.7	-2.4924
Sb 206.834	21.5495b	ppb	3.7755	17.5	-227.254
Se 196.026	2.1262b	ppb	8.8507	416.3	-0.7707
Si 288.158	3532.21b	ppb	109.826	3.1	21017.2
Sn 189.925	0.0052b	ppb	1.6660	31963.0	-0.2051
Sr 216.596	31.3068b	ppb	0.6146	2.0	-255.060
Ti 334.941	-1.2165b	ppb	0.0622	5.1	-170.011
Tl 190.794	24.6713b	ppb	7.1857	29.1	-38.0890
V 292.401	-4.2820b	ppb	0.6749	15.8	-2166.54
Zn 206.200	4.0469b	ppb	3.0416	75.2	2.8044

X (Samp) **12/15/2018, 11:23:01 AM** **Rack 1, Tube 14**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5101u	-0.3874u	0.1619
Al 308.215	-2.6268u	1.1525	-0.4788u
As 188.980	-3.3249u	-0.3008u	-1.9271u
B 249.678	-0.5067u	0.7858	0.3235
Ba 389.178	1.9153	0.2061	-2.1341u
Be 313.042	-0.0131u	-0.0206u	0.0008
Ca 370.602	-0.1093u	0.3196	-9.418u

Label	Replicates Concentration		
Cd 226.502	-0.4183u	-0.2465u	0.2738
Co 228.615	-1.1398u	0.5424	-0.6755u
Cr 267.716	0.0139	-0.4284u	-0.1366u
Cu 324.754	0.3866	0.3549	-0.3362u
Fe 271.441	-2.6700u	-6.4049u	-4.0854u
K 766.491	-1.1253u	-1.5434u	-1.0331u
Mg 279.078	0.5981	2.9206	-0.7736u
Mn 257.610	-0.0899u	-0.0637u	-0.0528u
Mo 202.032	4.8340	4.8518	3.7456
Na 330.237	-126.608u	-315.119u	-221.889u
Ni 231.604	0.9886	0.9732	0.0731
Pb 220.353	-2.3863u	-0.3073u	6.4209
Sb 206.834	-3.0932u	2.9064	-2.5209u
Se 196.026	-3.8453u	-24.3284u	-10.2948u
Si 288.158	29.3830	30.6210	25.7094
Sn 189.925	2.2586	4.3072	-2.3607u
Sr 216.596	0.3917	0.4635	-0.0016u
Ti 334.941	-0.0777u	0.0437	0.1020
Tl 190.794	-0.4425u	-9.0501u	0.4953
V 292.401	0.4937	0.0686	-0.2483u
Zn 206.200	-0.4973u	0.5761	-0.4251u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2452	ppb	0.3579	145.9	-38.1459
Al 308.215	-0.6511	ppb	1.8955	291.1	153.530
As 188.980	-1.8510	ppb	1.5135	81.8	0.4952
B 249.678	0.2009	ppb	0.6549	326.1	-65.6162
Ba 389.178	-0.0042	ppb	2.0329	47909.8	-50.0903
Be 313.042	-0.0110	ppb	0.0108	98.6	-193.157
Ca 370.602	-3.069	ppb	5.502	179.3	21.08
Cd 226.502	-0.1303	ppb	0.3604	276.5	3.8546
Co 228.615	-0.4243	ppb	0.8688	204.8	-9.4887
Cr 267.716	-0.1837	ppb	0.2249	122.4	15.7366
Cu 324.754	0.1351	ppb	0.4085	302.4	229.355
Fe 271.441	-4.3868	ppb	1.8856	43.0	14.3300
K 766.491	-1.2340	ppb	0.2719	22.0	215.859
Mg 279.078	0.9150	ppb	1.8674	204.1	20.3804
Mn 257.610	-0.0688	ppb	0.0191	27.7	23.2316
Mo 202.032	4.4771	ppb	0.6336	14.2	12.0180
Na 330.237	-221.205	ppb	94.2577	42.6	40.0726
Ni 231.604	0.6783	ppb	0.5241	77.3	-0.6943
Pb 220.353	1.2424	ppb	4.6036	370.5	6.7642
Sb 206.834	-0.9026	ppb	3.3111	366.8	5.3088
Se 196.026	-12.8228	ppb	10.4729	81.7	-3.4841
Si 288.158	28.5711	ppb	2.5545	8.9	473.321
Sn 189.925	1.4017	ppb	3.4156	243.7	0.2101
Sr 216.596	0.2845	ppb	0.2504	88.0	6.5689
Ti 334.941	0.0227	ppb	0.0917	404.7	-33.9962
Tl 190.794	-2.9991	ppb	5.2613	175.4	-5.1844
V 292.401	0.1047	ppb	0.3723	355.6	-1.2173
Zn 206.200	-0.1154	ppb	0.6000	519.7	0.4635

Ti 40 (Samp) **12/15/2018, 11:27:41 AM** **Rack 1, Tube 15**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4666u	-0.0007u	0.5086u
Al 308.215	-3.3752u	1.4961	-0.2101
As 188.980	2.4341	2.7095	1.3836
B 249.678	1.2565	0.0892	0.7911
Ba 389.178	-0.3462u	-1.6612u	0.5089
Be 313.042	0.1034	0.1091	0.1098
Ca 370.602	-350.7	-346.0	-348.5
Cd 226.502	-0.5497u	-0.1932u	-0.1842u
Co 228.615	-8.4209	-8.1501	-9.1739
Cr 267.716	-2.3775u	-2.4415u	-2.4200u
Cu 324.754	-5.1987u	-4.6450u	-4.4324u
Fe 271.441	-11.0739u	-9.3729u	-3.8858
K 766.491	-2.6524u	-1.0017u	-2.0895u
Mg 279.078	1.9402	-2.4323u	-1.6239u
Mn 257.610	-7.5941u	-7.5081	-7.5261
Mo 202.032	1.4848	0.0425	2.2130
Na 330.237	-963.511u	-840.914u	-981.020u
Ni 231.604	0.8061	-1.1532u	-0.0118u
Pb 220.353	0.1728u	-0.4229u	-8.6710u
Sb 206.834	6.9798	2.0096	-2.0868u
Se 196.026	5.9731	-2.4518u	-2.1519u
Si 288.158	1268.22	1286.11	1310.14
Sn 189.925	1.3339	0.8371	4.4939
Sr 216.596	0.5113	-0.1358u	-0.3447u
Ti 334.941	37909.2x	37873.3x	37898.8x
Tl 190.794	5.0365	12.1430	8.2259
V 292.401	8.1318	7.7094	7.7071
Zn 206.200	1.2122	3.2799	-0.9241u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0138b	ppb	0.4878	3543.1	-79.1385
Al 308.215	-0.6964b	ppb	2.4718	354.9	153.863
As 188.980	2.1757b	ppb	0.6997	32.2	1.5138
B 249.678	0.7123b	ppb	0.5877	82.5	-62.2488
Ba 389.178	-0.4995b	ppb	1.0931	218.8	-54.8141
Be 313.042	0.1075b	ppb	0.0035	3.3	-95.9918
Ca 370.602	-348.4b	ppb	2.357	0.7	249.3
Cd 226.502	-0.3090b	ppb	0.2085	67.5	-10.3970
Co 228.615	-8.5816b	ppb	0.5305	6.2	287.167
Cr 267.716	-2.4130b	ppb	0.0325	1.3	0.3011
Cu 324.754	-4.7587b	ppb	0.3956	8.3	51.6731
Fe 271.441	-8.1108b	ppb	3.7566	46.3	15.1793
K 766.491	-1.9146b	ppb	0.8392	43.8	199.019
Mg 279.078	-0.7053b	ppb	2.3265	329.9	18.1450
Mn 257.610	-7.5428b	ppb	0.0454	0.6	33.2434
Mo 202.032	1.2468b	ppb	1.1046	88.6	5.3021
Na 330.237	-928.482b	ppb	76.3397	8.2	-13.6255
Ni 231.604	-0.1196b	ppb	0.9841	822.5	-1.7855
Pb 220.353	-2.9737b	ppb	4.9430	166.2	-2.4468
Sb 206.834	2.3009b	ppb	4.5403	197.3	6.6603
Se 196.026	0.4565b	ppb	4.7799	1047.1	-1.0738
Si 288.158	1288.16b	ppb	21.0331	1.6	8207.64

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	2.2217b	ppb	1.9835	89.3	0.4539
Sr 216.596	0.0103b	ppb	0.4463	4348.9	5.5651
Ti 334.941	37893.8xb	ppb	18.4629	0.0	4159531
Tl 190.794	8.4685b	ppb	3.5595	42.0	-1.9000
V 292.401	7.8494b	ppb	0.2445	3.1	296.554
Zn 206.200	1.1893b	ppb	2.1021	176.7	1.1971

X (Samp) **12/15/2018, 11:32:22 AM** **Rack 1, Tube 16**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3262	-0.6261u	-0.9248u
Al 308.215	1.4939	-2.1762u	-3.7744u
As 188.980	11.2479	-2.5835u	-2.4181u
B 249.678	-0.1527u	1.9044	1.6877
Ba 389.178	-0.0207u	0.0584	-0.5792u
Be 313.042	-0.0008u	-0.0021u	0.0021
Ca 370.602	-1.522u	-3.369u	0.6897
Cd 226.502	-0.0955u	0.0783	-0.0170u
Co 228.615	-0.2244u	-0.1116u	-0.5056u
Cr 267.716	-0.5933u	-0.1563u	-0.0735u
Cu 324.754	0.3850	0.1365	-0.4922u
Fe 271.441	-7.7798u	-1.7840u	-10.4222u
K 766.491	-1.3640u	-1.6680u	-1.9601u
Mg 279.078	2.1224	2.5135	-2.3294u
Mn 257.610	-0.0664u	-0.0531u	-0.0782u
Mo 202.032	-0.7986u	-1.1924u	-0.2602u
Na 330.237	-98.2469u	52.9413	-160.450u
Ni 231.604	-0.1757u	1.0069	0.8786
Pb 220.353	1.0669	-9.4871u	2.9698
Sb 206.834	-3.0621u	-1.3386u	-6.0958u
Se 196.026	-21.0027u	-4.8693u	4.6900
Si 288.158	24.2429	22.8084	16.8057
Sn 189.925	-5.6804u	-1.8389u	-3.3341u
Sr 216.596	1.0654	1.0395	1.2812
Ti 334.941	7.1772	6.2181	5.4956
Tl 190.794	2.0096	-2.9300u	-2.9109u
V 292.401	0.0516	0.1304	0.3501
Zn 206.200	-1.9169u	0.8321	-1.0283u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4082	ppb	0.6533	160.0	-43.8155
Al 308.215	-1.4856	ppb	2.7012	181.8	151.482
As 188.980	2.0821	ppb	7.9383	381.3	1.4906
B 249.678	1.1465	ppb	1.1303	98.6	-59.3844
Ba 389.178	-0.1805	ppb	0.3475	192.5	-51.7872
Be 313.042	-0.0002	ppb	0.0021	898.3	-184.058
Ca 370.602	-1.400	ppb	2.032	145.1	24.72
Cd 226.502	-0.0114	ppb	0.0870	762.4	5.6590
Co 228.615	-0.2805	ppb	0.2029	72.3	-8.7077
Cr 267.716	-0.2744	ppb	0.2793	101.8	13.7865
Cu 324.754	0.0098	ppb	0.4521	4625.7	224.704
Fe 271.441	-6.6620	ppb	4.4263	66.4	12.6249
K 766.491	-1.6640	ppb	0.2980	17.9	205.217

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	0.7688	ppb	2.6902	349.9	20.1789
Mn 257.610	-0.0659	ppb	0.0125	19.0	23.6314
Mo 202.032	-0.7504	ppb	0.4680	62.4	1.1570
Na 330.237	-68.5852	ppb	109.744	160.0	43.8198
Ni 231.604	0.5699	ppb	0.6489	113.9	-0.8338
Pb 220.353	-1.8168	ppb	6.7105	369.4	5.1721
Sb 206.834	-3.4988	ppb	2.4085	68.8	4.2774
Se 196.026	-7.0607	ppb	12.9858	183.9	-2.4382
Si 288.158	21.2857	ppb	3.9455	18.5	438.021
Sn 189.925	-3.6178	ppb	1.9364	53.5	-1.2824
Sr 216.596	1.1287	ppb	0.1327	11.8	9.8636
Ti 334.941	6.2970	ppb	0.8435	13.4	654.736
Tl 190.794	-1.2771	ppb	2.8464	222.9	-4.7024
V 292.401	0.1773	ppb	0.1547	87.2	0.1554
Zn 206.200	-0.7043	ppb	1.4028	199.2	0.1325

V 50 (Samp) **12/15/2018, 11:37:02 AM** **Rack 1, Tube 17**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.1493	-0.9912	2.0273
Al 308.215	-35.4964	-30.5007	-29.4915
As 188.980	10.1513	6.1874	6.1834
B 249.678	-2.0600u	-2.4230u	-1.0363u
Ba 389.178	2.6775	1.9851	3.1673
Be 313.042	-0.9221	-0.9178	-0.9023
Ca 370.602	30.63	25.90	36.24
Cd 226.502	-0.2661u	-0.3034u	-0.3442u
Co 228.615	0.4039	-0.2255u	0.0599
Cr 267.716	5.1470	4.6347u	5.0851
Cu 324.754	-4.2310u	-4.6371u	-3.5667u
Fe 271.441	57.4589	63.1341	65.9137
K 766.491	0.4576	0.4033	0.7528
Mg 279.078	15.2265	15.8078	20.3623
Mn 257.610	-0.2205u	-0.1307u	-0.1937u
Mo 202.032	4.8276	1.8782u	4.0126u
Na 330.237	-53.3883u	9.2934	-40.9216u
Ni 231.604	0.9644	0.8871	0.0281
Pb 220.353	-1.5398u	-5.3814u	-9.7329u
Sb 206.834	-9.5497u	0.0431	0.1589
Se 196.026	0.2295	1.3215	2.7457
Si 288.158	18.4287	17.9576	14.1280
Sn 189.925	3.3486	1.9017	2.3876
Sr 216.596	0.1848	-0.3442u	1.7341
Ti 334.941	2.3541	2.4696	2.6843
Tl 190.794	23.7272	35.2558	34.4627
V 292.401	48188.1x	47981.3x	48015.7x
Zn 206.200	-0.6496u	-2.9228u	3.3243

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7285b	ppb	1.5526	213.1	59.2120
Al 308.215	-31.8295b	ppb	3.2155	10.1	1556.69
As 188.980	7.5074b	ppb	2.2897	30.5	2.8649
B 249.678	-1.8398b	ppb	0.7191	39.1	-79.3711

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	2.6100b	ppb	0.5940	22.8	18.7778
Be 313.042	-0.9141b	ppb	0.0104	1.1	248.804
Ca 370.602	30.92b	ppb	5.179	16.7	397.0
Cd 226.502	-0.3045b	ppb	0.0391	12.8	1.4815
Co 228.615	0.0794b	ppb	0.3152	396.8	-7.0308
Cr 267.716	4.9556b	ppb	0.2796	5.6	22.7229
Cu 324.754	-4.1449b	ppb	0.5404	13.0	-275.343
Fe 271.441	62.1689b	ppb	4.3092	6.9	281.163
K 766.491	0.5379b	ppb	0.1881	35.0	259.700
Mg 279.078	17.1322b	ppb	2.8124	16.4	42.5320
Mn 257.610	-0.1816b	ppb	0.0461	25.4	12.7464
Mo 202.032	3.5728b	ppb	1.5231	42.6	0.1259
Na 330.237	-28.3389b	ppb	33.1812	117.1	44.7820
Ni 231.604	0.6266b	ppb	0.5197	82.9	-0.7610
Pb 220.353	-5.5514b	ppb	4.0992	73.8	3.2191
Sb 206.834	-3.1159b	ppb	5.5721	178.8	4.4417
Se 196.026	1.4322b	ppb	1.2617	88.1	-0.8957
Si 288.158	16.8381b	ppb	2.3588	14.0	416.730
Sn 189.925	2.5460b	ppb	0.7363	28.9	0.5504
Sr 216.596	0.5249b	ppb	1.0801	205.8	7.6756
Ti 334.941	2.5026b	ppb	0.1676	6.7	238.298
Tl 190.794	31.1486b	ppb	6.4393	20.7	44.0276
V 292.401	48061.7xb	ppb	110.830	0.2	629722
Zn 206.200	-0.0827b	ppb	3.1619	3821.5	0.4825

X (Samp) **12/15/2018, 11:41:43 AM** **Rack 1, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.7461u	0.3731	0.1223
Al 308.215	-4.9148u	-0.7139u	-0.9381u
As 188.980	-2.9169u	4.2050	2.7951
B 249.678	0.2016	0.1501	1.4600
Ba 389.178	-1.0982u	-0.4699u	-0.4396u
Be 313.042	-0.0004u	-0.0050u	-0.0097u
Ca 370.602	-0.8385u	-1.050u	0.1174
Cd 226.502	-0.1791u	0.3757	0.2467
Co 228.615	-0.2860u	-0.6831u	-0.3750u
Cr 267.716	-0.4928u	-0.0943u	-0.0625u
Cu 324.754	0.3555	-0.1625u	0.1885
Fe 271.441	-12.5121u	3.4730	-8.8485u
K 766.491	-1.3080u	-1.0878u	-3.0275u
Mg 279.078	-2.1155u	1.0557	-1.3481u
Mn 257.610	-0.0473u	-0.0762u	-0.0576u
Mo 202.032	-0.7017u	-0.7544u	-0.1566u
Na 330.237	-9.4136u	-143.877u	-119.493u
Ni 231.604	-0.2264u	-1.8278u	0.1957
Pb 220.353	0.3663	-5.3148u	4.2061
Sb 206.834	-0.3750u	4.4096	-9.2007u
Se 196.026	-11.6139u	-2.7761u	4.3732
Si 288.158	4.5816	5.1592	3.5363
Sn 189.925	3.4295	-2.3653u	1.2411
Sr 216.596	-0.5632u	-0.1230u	-0.1978u
Ti 334.941	0.7777	0.9714	0.9589

Label	Replicates Concentration		
Tl 190.794	0.2906	-6.9386u	4.6360
V 292.401	1.5406	1.3660	0.8368
Zn 206.200	-0.5959u	-2.0920u	-1.3626u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0836	ppb	0.5873	702.8	-32.5224
Al 308.215	-2.1889	ppb	2.3633	108.0	149.861
As 188.980	1.3611	ppb	3.7713	277.1	1.3081
B 249.678	0.6039	ppb	0.7419	122.8	-62.9566
Ba 389.178	-0.6692	ppb	0.3718	55.6	-56.4602
Be 313.042	-0.0051	ppb	0.0046	91.7	-187.968
Ca 370.602	-0.5902	ppb	0.6219	105.4	26.29
Cd 226.502	0.1478	ppb	0.2903	196.5	8.0831
Co 228.615	-0.4480	ppb	0.2084	46.5	-9.5373
Cr 267.716	-0.2165	ppb	0.2398	110.8	15.0269
Cu 324.754	0.1272	ppb	0.2644	207.9	228.958
Fe 271.441	-5.9625	ppb	8.3742	140.4	13.1515
K 766.491	-1.8078	ppb	1.0620	58.7	201.661
Mg 279.078	-0.8026	ppb	1.6545	206.1	18.0132
Mn 257.610	-0.0604	ppb	0.0147	24.3	24.0663
Mo 202.032	-0.5376	ppb	0.3310	61.6	1.5990
Na 330.237	-90.9279	ppb	71.6386	78.8	43.2766
Ni 231.604	-0.6195	ppb	1.0675	172.3	-2.3635
Pb 220.353	-0.2475	ppb	4.7900	1935.7	5.9899
Sb 206.834	-1.7220	ppb	6.9044	400.9	5.0109
Se 196.026	-3.3389	ppb	8.0084	239.8	-1.7627
Si 288.158	4.4257	ppb	0.8226	18.6	358.532
Sn 189.925	0.7684	ppb	2.9262	380.8	0.0218
Sr 216.596	-0.2947	ppb	0.2356	79.9	4.4281
Ti 334.941	0.9026	ppb	0.1084	12.0	62.6067
Tl 190.794	-0.6706	ppb	5.8469	871.8	-4.5349
V 292.401	1.2478	ppb	0.3665	29.4	14.1275
Zn 206.200	-1.3502	ppb	0.7481	55.4	-0.2309

ZN 30 (Samp) **12/15/2018, 11:46:24 AM** **Rack 1, Tube 19**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1780	0.0121	-0.1746u
Al 308.215	-0.2087u	-1.3579u	-1.4482u
As 188.980	1.8014	-0.9422u	1.8217
B 249.678	0.9434	0.8437	0.0166
Ba 389.178	0.8200	0.6172	0.2461
Be 313.042	-0.0139u	-0.0165u	-0.0060u
Ca 370.602	-3.028u	4.636	-0.4579u
Cd 226.502	-0.0995u	-0.0270u	-0.1821u
Co 228.615	-1.2085u	-1.4999u	-0.1935u
Cr 267.716	0.1036	-0.2693u	-0.2310u
Cu 324.754	0.1307	0.0704	0.1337
Fe 271.441	-10.7476u	-8.5913u	-1.6089u
K 766.491	-1.3356u	-1.0274u	-0.7484u
Mg 279.078	-1.6015u	4.8377	-1.7492u
Mn 257.610	-0.0710u	-0.0547u	0.0313
Mo 202.032	1.6329	1.2323	1.3924

Label	Replicates Concentration		
Na 330.237	1146.71u	845.027u	1037.92u
Ni 231.604	0.1635	-1.7081u	-0.8372u
Pb 220.353	2.5379	-4.7026u	6.4986
Sb 206.834	-0.0893u	-0.2540u	1.0616
Se 196.026	4.0971	-5.4991u	-9.6880u
Si 288.158	0.9035	1.5007	1.5200
Sn 189.925	-3.1298u	3.3104	4.4467
Sr 216.596	0.0424	0.1364	1.2700
Ti 334.941	0.4373	0.5682	0.5474
Tl 190.794	-0.8336u	-3.7746u	1.6550
V 292.401	-0.1465u	0.8457	0.6660
Zn 206.200	29856.5x	29877.5x	29819.3x

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0052b	ppb	0.1764	3400.9	-29.4432
Al 308.215	-1.0049b	ppb	0.6910	68.8	152.654
As 188.980	0.8936b	ppb	1.5900	177.9	1.1897
B 249.678	0.6012b	ppb	0.5088	84.6	-62.9756
Ba 389.178	0.5611b	ppb	0.2910	51.9	-44.6870
Be 313.042	-0.0121b	ppb	0.0055	45.3	-192.968
Ca 370.602	0.3833b	ppb	3.901	1017.6	28.30
Cd 226.502	-0.1029b	ppb	0.0776	75.4	4.2721
Co 228.615	-0.9673b	ppb	0.6858	70.9	-11.9719
Cr 267.716	-0.1322b	ppb	0.2051	155.1	16.6050
Cu 324.754	0.1116b	ppb	0.0357	32.0	228.433
Fe 271.441	-6.9826b	ppb	4.7770	68.4	12.3418
K 766.491	-1.0372b	ppb	0.2937	28.3	220.728
Mg 279.078	0.4956b	ppb	3.7610	758.8	19.8019
Mn 257.610	-0.0315b	ppb	0.0550	174.6	26.8585
Mo 202.032	1.4192b	ppb	0.2017	14.2	5.6646
Na 330.237	1009.88b	ppb	152.781	15.1	-3.0115
Ni 231.604	-0.7939b	ppb	0.9366	118.0	-2.5731
Pb 220.353	1.4446b	ppb	5.6801	393.2	6.8704
Sb 206.834	0.2394b	ppb	0.7168	299.4	5.8083
Se 196.026	-3.6967b	ppb	7.0671	191.2	-1.8276
Si 288.158	1.3081b	ppb	0.3505	26.8	344.188
Sn 189.925	1.5424b	ppb	4.0860	264.9	0.2518
Sr 216.596	0.4829b	ppb	0.6833	141.5	7.3783
Ti 334.941	0.5176b	ppb	0.0703	13.6	20.3858
Tl 190.794	-0.9844b	ppb	2.7179	276.1	-4.6255
V 292.401	0.4551b	ppb	0.5287	116.2	3.6286
Zn 206.200	29851.1xb	ppb	29.4511	0.1	16790.8

X (Samp) **12/15/2018, 11:51:05 AM** **Rack 1, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1431	0.1875	-0.3159u
Al 308.215	-0.0219u	-5.7636u	-0.2343u
As 188.980	-2.1774u	-0.7801u	-2.9487u
B 249.678	1.0320	1.4656	0.4564
Ba 389.178	-0.1292u	-0.1384u	0.3427
Be 313.042	-0.0038u	0.0002	-0.0044u
Ca 370.602	-3.304u	-5.396u	-3.307u

Label	Replicates Concentration		
Cd 226.502	-0.1994u	-0.1141u	0.2789
Co 228.615	-0.3039u	-0.5032u	-1.2303u
Cr 267.716	0.0751	-0.3007u	-0.3571u
Cu 324.754	-0.0128u	0.1405	-0.0181u
Fe 271.441	0.7020	-1.0048u	2.3705
K 766.491	-0.7542u	-1.9809u	-1.4254u
Mg 279.078	3.3959	4.2153	0.4572
Mn 257.610	-0.1374u	-0.1260u	-0.1568u
Mo 202.032	-1.0857u	-0.8312u	0.6679
Na 330.237	311.380	220.758	-318.103u
Ni 231.604	0.8654	1.4946	0.1976
Pb 220.353	-1.0555u	1.5082	-1.6193u
Sb 206.834	3.4391	-2.9765u	-7.8894u
Se 196.026	-2.6948u	-2.0044u	-12.0587u
Si 288.158	0.0577	0.8259	-1.2150u
Sn 189.925	-1.5110u	2.3841	6.3678
Sr 216.596	0.5960	0.1157	0.2122
Ti 334.941	0.4126	0.4967	0.3329
Tl 190.794	2.7379	-13.2195u	0.1679
V 292.401	0.5274	-0.0999u	0.1908
Zn 206.200	0.8876	1.3621	1.8146

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0049	ppb	0.2787	5681.5	-29.4536
Al 308.215	-2.0066	ppb	3.2554	162.2	150.258
As 188.980	-1.9687	ppb	1.0993	55.8	0.4661
B 249.678	0.9847	ppb	0.5063	51.4	-60.4524
Ba 389.178	0.0250	ppb	0.2752	1099.7	-49.8197
Be 313.042	-0.0026	ppb	0.0025	92.7	-186.034
Ca 370.602	-4.003	ppb	1.207	30.2	19.14
Cd 226.502	-0.0115	ppb	0.2551	2217.4	5.6610
Co 228.615	-0.6791	ppb	0.4876	71.8	-10.6140
Cr 267.716	-0.1942	ppb	0.2349	121.0	15.5106
Cu 324.754	0.0365	ppb	0.0901	246.7	225.676
Fe 271.441	0.6893	ppb	1.6877	244.9	18.1214
K 766.491	-1.3868	ppb	0.6143	44.3	212.076
Mg 279.078	2.6895	ppb	1.9761	73.5	22.8268
Mn 257.610	-0.1401	ppb	0.0156	11.1	16.3528
Mo 202.032	-0.4164	ppb	0.9475	227.6	1.8509
Na 330.237	71.3453	ppb	340.302	477.0	47.2592
Ni 231.604	0.8525	ppb	0.6486	76.1	-0.4700
Pb 220.353	-0.3889	ppb	1.6669	428.7	5.9165
Sb 206.834	-2.4756	ppb	5.6809	229.5	4.6999
Se 196.026	-5.5860	ppb	5.6162	100.5	-2.1706
Si 288.158	-0.1105uv	ppb	1.0308	932.9	337.093
Sn 189.925	2.4136	ppb	3.9395	163.2	0.5111
Sr 216.596	0.3080	ppb	0.2541	82.5	6.7282
Ti 334.941	0.4141	ppb	0.0819	19.8	8.9695
Tl 190.794	-3.4379	ppb	8.5680	249.2	-5.2984
V 292.401	0.2061	ppb	0.3139	152.3	0.4950
Zn 206.200	1.3547	ppb	0.4636	34.2	1.2907

Cont Calib Verif (CCV) **12/15/2018, 11:55:49 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	486.262	487.811	486.670
Al 308.215	9859.15	9857.58	9863.15
As 188.980	509.287	497.809	508.340
B 249.678	495.590	497.652	498.758
Ba 389.178	492.174	491.797	491.358
Be 313.042	513.496	513.186	513.193
Ca 370.602	10018	10023	9999
Cd 226.502	502.745	503.163	503.350
Co 228.615	505.337	502.951	504.556
Cr 267.716	498.081	498.124	497.785
Cu 324.754	496.720	500.200	500.631
Fe 271.441	10000.9	10018.0	9972.18
K 766.491	9725.35	9753.76	9760.04
Mg 279.078	10037.3	10021.9	10024.3
Mn 257.610	502.361	501.978	501.663
Mo 202.032	498.812	495.735	496.608
Na 330.237	9805.07	10263.3	9943.02
Ni 231.604	503.051	506.417	506.558
Pb 220.353	513.927	506.736	509.013
Sb 206.834	500.207	500.693	516.455
Se 196.026	491.558	506.348	497.970
Si 288.158	4917.33	4910.14	4906.03
Sn 189.925	501.450	498.882	501.078
Sr 216.596	508.710	506.924	505.325
Ti 334.941	498.225	497.716	496.662
Tl 190.794	486.225	490.403	495.485
V 292.401	500.527	500.986	500.024
Zn 206.200	1037.00	1036.36	1032.12

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	486.914	ppb	0.8025	0.2	16884.1	97.38287
Al 308.215	9859.96	ppb	2.8743	0.0	23429.5	98.59962
As 188.980	505.146	ppb	6.3714	1.3	128.594	101.02910
B 249.678	497.333	ppb	1.6078	0.3	3198.15	99.46665
Ba 389.178	491.777	ppb	0.4084	0.1	4668.88	98.35532
Be 313.042	513.292	ppb	0.1766	0.0	417704	102.65833
Ca 370.602	10013	ppb	12.91	0.1	20926	100.13159
Cd 226.502	503.086	ppb	0.3095	0.1	7670.59	100.61721
Co 228.615	504.281	ppb	1.2162	0.2	2335.70	100.85625
Cr 267.716	497.997	ppb	0.1847	0.0	10757.5	99.59937
Cu 324.754	499.184	ppb	2.1447	0.4	18335.3	99.83672
Fe 271.441	9997.03	ppb	23.1430	0.2	7550.61	99.92030
K 766.491	9746.38	ppb	18.4871	0.2	241403	97.46383
Mg 279.078	10027.8	ppb	8.3028	0.1	13832.4	100.27800
Mn 257.610	502.000	ppb	0.3498	0.1	48623.9	100.40010
Mo 202.032	497.052	ppb	1.5858	0.3	1035.18	99.41041
Na 330.237	10003.8	ppb	235.075	2.3	287.459	100.03796
Ni 231.604	505.342	ppb	1.9853	0.4	647.841	101.06844
Pb 220.353	509.892	ppb	3.6754	0.7	271.159	101.97838
Sb 206.834	505.785	ppb	9.2435	1.8	212.727	101.15696
Se 196.026	498.625	ppb	7.4164	1.5	89.4227	99.72504
Si 288.158	4911.17	ppb	5.7174	0.1	23656.0	98.22332

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	500.470	ppb	1.3879	0.3	148.606	100.09401
Sr 216.596	506.986	ppb	1.6935	0.3	1935.56	101.39726
Ti 334.941	497.535	ppb	0.7971	0.2	54610.4	99.50690
Tl 190.794	490.704	ppb	4.6372	0.9	131.083	98.14083
V 292.401	500.512	ppb	0.4811	0.1	6513.81	100.10246
Zn 206.200	1035.16	ppb	2.6521	0.3	582.357	103.51593

Cont Calib Blank (CCB) **12/15/2018, 12:00:31 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0018u	-0.0141u	0.7746
Al 308.215	-3.7860u	-0.5138u	-2.7134u
As 188.980	-1.5126u	5.4027	4.0930
B 249.678	2.3759	1.5506	1.7415
Ba 389.178	-0.3297u	-0.3003u	0.8858
Be 313.042	0.0100	0.0167	0.0135
Ca 370.602	-1.975u	-5.177u	0.2371
Cd 226.502	-0.0073u	-0.2040u	-0.1278u
Co 228.615	-1.0789u	-0.0020u	-1.2851u
Cr 267.716	-0.2690u	-0.0750u	-0.1739u
Cu 324.754	0.4764	-0.4841u	0.0726
Fe 271.441	2.2958	-2.0342u	-1.2805u
K 766.491	-0.4154u	-0.1508u	-0.7223u
Mg 279.078	-1.2954u	2.1096	3.0380
Mn 257.610	-0.0635u	0.0449	-0.0688u
Mo 202.032	-0.4448u	-0.6522u	0.9437
Na 330.237	-156.518u	-155.930u	-185.361u
Ni 231.604	-2.1449u	1.7199	0.3408
Pb 220.353	0.4228	0.0202	-3.4246u
Sb 206.834	-7.0790u	-2.8413u	-1.5158u
Se 196.026	5.7645	-2.9041u	-4.5200u
Si 288.158	5.1048	4.1404	0.6125
Sn 189.925	1.5610	1.9866	-2.4288u
Sr 216.596	-0.3899u	0.2664	1.1405
Ti 334.941	0.2622	0.3762	0.2214
Tl 190.794	9.7629	4.0544	-11.3444u
V 292.401	0.5046	0.1395	0.0270
Zn 206.200	0.4450	-0.7794u	-2.8963u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2529	ppb	0.4519	178.7	-20.8380	0.25291
Al 308.215	-2.3377	ppb	1.6681	71.4	149.481	-2.33774
As 188.980	2.6610	ppb	3.6733	138.0	1.6369	2.66102
B 249.678	1.8893	ppb	0.4320	22.9	-54.4972	1.88933
Ba 389.178	0.0853	ppb	0.6934	813.4	-49.2387	0.08525
Be 313.042	0.0134	ppb	0.0034	25.2	-172.970	0.01341
Ca 370.602	-2.305	ppb	2.722	118.1	22.68	-2.30487
Cd 226.502	-0.1131	ppb	0.0992	87.7	4.1175	-0.11306
Co 228.615	-0.7887	ppb	0.6890	87.4	-11.1257	-0.78865
Cr 267.716	-0.1726	ppb	0.0970	56.2	15.9749	-0.17262
Cu 324.754	0.0216	ppb	0.4823	2228.1	225.142	0.02165
Fe 271.441	-0.3397	ppb	2.3132	681.1	17.3412	-0.33966
K 766.491	-0.4295	ppb	0.2860	66.6	235.763	-0.42951

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	1.2841	ppb	2.2816	177.7	20.8885	1.28406
Mn 257.610	-0.0291	ppb	0.0642	220.4	27.0937	-0.02912
Mo 202.032	-0.0511	ppb	0.8677	1698.3	2.6098	-0.05110
Na 330.237	-165.936	ppb	16.8249	10.1	41.4319	-165.93599
Ni 231.604	-0.0280	ppb	1.9586	6983.6	-1.6023	-0.02805
Pb 220.353	-0.9939	ppb	2.1147	212.8	5.6016	-0.99386
Sb 206.834	-3.8120	ppb	2.9059	76.2	4.1462	-3.81201
Se 196.026	-0.5532	ppb	5.5306	999.8	-1.2571	-0.55320
Si 288.158	3.2859	ppb	2.3649	72.0	352.890	3.28593
Sn 189.925	0.3729	ppb	2.4357	653.2	-0.0958	0.37291
Sr 216.596	0.3390	ppb	0.7678	226.5	6.8410	0.33901
Ti 334.941	0.2866	ppb	0.0802	28.0	-5.0033	0.28660
Tl 190.794	0.8243	ppb	10.9181	1324.5	-4.1251	0.82433
V 292.401	0.2237	ppb	0.2497	111.6	0.6992	0.22369
Zn 206.200	-1.0769	ppb	1.6904	157.0	-0.0773	-1.07690

Ni 10 (Samp) **12/15/2018, 12:05:12 PM** **Rack 1, Tube 21**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3756u	-0.4334u	-0.4848u
Al 308.215	0.6373	-0.4680u	0.7114
As 188.980	5.0479	5.6611	10.5525
B 249.678	0.8189	0.1879	1.9854
Ba 389.178	0.5917	-0.6917u	0.4340
Be 313.042	-0.0188u	-0.0161u	-0.0103u
Ca 370.602	2.672	0.8406	1.041
Cd 226.502	0.0903	0.6362	-0.0057u
Co 228.615	-0.2162u	-0.3948u	1.1252
Cr 267.716	0.0567	-0.5048u	-0.0178u
Cu 324.754	0.4050	0.6038	0.3496
Fe 271.441	-1.6190u	2.1870	3.4888
K 766.491	-0.9381u	-0.8582u	-1.2506u
Mg 279.078	0.1828	4.6997	4.7003
Mn 257.610	-0.1174u	-0.0480u	-0.0983u
Mo 202.032	0.2992	0.1963	-1.3553u
Na 330.237	19.5643	-74.8335u	-54.2427u
Ni 231.604	10149.5x	10116.7x	10176.3x
Pb 220.353	3.5139	-5.5427u	0.7478
Sb 206.834	0.7293	0.5387	-4.2824u
Se 196.026	-20.9797u	-23.4471u	0.2564
Si 288.158	0.9813	0.5345	-1.2791u
Sn 189.925	0.3199	1.3309	-1.8327u
Sr 216.596	11.4090u	12.4177u	10.8199u
Ti 334.941	0.1112	0.1075	0.2512
Tl 190.794	-2.1478u	-5.1155u	5.7473
V 292.401	-0.0507u	-0.1041u	0.4947
Zn 206.200	-0.4765u	-0.5165u	1.0816

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4313b	ppb	0.0546	12.7	-44.4926
Al 308.215	0.2936b	ppb	0.6606	225.0	155.680
As 188.980	7.0872b	ppb	3.0167	42.6	2.7563
B 249.678	0.9974b	ppb	0.9119	91.4	-60.3705

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.1113b	ppb	0.6999	628.6	-48.9937
Be 313.042	-0.0151b	ppb	0.0044	28.9	-196.141
Ca 370.602	1.518b	ppb	1.004	66.2	30.65
Cd 226.502	0.2402b	ppb	0.3462	144.1	9.4944
Co 228.615	0.1714b	ppb	0.8308	484.8	-6.6654
Cr 267.716	-0.1553b	ppb	0.3049	196.4	16.3495
Cu 324.754	0.4528b	ppb	0.1337	29.5	240.775
Fe 271.441	1.3523b	ppb	2.6542	196.3	18.6630
K 766.491	-1.0156b	ppb	0.2074	20.4	221.260
Mg 279.078	3.1943b	ppb	2.6080	81.6	23.5214
Mn 257.610	-0.0879b	ppb	0.0359	40.8	21.3912
Mo 202.032	-0.2866b	ppb	0.9270	323.5	2.1206
Na 330.237	-36.5040b	ppb	49.6360	136.0	44.6131
Ni 231.604	10147.5xb	ppb	29.8517	0.3	13049.2
Pb 220.353	-0.4270b	ppb	4.6412	1087.0	5.8964
Sb 206.834	-1.0048b	ppb	2.8401	282.7	5.3070
Se 196.026	-14.7235b	ppb	13.0314	88.5	-3.8291
Si 288.158	0.0789uvb	ppb	1.1971	1517.6	338.007
Sn 189.925	-0.0606b	ppb	1.6157	2664.3	-0.2247
Sr 216.596	11.5489b	ppb	0.8080	7.0	-38.5473
Ti 334.941	0.1566b	ppb	0.0819	52.3	-19.2857
Tl 190.794	-0.5053b	ppb	5.6146	1111.1	-4.4897
V 292.401	0.1133b	ppb	0.3314	292.5	-0.7352
Zn 206.200	0.0295b	ppb	0.9113	3088.3	0.5452

X (Samp) **12/15/2018, 12:09:54 PM** **Rack 1, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3804u	-0.8369u	-0.2628u
Al 308.215	-2.3393u	-4.1386u	-1.9714u
As 188.980	5.2037	-2.8663u	-2.8772u
B 249.678	0.6489	-0.0794u	0.9248
Ba 389.178	0.4463	-1.2908u	-0.4854u
Be 313.042	-0.0051u	-0.0088u	-0.0024u
Ca 370.602	0.4367	-4.327u	-0.0426u
Cd 226.502	-0.0156u	0.3211	0.2645
Co 228.615	-1.1831u	-0.9115u	-0.2535u
Cr 267.716	0.0860	-0.2187u	-0.4554u
Cu 324.754	0.6378	0.4529	-0.2453u
Fe 271.441	-3.1381u	2.4100	4.1490
K 766.491	-0.8535u	-1.1821u	-0.7032u
Mg 279.078	1.4141	-1.1944u	1.3171
Mn 257.610	-0.0646u	-0.0648u	-0.0151u
Mo 202.032	-1.2126u	-0.8827u	0.4030
Na 330.237	32.2587	-276.226u	-186.629u
Ni 231.604	0.4416	1.5968	-1.4855u
Pb 220.353	0.8717	-2.4530u	2.1351
Sb 206.834	-4.5547u	-6.1643u	5.7475
Se 196.026	-11.0806u	-0.4048u	3.6118
Si 288.158	-0.1191u	-1.4600u	0.5530
Sn 189.925	1.5017	-2.6800u	3.1921
Sr 216.596	-0.1970u	0.6043	0.2714
Ti 334.941	0.1588	0.2735	0.2574

Label	Replicates Concentration		
Tl 190.794	-3.8837u	-6.2417u	5.8289
V 292.401	-0.2672u	-0.0909u	-0.4640u
Zn 206.200	1.3890	0.2697	-2.3824u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4933	ppb	0.3033	61.5	-46.7669
Al 308.215	-2.8164	ppb	1.1597	41.2	148.335
As 188.980	-0.1799	ppb	4.6623	2591.5	0.9184
B 249.678	0.4981	ppb	0.5188	104.2	-63.6592
Ba 389.178	-0.4433	ppb	0.8693	196.1	-54.2975
Be 313.042	-0.0054	ppb	0.0032	59.5	-188.307
Ca 370.602	-1.311	ppb	2.623	200.1	24.75
Cd 226.502	0.1900	ppb	0.1803	94.9	8.7304
Co 228.615	-0.7827	ppb	0.4780	61.1	-11.0957
Cr 267.716	-0.1961	ppb	0.2714	138.5	15.4716
Cu 324.754	0.2818	ppb	0.4657	165.3	234.575
Fe 271.441	1.1403	ppb	3.8058	333.8	18.4365
K 766.491	-0.9129	ppb	0.2449	26.8	223.802
Mg 279.078	0.5123	ppb	1.4788	288.7	19.8250
Mn 257.610	-0.0482	ppb	0.0286	59.4	25.2411
Mo 202.032	-0.5641	ppb	0.8536	151.3	1.5440
Na 330.237	-143.532	ppb	158.694	110.6	41.9838
Ni 231.604	0.1843	ppb	1.5572	844.9	-1.3290
Pb 220.353	0.1846	ppb	2.3700	1283.8	6.2151
Sb 206.834	-1.6572	ppb	6.4630	390.0	5.0387
Se 196.026	-2.6246	ppb	7.5935	289.3	-1.6330
Si 288.158	-0.3420uv	ppb	1.0248	299.6	335.564
Sn 189.925	0.6713	ppb	3.0228	450.3	-0.0070
Sr 216.596	0.2262	ppb	0.4026	178.0	6.4141
Ti 334.941	0.2299	ppb	0.0621	27.0	-11.2361
Tl 190.794	-1.4322	ppb	6.3979	446.7	-4.7471
V 292.401	-0.2740	ppb	0.1867	68.1	-5.8080
Zn 206.200	-0.2412	ppb	1.9369	803.0	0.3927

SN 40 (Samp) **12/15/2018, 12:14:37 PM** **Rack 1, Tube 23**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1947u	0.7218	0.4710
Al 308.215	2.2981	0.3413	3.5072
As 188.980	3.4176	1.2364	8.8585
B 249.678	1.2571	1.4126	1.7835
Ba 389.178	0.1840	0.6713	-0.4683u
Be 313.042	-0.0206u	-0.0143u	-0.0128u
Ca 370.602	1.235	1.488	0.0854
Cd 226.502	-0.1507u	-0.1282u	-0.0159u
Co 228.615	1.4526u	0.1498u	0.0110u
Cr 267.716	0.0937	0.1660	-0.1600u
Cu 324.754	-0.3172u	0.5590	0.5567
Fe 271.441	-7.8855u	4.9417	-2.5300u
K 766.491	-0.1696u	-0.9172u	-0.0487u
Mg 279.078	0.3303	-0.5655u	2.4988
Mn 257.610	-0.0381u	-0.0801u	-0.1034u
Mo 202.032	-0.8044u	0.4057	0.0123

Label	Replicates Concentration		
Na 330.237	-111.381u	99.4413	219.645
Ni 231.604	2.1840	0.0380	-1.2146u
Pb 220.353	-4.6986u	-2.5753u	0.4804
Sb 206.834	-9.7648u	-2.0636	-6.8016
Se 196.026	-8.3912u	-14.0260u	1.0871
Si 288.158	8537.45	8732.84	8844.69
Sn 189.925	39766.5x	40132.2x	40430.0x
Sr 216.596	0.5741	-0.2830u	0.1019
Ti 334.941	0.9561	0.8102	0.6926
Tl 190.794	-4.9326u	-2.1692u	0.2811
V 292.401	-0.1186u	0.1473	-0.2964u
Zn 206.200	0.2547	-2.7088u	0.8136

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3327b	ppb	0.4737	142.4	-18.0681
Al 308.215	2.0489b	ppb	1.5976	78.0	159.821
As 188.980	4.5042b	ppb	3.9255	87.2	2.1030
B 249.678	1.4844b	ppb	0.2705	18.2	-57.1611
Ba 389.178	0.1290b	ppb	0.5718	443.3	-48.8244
Be 313.042	-0.0159b	ppb	0.0041	26.0	-194.892
Ca 370.602	0.9362b	ppb	0.7475	79.8	29.46
Cd 226.502	-0.0982b	ppb	0.0722	73.5	4.3406
Co 228.615	0.5378b	ppb	0.7953	147.9	-16.1120
Cr 267.716	0.0332b	ppb	0.1712	515.5	20.4147
Cu 324.754	0.2662b	ppb	0.5052	189.8	234.012
Fe 271.441	-1.8246b	ppb	6.4426	353.1	16.1735
K 766.491	-0.3785b	ppb	0.4704	124.3	237.026
Mg 279.078	0.7545b	ppb	1.5756	208.8	20.1584
Mn 257.610	-0.0739b	ppb	0.0331	44.8	24.3584
Mo 202.032	-0.1288b	ppb	0.6173	479.2	2.4484
Na 330.237	69.2350b	ppb	167.568	242.0	47.2104
Ni 231.604	0.3358b	ppb	1.7187	511.8	-1.1334
Pb 220.353	-2.2645b	ppb	2.6035	115.0	4.9403
Sb 206.834	-6.2100b	ppb	3.8845	62.6	6.4620
Se 196.026	-7.1100b	ppb	7.6376	107.4	-2.4472
Si 288.158	8704.99b	ppb	155.502	1.8	44831.1
Sn 189.925	40109.6xb	ppb	332.302	0.8	11926.1
Sr 216.596	0.1310b	ppb	0.4293	327.7	6.0500
Ti 334.941	0.8196b	ppb	0.1320	16.1	53.4927
Tl 190.794	-2.2736b	ppb	2.6084	114.7	-4.9801
V 292.401	-0.0893b	ppb	0.2233	250.1	-3.4012
Zn 206.200	-0.5468b	ppb	1.8931	346.2	0.2209

X (Samp) **12/15/2018, 12:19:19 PM** **Rack 1, Tube 24**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3415u	0.4734	-0.4014u
Al 308.215	-0.6468u	-0.5650u	1.2915
As 188.980	4.4017	7.0291	7.3230
B 249.678	2.4374	1.8523	1.4275
Ba 389.178	-0.6916u	-1.3898u	-0.3350u
Be 313.042	-0.0117u	-0.0044u	-0.0020u
Ca 370.602	-2.336u	-0.3812u	-4.110u

Label	Replicates Concentration		
Cd 226.502	0.0624	0.2173	0.2164
Co 228.615	-1.1279u	-1.0843u	-0.1907u
Cr 267.716	-0.0669u	-0.2978u	-0.0217u
Cu 324.754	-0.1386u	-0.0877u	0.1441
Fe 271.441	-5.2798u	3.3367	-2.5703u
K 766.491	-0.7799u	-1.3143u	-0.8653u
Mg 279.078	2.7708	-3.4331u	1.9154
Mn 257.610	0.0278	-0.0480u	-0.0526u
Mo 202.032	-0.4597u	-2.1885u	-0.3224u
Na 330.237	36.3024	-90.3745u	-5.8172u
Ni 231.604	-0.1811u	2.0058	-0.9132u
Pb 220.353	-1.6065u	-1.3004u	-2.8388u
Sb 206.834	-1.2693u	-11.0556u	0.5648
Se 196.026	-1.9287u	-6.8605u	-18.1111u
Si 288.158	64.5022	60.4034	53.3642
Sn 189.925	3.6865	6.6243	-0.5374u
Sr 216.596	-0.0234u	0.3862	0.3898
Ti 334.941	0.0200	0.0125	0.0103
Tl 190.794	-5.5296u	-2.7050u	-9.7215u
V 292.401	-0.1676u	-0.1098u	0.3076
Zn 206.200	-0.5376u	-0.0388u	1.2523

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0898	ppb	0.4887	544.1	-32.7453
Al 308.215	0.0266	ppb	1.0962	4124.4	155.034
As 188.980	6.2513	ppb	1.6085	25.7	2.5450
B 249.678	1.9058	ppb	0.5070	26.6	-54.3905
Ba 389.178	-0.8055	ppb	0.5366	66.6	-57.7631
Be 313.042	-0.0060	ppb	0.0050	84.0	-188.711
Ca 370.602	-2.276	ppb	1.865	81.9	22.73
Cd 226.502	0.1654	ppb	0.0892	53.9	8.3566
Co 228.615	-0.8010	ppb	0.5290	66.0	-11.1755
Cr 267.716	-0.1288	ppb	0.1481	115.0	16.9209
Cu 324.754	-0.0274	ppb	0.1507	550.1	223.345
Fe 271.441	-1.5045	ppb	4.4060	292.9	16.4749
K 766.491	-0.9865	ppb	0.2870	29.1	221.981
Mg 279.078	0.4177	ppb	3.3622	804.9	19.6945
Mn 257.610	-0.0243	ppb	0.0452	186.1	27.5488
Mo 202.032	-0.9902	ppb	1.0400	105.0	0.6587
Na 330.237	-19.9629	ppb	64.5123	323.2	45.0179
Ni 231.604	0.3038	ppb	1.5187	499.9	-1.1757
Pb 220.353	-1.9153	ppb	0.8144	42.5	5.1223
Sb 206.834	-3.9201	ppb	6.2473	159.4	4.1106
Se 196.026	-8.9668	ppb	8.2942	92.5	-2.7842
Si 288.158	59.4233	ppb	5.6334	9.5	618.176
Sn 189.925	3.2578	ppb	3.6000	110.5	0.7621
Sr 216.596	0.2509	ppb	0.2376	94.7	6.5185
Ti 334.941	0.0143	ppb	0.0051	35.7	-34.9070
Tl 190.794	-5.9854	ppb	3.5303	59.0	-5.9993
V 292.401	0.0101	ppb	0.2593	2575.2	-2.0262
Zn 206.200	0.2253	ppb	0.9237	410.0	0.6552

CA 800 (Samp) **12/15/2018, 12:24:00 PM** **Rack 1, Tube 25**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2748u	-0.1729u	-0.3328u
Al 308.215	5.0504	5.2110	3.9498
As 188.980	1.4034	11.9788	1.7550
B 249.678	0.1952	1.3699	0.4851
Ba 389.178	-5.1327u	-7.0431u	-2.6301u
Be 313.042	-0.1487	-0.1504	-0.1583u
Ca 370.602	837514x	837608x	837878x
Cd 226.502	0.3020	0.4702	0.3001
Co 228.615	-1.1402u	0.0354	-0.6579u
Cr 267.716	0.6908	0.9389	1.0221
Cu 324.754	-2.0454u	-2.0864u	-1.8141u
Fe 271.441	2.7993	22.1921	20.0658
K 766.491	-2.8420u	-3.2593u	-3.8139u
Mg 279.078	1.9166	-1.2197u	5.2862
Mn 257.610	-0.2492u	-0.1518u	-0.0809u
Mo 202.032	0.2645	-0.8994u	0.1759
Na 330.237	-192.942u	-146.032u	66.7041
Ni 231.604	1.9486	0.3530	0.4016
Pb 220.353	0.2491	-5.1637u	-0.0127u
Sb 206.834	8.7925	4.3296	-1.1923u
Se 196.026	-13.0469u	1.7815	7.3868
Si 288.158	38.0806	36.2419	33.9814
Sn 189.925	4.8933	-0.3257u	2.6222
Sr 216.596	10.7590	9.6997	10.3730
Ti 334.941	2.7278	2.7897	2.7723
Tl 190.794	-5.0802u	3.1356	-20.1354u
V 292.401	1.0551	1.3352	-0.1497u
Zn 206.200	0.3946	2.0136	0.8690

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2602b	ppb	0.0809	31.1	-39.3754
Al 308.215	4.7370b	ppb	0.6865	14.5	166.207
As 188.980	5.0457b	ppb	6.0068	119.0	2.2398
B 249.678	0.6834b	ppb	0.6119	89.5	-62.4492
Ba 389.178	-4.9353b	ppb	2.2131	44.8	-97.2607
Be 313.042	-0.1525b	ppb	0.0051	3.3	-179.391
Ca 370.602	837666xb	ppb	189.2	0.0	1747982
Cd 226.502	0.3575b	ppb	0.0977	27.3	11.2862
Co 228.615	-0.5876b	ppb	0.5909	100.6	-10.1751
Cr 267.716	0.8839b	ppb	0.1723	19.5	38.7538
Cu 324.754	-1.9820b	ppb	0.1468	7.4	152.490
Fe 271.441	15.0190b	ppb	10.6359	70.8	28.8877
K 766.491	-3.3051b	ppb	0.4876	14.8	164.613
Mg 279.078	1.9943b	ppb	3.2537	163.1	21.8663
Mn 257.610	-0.1606b	ppb	0.0845	52.6	19.1482
Mo 202.032	-0.1530b	ppb	0.6479	423.4	2.3977
Na 330.237	-90.7571b	ppb	138.368	152.5	43.2717
Ni 231.604	0.9011b	ppb	0.9075	100.7	-0.4076
Pb 220.353	-1.6424b	ppb	3.0523	185.8	5.2633
Sb 206.834	3.9766b	ppb	5.0018	125.8	7.3637
Se 196.026	-1.2928b	ppb	10.5580	816.7	-1.3913
Si 288.158	36.1013b	ppb	2.0532	5.7	508.142

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	2.3966b	ppb	2.6168	109.2	0.5060
Sr 216.596	10.2772b	ppb	0.5361	5.2	44.8386
Ti 334.941	2.7633b	ppb	0.0319	1.2	266.849
Tl 190.794	-7.3600b	ppb	11.8018	160.4	-6.3794
V 292.401	0.7469b	ppb	0.7890	105.6	7.5091
Zn 206.200	1.0924b	ppb	0.8323	76.2	1.1423

X (Samp) **12/15/2018, 12:28:40 PM** **Rack 1, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1088u	0.3975	0.6741
Al 308.215	1.9602	0.5112	0.1243
As 188.980	4.9756	0.0516	-1.4104u
B 249.678	1.4301	0.6808	1.5988
Ba 389.178	-0.6218u	-0.2458u	-0.3974u
Be 313.042	-0.0242u	-0.0103u	-0.0080u
Ca 370.602	28.11	27.30	32.43
Cd 226.502	-0.0716u	-0.1463u	0.1550
Co 228.615	-1.5568u	-0.9765u	-0.1739u
Cr 267.716	0.2503	0.1405	-0.2793u
Cu 324.754	-0.0102u	0.7353	0.4789
Fe 271.441	-1.6004u	-2.7890u	-5.8624u
K 766.491	-1.0978u	-0.3285u	-1.1285u
Mg 279.078	-0.3889u	7.2650	3.5879
Mn 257.610	-0.0620u	0.0213	0.0208
Mo 202.032	-0.3573u	-1.0026u	-0.1345u
Na 330.237	202.107	-103.838u	-69.6518u
Ni 231.604	-0.3657u	1.0656	-1.1909u
Pb 220.353	-1.2530u	2.6447	-0.8578u
Sb 206.834	-7.1718u	6.5089	2.9726
Se 196.026	-3.6123u	2.4226	-4.2718u
Si 288.158	11.4529	10.3005	7.6489
Sn 189.925	0.4078	0.4816	6.2009
Sr 216.596	-0.4909u	0.3353	-0.2835u
Ti 334.941	0.0124	-0.0101u	0.0852
Tl 190.794	-2.1089u	2.7299	3.2298
V 292.401	0.0102	0.3882	-0.0593u
Zn 206.200	-1.5916u	1.2659	1.5412

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3209	ppb	0.3970	123.7	-18.4728
Al 308.215	0.8652	ppb	0.9678	111.8	157.029
As 188.980	1.2056	ppb	3.3458	277.5	1.2688
B 249.678	1.2366	ppb	0.4886	39.5	-58.7934
Ba 389.178	-0.4217	ppb	0.1892	44.9	-54.0907
Be 313.042	-0.0142	ppb	0.0087	61.6	-195.439
Ca 370.602	29.28	ppb	2.760	9.4	88.58
Cd 226.502	-0.0210	ppb	0.1569	748.7	5.5172
Co 228.615	-0.9024	ppb	0.6944	77.0	-11.6557
Cr 267.716	0.0371	ppb	0.2795	752.6	20.4980
Cu 324.754	0.4013	ppb	0.3787	94.4	238.909
Fe 271.441	-3.4173	ppb	2.1994	64.4	15.0237
K 766.491	-0.8516	ppb	0.4533	53.2	225.319

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	3.4880	ppb	3.8280	109.7	23.9255
Mn 257.610	-0.0066	ppb	0.0479	723.5	29.2531
Mo 202.032	-0.4981	ppb	0.4509	90.5	1.6811
Na 330.237	9.5393	ppb	167.643	1757.4	45.7431
Ni 231.604	-0.1636	ppb	1.1417	697.7	-1.7766
Pb 220.353	0.1780	ppb	2.1454	1205.5	6.2116
Sb 206.834	0.7699	ppb	7.1014	922.4	6.0418
Se 196.026	-1.8205	ppb	3.6894	202.7	-1.4871
Si 288.158	9.8008	ppb	1.9506	19.9	383.820
Sn 189.925	2.3634	ppb	3.3235	140.6	0.4961
Sr 216.596	-0.1464	ppb	0.4298	293.6	4.9891
Ti 334.941	0.0292	ppb	0.0498	170.7	-33.2716
Tl 190.794	1.2836	ppb	2.9486	229.7	-3.9986
V 292.401	0.1130	ppb	0.2408	213.1	-0.7427
Zn 206.200	0.4052	ppb	1.7347	428.2	0.7564

SR 10 (Samp) **12/15/2018, 12:33:20 PM** **Rack 1, Tube 27**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2496u	0.6057u	1.2062
Al 308.215	-4.1678u	-4.0094u	-4.9809u
As 188.980	-0.8710u	2.5595	2.7105
B 249.678	0.7103	0.5837	0.7819
Ba 389.178	1.0623	0.6001	0.5180
Be 313.042	-0.0083u	-0.0040u	-0.0125u
Ca 370.602	-4.429u	1.563	2.147
Cd 226.502	-0.1370u	-0.1386u	-0.0149u
Co 228.615	-0.5570u	0.1362	-0.1383u
Cr 267.716	0.0166	-0.1868u	0.1143
Cu 324.754	0.0120	1.2502	-0.1682u
Fe 271.441	-0.6232u	1.0131	-0.8963u
K 766.491	-0.7421u	-1.5392u	-1.6219u
Mg 279.078	3.9358	0.8751	1.0224
Mn 257.610	-0.0760u	-0.1516u	-0.1519u
Mo 202.032	0.0247	0.0040	0.5261
Na 330.237	30.8368	-239.471u	-302.768u
Ni 231.604	-2.3489u	-1.3039u	-0.3337u
Pb 220.353	0.5144	1.5054	-2.3287u
Sb 206.834	-0.5425u	-0.7297u	-1.9404u
Se 196.026	7.0567	4.2082	4.1052
Si 288.158	7.6563	4.5796	4.6719
Sn 189.925	-1.0877u	6.3941	8.4272
Sr 216.596	10348.6x	10353.7x	10343.7x
Ti 334.941	0.0139	-0.0078u	0.0855
Tl 190.794	-2.4935u	-1.9265u	-0.1342u
V 292.401	0.1588	-0.0399u	-0.0351u
Zn 206.200	1.0422	0.6764	-3.8790u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6872b	ppb	0.4835	70.4	-41.5561
Al 308.215	-4.3861b	ppb	0.5212	11.9	144.651
As 188.980	1.4663b	ppb	2.0256	138.1	1.3347
B 249.678	0.6919b	ppb	0.1003	14.5	-62.3799

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.7268b	ppb	0.2934	40.4	-43.1033
Be 313.042	-0.0083b	ppb	0.0043	51.5	-190.645
Ca 370.602	-0.2398b	ppb	3.640	1517.9	26.98
Cd 226.502	-0.0968b	ppb	0.0710	73.3	4.3625
Co 228.615	-0.1864b	ppb	0.3491	187.3	-8.3363
Cr 267.716	-0.0186b	ppb	0.1536	825.1	19.2948
Cu 324.754	0.3647b	ppb	0.7722	211.8	237.593
Fe 271.441	-0.1688b	ppb	1.0326	611.9	17.5023
K 766.491	-1.3011b	ppb	0.4858	37.3	214.198
Mg 279.078	1.9444b	ppb	1.7262	88.8	21.8002
Mn 257.610	-0.1265b	ppb	0.0437	34.6	17.6664
Mo 202.032	0.1849b	ppb	0.2956	159.9	3.1003
Na 330.237	-170.467b	ppb	177.184	103.9	41.3206
Ni 231.604	-1.3288b	ppb	1.0078	75.8	-3.2759
Pb 220.353	-0.1029b	ppb	1.9902	1933.3	6.0651
Sb 206.834	-1.0709b	ppb	0.7588	70.9	5.2746
Se 196.026	5.1234b	ppb	1.6751	32.7	-0.2268
Si 288.158	5.6359b	ppb	1.7503	31.1	364.368
Sn 189.925	4.5779b	ppb	5.0107	109.5	1.1546
Sr 216.596	10348.7xb	ppb	5.0319	0.0	39575.9
Ti 334.941	0.0305b	ppb	0.0488	159.8	-33.1168
Tl 190.794	-1.5181b	ppb	1.2315	81.1	-4.7702
V 292.401	0.0279b	ppb	0.1133	406.0	-1.9046
Zn 206.200	-0.7201b	ppb	2.7418	380.7	0.1235

X (Samp) **12/15/2018, 12:38:01 PM** **Rack 1, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0303u	-0.3788u	-0.0626u
Al 308.215	-3.2706u	-0.3327u	-0.4692u
As 188.980	2.7067	-0.0159u	2.5311
B 249.678	-0.2477u	1.4521	-0.3752u
Ba 389.178	1.1688	0.0854	-0.5298u
Be 313.042	-0.0234u	0.0069	-0.0032u
Ca 370.602	0.7328	-6.489u	0.0079
Cd 226.502	0.0908	-0.2616u	-0.1015u
Co 228.615	-1.4630u	-1.1390u	-0.6554u
Cr 267.716	-0.0787u	0.1165	-0.5765u
Cu 324.754	0.1749	0.3839	-0.7494u
Fe 271.441	3.1751	1.5907	-10.0542u
K 766.491	-1.6534u	-1.4634u	-2.0193u
Mg 279.078	5.3510	0.7468	-5.2131u
Mn 257.610	-0.0603u	-0.1091u	-0.0814u
Mo 202.032	0.5926	-1.4824u	-0.5857u
Na 330.237	-75.0452u	132.947	68.0594
Ni 231.604	0.5197	0.1726	1.1554
Pb 220.353	4.4887	5.5699	3.1516
Sb 206.834	-2.3968u	1.9164	-8.0095u
Se 196.026	2.2665	-3.7388u	2.6901
Si 288.158	3.3897	5.8579	2.2511
Sn 189.925	0.6708	0.8000	3.4494
Sr 216.596	0.7610	-0.0371u	1.5184
Ti 334.941	0.1666	0.0908	0.0013

Label	Replicates Concentration		
Tl 190.794	-2.4955u	-3.1334u	2.4760
V 292.401	0.1096	0.3020	-0.2989u
Zn 206.200	-0.0720u	0.0377	0.4007

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1572	ppb	0.1926	122.5	-35.0909
Al 308.215	-1.3575	ppb	1.6582	122.2	151.783
As 188.980	1.7406	ppb	1.5237	87.5	1.4042
B 249.678	0.2764	ppb	1.0202	369.1	-65.1249
Ba 389.178	0.2415	ppb	0.8600	356.1	-47.7456
Be 313.042	-0.0066	ppb	0.0154	235.1	-189.215
Ca 370.602	-1.916	ppb	3.977	207.5	23.47
Cd 226.502	-0.0908	ppb	0.1765	194.4	4.4612
Co 228.615	-1.0858	ppb	0.4064	37.4	-12.5047
Cr 267.716	-0.1795	ppb	0.3574	199.0	15.8278
Cu 324.754	-0.0636	ppb	0.6031	949.0	222.048
Fe 271.441	-1.7628	ppb	7.2242	409.8	16.2576
K 766.491	-1.7121	ppb	0.2826	16.5	204.029
Mg 279.078	0.2949	ppb	5.2966	1796.1	19.5259
Mn 257.610	-0.0836	ppb	0.0245	29.3	21.8227
Mo 202.032	-0.4918	ppb	1.0407	211.6	1.6941
Na 330.237	41.9870	ppb	106.419	253.5	46.5402
Ni 231.604	0.6159	ppb	0.4984	80.9	-0.7739
Pb 220.353	4.4034	ppb	1.2114	27.5	8.4111
Sb 206.834	-2.8300	ppb	4.9771	175.9	4.5551
Se 196.026	0.4059	ppb	3.5957	885.8	-1.0830
Si 288.158	3.8329	ppb	1.8438	48.1	355.514
Sn 189.925	1.6401	ppb	1.5683	95.6	0.2810
Sr 216.596	0.7474	ppb	0.7779	104.1	8.4117
Ti 334.941	0.0862	ppb	0.0827	95.9	-27.0089
Tl 190.794	-1.0510	ppb	3.0711	292.2	-4.6419
V 292.401	0.0376	ppb	0.3069	816.2	-1.7107
Zn 206.200	0.1221	ppb	0.2474	202.5	0.5971

SI 40 (Samp) **12/15/2018, 12:42:41 PM** **Rack 1, Tube 29**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2385	0.4072	-0.7063u
Al 308.215	1.4768	-2.3646u	-0.1325u
As 188.980	2.6676	-1.1976u	-0.0628u
B 249.678	1.3116	0.6744	0.9228
Ba 389.178	0.6813	0.5571	1.4540
Be 313.042	-0.0014u	-0.0050u	-0.0191u
Ca 370.602	8.325	-0.3791u	-0.0710u
Cd 226.502	-0.2505u	-0.0015u	-0.2024u
Co 228.615	-1.7504u	-1.6432u	-0.9017u
Cr 267.716	-0.4813u	-0.5025u	-0.2190u
Cu 324.754	-0.2254u	0.3017	0.4617
Fe 271.441	-5.3674u	1.8435	-1.0560u
K 766.491	-0.7037u	-0.0266u	-0.5539u
Mg 279.078	1.3607	2.0870	-2.3630u
Mn 257.610	-0.0724u	0.0358	-0.0692u
Mo 202.032	-0.1099u	-0.2922u	0.0912

Label	Replicates Concentration		
Na 330.237	-81.0513u	14.0221	-6.8772u
Ni 231.604	1.5191	0.2396	-1.2433u
Pb 220.353	-1.7658u	3.8188	3.5436
Sb 206.834	-3.3906u	3.0121	0.3379
Se 196.026	-1.9394u	-8.8476u	-6.9042u
Si 288.158	37745.2	37905.5	38021.0
Sn 189.925	-0.6679u	7.4496	0.8225
Sr 216.596	0.0286	-0.7949u	0.5916
Ti 334.941	0.2389	0.1183	0.2231
Tl 190.794	-11.5071u	1.8834	-5.3193u
V 292.401	0.0390	-0.0798u	0.3649
Zn 206.200	1.4775	0.2728	1.5902

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0202	ppb	0.6001	2968.1	-30.3258
Al 308.215	-0.3401	ppb	1.9291	567.2	154.201
As 188.980	0.4691	ppb	1.9867	423.5	1.0824
B 249.678	0.9696	ppb	0.3212	33.1	-60.5504
Ba 389.178	0.8975	ppb	0.4860	54.1	-41.4724
Be 313.042	-0.0085	ppb	0.0094	110.5	-190.845
Ca 370.602	2.625	ppb	4.939	188.1	32.97
Cd 226.502	-0.1515	ppb	0.1321	87.2	3.5304
Co 228.615	-1.4318	ppb	0.4621	32.3	-14.1217
Cr 267.716	-0.4009	ppb	0.1579	39.4	11.0525
Cu 324.754	0.1793	ppb	0.3595	200.5	230.874
Fe 271.441	-1.5266	ppb	3.6284	237.7	16.4272
K 766.491	-0.4281	ppb	0.3557	83.1	235.799
Mg 279.078	0.3616	ppb	2.3873	660.3	19.6171
Mn 257.610	-0.0353	ppb	0.0616	174.6	26.4785
Mo 202.032	-0.1036	ppb	0.1918	185.1	2.5007
Na 330.237	-24.6354	ppb	49.9625	202.8	44.9016
Ni 231.604	0.1718	ppb	1.3824	804.7	-1.3449
Pb 220.353	1.8655	ppb	3.1478	168.7	7.0898
Sb 206.834	-0.0135	ppb	3.2158	23741.1	5.7110
Se 196.026	-5.8971	ppb	3.5625	60.4	-2.2270
Si 288.158	37890.6	ppb	138.480	0.4	179210
Sn 189.925	2.5347	ppb	4.3211	170.5	0.5470
Sr 216.596	-0.0582	ppb	0.6973	1197.9	5.3269
Ti 334.941	0.1934	ppb	0.0655	33.9	-15.2417
Tl 190.794	-4.9810	ppb	6.7017	134.5	-5.7256
V 292.401	0.1081	ppb	0.2302	213.1	-0.8650
Zn 206.200	1.1135	ppb	0.7302	65.6	1.1548

X (Samp) **12/15/2018, 12:47:22 PM** **Rack 1, Tube 30**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0041	0.1485	-0.6867u
Al 308.215	-2.0297u	-2.2557u	-2.8775u
As 188.980	-3.4114u	0.5189	-2.1535u
B 249.678	1.1386	-1.2633u	0.9165
Ba 389.178	-0.2293u	-1.0418u	-0.3921u
Be 313.042	0.0038	-0.0002u	-0.0060u
Ca 370.602	-3.289u	-0.8625u	1.402

Label	Replicates Concentration		
Cd 226.502	-0.2527u	-0.2021u	-0.0278u
Co 228.615	-0.3821u	-0.6576u	0.0302
Cr 267.716	0.1110	-0.3737u	0.0371
Cu 324.754	-0.2198u	0.0999	-0.0967u
Fe 271.441	-2.5454u	-2.2511u	0.3562
K 766.491	0.2262	-0.9810u	-1.6782u
Mg 279.078	-2.6277u	2.9508	-0.5598u
Mn 257.610	-0.0993u	0.0271	-0.0901u
Mo 202.032	-0.3935u	0.0700	0.6760
Na 330.237	59.5055	-163.881u	138.225
Ni 231.604	1.0142	0.6184	0.4615
Pb 220.353	8.0052	-3.2086u	-1.5613u
Sb 206.834	-3.6141u	-3.3008u	-4.9142u
Se 196.026	-5.7886u	-6.1470u	-4.6185u
Si 288.158	28.1827	27.0317	23.7938
Sn 189.925	-0.4394u	5.3476	-2.3456u
Sr 216.596	1.4599	1.0126	0.0253
Ti 334.941	0.0501	0.0313	0.0342
Tl 190.794	-5.2745u	1.0832	-0.5512u
V 292.401	-0.3137u	0.3258	0.1134
Zn 206.200	-1.0824u	-1.2438u	0.7526

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1780	ppb	0.4464	250.8	-35.8113
Al 308.215	-2.3876	ppb	0.4391	18.4	149.361
As 188.980	-1.6820	ppb	2.0071	119.3	0.5385
B 249.678	0.2639	ppb	1.3273	502.9	-65.2023
Ba 389.178	-0.5544	ppb	0.4299	77.5	-55.3609
Be 313.042	-0.0008	ppb	0.0049	621.2	-184.562
Ca 370.602	-0.9163	ppb	2.346	256.0	25.56
Cd 226.502	-0.1609	ppb	0.1180	73.3	3.3906
Co 228.615	-0.3365	ppb	0.3462	102.9	-9.0287
Cr 267.716	-0.0752	ppb	0.2612	347.2	18.0764
Cu 324.754	-0.0722	ppb	0.1612	223.3	221.746
Fe 271.441	-1.4801	ppb	1.5971	107.9	16.5015
K 766.491	-0.8110	ppb	0.9635	118.8	226.323
Mg 279.078	-0.0789	ppb	2.8202	3574.5	19.0108
Mn 257.610	-0.0541	ppb	0.0705	130.2	24.6570
Mo 202.032	0.1175	ppb	0.5363	456.5	2.9601
Na 330.237	11.2831	ppb	156.719	1389.0	45.7874
Ni 231.604	0.6980	ppb	0.2848	40.8	-0.6688
Pb 220.353	1.0784	ppb	6.0550	561.5	6.6802
Sb 206.834	-3.9430	ppb	0.8555	21.7	4.0902
Se 196.026	-5.5180	ppb	0.7994	14.5	-2.1582
Si 288.158	26.3361	ppb	2.2756	8.6	461.537
Sn 189.925	0.8542	ppb	4.0064	469.0	0.0474
Sr 216.596	0.8326	ppb	0.7341	88.2	8.7196
Ti 334.941	0.0385	ppb	0.0102	26.3	-32.2503
Tl 190.794	-1.5808	ppb	3.3015	208.9	-4.7876
V 292.401	0.0418	ppb	0.3257	778.9	-1.7074
Zn 206.200	-0.5245	ppb	1.1090	211.4	0.2333

Cont Calib Verif (CCV) **12/15/2018, 12:52:05 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	486.831	487.671	486.739
Al 308.215	9867.66	9868.91	9862.39
As 188.980	511.784	511.513	505.021
B 249.678	497.628	501.909	497.462
Ba 389.178	493.260	492.353	490.542
Be 313.042	515.451	515.735	515.369
Ca 370.602	10043	10052	10026
Cd 226.502	506.891	505.718	506.071
Co 228.615	505.286	506.036	506.521
Cr 267.716	499.725	499.940	498.939
Cu 324.754	499.261	499.023	501.172
Fe 271.441	10026.0	10001.6	9988.46
K 766.491	9715.15	9727.16	9728.57
Mg 279.078	10093.1	10067.6	10070.9
Mn 257.610	503.767	503.114	503.163
Mo 202.032	498.798	496.348	496.232
Na 330.237	9963.81	10041.9	10188.1
Ni 231.604	509.105	505.676	509.253
Pb 220.353	507.610	509.221	514.735
Sb 206.834	503.178	501.666	506.686
Se 196.026	500.603	489.610	511.970
Si 288.158	4916.49	4917.45	4906.96
Sn 189.925	493.736	498.560	500.502
Sr 216.596	509.756	509.722	506.508
Ti 334.941	496.697	496.844	496.832
Tl 190.794	488.365	486.976	496.069
V 292.401	502.758	501.991	502.276
Zn 206.200	1039.52	1037.00	1033.36

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	487.081	ppb	0.5136	0.1	16889.9	97.41612
Al 308.215	9866.32	ppb	3.4585	0.0	23444.6	98.66322
As 188.980	509.439	ppb	3.8291	0.8	129.680	101.88787
B 249.678	499.000	ppb	2.5206	0.5	3209.10	99.79990
Ba 389.178	492.052	ppb	1.3835	0.3	4671.57	98.41035
Be 313.042	515.518	ppb	0.1918	0.0	419517	103.10366
Ca 370.602	10040	ppb	13.08	0.1	20982	100.40270
Cd 226.502	506.227	ppb	0.6016	0.1	7718.40	101.24536
Co 228.615	505.948	ppb	0.6225	0.1	2343.45	101.18955
Cr 267.716	499.535	ppb	0.5271	0.1	10790.6	99.90694
Cu 324.754	499.819	ppb	1.1779	0.2	18358.3	99.96373
Fe 271.441	10005.4	ppb	19.0636	0.2	7556.98	100.00376
K 766.491	9723.63	ppb	7.3762	0.1	240840	97.23625
Mg 279.078	10077.2	ppb	13.8763	0.1	13900.5	100.77213
Mn 257.610	503.348	ppb	0.3637	0.1	48754.5	100.66962
Mo 202.032	497.126	ppb	1.4490	0.3	1035.33	99.42516
Na 330.237	10064.6	ppb	113.882	1.1	288.954	100.64616
Ni 231.604	508.011	ppb	2.0237	0.4	651.272	101.60224
Pb 220.353	510.522	ppb	3.7364	0.7	271.487	102.10432
Sb 206.834	503.843	ppb	2.5756	0.5	211.936	100.76865
Se 196.026	500.728	ppb	11.1804	2.2	89.8046	100.14561
Si 288.158	4913.64	ppb	5.8012	0.1	23667.2	98.27273

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	497.599	ppb	3.4838	0.7	147.753	99.51987
Sr 216.596	508.662	ppb	1.8657	0.4	1941.96	101.73238
Ti 334.941	496.791	ppb	0.0817	0.0	54528.9	99.35814
Tl 190.794	490.470	ppb	4.8985	1.0	131.024	98.09396
V 292.401	502.341	ppb	0.3876	0.1	6537.81	100.46827
Zn 206.200	1036.63	ppb	3.0982	0.3	583.181	103.66252

Cont Calib Blank (CCB) **12/15/2018, 12:56:47 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1982	0.4729	0.6378
Al 308.215	-1.7938u	-2.8648u	-4.9936u
As 188.980	2.7642	4.3169	-1.5809u
B 249.678	3.7916	2.4486	2.4169
Ba 389.178	0.1498	-0.4594u	1.4906
Be 313.042	0.0231	0.0206	0.0088
Ca 370.602	-3.811u	-3.620u	4.744
Cd 226.502	-0.0514u	-0.0708u	0.0949
Co 228.615	-0.7478u	-1.9819u	-1.3137u
Cr 267.716	-0.2514u	0.2078	-0.3340u
Cu 324.754	-0.2450u	-0.0516u	0.2987
Fe 271.441	-8.2278u	-8.5992u	-1.0124u
K 766.491	-0.2873u	-0.4022u	-0.7615u
Mg 279.078	-8.1239u	5.3008	1.7180
Mn 257.610	-0.0229u	-0.0302u	-0.0954u
Mo 202.032	0.2859	-0.5848u	0.5859
Na 330.237	-232.518u	-269.481u	-64.7058u
Ni 231.604	-1.2585u	-0.3657u	-0.4131u
Pb 220.353	0.4083	6.0870	4.3023
Sb 206.834	5.2378	-2.0442u	2.4437
Se 196.026	-11.7431u	-13.3963u	5.0394
Si 288.158	3.0501	6.6638	4.8317
Sn 189.925	-0.0788u	-1.4780u	-3.6091u
Sr 216.596	-0.5769u	0.8024	1.5556
Ti 334.941	0.1837	0.1723	0.0862
Tl 190.794	-14.1857u	-3.6158u	-8.4157u
V 292.401	0.2383	0.5915	0.5228
Zn 206.200	0.8217	-3.2502u	-0.5020u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.4363	ppb	0.2221	50.9	-14.4655	0.43629
Al 308.215	-3.2174	ppb	1.6288	50.6	147.422	-3.21739
As 188.980	1.8334	ppb	3.0571	166.7	1.4275	1.83339
B 249.678	2.8857	ppb	0.7847	27.2	-47.9300	2.88571
Ba 389.178	0.3937	ppb	0.9976	253.4	-46.2915	0.39368
Be 313.042	0.0175	ppb	0.0076	43.7	-169.674	0.01748
Ca 370.602	-0.8958	ppb	4.885	545.3	25.63	-0.89584
Cd 226.502	-0.0091	ppb	0.0906	991.6	5.6948	-0.00914
Co 228.615	-1.3478	ppb	0.6177	45.8	-13.7308	-1.34782
Cr 267.716	-0.1258	ppb	0.2919	231.9	16.9819	-0.12585
Cu 324.754	0.0007	ppb	0.2756	38324.9	224.390	0.00072
Fe 271.441	-5.9465	ppb	4.2771	71.9	13.1019	-5.94647
K 766.491	-0.4837	ppb	0.2474	51.1	234.423	-0.48367

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-0.3684	ppb	6.9513	1887.0	18.6119	-0.36837
Mn 257.610	-0.0495	ppb	0.0399	80.7	25.1068	-0.04948
Mo 202.032	0.0957	ppb	0.6081	635.7	2.9148	0.09566
Na 330.237	-188.901	ppb	109.133	57.8	40.8690	-188.90138
Ni 231.604	-0.6791	ppb	0.5024	74.0	-2.4390	-0.67909
Pb 220.353	3.5992	ppb	2.9039	80.7	7.9924	3.59922
Sb 206.834	1.8791	ppb	3.6737	195.5	6.4946	1.87909
Se 196.026	-6.7000	ppb	10.2002	152.2	-2.3728	-6.69999
Si 288.158	4.8485	ppb	1.8069	37.3	360.354	4.84853
Sn 189.925	-1.7220	ppb	1.7778	103.2	-0.7187	-1.72197
Sr 216.596	0.5937	ppb	1.0815	182.2	7.8195	0.59369
Ti 334.941	0.1474	ppb	0.0533	36.2	-20.2903	0.14740
Tl 190.794	-8.7391	ppb	5.2924	60.6	-6.7605	-8.73908
V 292.401	0.4509	ppb	0.1873	41.5	3.6432	0.45087
Zn 206.200	-0.9768	ppb	2.0771	212.6	-0.0208	-0.97684

idl (Samp) **12/15/2018, 1:01:27 PM** **Rack 1, Tube 31**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	-0.3404u	-0.1502u	0.4725
Al 308.215	-4.5211u	-0.4429u	-4.7614u
As 188.980	2.0981	-1.9689u	-1.9933u
B 249.678	1.2805	0.9288	0.9016
Ba 389.178	0.6503	0.2866	0.4813
Be 313.042	-0.0124u	-0.0112u	0.0111
Ca 370.602	1.567	1.294	3.952
Cd 226.502	-0.0784u	-0.0231u	-0.0141u
Co 228.615	-0.7922u	-0.8440u	-1.3938u
Cr 267.716	-0.3719u	-0.1877u	0.0936
Cu 324.754	0.1403	-0.2618u	0.1465
Fe 271.441	-13.0412u	0.4827	6.4576
K 766.491	-0.8299u	-1.2288u	-0.9551u
Mg 279.078	-2.8522u	0.0222	4.4638
Mn 257.610	-0.0719u	0.0154	-0.0512u
Mo 202.032	-0.1141u	0.2839	0.6198
Na 330.237	-222.124u	-346.398u	-79.4085u
Ni 231.604	0.1801	0.0534	-0.2404u
Pb 220.353	9.3319	-4.6949u	2.9213
Sb 206.834	-0.9251u	0.3130	2.8765
Se 196.026	5.0892	-12.8922u	2.9360
Si 288.158	-0.5572u	-1.8064u	-1.6615u
Sn 189.925	0.0922	-4.1642u	-1.8745u
Sr 216.596	0.9117	-0.3652u	-0.2586u
Ti 334.941	0.1193	0.0584	0.0248
Tl 190.794	-1.7151u	-7.0594u	-7.7711u
V 292.401	0.1257	0.4156	0.0473
Zn 206.200	0.6089	-2.3603u	0.3079

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0061	ppb	0.4252	7013.6	-29.8344
Al 308.215	-3.2418	ppb	2.4269	74.9	147.351
As 188.980	-0.6214	ppb	2.3552	379.0	0.8067
B 249.678	1.0370	ppb	0.2113	20.4	-60.1084

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.4727	ppb	0.1820	38.5	-45.5345
Be 313.042	-0.0042	ppb	0.0132	316.5	-187.304
Ca 370.602	2.271	ppb	1.462	64.4	32.22
Cd 226.502	-0.0385	ppb	0.0348	90.4	5.2506
Co 228.615	-1.0100	ppb	0.3334	33.0	-12.1601
Cr 267.716	-0.1553	ppb	0.2344	151.0	16.3481
Cu 324.754	0.0083	ppb	0.2340	2807.6	224.666
Fe 271.441	-2.0336	ppb	9.9900	491.2	16.0626
K 766.491	-1.0046	ppb	0.2040	20.3	221.533
Mg 279.078	0.5446	ppb	3.6858	676.8	19.8702
Mn 257.610	-0.0359	ppb	0.0456	127.1	26.4232
Mo 202.032	0.2632	ppb	0.3674	139.6	3.2628
Na 330.237	-215.977	ppb	133.601	61.9	40.2013
Ni 231.604	-0.0023	ppb	0.2158	9363.8	-1.5691
Pb 220.353	2.5195	ppb	7.0220	278.7	7.4303
Sb 206.834	0.7548	ppb	1.9389	256.9	6.0315
Se 196.026	-1.6223	ppb	9.8192	605.3	-1.4511
Si 288.158	-1.3417uv	ppb	0.6833	50.9	331.236
Sn 189.925	-1.9822	ppb	2.1302	107.5	-0.7960
Sr 216.596	0.0960	ppb	0.7084	738.2	5.9142
Ti 334.941	0.0675	ppb	0.0479	71.0	-29.0594
Tl 190.794	-5.5152	ppb	3.3102	60.0	-5.8719
V 292.401	0.1962	ppb	0.1940	98.9	0.3166
Zn 206.200	-0.4811	ppb	1.6343	339.7	0.2579

idl (Samp) **12/15/2018, 1:06:09 PM** **Rack 1, Tube 32**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1311u	0.0258	-0.8802u
Al 308.215	-1.1398u	0.0885	-1.7293u
As 188.980	4.1320	0.4465	2.8233
B 249.678	1.1441	1.1098	1.0257
Ba 389.178	-1.1797u	-0.0024u	-1.4137u
Be 313.042	-0.0172u	-0.0136u	-0.0042u
Ca 370.602	-2.318u	-1.890u	-5.812u
Cd 226.502	-0.1076u	0.2049	0.2318
Co 228.615	-0.6144u	-0.2728u	-0.5341u
Cr 267.716	-0.1152u	-0.2730u	-0.0798u
Cu 324.754	0.4643	-0.0101u	0.2117
Fe 271.441	-6.5165u	1.8701	-1.6967u
K 766.491	-0.4965u	-0.8281u	-1.5944u
Mg 279.078	-0.8023u	-2.9900u	3.8821
Mn 257.610	-0.0709u	-0.0090u	-0.0490u
Mo 202.032	-0.0135u	0.8865	0.8413
Na 330.237	-69.4428u	-272.475u	62.0830
Ni 231.604	0.7743	0.7281	-0.5109u
Pb 220.353	2.3739	-2.3570u	-0.8595u
Sb 206.834	-1.1070u	-0.9690u	-2.8816u
Se 196.026	5.3265	8.9789	-19.5021u
Si 288.158	-3.6917u	-1.4203u	0.1142
Sn 189.925	1.1003	-0.7714u	-0.1398u
Sr 216.596	0.2902	0.2796	0.2775
Ti 334.941	0.0161	-0.1067u	-0.0825u

Label	Replicates Concentration		
Tl 190.794	-10.7899u	0.7798	4.1688
V 292.401	0.1077	-0.4061u	0.4583
Zn 206.200	-0.2140u	0.0657	1.6008

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3285	ppb	0.4842	147.4	-41.0404
Al 308.215	-0.9269	ppb	0.9274	100.1	152.814
As 188.980	2.4673	ppb	1.8684	75.7	1.5878
B 249.678	1.0932	ppb	0.0609	5.6	-59.7381
Ba 389.178	-0.8653	ppb	0.7564	87.4	-58.3344
Be 313.042	-0.0117	ppb	0.0067	57.5	-193.436
Ca 370.602	-3.340	ppb	2.152	64.4	20.51
Cd 226.502	0.1097	ppb	0.1887	172.0	7.5064
Co 228.615	-0.4738	ppb	0.1786	37.7	-9.6735
Cr 267.716	-0.1560	ppb	0.1029	66.0	16.3335
Cu 324.754	0.2219	ppb	0.2374	106.9	232.420
Fe 271.441	-2.1144	ppb	4.2089	199.1	16.0163
K 766.491	-0.9730	ppb	0.5631	57.9	222.315
Mg 279.078	0.0299	ppb	3.5108	11736.8	19.1602
Mn 257.610	-0.0430	ppb	0.0314	73.1	25.7304
Mo 202.032	0.5714	ppb	0.5071	88.7	3.9033
Na 330.237	-93.2783	ppb	168.548	180.7	43.2152
Ni 231.604	0.3305	ppb	0.7290	220.6	-1.1413
Pb 220.353	-0.2808	ppb	2.4179	861.0	5.9726
Sb 206.834	-1.6525	ppb	1.0666	64.5	5.0336
Se 196.026	-1.7322	ppb	15.4971	894.6	-1.4711
Si 288.158	-1.6659uv	ppb	1.9148	114.9	329.872
Sn 189.925	0.0630	ppb	0.9522	1510.3	-0.1879
Sr 216.596	0.2824	ppb	0.0068	2.4	6.6248
Ti 334.941	-0.0577	ppb	0.0651	112.7	-42.8123
Tl 190.794	-1.9471	ppb	7.8433	402.8	-4.8892
V 292.401	0.0533	ppb	0.4348	815.4	-1.5819
Zn 206.200	0.4842	ppb	0.9771	201.8	0.8008

idl (Samp) **12/15/2018, 1:10:51 PM** **Rack 1, Tube 33**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4183	0.0067	-0.0833u
Al 308.215	-4.7203u	5.4543	-1.4308u
As 188.980	-3.7622u	0.7112	-3.7303u
B 249.678	1.0637	0.3062	-0.0000u
Ba 389.178	-0.2684u	-1.2265u	-0.5625u
Be 313.042	-0.0007u	0.0048	-0.0044u
Ca 370.602	-6.352u	-4.757u	-3.003u
Cd 226.502	0.0504	-0.0288u	-0.4509u
Co 228.615	-0.8272u	-0.2904u	-1.4447u
Cr 267.716	-0.1965u	0.0398	0.0352
Cu 324.754	0.0144	-0.2984u	0.0034
Fe 271.441	1.2195	4.9384	12.7181
K 766.491	-1.2561u	-1.3768u	-0.5837u
Mg 279.078	0.3243	3.5543	0.0207
Mn 257.610	-0.1404u	-0.0611u	-0.0411u
Mo 202.032	0.9713	-0.3437u	-1.0249u

Label	Replicates Concentration		
Na 330.237	-149.434u	283.247	59.5603
Ni 231.604	2.0645	0.9805	-0.0877u
Pb 220.353	-0.0659u	12.4227	3.3847
Sb 206.834	-4.8614u	-5.0598u	-3.4727u
Se 196.026	-7.3902u	-1.5958u	-12.6566u
Si 288.158	-2.1369u	-4.0300u	-3.3883u
Sn 189.925	-5.4966u	6.4807	-4.0309u
Sr 216.596	-0.5642u	-0.1590u	0.7722
Ti 334.941	0.0999	0.0620	-0.1086u
Tl 190.794	-3.1816u	-0.1744u	-7.2316u
V 292.401	0.3667	-0.1687u	0.5396
Zn 206.200	-1.7867u	-0.0540u	1.4720

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1139	ppb	0.2674	234.7	-25.6649
Al 308.215	-0.2323	ppb	5.1921	2235.1	154.452
As 188.980	-2.2604	ppb	2.5735	113.9	0.3922
B 249.678	0.4566	ppb	0.5476	119.9	-63.9349
Ba 389.178	-0.6858	ppb	0.4908	71.6	-56.6152
Be 313.042	-0.0001	ppb	0.0046	5468.1	-183.978
Ca 370.602	-4.704	ppb	1.675	35.6	17.66
Cd 226.502	-0.1431	ppb	0.2695	188.4	3.6625
Co 228.615	-0.8541	ppb	0.5776	67.6	-11.4353
Cr 267.716	-0.0405	ppb	0.1351	333.6	18.8241
Cu 324.754	-0.0935	ppb	0.1775	189.8	220.972
Fe 271.441	6.2920	ppb	5.8676	93.3	22.3044
K 766.491	-1.0722	ppb	0.4273	39.9	219.861
Mg 279.078	1.2998	ppb	1.9584	150.7	20.9105
Mn 257.610	-0.0809	ppb	0.0525	64.9	22.0775
Mo 202.032	-0.1324	ppb	1.0147	766.2	2.4408
Na 330.237	64.4577	ppb	216.382	335.7	47.0934
Ni 231.604	0.9857	ppb	1.0761	109.2	-0.2982
Pb 220.353	5.2472	ppb	6.4493	122.9	8.8501
Sb 206.834	-4.4647	ppb	0.8648	19.4	3.8741
Se 196.026	-7.2142	ppb	5.5325	76.7	-2.4661
Si 288.158	-3.1851uv	ppb	0.9628	30.2	322.389
Sn 189.925	-1.0156	ppb	6.5332	643.3	-0.5086
Sr 216.596	0.0163	ppb	0.6853	4192.3	5.6093
Ti 334.941	0.0177	ppb	0.1111	625.9	-34.5258
Tl 190.794	-3.5292	ppb	3.5414	100.3	-5.3251
V 292.401	0.2459	ppb	0.3693	150.2	0.9686
Zn 206.200	-0.1229	ppb	1.6305	1326.8	0.4593

idl (Samp) **12/15/2018, 1:15:33 PM** **Rack 1, Tube 34**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1222	-0.0676u	-0.6600u
Al 308.215	-2.2339u	0.3756	-4.5076u
As 188.980	3.0011	3.2085	4.5636
B 249.678	1.3252	0.6479	-0.1422u
Ba 389.178	0.0031	-0.0329u	0.8662
Be 313.042	-0.0185u	-0.0127u	-0.0094u
Ca 370.602	-2.226u	2.711	0.0152

Label	Replicates Concentration		
Cd 226.502	0.2642	-0.1718u	0.2237
Co 228.615	-0.9861u	-0.2531u	-0.0848u
Cr 267.716	0.1597	0.0513	-0.1996u
Cu 324.754	0.4443	-0.0087u	-0.8052u
Fe 271.441	-3.6259u	-3.4693u	-5.3231u
K 766.491	-1.5910u	-1.2173u	-1.6619u
Mg 279.078	2.1406	-0.9556u	3.4532
Mn 257.610	-0.0991u	-0.1292u	-0.0788u
Mo 202.032	0.2283	-0.1444u	-0.4307u
Na 330.237	-231.220u	-111.936u	-78.9187u
Ni 231.604	-1.6701u	0.0201	1.6565
Pb 220.353	-3.2644u	-5.0180u	2.0921
Sb 206.834	-7.5942u	-9.9148u	-4.4580u
Se 196.026	-10.0919u	0.9025	-1.2897u
Si 288.158	-2.2148u	-6.4397u	-1.2076u
Sn 189.925	0.9873	9.8812	3.7762
Sr 216.596	0.5899	0.3880	0.0043
Ti 334.941	-0.0229u	-0.0355u	0.0396
Tl 190.794	-6.4530u	-9.3728u	9.2163
V 292.401	0.1961	0.0257	0.2775
Zn 206.200	-1.9986u	0.2084	1.0078

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2018	ppb	0.4080	202.2	-36.6360
Al 308.215	-2.1220	ppb	2.4435	115.2	149.990
As 188.980	3.5911	ppb	0.8486	23.6	1.8721
B 249.678	0.6103	ppb	0.7344	120.3	-62.9191
Ba 389.178	0.2788	ppb	0.5090	182.6	-47.3887
Be 313.042	-0.0136	ppb	0.0046	33.9	-194.935
Ca 370.602	0.1669	ppb	2.472	1481.4	27.83
Cd 226.502	0.1054	ppb	0.2409	228.7	7.4413
Co 228.615	-0.4414	ppb	0.4792	108.6	-9.5170
Cr 267.716	0.0038	ppb	0.1843	4843.1	19.7789
Cu 324.754	-0.1232	ppb	0.6326	513.5	219.892
Fe 271.441	-4.1394	ppb	1.0281	24.8	14.4963
K 766.491	-1.4901	ppb	0.2389	16.0	209.521
Mg 279.078	1.5460	ppb	2.2637	146.4	21.2501
Mn 257.610	-0.1024	ppb	0.0254	24.8	19.9995
Mo 202.032	-0.1156	ppb	0.3304	285.8	2.4758
Na 330.237	-140.691	ppb	80.1189	56.9	42.0510
Ni 231.604	0.0022	ppb	1.6634	76848.4	-1.5636
Pb 220.353	-2.0635	ppb	3.7041	179.5	5.0448
Sb 206.834	-7.3223	ppb	2.7385	37.4	2.6944
Se 196.026	-3.4930	ppb	5.8190	166.6	-1.7907
Si 288.158	-3.2874uv	ppb	2.7761	84.4	322.302
Sn 189.925	4.8816	ppb	4.5488	93.2	1.2449
Sr 216.596	0.3274	ppb	0.2975	90.9	6.8049
Ti 334.941	-0.0063	ppb	0.0402	640.1	-37.1604
Tl 190.794	-2.2032	ppb	9.9967	453.7	-4.9590
V 292.401	0.1664	ppb	0.1285	77.2	-0.0593
Zn 206.200	-0.2608	ppb	1.5571	597.1	0.3818

idl (Samp) **12/15/2018, 1:20:15 PM** **Rack 1, Tube 35**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4824	0.0437	-0.1205u
Al 308.215	-1.4524u	-1.2113u	-1.6690u
As 188.980	1.7507	2.6890	-3.5791u
B 249.678	0.7635	0.1532	1.0043
Ba 389.178	0.4466	0.7645	-1.2272u
Be 313.042	-0.0085u	-0.0157u	-0.0157u
Ca 370.602	8.112	-0.3492u	-0.3546u
Cd 226.502	-0.4080u	-0.2966u	0.2322
Co 228.615	-0.7676u	-0.4552u	-1.2522u
Cr 267.716	-0.0758u	0.1240	-0.4394u
Cu 324.754	0.1590	0.3735	0.6751
Fe 271.441	-14.0078u	8.4825	-0.2297u
K 766.491	-1.9668u	-1.2148u	-1.6203u
Mg 279.078	6.1205	5.0450	1.6442
Mn 257.610	-0.0853u	0.0356	-0.0598u
Mo 202.032	-1.2831u	-0.2471u	1.2272
Na 330.237	-52.4203u	-234.585u	-23.3748u
Ni 231.604	2.1477	-0.5507u	-0.7271u
Pb 220.353	3.0127	1.1213	6.3521
Sb 206.834	3.9986	5.8537	0.3632
Se 196.026	0.9547	-18.7518u	-0.2580u
Si 288.158	-2.9213u	-3.4157u	-3.6347u
Sn 189.925	4.2676	1.1856	-2.2365u
Sr 216.596	-0.7622u	0.1938	0.2745
Ti 334.941	0.0606	0.0493	0.0502
Tl 190.794	-11.1853u	-7.7245u	10.1878
V 292.401	0.2136	0.5358	0.1830
Zn 206.200	-0.8509u	-1.5819u	-2.8835u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1352	ppb	0.3117	230.5	-24.9263
Al 308.215	-1.4442	ppb	0.2289	15.9	151.588
As 188.980	0.2869	ppb	3.3807	1178.4	1.0365
B 249.678	0.6403	ppb	0.4387	68.5	-62.7224
Ba 389.178	-0.0054	ppb	1.0700	19998.2	-50.1036
Be 313.042	-0.0133	ppb	0.0042	31.5	-194.696
Ca 370.602	2.469	ppb	4.886	197.9	32.63
Cd 226.502	-0.1575	ppb	0.3420	217.2	3.4418
Co 228.615	-0.8250	ppb	0.4016	48.7	-11.2953
Cr 267.716	-0.1304	ppb	0.2857	219.1	16.8844
Cu 324.754	0.4025	ppb	0.2593	64.4	238.950
Fe 271.441	-1.9183	ppb	11.3399	591.1	16.1502
K 766.491	-1.6007	ppb	0.3764	23.5	206.785
Mg 279.078	4.2699	ppb	2.3367	54.7	25.0037
Mn 257.610	-0.0365	ppb	0.0637	174.7	26.3866
Mo 202.032	-0.1010	ppb	1.2615	1249.2	2.5061
Na 330.237	-103.460	ppb	114.482	110.7	42.9684
Ni 231.604	0.2900	ppb	1.6113	555.7	-1.1932
Pb 220.353	3.4954	ppb	2.6486	75.8	7.9384
Sb 206.834	3.4052	ppb	2.7929	82.0	7.1319
Se 196.026	-6.0184	ppb	11.0441	183.5	-2.2490
Si 288.158	-3.3239uv	ppb	0.3654	11.0	321.927

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.0722	ppb	3.2535	303.4	0.1122
Sr 216.596	-0.0980	ppb	0.5767	588.5	5.1751
Ti 334.941	0.0534	ppb	0.0063	11.7	-30.5976
Tl 190.794	-2.9073	ppb	11.4720	394.6	-5.1528
V 292.401	0.3108	ppb	0.1955	62.9	1.8553
Zn 206.200	-1.7721	ppb	1.0295	58.1	-0.4683

idl (Samp) **12/15/2018, 1:24:58 PM** **Rack 1, Tube 36**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6014u	0.1559	0.1845
Al 308.215	-5.2534u	-2.4474u	-2.4068u
As 188.980	5.6299	1.9271	3.8637
B 249.678	0.6193	1.3036	-0.4686u
Ba 389.178	-0.6822u	-0.5835u	-0.1741u
Be 313.042	-0.0101u	-0.0068u	-0.0089u
Ca 370.602	-3.572u	0.9271	3.246
Cd 226.502	0.2481	0.1776	-0.0580u
Co 228.615	-1.4103u	-2.0109u	-1.6501u
Cr 267.716	-0.2477u	0.3017	-0.4578u
Cu 324.754	0.3121	0.1919	-0.0912u
Fe 271.441	-10.1759u	10.6705	-5.7967u
K 766.491	-1.4285u	-1.7624u	-1.1176u
Mg 279.078	-0.9564u	1.2670	3.7100
Mn 257.610	-0.0672u	-0.0907u	-0.0514u
Mo 202.032	-0.6503u	-0.7621u	-0.5631u
Na 330.237	-202.990u	-317.837u	-37.4351u
Ni 231.604	0.5659	0.0543	0.0268
Pb 220.353	2.6926	3.8866	0.4543
Sb 206.834	0.9108	-5.0671u	8.1794
Se 196.026	-12.1727u	1.7169	-5.8969u
Si 288.158	-3.6474u	-4.1204u	-3.6460u
Sn 189.925	2.5632	-2.1872u	0.0705
Sr 216.596	0.8033	0.2530	0.3603
Ti 334.941	0.0021	0.0931	0.0465
Tl 190.794	-8.6740u	3.8841	-5.7209u
V 292.401	0.7035	-0.2075u	0.2880
Zn 206.200	-0.9878u	1.1143	0.4687

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0870	ppb	0.4457	512.2	-32.6493
Al 308.215	-3.3692	ppb	1.6319	48.4	147.047
As 188.980	3.8069	ppb	1.8521	48.7	1.9267
B 249.678	0.4848	ppb	0.8937	184.4	-63.7422
Ba 389.178	-0.4799	ppb	0.2694	56.1	-54.6470
Be 313.042	-0.0086	ppb	0.0017	19.2	-190.885
Ca 370.602	0.2001	ppb	3.467	1732.6	27.91
Cd 226.502	0.1225	ppb	0.1603	130.8	7.7001
Co 228.615	-1.6904	ppb	0.3023	17.9	-15.3155
Cr 267.716	-0.1346	ppb	0.3921	291.3	16.7937
Cu 324.754	0.1376	ppb	0.2071	150.5	229.340
Fe 271.441	-1.7674	ppb	10.9918	621.9	16.2205
K 766.491	-1.4361	ppb	0.3225	22.5	210.856

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1.3402	ppb	2.3341	174.2	20.9666
Mn 257.610	-0.0697	ppb	0.0198	28.4	23.1574
Mo 202.032	-0.6585	ppb	0.0997	15.1	1.3478
Na 330.237	-186.087	ppb	140.963	75.8	40.9339
Ni 231.604	0.2157	ppb	0.3036	140.8	-1.2880
Pb 220.353	2.3445	ppb	1.7424	74.3	7.3396
Sb 206.834	1.3410	ppb	6.6337	494.7	6.2785
Se 196.026	-5.4509	ppb	6.9555	127.6	-2.1460
Si 288.158	-3.8046uv	ppb	0.2735	7.2	319.301
Sn 189.925	0.1489	ppb	2.3762	1596.3	-0.1624
Sr 216.596	0.4722	ppb	0.2917	61.8	7.3591
Ti 334.941	0.0472	ppb	0.0455	96.3	-31.2776
Tl 190.794	-3.5036	ppb	6.5661	187.4	-5.3181
V 292.401	0.2613	ppb	0.4561	174.5	1.2113
Zn 206.200	0.1984	ppb	1.0768	542.7	0.6401

idl (Samp) **12/15/2018, 1:29:39 PM** **Rack 1, Tube 37**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2506u	0.3927	-0.7797u
Al 308.215	-1.9645u	-4.4325u	-1.2942u
As 188.980	-0.0680u	-1.1575u	-0.6097u
B 249.678	1.5337	-0.3516u	0.1522
Ba 389.178	-0.5458u	-0.6306u	0.9318
Be 313.042	-0.0098u	-0.0081u	-0.0109u
Ca 370.602	-4.022u	-6.080u	1.181
Cd 226.502	-0.0775u	-0.3799u	-0.1250u
Co 228.615	-0.7759u	0.5923	-1.0544u
Cr 267.716	-0.1957u	-0.1987u	-0.1218u
Cu 324.754	0.5873	-0.0455u	-0.3505u
Fe 271.441	-2.9537u	-6.0779u	-8.0572u
K 766.491	-2.1268u	-1.7607u	-1.4857u
Mg 279.078	1.3832	3.2675	3.5605
Mn 257.610	-0.1428u	0.0038	-0.0801u
Mo 202.032	-0.0473u	-1.1245u	-0.6943u
Na 330.237	6.7290	-91.5395u	-51.6044u
Ni 231.604	-0.9940u	1.0730	-0.9624u
Pb 220.353	3.6904	-1.9408u	0.7861
Sb 206.834	-7.1353u	-1.1661u	0.1803
Se 196.026	-11.1725u	-3.0984u	-17.4516u
Si 288.158	-4.3594u	-3.1129u	-5.7983u
Sn 189.925	3.0854	1.7369	-4.1540u
Sr 216.596	0.3989	-0.6135u	0.3036
Ti 334.941	0.0344	-0.0321u	0.0202
Tl 190.794	3.8608	-1.8798u	-5.4721u
V 292.401	-0.5782u	0.6052	-0.1549u
Zn 206.200	-2.3956u	-0.8998u	-1.8157u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2126	ppb	0.5871	276.2	-37.0101
Al 308.215	-2.5638	ppb	1.6527	64.5	148.934
As 188.980	-0.6117	ppb	0.5448	89.1	0.8093
B 249.678	0.4448	ppb	0.9761	219.5	-64.0108

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.0815	ppb	0.8786	1077.8	-50.8358
Be 313.042	-0.0096	ppb	0.0014	15.0	-191.671
Ca 370.602	-2.974	ppb	3.742	125.8	21.27
Cd 226.502	-0.1941	ppb	0.1626	83.8	2.8839
Co 228.615	-0.4127	ppb	0.8814	213.6	-9.3781
Cr 267.716	-0.1720	ppb	0.0436	25.3	15.9885
Cu 324.754	0.0638	ppb	0.4783	749.9	226.666
Fe 271.441	-5.6963	ppb	2.5731	45.2	13.3482
K 766.491	-1.7910	ppb	0.3216	18.0	202.075
Mg 279.078	2.7371	ppb	1.1816	43.2	22.8920
Mn 257.610	-0.0730	ppb	0.0735	100.7	22.8389
Mo 202.032	-0.6220	ppb	0.5422	87.2	1.4236
Na 330.237	-45.4718	ppb	49.4204	108.7	44.3948
Ni 231.604	-0.2945	ppb	1.1843	402.2	-1.9455
Pb 220.353	0.8452	ppb	2.8161	333.2	6.5589
Sb 206.834	-2.7071	ppb	3.8936	143.8	4.6048
Se 196.026	-10.5741	ppb	7.1953	68.0	-3.0759
Si 288.158	-4.4235uv	ppb	1.3438	30.4	316.545
Sn 189.925	0.2228	ppb	3.8499	1728.3	-0.1404
Sr 216.596	0.0297	ppb	0.5591	1883.6	5.6751
Ti 334.941	0.0075	ppb	0.0350	466.5	-35.6468
Tl 190.794	-1.1637	ppb	4.7075	404.5	-4.6717
V 292.401	-0.0426	ppb	0.5997	1406.9	-2.7631
Zn 206.200	-1.7037	ppb	0.7541	44.3	-0.4297

idl (Samp) **12/15/2018, 1:34:19 PM** **Rack 1, Tube 38**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2445	-0.0846u	1.0640
Al 308.215	-1.3039u	1.3912	-1.6546u
As 188.980	-0.8989u	0.8456	-2.9943u
B 249.678	0.2346	0.4851	-0.0840u
Ba 389.178	-0.5281u	0.7870	-1.3998u
Be 313.042	-0.0159u	-0.0201u	-0.0106u
Ca 370.602	0.5600	9.031	-7.555u
Cd 226.502	-0.0732u	0.0773	-0.1957u
Co 228.615	-0.2459u	-0.0870u	-1.2837u
Cr 267.716	-0.2073u	0.3311	-0.0977u
Cu 324.754	0.0100	0.7768	0.7137
Fe 271.441	-6.7499u	3.6468	1.4431
K 766.491	-1.1998u	-0.7155u	-1.8566u
Mg 279.078	-3.2294u	2.9421	-3.0061u
Mn 257.610	-0.0731u	-0.0772u	-0.1034u
Mo 202.032	-0.0233u	0.1944	-0.9887u
Na 330.237	120.478	226.740	-166.844u
Ni 231.604	0.4528	-0.1631u	0.7516
Pb 220.353	1.0456	-2.0162u	-0.5797u
Sb 206.834	-5.2703u	-6.8244u	-4.0103u
Se 196.026	2.4437	-2.1211u	-0.3062u
Si 288.158	-5.4369u	-2.4475u	-3.2930u
Sn 189.925	-1.2024u	-1.1867u	6.2499
Sr 216.596	1.2142	-0.2223u	1.2369
Ti 334.941	0.0118	0.0650	0.0611

Label	Replicates Concentration		
Tl 190.794	-4.7760u	-4.0464u	1.4006
V 292.401	-0.0782u	-0.3458u	-0.9541u
Zn 206.200	0.0406	-0.2963u	-1.2541u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4080	ppb	0.5915	145.0	-15.4525
Al 308.215	-0.5224	ppb	1.6665	319.0	153.740
As 188.980	-1.0158	ppb	1.9226	189.3	0.7070
B 249.678	0.2119	ppb	0.2852	134.6	-65.5395
Ba 389.178	-0.3803	ppb	1.1009	289.5	-53.6981
Be 313.042	-0.0155	ppb	0.0047	30.4	-196.568
Ca 370.602	0.6787	ppb	8.294	1222.0	28.90
Cd 226.502	-0.0639	ppb	0.1367	214.0	4.8628
Co 228.615	-0.5388	ppb	0.6499	120.6	-9.9676
Cr 267.716	0.0087	ppb	0.2846	3262.0	19.8863
Cu 324.754	0.5002	ppb	0.4257	85.1	242.500
Fe 271.441	-0.5533	ppb	5.4783	990.1	17.1897
K 766.491	-1.2573	ppb	0.5727	45.5	215.282
Mg 279.078	-1.0978	ppb	3.5004	318.9	17.6063
Mn 257.610	-0.0846	ppb	0.0165	19.5	21.7065
Mo 202.032	-0.2726	ppb	0.6297	231.0	2.1499
Na 330.237	60.1247	ppb	203.615	338.7	46.9874
Ni 231.604	0.3471	ppb	0.4664	134.4	-1.1200
Pb 220.353	-0.5168	ppb	1.5319	296.4	5.8499
Sb 206.834	-5.3684	ppb	1.4096	26.3	3.5027
Se 196.026	0.0055	ppb	2.2983	42063.5	-1.1557
Si 288.158	-3.7258uv	ppb	1.5410	41.4	319.881
Sn 189.925	1.2869	ppb	4.2981	334.0	0.1760
Sr 216.596	0.7429	ppb	0.8360	112.5	8.3846
Ti 334.941	0.0460	ppb	0.0296	64.5	-31.4375
Tl 190.794	-2.4739	ppb	3.3753	136.4	-5.0337
V 292.401	-0.4594	ppb	0.4488	97.7	-8.2553
Zn 206.200	-0.5033	ppb	0.6717	133.5	0.2454

idl (Samp) **12/15/2018, 1:38:59 PM** **Rack 1, Tube 39**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0578u	-0.3447u	-0.3704u
Al 308.215	-0.9856u	-0.0810u	-0.9623u
As 188.980	-2.8520u	-2.9848u	-2.0647u
B 249.678	1.2562	0.8546	0.1475
Ba 389.178	0.3439	-0.1084u	0.3843
Be 313.042	0.0018	-0.0196u	-0.0192u
Ca 370.602	-3.301u	0.5798	-0.0535u
Cd 226.502	0.1079	-0.4075u	-0.0501u
Co 228.615	-1.1271u	-0.9977u	-1.2152u
Cr 267.716	-0.0838u	0.2781	-0.3765u
Cu 324.754	0.0054	0.5562	-0.3459u
Fe 271.441	6.3775	-13.1428u	-4.0859u
K 766.491	-1.2446u	-2.2800u	-1.3611u
Mg 279.078	6.1644	-1.5065u	1.1214
Mn 257.610	-0.1019u	-0.0684u	0.0277
Mo 202.032	-0.6255u	-0.7947u	-0.2988u

Label	Replicates Concentration		
Na 330.237	-64.8153u	-4.3590u	-17.8593u
Ni 231.604	0.1552	2.4370	-0.5287u
Pb 220.353	6.3099	3.3881	-2.8428u
Sb 206.834	-2.1073u	-2.0956u	-4.6562u
Se 196.026	0.4559	-14.9223u	14.8179
Si 288.158	-3.4547u	-3.5169u	-4.4741u
Sn 189.925	-4.9248u	3.7488	-0.9962u
Sr 216.596	0.6968	1.0330	0.2732
Ti 334.941	-0.0119u	0.0261	-0.0872u
Tl 190.794	-0.1042u	-3.8426u	-3.7685u
V 292.401	-0.0205u	-0.0449u	-0.2904u
Zn 206.200	-1.1926u	-1.4732u	0.5639

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2576	ppb	0.1736	67.4	-38.5780
Al 308.215	-0.6763	ppb	0.5157	76.3	153.386
As 188.980	-2.6339	ppb	0.4973	18.9	0.2979
B 249.678	0.7528	ppb	0.5613	74.6	-61.9800
Ba 389.178	0.2066	ppb	0.2736	132.4	-48.0813
Be 313.042	-0.0123	ppb	0.0123	99.4	-193.926
Ca 370.602	-0.9250	ppb	2.082	225.1	25.55
Cd 226.502	-0.1166	ppb	0.2641	226.5	4.0626
Co 228.615	-1.1133	ppb	0.1094	9.8	-12.6350
Cr 267.716	-0.0607	ppb	0.3279	540.1	18.3890
Cu 324.754	0.0719	ppb	0.4547	632.2	226.963
Fe 271.441	-3.6170	ppb	9.7686	270.1	14.8540
K 766.491	-1.6286	ppb	0.5671	34.8	206.095
Mg 279.078	1.9264	ppb	3.8983	202.4	21.7738
Mn 257.610	-0.0475	ppb	0.0673	141.5	25.2974
Mo 202.032	-0.5730	ppb	0.2521	44.0	1.5255
Na 330.237	-29.0112	ppb	31.7335	109.4	44.7983
Ni 231.604	0.6878	ppb	1.5529	225.8	-0.6811
Pb 220.353	2.2851	ppb	4.6750	204.6	7.3085
Sb 206.834	-2.9530	ppb	1.4750	49.9	4.5030
Se 196.026	0.1172	ppb	14.8730	12693.5	-1.1354
Si 288.158	-3.8153uv	ppb	0.5714	15.0	319.361
Sn 189.925	-0.7241	ppb	4.3432	599.8	-0.4219
Sr 216.596	0.6677	ppb	0.3807	57.0	8.1004
Ti 334.941	-0.0243	ppb	0.0577	237.2	-39.1435
Tl 190.794	-2.5718	ppb	2.1373	83.1	-5.0612
V 292.401	-0.1186	ppb	0.1493	125.9	-3.7703
Zn 206.200	-0.7006	ppb	1.1041	157.6	0.1344

idl (Samp) **12/15/2018, 1:43:40 PM** **Rack 1, Tube 40**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0162	0.1885	0.8098
Al 308.215	-3.4134u	-2.3394u	0.9681
As 188.980	-0.6813u	-2.3057u	1.7246
B 249.678	-0.2577u	0.3129	-0.0942u
Ba 389.178	-0.5999u	0.8000	-1.0913u
Be 313.042	-0.0075u	-0.0131u	-0.0061u
Ca 370.602	-0.3061u	1.101	5.330

Label	Replicates Concentration		
Cd 226.502	-0.0031u	-0.0988u	0.1235
Co 228.615	-0.7481u	-0.3714u	-0.5367u
Cr 267.716	-0.2078u	0.0368	-0.1537u
Cu 324.754	-0.3294u	-0.3353u	-0.0278u
Fe 271.441	-4.9375u	0.2048	-13.1455u
K 766.491	-1.5980u	-1.8897u	-1.8222u
Mg 279.078	0.7616	2.7978	3.0289
Mn 257.610	-0.1140u	0.0100	-0.0520u
Mo 202.032	0.3154	-1.2695u	-0.2328u
Na 330.237	87.3189	-290.266u	31.9677
Ni 231.604	0.0117	-0.4296u	1.6254
Pb 220.353	-2.1162u	5.8215	4.2939
Sb 206.834	2.8706	-0.3400u	-3.1164u
Se 196.026	2.6479	-18.2806u	-7.0338u
Si 288.158	-5.7038u	-5.6833u	-5.3519u
Sn 189.925	0.3365	-0.9375u	-3.5079u
Sr 216.596	0.8931	0.9633	0.7018
Ti 334.941	-0.1269u	-0.0826u	0.0405
Tl 190.794	7.2220	1.9958	-0.0591u
V 292.401	-0.4550u	-0.2800u	0.6163
Zn 206.200	1.2814	-1.3200u	-2.3538u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3382	ppb	0.4174	123.4	-17.8762
Al 308.215	-1.5949	ppb	2.2836	143.2	151.214
As 188.980	-0.4208	ppb	2.0277	481.8	0.8576
B 249.678	-0.0130	ppb	0.2938	2260.3	-67.0234
Ba 389.178	-0.2971	ppb	0.9813	330.3	-52.9006
Be 313.042	-0.0089	ppb	0.0037	41.2	-191.096
Ca 370.602	2.042	ppb	2.933	143.7	31.74
Cd 226.502	0.0072	ppb	0.1115	1548.3	5.9469
Co 228.615	-0.5520	ppb	0.1888	34.2	-10.0217
Cr 267.716	-0.1082	ppb	0.1285	118.8	17.3646
Cu 324.754	-0.2309	ppb	0.1759	76.2	215.972
Fe 271.441	-5.9594	ppb	6.7336	113.0	13.1381
K 766.491	-1.7700	ppb	0.1527	8.6	202.596
Mg 279.078	2.1961	ppb	1.2477	56.8	22.1460
Mn 257.610	-0.0520	ppb	0.0620	119.3	24.8629
Mo 202.032	-0.3956	ppb	0.8049	203.4	1.8941
Na 330.237	-56.9929	ppb	203.907	357.8	44.1079
Ni 231.604	0.4025	ppb	1.0818	268.8	-1.0489
Pb 220.353	2.6664	ppb	4.2117	158.0	7.5070
Sb 206.834	-0.1953	ppb	2.9961	1534.3	5.6474
Se 196.026	-7.5555	ppb	10.4740	138.6	-2.5280
Si 288.158	-5.5797uv	ppb	0.1975	3.5	310.983
Sn 189.925	-1.3696	ppb	1.9582	143.0	-0.6139
Sr 216.596	0.8527	ppb	0.1354	15.9	8.8185
Ti 334.941	-0.0563	ppb	0.0868	154.0	-42.6599
Tl 190.794	3.0529	ppb	3.7539	123.0	-3.5099
V 292.401	-0.0396	ppb	0.5747	1452.5	-2.7025
Zn 206.200	-0.7975	ppb	1.8731	234.9	0.0799

Cont Calib Verif (CCV) **12/15/2018, 1:48:22 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	490.746	485.562	485.851
Al 308.215	9900.60	9926.73	9910.12
As 188.980	502.748	519.536	520.742
B 249.678	502.327	501.830	505.680
Ba 389.178	491.968	491.468	489.943
Be 313.042	519.884	520.214	520.087
Ca 370.602	10059	10066	10067
Cd 226.502	508.420	508.438	508.024
Co 228.615	505.371	505.911	507.638
Cr 267.716	499.988	501.494	500.077
Cu 324.754	507.906	504.587	506.402
Fe 271.441	10049.6	10040.2	10027.4
K 766.491	9766.22	9776.80	9777.39
Mg 279.078	10127.7	10156.2	10117.9
Mn 257.610	505.117	505.762	505.247
Mo 202.032	502.305	502.263	499.691
Na 330.237	10246.7	10086.8	10268.3
Ni 231.604	508.916	509.225	511.731
Pb 220.353	516.471	505.923	513.451
Sb 206.834	502.937	502.544	508.502
Se 196.026	537.791	518.100	519.788
Si 288.158	4893.89	4901.82	4902.48
Sn 189.925	506.395	493.433	497.974
Sr 216.596	509.927	509.995	511.490
Ti 334.941	496.603	496.748	495.920
Tl 190.794	494.749	490.993	489.981
V 292.401	501.018	502.900	501.966
Zn 206.200	1059.39	1053.41	1060.33

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	487.386	ppb	2.9132	0.6	16900.5	97.47725
Al 308.215	9912.49	ppb	13.2223	0.1	23553.5	99.12486
As 188.980	514.342	ppb	10.0585	2.0	130.920	102.86845
B 249.678	503.279	ppb	2.0939	0.4	3237.25	100.65575
Ba 389.178	491.126	ppb	1.0549	0.2	4662.80	98.22522
Be 313.042	520.062	ppb	0.1664	0.0	423216	104.01239
Ca 370.602	10064	ppb	4.415	0.0	21032	100.63830
Cd 226.502	508.294	ppb	0.2340	0.0	7749.89	101.65877
Co 228.615	506.307	ppb	1.1839	0.2	2345.07	101.26137
Cr 267.716	500.520	ppb	0.8451	0.2	10811.9	100.10395
Cu 324.754	506.298	ppb	1.6618	0.3	18593.4	101.25961
Fe 271.441	10039.1	ppb	11.1608	0.1	7582.32	100.34045
K 766.491	9773.47	ppb	6.2846	0.1	242073	97.73470
Mg 279.078	10133.9	ppb	19.8805	0.2	13978.6	101.33942
Mn 257.610	505.375	ppb	0.3413	0.1	48950.8	101.07504
Mo 202.032	501.420	ppb	1.4971	0.3	1044.25	100.28394
Na 330.237	10200.6	ppb	99.1565	1.0	292.243	102.00599
Ni 231.604	509.957	ppb	1.5438	0.3	653.773	101.99143
Pb 220.353	511.948	ppb	5.4321	1.1	272.229	102.38966
Sb 206.834	504.661	ppb	3.3324	0.7	212.247	100.93216
Se 196.026	525.226	ppb	10.9139	2.1	94.2514	105.04520
Si 288.158	4899.40	ppb	4.7810	0.1	23600.9	97.98791

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	499.267	ppb	6.5772	1.3	148.249	99.85345
Sr 216.596	510.471	ppb	0.8831	0.2	1948.82	102.09412
Ti 334.941	496.424	ppb	0.4424	0.1	54488.9	99.28471
Tl 190.794	491.908	ppb	2.5121	0.5	131.415	98.38156
V 292.401	501.961	ppb	0.9413	0.2	6532.54	100.39227
Zn 206.200	1057.71	ppb	3.7531	0.4	595.040	105.77102

Cont Calib Blank (CCB) **12/15/2018, 1:53:05 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0684	-0.1044u	-0.0382u
Al 308.215	2.0322	-2.1330u	-3.0610u
As 188.980	-3.5335u	6.7391	6.7334
B 249.678	3.0366	1.3461	2.1587
Ba 389.178	-0.3646u	-1.1173u	0.4555
Be 313.042	0.0140	0.0212	0.0111
Ca 370.602	2.003	-1.516u	-1.299u
Cd 226.502	0.3293	-0.0144u	-0.0375u
Co 228.615	-1.0547u	-1.6698u	-0.2486u
Cr 267.716	-0.3601u	-0.0149u	-0.0348u
Cu 324.754	0.9893	-0.1074u	0.0002
Fe 271.441	-1.5955u	6.5668	2.3142
K 766.491	0.1355	-0.4280u	-1.1432u
Mg 279.078	3.7368	2.1915	0.7953
Mn 257.610	-0.0432u	0.0380	-0.0642u
Mo 202.032	0.5899	-1.0595u	1.3964
Na 330.237	-103.888u	-136.537u	65.5879
Ni 231.604	1.1700	-0.2076u	-0.2726u
Pb 220.353	2.1499	-3.5633u	-2.1130u
Sb 206.834	4.2993	-4.2933u	-4.3028u
Se 196.026	-7.8266u	6.2849	-2.2718u
Si 288.158	-2.6721u	-4.0689u	-3.9603u
Sn 189.925	4.8304	-3.5191u	-5.0170u
Sr 216.596	0.2093	0.4803	0.0919
Ti 334.941	0.0868	0.1404	0.1796
Tl 190.794	-0.0551u	1.5591	-5.4787u
V 292.401	-0.9164u	-0.8381u	0.6710
Zn 206.200	-0.0858u	-1.4801u	-0.2169u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0247	ppb	0.0872	352.5	-30.4839	-0.02474
Al 308.215	-1.0540	ppb	2.7126	257.4	152.503	-1.05395
As 188.980	3.3130	ppb	5.9293	179.0	1.8017	3.31299
B 249.678	2.1805	ppb	0.8455	38.8	-52.5834	2.18047
Ba 389.178	-0.3421	ppb	0.7866	229.9	-53.3276	-0.34213
Be 313.042	0.0154	ppb	0.0052	33.7	-171.379	0.01545
Ca 370.602	-0.2705	ppb	1.972	729.1	26.91	-0.27048
Cd 226.502	0.0925	ppb	0.2054	222.1	7.2481	0.09248
Co 228.615	-0.9910	ppb	0.7127	71.9	-12.0753	-0.99101
Cr 267.716	-0.1366	ppb	0.1938	141.9	16.7548	-0.13657
Cu 324.754	0.2940	ppb	0.6045	205.6	235.039	0.29403
Fe 271.441	2.4285	ppb	4.0824	168.1	19.4050	2.42852
K 766.491	-0.4786	ppb	0.6408	133.9	234.549	-0.47858

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	2.2412	ppb	1.4714	65.7	22.2077	2.24122
Mn 257.610	-0.0231	ppb	0.0540	233.5	27.6632	-0.02312
Mo 202.032	0.3089	ppb	1.2518	405.2	3.3579	0.30894
Na 330.237	-58.2791	ppb	108.507	186.2	44.0762	-58.27911
Ni 231.604	0.2299	ppb	0.8148	354.4	-1.2703	0.22992
Pb 220.353	-1.1755	ppb	2.9697	252.6	5.5069	-1.17548
Sb 206.834	-1.4323	ppb	4.9637	346.6	5.1240	-1.43229
Se 196.026	-1.2712	ppb	7.1088	559.2	-1.3874	-1.27116
Si 288.158	-3.5671uv	ppb	0.7770	21.8	320.710	-3.56710
Sn 189.925	-1.2353	ppb	5.3061	429.6	-0.5739	-1.23525
Sr 216.596	0.2605	ppb	0.1992	76.5	6.5343	0.26049
Ti 334.941	0.1356	ppb	0.0466	34.3	-21.5899	0.13561
Tl 190.794	-1.3249	ppb	3.6867	278.3	-4.7190	-1.32493
V 292.401	-0.3612	ppb	0.8948	247.8	-7.0152	-0.36116
Zn 206.200	-0.5943	ppb	0.7700	129.6	0.1942	-0.59429

MB 680-551754/1-A (Samp) **12/15/2018, 1:57:45 PM** **Rack 1, Tube 41**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3707	-0.5229u	0.7002
Al 308.215	2.1920	1.6696	3.3004
As 188.980	-2.4511u	0.2519	8.2480
B 249.678	0.7504	1.7254	0.9717
Ba 389.178	1.3428	-0.7142u	-0.1708u
Be 313.042	0.0029	-0.0076u	-0.0043u
Ca 370.602	2.108	-2.635u	-1.434u
Cd 226.502	-0.2939u	0.1819	0.0571
Co 228.615	-1.4350u	-0.2726u	-0.3180u
Cr 267.716	0.1986	-0.3836u	-0.1666u
Cu 324.754	0.8584	0.5873	-0.0816u
Fe 271.441	-3.2743u	-1.4039u	-4.8076u
K 766.491	7.1854	4.7917	5.0004
Mg 279.078	2.7956	5.0638	2.9354
Mn 257.610	4.6882	4.6662	4.6665
Mo 202.032	-0.6761u	0.8544	-1.6106u
Na 330.237	-191.947u	-9.0041u	-123.461u
Ni 231.604	-2.1111u	1.5666	0.1887
Pb 220.353	-0.6996u	0.4947	6.7171
Sb 206.834	-10.1318u	-0.1516u	-0.5328u
Se 196.026	2.4024	-14.6158u	-8.3606u
Si 288.158	-1.6758u	-3.1360u	-5.1612u
Sn 189.925	-2.4315u	0.5231	-2.8023u
Sr 216.596	0.0415	0.1861	1.0300
Ti 334.941	0.1039	0.0819	0.1214
Tl 190.794	-4.0937u	2.9196	0.8783
V 292.401	-0.4668u	0.1964	-0.1459u
Zn 206.200	1.6378	0.2322	2.1814

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1827	ppb	0.6329	346.5	-23.2709
Al 308.215	2.3874	ppb	0.8327	34.9	160.611
As 188.980	2.0162	ppb	5.5635	275.9	1.4739
B 249.678	1.1491	ppb	0.5111	44.5	-59.3702

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.1526	ppb	1.0660	698.4	-48.5960
Be 313.042	-0.0030	ppb	0.0054	180.0	-186.313
Ca 370.602	-0.6536	ppb	2.466	377.3	26.21
Cd 226.502	-0.0183	ppb	0.2467	1347.2	5.5587
Co 228.615	-0.6752	ppb	0.6584	97.5	-10.5975
Cr 267.716	-0.1172	ppb	0.2942	251.0	17.1802
Cu 324.754	0.4547	ppb	0.4838	106.4	240.844
Fe 271.441	-3.1619	ppb	1.7046	53.9	15.2217
K 766.491	5.6592	ppb	1.3259	23.4	386.416
Mg 279.078	3.5982	ppb	1.2711	35.3	24.0272
Mn 257.610	4.6736	ppb	0.0126	0.3	481.727
Mo 202.032	-0.4774	ppb	1.2445	260.7	1.7241
Na 330.237	-108.138	ppb	92.4293	85.5	42.8477
Ni 231.604	-0.1186	ppb	1.8580	1566.4	-1.7188
Pb 220.353	2.1708	ppb	3.9823	183.5	7.2491
Sb 206.834	-3.6054	ppb	5.6553	156.9	4.2322
Se 196.026	-6.8580	ppb	8.6080	125.5	-2.4010
Si 288.158	-3.3243uv	ppb	1.7503	52.7	321.366
Sn 189.925	-1.5702	ppb	1.8224	116.1	-0.6735
Sr 216.596	0.4192	ppb	0.5339	127.4	7.1576
Ti 334.941	0.1024	ppb	0.0198	19.3	-25.2241
Tl 190.794	-0.0986	ppb	3.6073	3657.3	-4.3781
V 292.401	-0.1387	ppb	0.3317	239.1	-4.0339
Zn 206.200	1.3505	ppb	1.0059	74.5	1.2882

LCS 680-551754/2-A (Samp) **12/15/2018, 2:02:26 PM** **Rack 1, Tube 42**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	19.4027	19.9193	20.1892
Al 308.215	2007.03	1999.78	2010.14
As 188.980	42.5022	41.5472	36.1327
B 249.678	80.8780	81.5902	79.9396
Ba 389.178	40.4208	41.2687	40.2883
Be 313.042	20.6081	20.5922	20.6099
Ca 370.602	2031	2028	2033
Cd 226.502	20.9801	21.1612	21.5146
Co 228.615	19.6087	19.8528	20.3488
Cr 267.716	40.8597	40.5907	40.8670
Cu 324.754	40.6509	40.9587	41.0331
Fe 271.441	2052.19	2040.46	2051.69
K 766.491	3258.26	3257.32	3261.39
Mg 279.078	2049.81	2043.83	2042.85
Mn 257.610	205.742	205.393	205.417
Mo 202.032	40.6791	40.4941	40.3434
Na 330.237	2160.61	2125.97	2200.33
Ni 231.604	42.9814	41.4236	43.7182
Pb 220.353	217.208	219.084	211.660
Sb 206.834	13.8382	14.6572	20.8092
Se 196.026	31.2358	36.3676	28.1142
Si 288.158	-6.8637u	-9.2393u	-6.0640u
Sn 189.925	39.1399	40.5762	40.7706
Sr 216.596	42.1138	42.2664	42.5962
Ti 334.941	40.4997	40.2466	40.1054

Label	Replicates Concentration		
Tl 190.794	6.0553	8.5088	13.0009
V 292.401	40.2814	40.7313	40.2298
Zn 206.200	43.0198	42.6413	43.3744

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	19.8371	ppb	0.3997	2.0	659.414
Al 308.215	2005.65	ppb	5.3135	0.3	4886.73
As 188.980	40.0607	ppb	3.4351	8.6	11.0879
B 249.678	80.8026	ppb	0.8279	1.0	463.128
Ba 389.178	40.6593	ppb	0.5319	1.3	341.712
Be 313.042	20.6034	ppb	0.0097	0.0	16589.2
Ca 370.602	2031	ppb	2.703	0.1	4266
Cd 226.502	21.2187	ppb	0.2718	1.3	330.376
Co 228.615	19.9368	ppb	0.3771	1.9	85.1926
Cr 267.716	40.7725	ppb	0.1575	0.4	899.301
Cu 324.754	40.8809	ppb	0.2026	0.5	1707.84
Fe 271.441	2048.11	ppb	6.6312	0.3	1555.89
K 766.491	3258.99	ppb	2.1282	0.1	80884.2
Mg 279.078	2045.50	ppb	3.7679	0.2	2835.71
Mn 257.610	205.518	ppb	0.1951	0.1	19910.0
Mo 202.032	40.5055	ppb	0.1681	0.4	86.8350
Na 330.237	2162.30	ppb	37.2081	1.7	98.3269
Ni 231.604	42.7077	ppb	1.1715	2.7	53.3394
Pb 220.353	215.984	ppb	3.8604	1.8	118.520
Sb 206.834	16.4349	ppb	3.8104	23.2	12.3501
Se 196.026	31.9058	ppb	4.1673	13.1	4.6594
Si 288.158	-7.3890uv	ppb	1.6516	22.4	313.472
Sn 189.925	40.1622	ppb	0.8907	2.2	11.7356
Sr 216.596	42.3255	ppb	0.2466	0.6	166.967
Ti 334.941	40.2839	ppb	0.1998	0.5	4392.17
Tl 190.794	9.1884	ppb	3.5223	38.3	-1.8434
V 292.401	40.4142	ppb	0.2758	0.7	524.121
Zn 206.200	43.0118	ppb	0.3666	0.9	24.6706

LLCS 680-551754/4-A (Samp) **12/15/2018, 2:07:07 PM** **Rack 1, Tube 43**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7805	-0.6729u	-0.4145u
Al 308.215	-0.6060u	1.4098	-1.9482u
As 188.980	-1.7110u	0.6485	-1.2479u
B 249.678	-0.3058u	0.0759	0.3049
Ba 389.178	0.1322	-0.6472u	-1.4352u
Be 313.042	-0.0224u	-0.0092u	-0.0035u
Ca 370.602	1.207	0.3060	4.366
Cd 226.502	0.1494	0.0123	-0.1209u
Co 228.615	-0.4841u	-1.3773u	-0.7098u
Cr 267.716	0.1273	0.0113	-0.2950u
Cu 324.754	0.1668	-0.0964u	-0.4498u
Fe 271.441	4.4501	4.2835	-4.6542u
K 766.491	-0.3760u	-1.3190u	-0.6931u
Mg 279.078	2.3899	5.6084	1.3684
Mn 257.610	-0.0701u	-0.0056u	-0.0623u
Mo 202.032	-0.7770u	-0.3695u	-0.8350u

Label	Replicates Concentration		
Na 330.237	-30.2224u	242.429	112.559
Ni 231.604	-0.2227u	-1.5645u	1.7322
Pb 220.353	4.9117	-2.3048u	1.6226
Sb 206.834	-2.3598u	-2.8556u	-0.1577u
Se 196.026	-15.4595u	-2.2926u	-1.0793u
Si 288.158	-4.1347u	-4.8515u	-4.4704u
Sn 189.925	2.5069	2.9340	4.8506
Sr 216.596	-0.3758u	0.2617	1.1534
Ti 334.941	-0.0829u	0.0825	0.0282
Tl 190.794	-1.0071u	-7.2848u	-5.8922u
V 292.401	0.3881	0.5213	-0.3978u
Zn 206.200	-0.9971u	-2.3989u	0.7085

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1023	ppb	0.7754	758.0	-33.1813
Al 308.215	-0.3815	ppb	1.6902	443.1	154.091
As 188.980	-0.7702	ppb	1.2502	162.3	0.7692
B 249.678	0.0250	ppb	0.3085	1234.9	-66.7796
Ba 389.178	-0.6500	ppb	0.7837	120.6	-56.2731
Be 313.042	-0.0117	ppb	0.0097	83.0	-193.421
Ca 370.602	1.960	ppb	2.132	108.8	31.56
Cd 226.502	0.0136	ppb	0.1352	993.2	6.0492
Co 228.615	-0.8571	ppb	0.4645	54.2	-11.4443
Cr 267.716	-0.0521	ppb	0.2182	418.7	18.5748
Cu 324.754	-0.1264	ppb	0.3094	244.7	219.770
Fe 271.441	1.3598	ppb	5.2089	383.1	18.6186
K 766.491	-0.7960	ppb	0.4798	60.3	226.695
Mg 279.078	3.1223	ppb	2.2128	70.9	23.4215
Mn 257.610	-0.0460	ppb	0.0352	76.5	25.4512
Mo 202.032	-0.6605	ppb	0.2537	38.4	1.3436
Na 330.237	108.255	ppb	136.376	126.0	48.1716
Ni 231.604	-0.0183	ppb	1.6578	9040.2	-1.5899
Pb 220.353	1.4098	ppb	3.6130	256.3	6.8528
Sb 206.834	-1.7910	ppb	1.4361	80.2	4.9827
Se 196.026	-6.2771	ppb	7.9753	127.1	-2.2960
Si 288.158	-4.4855uv	ppb	0.3587	8.0	316.149
Sn 189.925	3.4305	ppb	1.2482	36.4	0.8134
Sr 216.596	0.3464	ppb	0.7681	221.7	6.8791
Ti 334.941	0.0093	ppb	0.0843	908.8	-35.4560
Tl 190.794	-4.7280	ppb	3.2968	69.7	-5.6544
V 292.401	0.1706	ppb	0.4967	291.2	0.0140
Zn 206.200	-0.8958	ppb	1.5562	173.7	0.0245

680-161763-A-11-A (Samp) **12/15/2018, 2:11:49 PM** **Rack 1, Tube 44**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0551u	0.1574	0.3479
Al 308.215	36.1740	35.6641	35.7222
As 188.980	-0.8414u	1.5405	-2.8660u
B 249.678	37.2659	37.2011	38.0130
Ba 389.178	56.5917	56.3548	58.2559
Be 313.042	-0.0149u	-0.0199u	-0.0205u
Ca 370.602	42510	42504	42590

Label	Replicates Concentration		
Cd 226.502	-0.1458u	-0.1673u	0.0540
Co 228.615	-0.7103u	0.0296	-0.0209u
Cr 267.716	-0.1188u	-0.3298u	0.0988
Cu 324.754	0.8598	1.4245	1.5664
Fe 271.441	4.0104	-1.6730u	-2.9719u
K 766.491	3994.43	3992.50	3997.44
Mg 279.078	13524.0	13538.4	13545.9
Mn 257.610	13.5847	13.5316	13.5158
Mo 202.032	0.5205	1.3215	1.2683
Na 330.237	17980.3	17998.5	18074.3
Ni 231.604	-0.4269u	1.3955	1.7068
Pb 220.353	-1.7315u	-0.9881u	4.6937
Sb 206.834	-7.6025u	-2.4087u	6.1402
Se 196.026	4.9278	-12.9638u	-2.1812u
Si 288.158	4287.50	4296.97	4304.18
Sn 189.925	1.5639	-8.6765u	-1.9990u
Sr 216.596	179.988	179.783	180.093
Ti 334.941	-0.2300	-0.3195	-0.2746
Tl 190.794	-0.3493u	-1.4853u	-5.4468u
V 292.401	1.0812	1.3402	1.2035
Zn 206.200	281.889	284.737	281.961

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1500	ppb	0.2016	134.3	-25.1332
Al 308.215	35.8534	ppb	0.2791	0.8	239.592
As 188.980	-0.7223	ppb	2.2057	305.4	0.7812
B 249.678	37.4933	ppb	0.4512	1.2	179.961
Ba 389.178	57.0675	ppb	1.0360	1.8	510.094
Be 313.042	-0.0184	ppb	0.0031	16.9	-193.548
Ca 370.602	42535	ppb	48.06	0.1	88785
Cd 226.502	-0.0864	ppb	0.1220	141.2	4.5604
Co 228.615	-0.2339	ppb	0.4133	176.7	-8.5582
Cr 267.716	-0.1166	ppb	0.2143	183.8	17.3411
Cu 324.754	1.2836	ppb	0.3738	29.1	270.919
Fe 271.441	-0.2115	ppb	3.7135	1755.7	17.4848
K 766.491	3994.79	ppb	2.4881	0.1	99090.2
Mg 279.078	13536.1	ppb	11.1654	0.1	18674.6
Mn 257.610	13.5440	ppb	0.0361	0.3	1398.46
Mo 202.032	1.0368	ppb	0.4479	43.2	4.8697
Na 330.237	18017.7	ppb	49.8571	0.3	487.625
Ni 231.604	0.8918	ppb	1.1526	129.2	-0.4199
Pb 220.353	0.6580	ppb	3.5147	534.1	6.4615
Sb 206.834	-1.2903	ppb	6.9393	537.8	5.1798
Se 196.026	-3.4057	ppb	9.0084	264.5	-1.7735
Si 288.158	4296.22	ppb	8.3643	0.2	20618.8
Sn 189.925	-3.0372	ppb	5.1985	171.2	-1.1076
Sr 216.596	179.955	ppb	0.1579	0.1	693.634
Ti 334.941	-0.2747	ppb	0.0448	16.3	-22.4944
Tl 190.794	-2.4271	ppb	2.6761	110.3	-5.0167
V 292.401	1.2083	ppb	0.1296	10.7	13.5429
Zn 206.200	282.862	ppb	1.6235	0.6	159.630

680-161763-A-11-Asd (Samp) **12/15/2018, 2:16:31 PM** **Rack 1, Tube 45**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3101	-0.2098u	0.2577
Al 308.215	5.6968	1.8907	2.9693
As 188.980	-3.3275u	5.8864	5.6272
B 249.678	9.2209	7.2097	7.8469
Ba 389.178	9.5358	9.8205	9.5951
Be 313.042	-0.0251u	-0.0100u	-0.0025u
Ca 370.602	8096	8105	8118
Cd 226.502	0.0713	0.3279	0.0622
Co 228.615	0.3714	-0.9028u	-1.0362u
Cr 267.716	-0.0616u	-0.1029u	-0.3096u
Cu 324.754	0.9247	0.0615	0.4305
Fe 271.441	-2.6875u	-8.7289u	1.1695
K 766.491	713.681	715.260	714.942
Mg 279.078	2571.79	2578.32	2576.36
Mn 257.610	2.4658	2.5175	2.5425
Mo 202.032	0.4720	-0.8881u	-0.1056u
Na 330.237	3277.39	3296.65	3288.11
Ni 231.604	-0.1031u	0.7485	1.3402
Pb 220.353	-3.0532u	0.6254	1.4795
Sb 206.834	-1.8253u	-5.5351u	2.3483
Se 196.026	-11.1897u	-7.7081u	-8.8458u
Si 288.158	817.595	816.852	823.192
Sn 189.925	3.9618	-4.6798u	0.2054
Sr 216.596	34.0020	34.1131	34.0302
Ti 334.941	0.0743	0.0174	-0.1542u
Tl 190.794	-1.5814u	1.4498	-9.5330u
V 292.401	0.3587	0.8226	0.0348
Zn 206.200	53.5642	49.9095	53.0628

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1193	ppb	0.2863	239.9	-25.6126
Al 308.215	3.5189	ppb	1.9617	55.7	163.300
As 188.980	2.7287	ppb	5.2464	192.3	1.6540
B 249.678	8.0925	ppb	1.0279	12.7	-13.6418
Ba 389.178	9.6505	ppb	0.1502	1.6	44.9662
Be 313.042	-0.0125	ppb	0.0115	91.6	-193.076
Ca 370.602	8106	ppb	10.87	0.1	16943
Cd 226.502	0.1538	ppb	0.1508	98.1	8.1813
Co 228.615	-0.5225	ppb	0.7770	148.7	-9.8920
Cr 267.716	-0.1581	ppb	0.1329	84.1	16.3182
Cu 324.754	0.4722	ppb	0.4331	91.7	241.483
Fe 271.441	-3.4156	ppb	4.9892	146.1	15.0465
K 766.491	714.628	ppb	0.8355	0.1	17928.6
Mg 279.078	2575.49	ppb	3.3537	0.1	3568.67
Mn 257.610	2.5086	ppb	0.0391	1.6	283.659
Mo 202.032	-0.1739	ppb	0.6826	392.6	2.3547
Na 330.237	3287.39	ppb	9.6502	0.3	126.175
Ni 231.604	0.6618	ppb	0.7255	109.6	-0.7152
Pb 220.353	-0.3161	ppb	2.4086	762.0	5.9544
Sb 206.834	-1.6707	ppb	3.9440	236.1	5.0296
Se 196.026	-9.2479	ppb	1.7753	19.2	-2.8350
Si 288.158	819.213	ppb	3.4657	0.4	4204.53

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.1709	ppb	4.3331	2535.9	-0.2571
Sr 216.596	34.0484	ppb	0.0578	0.2	135.733
Ti 334.941	-0.0208	ppb	0.1190	571.1	-30.3683
Tl 190.794	-3.2216	ppb	5.6721	176.1	-5.2383
V 292.401	0.4054	ppb	0.3960	97.7	3.0734
Zn 206.200	52.1788	ppb	1.9812	3.8	29.8776

680-161763-A-11-Apds (Samp) **12/15/2018, 2:21:12 PM** **Rack 1, Tube 46**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.4445	52.0635	52.8818
Al 308.215	5099.25	5086.05	5074.30
As 188.980	99.6821	100.975	106.626
B 249.678	242.270	241.609	243.206
Ba 389.178	156.414	154.701	156.482
Be 313.042	52.3340	52.1886	52.1246
Ca 370.602	47172	47170	47169
Cd 226.502	52.4724	52.4859	52.3504
Co 228.615	51.2466	52.0956	51.2302
Cr 267.716	103.227	102.542	102.709
Cu 324.754	105.338	104.242	104.819
Fe 271.441	5139.96	5132.32	5121.48
K 766.491	12613.2	12592.3	12593.3
Mg 279.078	18600.6	18577.8	18577.4
Mn 257.610	528.733	528.108	527.216
Mo 202.032	103.678	103.366	101.885
Na 330.237	22981.4	23152.1	23310.7
Ni 231.604	105.009	103.293	104.669
Pb 220.353	529.003	534.570	526.499
Sb 206.834	59.7454	57.7561	53.0897
Se 196.026	87.2187	110.767	101.806
Si 288.158	4308.77	4311.46	4306.08
Sn 189.925	93.3846	106.688	101.071
Sr 216.596	281.053	282.701	280.198
Ti 334.941	100.273	100.271	99.9923
Tl 190.794	36.8006	38.5019	32.6077
V 292.401	102.372	102.857	102.931
Zn 206.200	380.295	383.823	379.429

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.4633	ppb	0.4095	0.8	1791.99
Al 308.215	5086.53	ppb	12.4846	0.2	12155.2
As 188.980	102.428	ppb	3.6927	3.6	26.8491
B 249.678	242.362	ppb	0.8025	0.3	1523.97
Ba 389.178	155.865	ppb	1.0093	0.6	1462.19
Be 313.042	52.2157	ppb	0.1073	0.2	42330.0
Ca 370.602	47170	ppb	1.775	0.0	98460
Cd 226.502	52.4362	ppb	0.0746	0.1	807.932
Co 228.615	51.5241	ppb	0.4950	1.0	231.985
Cr 267.716	102.826	ppb	0.3570	0.3	2238.15
Cu 324.754	104.800	ppb	0.5484	0.5	4027.25
Fe 271.441	5131.25	ppb	9.2809	0.2	3871.58
K 766.491	12599.6	ppb	11.8127	0.1	312001

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	18585.3	ppb	13.2988	0.1	25627.1
Mn 257.610	528.019	ppb	0.7625	0.1	51164.4
Mo 202.032	102.976	ppb	0.9581	0.9	216.571
Na 330.237	23148.0	ppb	164.687	0.7	612.921
Ni 231.604	104.324	ppb	0.9085	0.9	132.552
Pb 220.353	530.024	ppb	4.1314	0.8	281.949
Sb 206.834	56.8637	ppb	3.4164	6.0	28.8088
Se 196.026	99.9306	ppb	11.8857	11.9	17.0450
Si 288.158	4308.77	ppb	2.6897	0.1	20705.4
Sn 189.925	100.381	ppb	6.6785	6.7	29.6438
Sr 216.596	281.317	ppb	1.2725	0.5	1080.17
Ti 334.941	100.179	ppb	0.1613	0.2	11020.8
Tl 190.794	35.9701	ppb	3.0336	8.4	5.5042
V 292.401	102.720	ppb	0.3040	0.3	1335.65
Zn 206.200	381.183	ppb	2.3273	0.6	214.805

680-161763-A-11-B MS (Samp) **12/15/2018, 2:25:55 PM** **Rack 1, Tube 47**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	20.4672	19.6099	19.0131
Al 308.215	2024.29	2029.01	2025.90
As 188.980	33.0944	41.7377	37.6868
B 249.678	118.622	117.991	118.966
Ba 389.178	94.7695	97.4303	97.7095
Be 313.042	20.4616	20.4995	20.4154
Ca 370.602	45289	45274	45248
Cd 226.502	20.0436	20.0917	20.1230
Co 228.615	20.1570	19.3562	20.7543
Cr 267.716	40.5570	40.8828	40.3612
Cu 324.754	41.8770	41.0241	41.6520
Fe 271.441	2009.34	2016.55	2024.39
K 766.491	7474.91	7465.69	7467.48
Mg 279.078	15837.5	15849.5	15853.6
Mn 257.610	215.163	215.693	215.489
Mo 202.032	41.9332	42.6686	40.2083
Na 330.237	20594.7	20240.5	20841.3
Ni 231.604	41.0488	43.1845	41.3533
Pb 220.353	213.257	209.397	211.387
Sb 206.834	13.7633	16.4425	16.7066
Se 196.026	41.4256	35.8143	35.4334
Si 288.158	4427.87	4423.42	4427.66
Sn 189.925	38.3772	32.6847	42.3742
Sr 216.596	222.346	222.977	219.905
Ti 334.941	39.3904	39.4025	39.2908
Tl 190.794	7.9523	12.3754	20.7433
V 292.401	41.1480	41.7985	40.6509
Zn 206.200	326.582	331.000	325.764

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	19.6967	ppb	0.7309	3.7	653.816
Al 308.215	2026.40	ppb	2.3970	0.1	4935.69
As 188.980	37.5063	ppb	4.3245	11.5	10.4417
B 249.678	118.526	ppb	0.4945	0.4	711.586

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	96.6364	ppb	1.6228	1.7	891.699
Be 313.042	20.4589	ppb	0.0421	0.2	16477.0
Ca 370.602	45270	ppb	20.46	0.0	94493
Cd 226.502	20.0861	ppb	0.0400	0.2	313.144
Co 228.615	20.0892	ppb	0.7015	3.5	85.8867
Cr 267.716	40.6003	ppb	0.2635	0.6	895.738
Cu 324.754	41.5177	ppb	0.4420	1.1	1730.93
Fe 271.441	2016.76	ppb	7.5239	0.4	1532.38
K 766.491	7469.36	ppb	4.8893	0.1	185062
Mg 279.078	15846.8	ppb	8.3445	0.1	21856.8
Mn 257.610	215.448	ppb	0.2675	0.1	20930.4
Mo 202.032	41.6033	ppb	1.2629	3.0	89.1162
Na 330.237	20558.8	ppb	301.956	1.5	549.750
Ni 231.604	41.8622	ppb	1.1552	2.8	52.2518
Pb 220.353	211.347	ppb	1.9300	0.9	116.106
Sb 206.834	15.6375	ppb	1.6284	10.4	12.0108
Se 196.026	37.5577	ppb	3.3550	8.9	5.6861
Si 288.158	4426.32	ppb	2.5126	0.1	21243.8
Sn 189.925	37.8120	ppb	4.8694	12.9	11.0389
Sr 216.596	221.743	ppb	1.6224	0.7	852.989
Ti 334.941	39.3612	ppb	0.0613	0.2	4335.88
Tl 190.794	13.6903	ppb	6.4961	47.5	-0.5994
V 292.401	41.1991	ppb	0.5755	1.4	534.344
Zn 206.200	327.782	ppb	2.8166	0.9	184.845

680-161763-A-11-C MS (Samp) **12/15/2018, 2:30:37 PM** **Rack 1, Tube 48**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	18.7919	19.2539	19.9044
Al 308.215	2011.46	2005.61	2002.35
As 188.980	42.5240	46.6176	46.7905
B 249.678	117.786	117.342	117.361
Ba 389.178	95.6459	95.3094	93.8944
Be 313.042	20.3134	20.3010	20.3329
Ca 370.602	44550	44596	44598
Cd 226.502	20.5021	20.3140	20.3772
Co 228.615	20.3696	19.0671	19.1255
Cr 267.716	39.8231	40.3326	39.8269
Cu 324.754	41.3582	41.0857	41.3862
Fe 271.441	2021.49	2000.78	1998.74
K 766.491	7364.84	7372.82	7382.89
Mg 279.078	15606.9	15600.3	15612.7
Mn 257.610	213.486	213.280	213.800
Mo 202.032	39.9056	39.8543	40.2112
Na 330.237	20138.7	20531.1	20150.3
Ni 231.604	42.9085	42.5134	39.8187
Pb 220.353	203.448	204.460	209.394
Sb 206.834	16.8722	22.9716	21.3197
Se 196.026	41.5106	56.7862	45.7181
Si 288.158	4350.64	4353.43	4361.63
Sn 189.925	37.7240	48.2002	43.5065
Sr 216.596	220.123	221.218	219.889
Ti 334.941	39.0023	38.9468	38.9480

Label	Replicates Concentration		
Tl 190.794	9.9914	13.5655	12.4008
V 292.401	41.1048	40.3027	40.8525
Zn 206.200	320.782	322.380	325.682

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	19.3167	ppb	0.5589	2.9	640.614
Al 308.215	2006.47	ppb	4.6166	0.2	4888.67
As 188.980	45.3107	ppb	2.4149	5.3	12.4157
B 249.678	117.496	ppb	0.2509	0.2	704.804
Ba 389.178	94.9499	ppb	0.9294	1.0	875.318
Be 313.042	20.3158	ppb	0.0161	0.1	16360.5
Ca 370.602	44581	ppb	26.99	0.1	93056
Cd 226.502	20.3977	ppb	0.0957	0.5	317.885
Co 228.615	19.5207	ppb	0.7357	3.8	83.2545
Cr 267.716	39.9942	ppb	0.2931	0.7	882.665
Cu 324.754	41.2767	ppb	0.1660	0.4	1722.17
Fe 271.441	2007.00	ppb	12.5856	0.6	1525.01
K 766.491	7373.52	ppb	9.0471	0.1	182691
Mg 279.078	15606.6	ppb	6.1898	0.0	21525.8
Mn 257.610	213.522	ppb	0.2620	0.1	20743.2
Mo 202.032	39.9904	ppb	0.1930	0.5	85.7651
Na 330.237	20273.4	ppb	223.282	1.1	542.752
Ni 231.604	41.7468	ppb	1.6815	4.0	52.1042
Pb 220.353	205.767	ppb	3.1807	1.5	113.203
Sb 206.834	20.3878	ppb	3.1547	15.5	13.9847
Se 196.026	48.0050	ppb	7.8904	16.4	7.5821
Si 288.158	4355.23	ppb	5.7118	0.1	20908.4
Sn 189.925	43.1436	ppb	5.2475	12.2	12.6242
Sr 216.596	220.410	ppb	0.7096	0.3	847.912
Ti 334.941	38.9657	ppb	0.0317	0.1	4291.70
Tl 190.794	11.9859	ppb	1.8228	15.2	-1.0690
V 292.401	40.7533	ppb	0.4101	1.0	528.611
Zn 206.200	322.948	ppb	2.4990	0.8	182.127

680-161763-A-10-A (Samp) **12/15/2018, 2:35:19 PM** **Rack 1, Tube 49**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4283	-0.5348u	0.0576
Al 308.215	1022.62	1040.35	1054.53
As 188.980	-0.0732u	-1.3964u	5.6167
B 249.678	41.8372	39.7546	40.3732
Ba 389.178	65.4225	65.2733	65.7543
Be 313.042	0.0081	0.0164	0.0106
Ca 370.602	43456	43413	43451
Cd 226.502	-0.2832u	-0.1675u	-0.0917u
Co 228.615	-0.8887u	-1.3145u	0.6709
Cr 267.716	1.0118	1.3033	1.3341
Cu 324.754	4.8866	4.6000	4.4505
Fe 271.441	929.361	938.391	945.383
K 766.491	4217.78	4225.74	4224.62
Mg 279.078	14013.4	14002.6	14001.0
Mn 257.610	80.7860	80.8146	80.7679
Mo 202.032	1.2820	1.3940	0.6988

Label	Replicates Concentration		
Na 330.237	17980.8	17999.8	17963.0
Ni 231.604	4.9271	0.3871	0.9107
Pb 220.353	6.3617	-3.4411u	1.9869
Sb 206.834	2.4432	-5.3703u	-2.1486u
Se 196.026	-4.3561u	-5.1576u	-0.4932u
Si 288.158	6794.37	6872.39	6899.51
Sn 189.925	0.5177	6.2977	0.3401
Sr 216.596	185.058	183.987	183.643
Ti 334.941	27.2940	29.0591	29.5540
Tl 190.794	-0.5851u	-1.8325u	8.3751
V 292.401	3.7377	4.0825	4.0122
Zn 206.200	10.8471	9.2546	6.9171

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0163	ppb	0.4858	2981.6	-31.0194
Al 308.215	1039.16	ppb	15.9861	1.5	2605.77
As 188.980	1.3823	ppb	3.7262	269.6	1.3151
B 249.678	40.6550	ppb	1.0695	2.6	199.849
Ba 389.178	65.4833	ppb	0.2462	0.4	591.352
Be 313.042	0.0117	ppb	0.0043	36.5	-168.775
Ca 370.602	43440	ppb	23.41	0.1	90674
Cd 226.502	-0.1808	ppb	0.0964	53.3	3.8472
Co 228.615	-0.5108	ppb	1.0453	204.7	-9.5617
Cr 267.716	1.2164	ppb	0.1779	14.6	46.3359
Cu 324.754	4.6457	ppb	0.2216	4.8	393.026
Fe 271.441	937.711	ppb	8.0323	0.9	721.281
K 766.491	4222.71	ppb	4.3090	0.1	104730
Mg 279.078	14005.7	ppb	6.7567	0.0	19320.9
Mn 257.610	80.7895	ppb	0.0236	0.0	7902.94
Mo 202.032	1.1249	ppb	0.3733	33.2	5.0387
Na 330.237	17981.2	ppb	18.4307	0.1	487.292
Ni 231.604	2.0749	ppb	2.4839	119.7	1.1022
Pb 220.353	1.6358	ppb	4.9108	300.2	6.9628
Sb 206.834	-1.6919	ppb	3.9267	232.1	5.0282
Se 196.026	-3.3356	ppb	2.4940	74.8	-1.7518
Si 288.158	6855.42	ppb	54.5863	0.8	32701.8
Sn 189.925	2.3852	ppb	3.3895	142.1	0.5047
Sr 216.596	184.229	ppb	0.7379	0.4	710.187
Ti 334.941	28.6357	ppb	1.1880	4.1	3152.54
Tl 190.794	1.9858	ppb	5.5683	280.4	-3.8216
V 292.401	3.9441	ppb	0.1822	4.6	49.7128
Zn 206.200	9.0063	ppb	1.9767	21.9	5.5808

680-162088-C-1-A (Samp) **12/15/2018, 2:39:59 PM** **Rack 1, Tube 50**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.9606u	-0.4331u	-0.5256u
Al 308.215	5515.20	5492.64	5487.43
As 188.980	-0.5071u	8.1582	-1.3056u
B 249.678	98.4927	97.8361	98.6662
Ba 389.178	5.9073	6.3711	5.8063
Be 313.042	0.0977	0.0815u	0.0741u
Ca 370.602	28185	28151	28155

Label	Replicates Concentration		
Cd 226.502	0.3355	-0.0216u	-0.0310u
Co 228.615	1.1989	1.8348	1.2120
Cr 267.716	0.3930	0.8547	0.5075
Cu 324.754	14.9956	14.2401	14.8686
Fe 271.441	402.355	409.429	399.435
K 766.491	44438.4x	44262.9x	44335.7x
Mg 279.078	6664.47	6635.10	6654.07
Mn 257.610	53.1703	53.1628	52.9667
Mo 202.032	26.6525	26.0157	27.6086
Na 330.237	1621225x	1611521x	1617010x
Ni 231.604	19.7401	17.7358	17.7460
Pb 220.353	-5.1728u	0.3127	1.6848
Sb 206.834	-0.0788u	-3.1483u	3.2852
Se 196.026	4.4756	3.1803	0.6169
Si 288.158	11005.6	10998.5	10985.6
Sn 189.925	2.2012	2.9312	1.1317
Sr 216.596	184.206	183.600	181.831
Ti 334.941	0.9451	1.0285	1.0117
Tl 190.794	-10.2896u	-15.9525u	-3.0186u
V 292.401	0.7923	0.9446	0.7843
Zn 206.200	109.460	102.479	106.390

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6398b	ppb	0.2817	44.0	-52.5150
Al 308.215	5498.43b	ppb	14.7605	0.3	13122.1
As 188.980	2.1152b	ppb	5.2486	248.1	1.4960
B 249.678	98.3317b	ppb	0.4378	0.4	580.246
Ba 389.178	6.0282b	ppb	0.3012	5.0	14.7820
Be 313.042	0.0844b	ppb	0.0121	14.3	-189.193
Ca 370.602	28164b	ppb	18.56	0.1	58797
Cd 226.502	0.0943b	ppb	0.2089	221.6	4.4008
Co 228.615	1.4152b	ppb	0.3634	25.7	-1.1470
Cr 267.716	0.5851b	ppb	0.2404	41.1	44.5852
Cu 324.754	14.7014b	ppb	0.4046	2.8	758.125
Fe 271.441	403.740b	ppb	5.1388	1.3	320.693
K 766.491	44345.7xb	ppb	88.1535	0.2	1097500
Mg 279.078	6651.22b	ppb	14.8907	0.2	9184.30
Mn 257.610	53.0999b	ppb	0.1154	0.2	5189.43
Mo 202.032	26.7589b	ppb	0.8018	3.0	58.3063
Na 330.237	1616585xb	ppb	4866.09	0.3	39775.2
Ni 231.604	18.4073b	ppb	1.1542	6.3	22.1064
Pb 220.353	-1.0584b	ppb	3.6286	342.8	5.5024
Sb 206.834	0.0193b	ppb	3.2179	16641.6	5.5116
Se 196.026	2.7576b	ppb	1.9638	71.2	-0.6501
Si 288.158	10996.5b	ppb	10.1630	0.1	52253.3
Sn 189.925	2.0880b	ppb	0.9051	43.3	0.6065
Sr 216.596	183.212b	ppb	1.2340	0.7	705.682
Ti 334.941	0.9951b	ppb	0.0441	4.4	48.5576
Tl 190.794	-9.7536b	ppb	6.4836	66.5	-7.0763
V 292.401	0.8404b	ppb	0.0903	10.7	1.1671
Zn 206.200	106.110b	ppb	3.4990	3.3	60.2059

Cont Calib Verif (CCV) **12/15/2018, 2:44:41 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	489.973	484.963	486.587
Al 308.215	9905.86	9905.46	9931.18
As 188.980	503.918	510.032	518.201
B 249.678	502.144	506.701	508.001
Ba 389.178	487.189	491.188	492.251
Be 313.042	520.108	520.838	521.663
Ca 370.602	10068	10086	10074
Cd 226.502	509.461	509.488	510.276
Co 228.615	507.284	506.945	508.410
Cr 267.716	501.332	502.081	502.001
Cu 324.754	507.609	506.223	502.521
Fe 271.441	10023.2	10043.5	10060.3
K 766.491	9778.70	9776.15	9784.90
Mg 279.078	10167.9	10179.2	10187.9
Mn 257.610	505.380	506.049	506.273
Mo 202.032	503.628	500.634	505.473
Na 330.237	10348.8	10114.2	10167.0
Ni 231.604	510.882	510.257	517.399
Pb 220.353	513.727	516.168	518.350
Sb 206.834	497.212	507.315	495.587
Se 196.026	505.809	531.629	529.762
Si 288.158	4911.69	4916.29	4913.44
Sn 189.925	496.392	494.279	499.708
Sr 216.596	509.896	511.803	512.218
Ti 334.941	495.938	496.659	497.107
Tl 190.794	490.419	494.755	481.464
V 292.401	502.782	502.955	500.926
Zn 206.200	1050.55	1057.73	1051.21

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	487.174	ppb	2.5564	0.5	16893.1	97.43484
Al 308.215	9914.17	ppb	14.7381	0.1	23557.5	99.14168
As 188.980	510.717	ppb	7.1663	1.4	130.002	102.14340
B 249.678	505.615	ppb	3.0759	0.6	3252.63	101.12302
Ba 389.178	490.210	ppb	2.6692	0.5	4654.09	98.04193
Be 313.042	520.870	ppb	0.7781	0.1	423873	104.17393
Ca 370.602	10076	ppb	9.164	0.1	21057	100.76103
Cd 226.502	509.742	ppb	0.4627	0.1	7771.94	101.94836
Co 228.615	507.546	ppb	0.7666	0.2	2350.82	101.50925
Cr 267.716	501.805	ppb	0.4111	0.1	10839.6	100.36094
Cu 324.754	505.451	ppb	2.6301	0.5	18562.7	101.09020
Fe 271.441	10042.3	ppb	18.5505	0.2	7584.85	100.37302
K 766.491	9779.92	ppb	4.5016	0.0	242233	97.79919
Mg 279.078	10178.3	ppb	10.0604	0.1	14039.8	101.78340
Mn 257.610	505.900	ppb	0.4646	0.1	49001.7	101.18008
Mo 202.032	503.245	ppb	2.4423	0.5	1048.04	100.64899
Na 330.237	10210.0	ppb	123.098	1.2	292.484	102.09999
Ni 231.604	512.846	ppb	3.9554	0.8	657.487	102.56920
Pb 220.353	516.082	ppb	2.3125	0.4	274.379	103.21631
Sb 206.834	500.038	ppb	6.3541	1.3	210.328	100.00753
Se 196.026	522.400	ppb	14.3986	2.8	93.7385	104.47996
Si 288.158	4913.81	ppb	2.3183	0.0	23668.7	98.27612

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	496.793	ppb	2.7363	0.6	147.513	99.35863
Sr 216.596	511.305	ppb	1.2384	0.2	1951.97	102.26109
Ti 334.941	496.568	ppb	0.5897	0.1	54504.9	99.31364
Tl 190.794	488.879	ppb	6.7779	1.4	130.581	97.77589
V 292.401	502.221	ppb	1.1246	0.2	6535.81	100.44419
Zn 206.200	1053.16	ppb	3.9645	0.4	592.482	105.31636

Cont Calib Blank (CCB) **12/15/2018, 2:49:24 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0682	-0.4136u	-0.4214u
Al 308.215	-0.5725u	1.1447	3.8506
As 188.980	3.4769	-2.3124u	0.4416
B 249.678	3.0536	2.1945	2.1558
Ba 389.178	0.0037	0.0052	-1.2080u
Be 313.042	0.0139	0.0318	0.0401
Ca 370.602	-1.789u	-3.621u	-1.431u
Cd 226.502	0.2446	-0.1187u	0.0717
Co 228.615	-0.0545u	-0.2887u	-0.8921u
Cr 267.716	0.0397	-0.2903u	-0.0558u
Cu 324.754	-0.1804u	0.0394	0.6495
Fe 271.441	6.4041	-6.2043u	5.7696
K 766.491	1.4675	0.4727	1.0651
Mg 279.078	2.5182	7.0949	3.6301
Mn 257.610	0.0061	-0.0055u	-0.0332u
Mo 202.032	0.2934	0.5477	-1.6239u
Na 330.237	-85.2531u	-60.0355u	-332.426u
Ni 231.604	-0.9045u	-1.0834u	0.8540
Pb 220.353	5.1614	-0.0895u	-0.2415u
Sb 206.834	-7.2824u	5.8426	-3.2508u
Se 196.026	-0.4255u	2.0945	3.5545
Si 288.158	-0.4494u	-1.6056u	-3.9289u
Sn 189.925	1.5654	3.6579	-3.8090u
Sr 216.596	-1.2697u	0.0768	0.3592
Ti 334.941	0.2373	0.1784	0.1758
Tl 190.794	-5.7142u	4.0744	-8.9814u
V 292.401	-0.4202u	-0.0161u	0.1551
Zn 206.200	2.1243	0.5856	0.3110

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2556	ppb	0.2804	109.7	-38.5060	-0.25560
Al 308.215	1.4742	ppb	2.2299	151.3	158.460	1.47425
As 188.980	0.5354	ppb	2.8958	540.9	1.0994	0.53535
B 249.678	2.4680	ppb	0.5075	20.6	-50.6942	2.46797
Ba 389.178	-0.3997	ppb	0.7000	175.1	-53.8763	-0.39968
Be 313.042	0.0286	ppb	0.0134	46.8	-160.589	0.02861
Ca 370.602	-2.280	ppb	1.175	51.5	22.71	-2.28025
Cd 226.502	0.0659	ppb	0.1818	275.9	6.8467	0.06588
Co 228.615	-0.4118	ppb	0.4321	104.9	-9.3729	-0.41176
Cr 267.716	-0.1021	ppb	0.1698	166.3	17.4960	-0.10214
Cu 324.754	0.1695	ppb	0.4299	253.6	230.504	0.16951
Fe 271.441	1.9898	ppb	7.1034	357.0	19.1120	1.98979
K 766.491	1.0018	ppb	0.5004	50.0	271.177	1.00175

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	4.4144	ppb	2.3870	54.1	25.2017	4.41441
Mn 257.610	-0.0109	ppb	0.0202	185.5	28.8600	-0.01089
Mo 202.032	-0.2610	ppb	1.1872	454.9	2.1737	-0.26096
Na 330.237	-159.238	ppb	150.514	94.5	41.5920	-159.23840
Ni 231.604	-0.3780	ppb	1.0707	283.3	-2.0528	-0.37798
Pb 220.353	1.6101	ppb	3.0765	191.1	6.9569	1.61015
Sb 206.834	-1.5635	ppb	6.7233	430.0	5.0764	-1.56354
Se 196.026	1.7412	ppb	2.0134	115.6	-0.8406	1.74116
Si 288.158	-1.9947uv	ppb	1.7721	88.8	327.802	-1.99467
Sn 189.925	0.4714	ppb	3.8518	817.1	-0.0665	0.47141
Sr 216.596	-0.2779	ppb	0.8705	313.2	4.4944	-0.27790
Ti 334.941	0.1972	ppb	0.0348	17.6	-14.8223	0.19717
Tl 190.794	-3.5404	ppb	6.7939	191.9	-5.3269	-3.54039
V 292.401	-0.0937	ppb	0.2954	315.2	-3.4436	-0.09372
Zn 206.200	1.0069	ppb	0.9773	97.1	1.0948	1.00695

680-160611-A-1-D (Samp) **12/15/2018, 2:54:04 PM** **Rack 1, Tube 51**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	0.0952	-0.2286u	0.1967
Al 308.215	2.0219	0.0487	2.9658
As 188.980	4.2247	2.8948	4.6717
B 249.678	0.4831	0.5303	0.5713
Ba 389.178	1.1269	-0.8423u	0.5391
Be 313.042	0.0018	0.0055	-0.0015u
Ca 370.602	14.85	11.19	13.61
Cd 226.502	0.3594	0.2187	-0.1526u
Co 228.615	0.4092	-0.8186u	-1.6159u
Cr 267.716	-0.6449u	0.0423	-0.2319u
Cu 324.754	0.1595	0.7497	-0.1474u
Fe 271.441	-3.4383u	-0.2129u	-4.5391u
K 766.491	2.9238	3.4828	2.3629
Mg 279.078	10.6909	2.7271	1.4595
Mn 257.610	0.1783	0.0840	0.1177
Mo 202.032	-0.3466u	0.0355	-0.7979u
Na 330.237	211.530	9.7183	31.2502
Ni 231.604	0.2834	0.5321	1.4188
Pb 220.353	1.6977	0.1885	5.4870
Sb 206.834	-7.2209u	-7.5839u	2.5433
Se 196.026	2.2957	-14.6103u	-19.1866u
Si 288.158	-6.6199u	-5.3243u	-5.2489u
Sn 189.925	-4.1038u	-2.1704u	2.3607
Sr 216.596	0.5290	0.1653	1.5585
Ti 334.941	0.0079	0.0777	0.0482
Tl 190.794	2.0320	0.3571	2.3806
V 292.401	0.3735	0.0630	-0.0757u
Zn 206.200	5.3140	4.8264	2.8967

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0211	ppb	0.2222	1052.9	-28.8935
Al 308.215	1.6788	ppb	1.4885	88.7	158.947
As 188.980	3.9304	ppb	0.9243	23.5	1.9580
B 249.678	0.5282	ppb	0.0441	8.4	-63.4618

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.2746	ppb	1.0109	368.2	-47.4268
Be 313.042	0.0019	ppb	0.0035	179.5	-182.308
Ca 370.602	13.22	ppb	1.863	14.1	55.06
Cd 226.502	0.1418	ppb	0.2645	186.5	7.9979
Co 228.615	-0.6751	ppb	1.0202	151.1	-10.5997
Cr 267.716	-0.2782	ppb	0.3459	124.4	13.7016
Cu 324.754	0.2539	ppb	0.4559	179.5	233.564
Fe 271.441	-2.7301	ppb	2.2484	82.4	15.5567
K 766.491	2.9232	ppb	0.5600	19.2	318.719
Mg 279.078	4.9591	ppb	5.0041	100.9	25.9511
Mn 257.610	0.1267	ppb	0.0478	37.7	42.1567
Mo 202.032	-0.3697	ppb	0.4172	112.8	1.9479
Na 330.237	84.1661	ppb	110.825	131.7	47.5667
Ni 231.604	0.7448	ppb	0.5969	80.1	-0.6085
Pb 220.353	2.4578	ppb	2.7298	111.1	7.3982
Sb 206.834	-4.0872	ppb	5.7450	140.6	4.0332
Se 196.026	-10.5004	ppb	11.3155	107.8	-3.0625
Si 288.158	-5.7310uv	ppb	0.7707	13.4	310.624
Sn 189.925	-1.3045	ppb	3.3181	254.4	-0.5945
Sr 216.596	0.7509	ppb	0.7227	96.2	8.4233
Ti 334.941	0.0446	ppb	0.0351	78.6	-31.5735
Tl 190.794	1.5899	ppb	1.0818	68.0	-3.9138
V 292.401	0.1203	ppb	0.2300	191.2	-0.6398
Zn 206.200	4.3457	ppb	1.2784	29.4	2.9729

MB 680-551709/1-A (Samp) **12/15/2018, 2:58:44 PM** **Rack 1, Tube 52**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1443u	0.0865	-0.2210u
Al 308.215	-2.2751u	0.1829	-2.7763u
As 188.980	-2.4086u	-0.8870u	5.4340
B 249.678	0.4784	1.1472	-0.1137u
Ba 389.178	0.0836	0.2886	-0.2128u
Be 313.042	-0.0075u	-0.0124u	-0.0188u
Ca 370.602	4.342	1.539	2.934
Cd 226.502	0.0354	0.1329	-0.1914u
Co 228.615	-0.2328u	-0.9066u	-0.6930u
Cr 267.716	-0.1773u	-0.0353u	0.4814
Cu 324.754	-0.0912u	0.0714	0.4199
Fe 271.441	0.7172	-2.8308u	-4.6971u
K 766.491	0.7393	1.2658	0.4662
Mg 279.078	1.2833	0.5455	-1.2793u
Mn 257.610	0.1171	0.1959	0.1272
Mo 202.032	-0.8005u	0.8213	0.2434
Na 330.237	127.455	-59.4478u	-257.613u
Ni 231.604	-0.6871u	0.3970	0.0550
Pb 220.353	1.8492	-0.7291u	4.3641
Sb 206.834	-1.0906u	-0.6576u	8.6390
Se 196.026	-4.6383u	-10.5428u	-1.6946u
Si 288.158	-5.0948u	-3.2341u	-4.2122u
Sn 189.925	5.7069	-0.1245u	1.1106
Sr 216.596	0.5260	-1.0876u	0.0739
Ti 334.941	0.1556	-0.0101u	0.0797

Label	Replicates Concentration		
Tl 190.794	-15.0707u	-2.1651u	-2.0130u
V 292.401	0.4437	0.3502	0.2476
Zn 206.200	-1.9111u	0.7937	1.7111

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0929	ppb	0.1600	172.2	-32.8489
Al 308.215	-1.6228	ppb	1.5838	97.6	151.175
As 188.980	0.7128	ppb	4.1589	583.4	1.1441
B 249.678	0.5040	ppb	0.6308	125.2	-63.6196
Ba 389.178	0.0531	ppb	0.2521	474.7	-49.5493
Be 313.042	-0.0129	ppb	0.0057	44.3	-194.388
Ca 370.602	2.939	ppb	1.401	47.7	33.62
Cd 226.502	-0.0077	ppb	0.1664	2155.1	5.7207
Co 228.615	-0.6108	ppb	0.3443	56.4	-10.3041
Cr 267.716	0.0896	ppb	0.3467	386.8	21.6283
Cu 324.754	0.1334	ppb	0.2611	195.8	229.199
Fe 271.441	-2.2702	ppb	2.7503	121.1	15.9048
K 766.491	0.8237	ppb	0.4064	49.3	266.773
Mg 279.078	0.1832	ppb	1.3192	720.1	19.3690
Mn 257.610	0.1467	ppb	0.0429	29.2	44.0737
Mo 202.032	0.0881	ppb	0.8220	933.3	2.8989
Na 330.237	-63.2022	ppb	192.562	304.7	43.9564
Ni 231.604	-0.0784	ppb	0.5542	707.2	-1.6672
Pb 220.353	1.8281	ppb	2.5467	139.3	7.0703
Sb 206.834	2.2969	ppb	5.4967	239.3	6.6695
Se 196.026	-5.6252	ppb	4.5059	80.1	-2.1777
Si 288.158	-4.1804uv	ppb	0.9308	22.3	317.662
Sn 189.925	2.2310	ppb	3.0729	137.7	0.4567
Sr 216.596	-0.1626	ppb	0.8324	512.0	4.9198
Ti 334.941	0.0751	ppb	0.0829	110.5	-28.2327
Tl 190.794	-6.4163	ppb	7.4953	116.8	-6.1194
V 292.401	0.3472	ppb	0.0981	28.3	2.2923
Zn 206.200	0.1979	ppb	1.8831	951.6	0.6397

LCS 680-551709/2-A (Samp) **12/15/2018, 3:03:25 PM** **Rack 1, Tube 53**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.0297	51.3097	51.0796
Al 308.215	4987.35	4988.72	4987.67
As 188.980	106.834	106.035	109.233
B 249.678	202.831	203.431	204.244
Ba 389.178	99.1951	99.4892	99.4099
Be 313.042	52.8514	52.8842	52.8180
Ca 370.602	5060	5078	5065
Cd 226.502	52.6243	52.4139	52.3131
Co 228.615	51.3326	51.9254	51.2668
Cr 267.716	103.360	103.510	103.464
Cu 324.754	103.962	104.048	103.891
Fe 271.441	5126.29	5121.68	5118.81
K 766.491	7819.33	7819.99	7814.28
Mg 279.078	5126.07	5130.29	5126.25
Mn 257.610	516.410	516.525	516.271
Mo 202.032	104.270	103.367	103.219

Label	Replicates Concentration		
Na 330.237	5235.76	5494.24	5328.60
Ni 231.604	106.258	103.863	104.626
Pb 220.353	532.376	526.410	527.479
Sb 206.834	46.8169	49.0747	58.4164
Se 196.026	108.021	108.538	94.9793
Si 288.158	-6.6542u	-7.0212u	-7.2893u
Sn 189.925	100.103	105.436	101.844
Sr 216.596	102.845	105.247	104.070
Ti 334.941	101.185	100.905	100.850
Tl 190.794	44.1578	38.2594	45.6965
V 292.401	102.396	102.272	102.670
Zn 206.200	110.502	105.251	110.227

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.1397	ppb	0.1493	0.3	1746.73
Al 308.215	4987.91	ppb	0.7176	0.0	11922.6
As 188.980	107.367	ppb	1.6643	1.6	28.0982
B 249.678	203.502	ppb	0.7095	0.3	1268.07
Ba 389.178	99.3647	ppb	0.1522	0.2	907.551
Be 313.042	52.8512	ppb	0.0331	0.1	42842.0
Ca 370.602	5068	ppb	9.532	0.2	10605
Cd 226.502	52.4504	ppb	0.1588	0.3	808.109
Co 228.615	51.5082	ppb	0.3627	0.7	231.909
Cr 267.716	103.445	ppb	0.0765	0.1	2251.34
Cu 324.754	103.967	ppb	0.0790	0.1	3997.06
Fe 271.441	5122.26	ppb	3.7745	0.1	3864.84
K 766.491	7817.87	ppb	3.1225	0.0	193685
Mg 279.078	5127.54	ppb	2.3824	0.0	7079.59
Mn 257.610	516.402	ppb	0.1269	0.0	49982.5
Mo 202.032	103.619	ppb	0.5687	0.5	217.905
Na 330.237	5352.86	ppb	130.936	2.4	176.248
Ni 231.604	104.915	ppb	1.2236	1.2	133.313
Pb 220.353	528.755	ppb	3.1810	0.6	281.289
Sb 206.834	51.4360	ppb	6.1497	12.0	26.5643
Se 196.026	103.846	ppb	7.6835	7.4	17.7546
Si 288.158	-6.9882uv	ppb	0.3188	4.6	332.022
Sn 189.925	102.461	ppb	2.7192	2.7	30.2602
Sr 216.596	104.054	ppb	1.2010	1.2	402.349
Ti 334.941	100.980	ppb	0.1797	0.2	11064.9
Tl 190.794	42.7046	ppb	3.9258	9.2	7.3560
V 292.401	102.446	ppb	0.2037	0.2	1332.00
Zn 206.200	108.660	ppb	2.9553	2.7	61.5188

680-162091-C-2-B (Samp) **12/15/2018, 3:08:06 PM** **Rack 1, Tube 54**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3531u	-0.4090u	-0.3507u
Al 308.215	3072.78	3062.33	3057.01
As 188.980	7.9285	7.5731	-2.8338u
B 249.678	133.292	133.698	133.492
Ba 389.178	23.2953	23.0841	23.4256
Be 313.042	0.8438	0.8400	0.8394
Ca 370.602	35747	35719	35768

Label	Replicates Concentration		
Cd 226.502	-0.0366	-0.0108	0.0993
Co 228.615	47.3696	47.9055	48.3942
Cr 267.716	27.3258	27.5221	27.5981
Cu 324.754	29.2799	29.2016	29.5546
Fe 271.441	10468.3	10466.4	10463.1
K 766.491	4601.71	4607.03	4604.96
Mg 279.078	46908.4	46829.0	46939.8
Mn 257.610	999.943	999.184	999.834
Mo 202.032	1.7959	1.2112	0.2455
Na 330.237	58361.8	57940.2	58438.6
Ni 231.604	109.650	108.652	105.896
Pb 220.353	9.0387	8.7110	3.4308
Sb 206.834	1.3492	-1.2432u	3.5711
Se 196.026	-5.4912u	12.7660	5.1976
Si 288.158	15358.7	15342.8	15348.5
Sn 189.925	4.6521	2.2252	4.4519
Sr 216.596	84.5582	86.2130	85.2429
Ti 334.941	65.4040	64.9128	72.5118
Tl 190.794	4.6185	-8.4609u	-0.7039u
V 292.401	4.9732	5.2066	4.0284
Zn 206.200	215.011	207.729	205.760

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3709	ppb	0.0330	8.9	-43.3120
Al 308.215	3064.04	ppb	8.0239	0.3	7381.23
As 188.980	4.2226	ppb	6.1136	144.8	2.0486
B 249.678	133.494	ppb	0.2030	0.2	801.732
Ba 389.178	23.2683	ppb	0.1723	0.7	224.845
Be 313.042	0.8410	ppb	0.0024	0.3	502.727
Ca 370.602	35745	ppb	24.73	0.1	74614
Cd 226.502	0.0173	ppb	0.0722	416.6	13.9940
Co 228.615	47.8898	ppb	0.5125	1.1	216.006
Cr 267.716	27.4820	ppb	0.1405	0.5	615.744
Cu 324.754	29.3454	ppb	0.1854	0.6	1290.81
Fe 271.441	10465.9	ppb	2.6467	0.0	7873.89
K 766.491	4604.57	ppb	2.6833	0.1	114178
Mg 279.078	46892.4	ppb	57.0774	0.1	64635.9
Mn 257.610	999.654	ppb	0.4103	0.0	96887.6
Mo 202.032	1.0842	ppb	0.7830	72.2	4.8152
Na 330.237	58246.9	ppb	268.364	0.5	1475.51
Ni 231.604	108.066	ppb	1.9445	1.8	137.368
Pb 220.353	7.0601	ppb	3.1474	44.6	9.8516
Sb 206.834	1.2257	ppb	2.4095	196.6	6.4192
Se 196.026	4.1575	ppb	9.1729	220.6	-0.2789
Si 288.158	15350.0	ppb	8.0543	0.1	72804.8
Sn 189.925	3.7764	ppb	1.3471	35.7	0.9231
Sr 216.596	85.3381	ppb	0.8315	1.0	333.315
Ti 334.941	67.6095	ppb	4.2526	6.3	7538.03
Tl 190.794	-1.5155	ppb	6.5773	434.0	-4.8709
V 292.401	4.7361	ppb	0.6239	13.2	61.7589
Zn 206.200	209.500	ppb	4.8732	2.3	118.208

680-162091-C-2-Bsd (Samp) **12/15/2018, 3:12:47 PM** **Rack 1, Tube 55**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.6671	-0.8701u	-0.3878u
Al 308.215	738.484	738.568	729.990
As 188.980	-2.7878u	0.6272	-3.6539u
B 249.678	28.0969	29.5189	28.1296
Ba 389.178	5.3765	5.1397	4.6725
Be 313.042	0.1698	0.1531	0.1607
Ca 370.602	7423	7388	7360
Cd 226.502	-0.0773	0.0487	0.0811
Co 228.615	7.5299	10.2585	9.7910
Cr 267.716	5.6862	5.9891	5.6028
Cu 324.754	6.0190	6.9623	6.4867
Fe 271.441	2212.62	2199.60	2190.45
K 766.491	934.252	929.891	923.057
Mg 279.078	9703.80	9676.22	9616.41
Mn 257.610	210.299	209.157	208.415
Mo 202.032	0.3330	-0.0984u	0.8078
Na 330.237	12065.5	11747.5	11747.2
Ni 231.604	20.9931	23.5201	23.3828
Pb 220.353	4.8787	-1.3192u	0.4902
Sb 206.834	2.8853	5.5189	7.5274
Se 196.026	3.4627	4.2826	-6.2889u
Si 288.158	3404.52	3366.39	3364.69
Sn 189.925	-0.3789u	-2.7602u	0.2998
Sr 216.596	17.3619	18.6864	17.5273
Ti 334.941	21.3515	19.2693	21.9757
Tl 190.794	-1.6156u	-6.8999u	8.3298
V 292.401	1.5233	1.3902	1.3312
Zn 206.200	43.3557	37.3427	43.3945

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1969	ppb	0.7862	399.3	-36.6449
Al 308.215	735.681	ppb	4.9285	0.7	1890.03
As 188.980	-1.9382	ppb	2.2635	116.8	0.4772
B 249.678	28.5818	ppb	0.8117	2.8	119.084
Ba 389.178	5.0629	ppb	0.3582	7.1	9.1732
Be 313.042	0.1612	ppb	0.0083	5.2	-52.2769
Ca 370.602	7390	ppb	31.58	0.4	15448
Cd 226.502	0.0175	ppb	0.0837	478.5	7.7689
Co 228.615	9.1932	ppb	1.4593	15.9	35.5045
Cr 267.716	5.7594	ppb	0.2033	3.5	144.613
Cu 324.754	6.4893	ppb	0.4716	7.3	460.175
Fe 271.441	2200.89	ppb	11.1426	0.5	1669.70
K 766.491	929.066	ppb	5.6430	0.6	23234.4
Mg 279.078	9665.48	ppb	44.6752	0.5	13337.9
Mn 257.610	209.291	ppb	0.9491	0.5	20307.8
Mo 202.032	0.3475	ppb	0.4532	130.4	3.4056
Na 330.237	11853.4	ppb	183.650	1.5	336.506
Ni 231.604	22.6320	ppb	1.4210	6.3	27.5306
Pb 220.353	1.3499	ppb	3.1872	236.1	6.8313
Sb 206.834	5.3106	ppb	2.3280	43.8	7.9527
Se 196.026	0.4855	ppb	5.8810	1211.5	-1.0427
Si 288.158	3378.53	ppb	22.5210	0.7	16287.8

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.9464	ppb	1.6070	169.8	-0.4867
Sr 216.596	17.8585	ppb	0.7217	4.0	74.1326
Ti 334.941	20.8655	ppb	1.4171	6.8	2285.48
Tl 190.794	-0.0619	ppb	7.7328	12486.1	-4.3917
V 292.401	1.4149	ppb	0.0984	7.0	16.7080
Zn 206.200	41.3643	ppb	3.4829	8.4	23.7615

680-162091-C-2-Bpds (Samp) **12/15/2018, 3:17:28 PM** **Rack 1, Tube 56**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.9913	51.7223	51.8507
Al 308.215	8503.50	8485.58	8461.15
As 188.980	99.8326	108.174	111.914
B 249.678	334.368	337.830	337.745
Ba 389.178	124.905	127.436	122.257
Be 313.042	53.7328	53.7844	53.8713
Ca 370.602	40030	40028	39995
Cd 226.502	52.8015	52.1284	52.5207
Co 228.615	98.4514	98.6170	99.4159
Cr 267.716	131.030	130.695	131.719
Cu 324.754	133.073	132.583	133.142
Fe 271.441	15417.2	15460.4	15443.9
K 766.491	13207.4	13189.8	13167.3
Mg 279.078	51386.8	51449.1	51489.7
Mn 257.610	1495.19	1496.93	1496.51
Mo 202.032	103.510	106.022	101.595
Na 330.237	63318.6	63023.4	63897.9
Ni 231.604	207.075	207.645	203.672
Pb 220.353	525.841	523.920	524.901
Sb 206.834	54.7710	49.7494	59.6039
Se 196.026	94.8529	96.2663	115.186
Si 288.158	15969.4	15991.7	15912.2
Sn 189.925	102.087	105.824	108.627
Sr 216.596	186.404	188.268	188.108
Ti 334.941	188.758	199.525	194.271
Tl 190.794	34.0643	36.5745	40.6938
V 292.401	106.313	107.075	106.887
Zn 206.200	312.158	311.530	311.583

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.8548	ppb	0.1346	0.3	1770.74
Al 308.215	8483.41	ppb	21.2583	0.3	20166.3
As 188.980	106.640	ppb	6.1849	5.8	27.9308
B 249.678	336.648	ppb	1.9748	0.6	2134.61
Ba 389.178	124.866	ppb	2.5895	2.1	1203.14
Be 313.042	53.7962	ppb	0.0700	0.1	43613.1
Ca 370.602	40017	ppb	19.73	0.0	83533
Cd 226.502	52.4836	ppb	0.3381	0.6	816.398
Co 228.615	98.8281	ppb	0.5157	0.5	452.953
Cr 267.716	131.148	ppb	0.5218	0.4	2852.12
Cu 324.754	132.933	ppb	0.3051	0.2	5049.71
Fe 271.441	15440.5	ppb	21.7569	0.1	11610.3
K 766.491	13188.1	ppb	20.0885	0.2	326563

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	51441.9	ppb	51.8693	0.1	70899.8
Mn 257.610	1496.21	ppb	0.9089	0.1	144919
Mo 202.032	103.709	ppb	2.2203	2.1	217.942
Na 330.237	63413.3	ppb	444.851	0.7	1601.67
Ni 231.604	206.130	ppb	2.1480	1.0	263.438
Pb 220.353	524.887	ppb	0.9605	0.2	279.322
Sb 206.834	54.7081	ppb	4.9275	9.0	28.1093
Se 196.026	102.102	ppb	11.3532	11.1	17.5589
Si 288.158	15957.8	ppb	41.0141	0.3	75702.9
Sn 189.925	105.513	ppb	3.2814	3.1	31.1743
Sr 216.596	187.593	ppb	1.0330	0.6	723.258
Ti 334.941	194.185	ppb	5.3837	2.8	21447.0
Tl 190.794	37.1108	ppb	3.3471	9.0	5.7136
V 292.401	106.758	ppb	0.3967	0.4	1390.55
Zn 206.200	311.757	ppb	0.3483	0.1	175.599

680-162091-A-2-C MS (Samp) **12/15/2018, 3:22:10 PM** **Rack 1, Tube 57**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.7984	49.3572	49.9824
Al 308.215	6723.15	6718.24	6726.69
As 188.980	107.690	104.655	106.801
B 249.678	355.434	358.315	357.586
Ba 389.178	112.958	112.192	111.705
Be 313.042	52.9636	52.8222	52.8500
Ca 370.602	50381	50356	50378
Cd 226.502	51.0799	51.0950	51.4488
Co 228.615	128.927	129.207	128.253
Cr 267.716	113.516	114.052	114.598
Cu 324.754	116.388	115.935	116.206
Fe 271.441	21105.1	21003.0	21006.3
K 766.491	13289.2	13297.6	13298.0
Mg 279.078	66797.1	66752.1	66744.9
Mn 257.610	2204.86	2204.47	2203.52
Mo 202.032	100.458	100.271	101.548
Na 330.237	64976.8	65015.3	64545.2
Ni 231.604	261.638	260.807	263.411
Pb 220.353	497.894	510.589	503.449
Sb 206.834	50.4207	52.7622	56.3945
Se 196.026	94.3515	104.701	96.0087
Si 288.158	16549.2	16586.9	16585.5
Sn 189.925	90.9556	90.0191	103.995
Sr 216.596	205.090	203.149	204.326
Ti 334.941	117.161	120.826	116.344
Tl 190.794	25.5726	41.4645	38.3856
V 292.401	101.781	101.829	101.545
Zn 206.200	358.416	365.608	363.548

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.0460	ppb	0.7227	1.4	1708.14
Al 308.215	6722.69	ppb	4.2440	0.1	16014.0
As 188.980	106.382	ppb	1.5605	1.5	27.8798
B 249.678	357.111	ppb	1.4978	0.4	2263.79

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	112.285	ppb	0.6316	0.6	1100.48
Be 313.042	52.8786	ppb	0.0749	0.1	42867.2
Ca 370.602	50372	ppb	13.47	0.0	105139
Cd 226.502	51.2079	ppb	0.2088	0.4	801.097
Co 228.615	128.796	ppb	0.4906	0.4	591.723
Cr 267.716	114.055	ppb	0.5408	0.5	2485.55
Cu 324.754	116.176	ppb	0.2278	0.2	4443.25
Fe 271.441	21038.1	ppb	58.0386	0.3	15812.3
K 766.491	13294.9	ppb	4.9847	0.0	329205
Mg 279.078	66764.7	ppb	28.2948	0.0	92010.9
Mn 257.610	2204.28	ppb	0.6865	0.0	213443
Mo 202.032	100.759	ppb	0.6897	0.7	211.733
Na 330.237	64845.8	ppb	260.994	0.4	1636.33
Ni 231.604	261.952	ppb	1.3302	0.5	335.200
Pb 220.353	503.977	ppb	6.3638	1.3	268.538
Sb 206.834	53.1925	ppb	3.0101	5.7	27.5031
Se 196.026	98.3536	ppb	5.5589	5.7	16.9602
Si 288.158	16573.9	ppb	21.3788	0.1	78606.5
Sn 189.925	94.9898	ppb	7.8125	8.2	28.0456
Sr 216.596	204.189	ppb	0.9779	0.5	787.556
Ti 334.941	118.110	ppb	2.3875	2.0	13146.8
Tl 190.794	35.1409	ppb	8.4282	24.0	5.1645
V 292.401	101.718	ppb	0.1518	0.1	1325.96
Zn 206.200	362.524	ppb	3.7037	1.0	204.088

680-162091-A-2-D MSD (Samp) **12/15/2018, 3:26:52 PM** **Rack 1, Tube 58**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.4198	50.8366	49.9992
Al 308.215	7812.51	7822.68	7799.66
As 188.980	111.410	108.351	105.763
B 249.678	357.967	357.687	357.589
Ba 389.178	118.646	117.742	118.517
Be 313.042	53.7412	53.8835	53.8087
Ca 370.602	49630	49769	49783
Cd 226.502	52.2449	52.1008	51.8394
Co 228.615	123.360	123.358	124.264
Cr 267.716	133.243	133.726	134.021
Cu 324.754	112.709	113.344	112.101
Fe 271.441	20424.6	20489.0	20423.2
K 766.491	13561.0	13544.3	13556.6
Mg 279.078	65918.2	66172.9	66169.0
Mn 257.610	2098.61	2105.32	2105.40
Mo 202.032	100.077	101.882	100.065
Na 330.237	65916.2	66151.3	65896.8
Ni 231.604	267.005	265.076	270.539
Pb 220.353	519.752	533.528	519.177
Sb 206.834	58.7701	52.8027	45.2261
Se 196.026	110.414	103.293	103.484
Si 288.158	17138.9	17130.8	17099.8
Sn 189.925	98.5330	100.969	91.8058
Sr 216.596	202.714	202.488	203.965
Ti 334.941	144.345	145.271	141.391

Label	Replicates Concentration		
Tl 190.794	33.7243	38.5874	41.9650
V 292.401	104.838	105.400	105.034
Zn 206.200	355.122	363.436	361.152

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.4185	ppb	0.4187	0.8	1720.97
Al 308.215	7811.62	ppb	11.5361	0.1	18582.0
As 188.980	108.508	ppb	2.8270	2.6	28.4133
B 249.678	357.747	ppb	0.1961	0.1	2268.58
Ba 389.178	118.302	ppb	0.4892	0.4	1157.13
Be 313.042	53.8111	ppb	0.0712	0.1	43626.5
Ca 370.602	49727	ppb	84.43	0.2	103794
Cd 226.502	52.0617	ppb	0.2056	0.4	813.687
Co 228.615	123.660	ppb	0.5228	0.4	568.092
Cr 267.716	133.663	ppb	0.3925	0.3	2908.05
Cu 324.754	112.718	ppb	0.6219	0.6	4317.67
Fe 271.441	20445.6	ppb	37.6212	0.2	15367.4
K 766.491	13554.0	ppb	8.6565	0.1	335615
Mg 279.078	66086.7	ppb	145.950	0.2	91077.3
Mn 257.610	2103.11	ppb	3.8984	0.2	203659
Mo 202.032	100.675	ppb	1.0457	1.0	211.566
Na 330.237	65988.1	ppb	141.677	0.2	1664.43
Ni 231.604	267.540	ppb	2.7707	1.0	342.392
Pb 220.353	524.152	ppb	8.1244	1.6	279.015
Sb 206.834	52.2663	ppb	6.7879	13.0	27.1868
Se 196.026	105.730	ppb	4.0574	3.8	18.2880
Si 288.158	17123.1	ppb	20.6397	0.1	81200.8
Sn 189.925	97.1027	ppb	4.7462	4.9	28.6740
Sr 216.596	203.056	ppb	0.7957	0.4	783.047
Ti 334.941	143.669	ppb	2.0264	1.4	15950.0
Tl 190.794	38.0922	ppb	4.1426	10.9	5.9722
V 292.401	105.091	ppb	0.2852	0.3	1369.76
Zn 206.200	359.903	ppb	4.2956	1.2	202.611

680-162091-B-1-B (Samp) **12/15/2018, 3:31:34 PM** **Rack 1, Tube 59**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2762u	-0.0400u	0.1320
Al 308.215	477.478	476.425	470.143
As 188.980	5.3002	4.5960	5.1683
B 249.678	14.5640	15.7196	14.6513
Ba 389.178	81.1228	80.6296	82.5838
Be 313.042	0.0654	0.0590	0.0687
Ca 370.602	25276	25282	25255
Cd 226.502	0.3707	0.5072	0.4053
Co 228.615	3.3917	3.7571	3.2017
Cr 267.716	2.8098	2.8632	2.5445
Cu 324.754	3.0877	4.0135	2.8436
Fe 271.441	1374.65	1381.59	1384.20
K 766.491	2498.55	2496.58	2493.21
Mg 279.078	22203.4	22171.8	22164.4
Mn 257.610	252.547	252.229	251.849
Mo 202.032	0.1663	-0.3987u	-0.6543u

Label	Replicates Concentration		
Na 330.237	34142.3	33846.7	33270.6
Ni 231.604	26.7506	28.1733	28.4405
Pb 220.353	-0.0361u	-0.2710u	0.9773
Sb 206.834	11.8314	1.5267	3.7202
Se 196.026	-11.2702u	-10.3826u	0.6018
Si 288.158	16224.9	16218.9	16205.2
Sn 189.925	6.3531	3.0077	-1.8268u
Sr 216.596	66.6209	66.1475	66.1453
Ti 334.941	13.4257	11.1227	15.6556
Tl 190.794	-6.6999u	-0.8067u	-0.3328u
V 292.401	1.2720	1.3324	1.5086
Zn 206.200	16.7457	18.7417	14.8094

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0614	ppb	0.2049	333.7	-31.9327
Al 308.215	474.682	ppb	3.9660	0.8	1274.50
As 188.980	5.0215	ppb	0.3743	7.5	2.2362
B 249.678	14.9783	ppb	0.6435	4.3	30.3208
Ba 389.178	81.4454	ppb	1.0162	1.2	752.766
Be 313.042	0.0644	ppb	0.0049	7.7	-129.586
Ca 370.602	25271	ppb	13.97	0.1	52763
Cd 226.502	0.4277	ppb	0.0710	16.6	13.4198
Co 228.615	3.4501	ppb	0.2823	8.2	8.7360
Cr 267.716	2.7391	ppb	0.1707	6.2	79.6533
Cu 324.754	3.3150	ppb	0.6172	18.6	344.864
Fe 271.441	1380.14	ppb	4.9336	0.4	1053.49
K 766.491	2496.11	ppb	2.7001	0.1	62008.2
Mg 279.078	22179.9	ppb	20.7380	0.1	30585.0
Mn 257.610	252.208	ppb	0.3495	0.1	24510.5
Mo 202.032	-0.2955	ppb	0.4199	142.1	2.0815
Na 330.237	33753.2	ppb	443.334	1.3	874.866
Ni 231.604	27.7881	ppb	0.9084	3.3	34.1679
Pb 220.353	0.2234	ppb	0.6634	296.9	6.2499
Sb 206.834	5.6927	ppb	5.4281	95.4	8.0999
Se 196.026	-7.0170	ppb	6.6130	94.2	-2.4030
Si 288.158	16216.4	ppb	10.1289	0.1	76891.8
Sn 189.925	2.5113	ppb	4.1125	163.8	0.5441
Sr 216.596	66.3046	ppb	0.2740	0.4	259.162
Ti 334.941	13.4013	ppb	2.2666	16.9	1506.76
Tl 190.794	-2.6131	ppb	3.5472	135.7	-5.0584
V 292.401	1.3710	ppb	0.1230	9.0	16.0329
Zn 206.200	16.7656	ppb	1.9662	11.7	9.9381

680-162091-B-3-B (Samp) **12/15/2018, 3:36:17 PM** **Rack 1, Tube 60**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.0933u	0.1240	-0.7003u
Al 308.215	2627.36	2643.41	2606.84
As 188.980	10.6237	12.9741	11.3012
B 249.678	158.545	159.003	158.676
Ba 389.178	17.8163	18.9716	17.8031
Be 313.042	1.6657	1.6613	1.6596
Ca 370.602	43695	43751	43694

Label	Replicates Concentration		
Cd 226.502	0.5460	0.6077	0.2154
Co 228.615	80.8733	80.2523	79.9153
Cr 267.716	26.2383	26.0962	25.9220
Cu 324.754	10.5514	10.3341	10.8491
Fe 271.441	19504.6	19518.1	19502.5
K 766.491	4989.22	4988.83	4985.45
Mg 279.078	59620.0	59661.8	59577.2
Mn 257.610	1716.59	1719.75	1718.19
Mo 202.032	1.9092	0.4442	-0.5678u
Na 330.237	58009.2	58055.0	57865.2
Ni 231.604	164.069	164.718	160.025
Pb 220.353	2.3476	-0.9549u	-1.4027u
Sb 206.834	7.1353	-2.7189u	-5.0735u
Se 196.026	3.9270	0.8885	-4.2718u
Si 288.158	17422.4	17448.0	17429.6
Sn 189.925	-0.9576u	4.3999	3.7916
Sr 216.596	99.6373	100.006	99.9256
Ti 334.941	46.7594	46.7851	48.7712
Tl 190.794	3.3002	3.0862	0.4666u
V 292.401	4.0636	2.8994	3.3384
Zn 206.200	275.384	288.147	274.030

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5565	ppb	0.6213	111.6	-50.2497
Al 308.215	2625.87	ppb	18.3309	0.7	6348.13
As 188.980	11.6330	ppb	1.2098	10.4	3.9412
B 249.678	158.741	ppb	0.2361	0.1	959.003
Ba 389.178	18.1970	ppb	0.6708	3.7	192.216
Be 313.042	1.6622	ppb	0.0032	0.2	1172.12
Ca 370.602	43713	ppb	32.35	0.1	91236
Cd 226.502	0.4563	ppb	0.2110	46.2	27.3307
Co 228.615	80.3469	ppb	0.4860	0.6	366.919
Cr 267.716	26.0855	ppb	0.1584	0.6	587.986
Cu 324.754	10.5782	ppb	0.2585	2.4	612.202
Fe 271.441	19508.4	ppb	8.4897	0.0	14661.1
K 766.491	4987.83	ppb	2.0743	0.0	123661
Mg 279.078	59619.7	ppb	42.2940	0.1	82169.4
Mn 257.610	1718.18	ppb	1.5781	0.1	166415
Mo 202.032	0.5952	ppb	1.2454	209.2	3.6680
Na 330.237	57976.5	ppb	99.0685	0.2	1467.91
Ni 231.604	162.937	ppb	2.5430	1.6	207.905
Pb 220.353	-0.0033	ppb	2.0483	61880.6	6.2661
Sb 206.834	-0.2190	ppb	6.4769	2956.9	5.9118
Se 196.026	0.1812	ppb	4.1449	2287.0	-0.9075
Si 288.158	17433.4	ppb	13.1572	0.1	82638.9
Sn 189.925	2.4113	ppb	2.9334	121.6	0.5172
Sr 216.596	99.8564	ppb	0.1940	0.2	390.420
Ti 334.941	47.4386	ppb	1.1542	2.4	5365.75
Tl 190.794	2.2843	ppb	1.5778	69.1	-3.9661
V 292.401	3.4338	ppb	0.5879	17.1	46.6098
Zn 206.200	279.187	ppb	7.7888	2.8	157.284

Cont Calib Verif (CCV) **12/15/2018, 3:41:00 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	486.875	493.261	487.039
Al 308.215	9919.85	9911.88	9870.09
As 188.980	509.106	513.858	513.041
B 249.678	506.687	506.836	507.793
Ba 389.178	488.431	488.507	485.136
Be 313.042	524.324	524.999	523.202
Ca 370.602	10103	10095	10068
Cd 226.502	510.968	513.436	511.341
Co 228.615	508.337	505.554	505.333
Cr 267.716	503.480	503.432	501.918
Cu 324.754	503.246	505.979	500.718
Fe 271.441	10093.0	10079.1	10086.1
K 766.491	9827.25	9813.15	9800.45
Mg 279.078	10263.5	10249.2	10217.6
Mn 257.610	507.015	507.024	506.124
Mo 202.032	502.343	502.161	503.913
Na 330.237	10300.4	10546.7	9786.52
Ni 231.604	513.749	515.172	512.121
Pb 220.353	530.166	511.447	523.907
Sb 206.834	511.985	503.868	505.987
Se 196.026	509.692	519.163	524.780
Si 288.158	4929.40	4931.15	4913.73
Sn 189.925	508.219	504.577	497.124
Sr 216.596	510.882	513.607	512.976
Ti 334.941	497.289	498.483	497.383
Tl 190.794	504.455	495.000	483.844
V 292.401	501.973	502.038	500.261
Zn 206.200	1059.45	1052.59	1055.53

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	489.058	ppb	3.6405	0.7	16958.6	97.81165
Al 308.215	9900.61	ppb	26.7261	0.3	23525.5	99.00610
As 188.980	512.001	ppb	2.5406	0.5	130.327	102.40029
B 249.678	507.105	ppb	0.6000	0.1	3262.41	101.42109
Ba 389.178	487.358	ppb	1.9246	0.4	4626.88	97.47166
Be 313.042	524.175	ppb	0.9075	0.2	426564	104.83501
Ca 370.602	10088	ppb	18.14	0.2	21083	100.88371
Cd 226.502	511.915	ppb	1.3306	0.3	7805.04	102.38297
Co 228.615	506.408	ppb	1.6743	0.3	2345.54	101.28160
Cr 267.716	502.943	ppb	0.8883	0.2	10864.2	100.58864
Cu 324.754	503.314	ppb	2.6309	0.5	18485.2	100.66286
Fe 271.441	10086.0	ppb	6.9624	0.1	7617.62	100.81005
K 766.491	9813.62	ppb	13.4075	0.1	243066	98.13616
Mg 279.078	10243.4	ppb	23.5071	0.2	14129.5	102.43421
Mn 257.610	506.721	ppb	0.5171	0.1	49081.4	101.34419
Mo 202.032	502.805	ppb	0.9633	0.2	1047.13	100.56108
Na 330.237	10211.2	ppb	387.874	3.8	292.502	102.11205
Ni 231.604	513.681	ppb	1.5269	0.3	658.561	102.73613
Pb 220.353	521.840	ppb	9.5288	1.8	277.377	104.36803
Sb 206.834	507.280	ppb	4.2104	0.8	213.326	101.45604
Se 196.026	517.878	ppb	7.6252	1.5	92.9180	103.57567
Si 288.158	4924.76	ppb	9.5934	0.2	23721.1	98.49525

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	503.307	ppb	5.6553	1.1	149.450	100.66136
Sr 216.596	512.488	ppb	1.4266	0.3	1956.48	102.49764
Ti 334.941	497.718	ppb	0.6638	0.1	54631.3	99.54366
Tl 190.794	494.433	ppb	10.3176	2.1	132.107	98.88663
V 292.401	501.424	ppb	1.0076	0.2	6525.33	100.28485
Zn 206.200	1055.85	ppb	3.4420	0.3	593.994	105.58540

Cont Calib Blank (CCB) **12/15/2018, 3:45:43 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	-0.2647u	0.1944	0.1993
Al 308.215	-0.7155u	2.1811	0.1549
As 188.980	3.0237	4.4326	4.8654
B 249.678	3.0548	2.3194	3.4866
Ba 389.178	1.0426	-0.1807u	-0.0403u
Be 313.042	0.0203	0.0326	0.0257
Ca 370.602	-2.636u	0.0014	2.956
Cd 226.502	0.0982	-0.0796u	-0.0626u
Co 228.615	-0.7699u	-1.6874u	-0.5118u
Cr 267.716	-0.4639u	-0.2600u	0.0274
Cu 324.754	0.2341	0.5323	0.1981
Fe 271.441	-4.5127u	-2.1341u	-9.2250u
K 766.491	1.0277	0.9810	0.5879
Mg 279.078	5.4450	-0.4162u	6.1889
Mn 257.610	-0.1029u	0.0444	-0.0019u
Mo 202.032	0.2909	0.6634	-0.4180u
Na 330.237	-248.553u	-113.270u	-32.9773u
Ni 231.604	0.4306	0.3452	-0.3829u
Pb 220.353	-3.0810u	2.5610	3.2003
Sb 206.834	-2.5404u	4.0990	-5.0290u
Se 196.026	7.3428	-14.0362u	-18.2066u
Si 288.158	-0.3231u	-2.3968u	-2.3046u
Sn 189.925	-4.5617u	-2.2499u	2.0446
Sr 216.596	0.2777	0.7384	0.4480
Ti 334.941	0.1753	0.1874	0.1431
Tl 190.794	0.8140	2.0139	0.5709
V 292.401	0.2811	0.1567	-0.0334u
Zn 206.200	-1.3494u	-1.0890u	0.3783

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0430	ppb	0.2665	620.1	-28.1335	0.04298
Al 308.215	0.5402	ppb	1.4862	275.1	156.269	0.54017
As 188.980	4.1073	ppb	0.9630	23.4	2.0026	4.10727
B 249.678	2.9536	ppb	0.5902	20.0	-47.4891	2.95362
Ba 389.178	0.2739	ppb	0.6694	244.4	-47.4334	0.27389
Be 313.042	0.0262	ppb	0.0061	23.4	-162.579	0.02619
Ca 370.602	0.1073	ppb	2.797	2606.5	27.71	0.10733
Cd 226.502	-0.0147	ppb	0.0981	668.0	5.6153	-0.01469
Co 228.615	-0.9897	ppb	0.6179	62.4	-12.0645	-0.98968
Cr 267.716	-0.2322	ppb	0.2468	106.3	14.6915	-0.23215
Cu 324.754	0.3215	ppb	0.1834	57.1	236.023	0.32149
Fe 271.441	-5.2906	ppb	3.6089	68.2	13.6159	-5.29059
K 766.491	0.8655	ppb	0.2416	27.9	267.807	0.86553

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	3.7392	ppb	3.6179	96.8	24.2718	3.73924
Mn 257.610	-0.0201	ppb	0.0753	374.3	27.9636	-0.02012
Mo 202.032	0.1788	ppb	0.5493	307.3	3.0874	0.17876
Na 330.237	-131.600	ppb	108.950	82.8	42.2755	-131.60016
Ni 231.604	0.1310	ppb	0.4471	341.4	-1.3976	0.13096
Pb 220.353	0.8934	ppb	3.4568	386.9	6.5839	0.89345
Sb 206.834	-1.1568	ppb	4.7187	407.9	5.2411	-1.15679
Se 196.026	-8.3000	ppb	13.7066	165.1	-2.6632	-8.29999
Si 288.158	-1.6749uv	ppb	1.1715	69.9	329.664	-1.67487
Sn 189.925	-1.5890	ppb	3.3524	211.0	-0.6791	-1.58900
Sr 216.596	0.4881	ppb	0.2330	47.7	7.4078	0.48806
Ti 334.941	0.1686	ppb	0.0229	13.6	-17.9522	0.16862
Tl 190.794	1.1329	ppb	0.7726	68.2	-4.0408	1.13291
V 292.401	0.1348	ppb	0.1584	117.5	-0.4820	0.13483
Zn 206.200	-0.6867	ppb	0.9314	135.6	0.1423	-0.68672

MB 680-551351/1-A (Samp) **12/15/2018, 3:50:23 PM** **Rack 2, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5298u	-0.1647u	0.4238
Al 308.215	4.6989	0.5063	3.1612
As 188.980	-0.8953u	1.0266	-0.1842u
B 249.678	2.5319	0.9773	1.4496
Ba 389.178	-0.5233u	-0.4298u	-2.2529u
Be 313.042	-0.0074u	-0.0096u	-0.0132u
Ca 370.602	3.679	6.136	11.67
Cd 226.502	-0.0298u	0.0273	-0.3853u
Co 228.615	-0.2246u	-0.0593u	-0.8603u
Cr 267.716	-0.1303u	-0.0058u	-0.1191u
Cu 324.754	0.2652	0.3174	-0.2110u
Fe 271.441	-9.8835u	2.5539	3.2662
K 766.491	1.5339	1.4762	1.9140
Mg 279.078	6.0770	2.1238	-0.5391u
Mn 257.610	0.1041	0.1583	0.1177
Mo 202.032	1.3066	-0.3393u	-0.9917u
Na 330.237	285.155	-121.084u	219.117
Ni 231.604	-0.4297u	0.0771	1.8027
Pb 220.353	0.2121	2.0677	-3.7840u
Sb 206.834	-4.4569u	-3.1160u	-7.5664u
Se 196.026	-13.1022u	3.7718	2.5810
Si 288.158	-0.1172u	0.8833	-1.0299u
Sn 189.925	2.7649	5.3496	1.8639
Sr 216.596	0.0618	0.6368	0.6142
Ti 334.941	0.1062	0.0403	0.2577
Tl 190.794	-2.1800u	-4.3923u	0.3790
V 292.401	0.2808	0.0582	0.1754
Zn 206.200	2.0317	2.9680	0.6905

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0902	ppb	0.4811	533.3	-32.7617
Al 308.215	2.7888	ppb	2.1210	76.1	161.573
As 188.980	-0.0176	ppb	0.9717	5518.1	0.9594
B 249.678	1.6529	ppb	0.7970	48.2	-56.0515

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-1.0686	ppb	1.0266	96.1	-60.2783
Be 313.042	-0.0101	ppb	0.0029	29.2	-192.123
Ca 370.602	7.162	ppb	4.094	57.2	42.44
Cd 226.502	-0.1292	ppb	0.2236	173.0	3.8694
Co 228.615	-0.3814	ppb	0.4229	110.9	-9.2381
Cr 267.716	-0.0851	ppb	0.0688	80.9	17.8640
Cu 324.754	0.1238	ppb	0.2912	235.1	228.854
Fe 271.441	-1.3545	ppb	7.3949	546.0	16.6056
K 766.491	1.6413	ppb	0.2378	14.5	287.003
Mg 279.078	2.5539	ppb	3.3289	130.3	22.6357
Mn 257.610	0.1267	ppb	0.0282	22.3	42.1430
Mo 202.032	-0.0081	ppb	1.1844	14557.9	2.6991
Na 330.237	127.729	ppb	217.994	170.7	48.6426
Ni 231.604	0.4834	ppb	1.1703	242.1	-0.9451
Pb 220.353	-0.5014	ppb	2.9904	596.4	5.8577
Sb 206.834	-5.0464	ppb	2.2830	45.2	3.6333
Se 196.026	-2.2498	ppb	9.4173	418.6	-1.5650
Si 288.158	-0.0879uv	ppb	0.9569	1088.1	337.156
Sn 189.925	3.3261	ppb	1.8094	54.4	0.7824
Sr 216.596	0.4376	ppb	0.3256	74.4	7.2185
Ti 334.941	0.1348	ppb	0.1115	82.7	-21.6830
Tl 190.794	-2.0644	ppb	2.3878	115.7	-4.9203
V 292.401	0.1715	ppb	0.1113	64.9	-0.0050
Zn 206.200	1.8967	ppb	1.1448	60.4	1.5954

LCS 680-551351/2-A (Samp) **12/15/2018, 3:55:04 PM** **Rack 2, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.1176	52.0680	52.2082
Al 308.215	5081.28	5083.72	5076.31
As 188.980	105.510	101.105	97.6793
B 249.678	208.910	209.875	209.458
Ba 389.178	102.319	100.334	100.545
Be 313.042	54.0332	53.9039	53.9240
Ca 370.602	5192	5181	5186
Cd 226.502	53.7053	53.8386	53.6725
Co 228.615	52.1734	51.1054	51.4280
Cr 267.716	105.014	105.252	105.204
Cu 324.754	105.470	106.129	105.094
Fe 271.441	5200.60	5204.84	5214.55
K 766.491	8013.33	8016.66	7999.44
Mg 279.078	5235.30	5253.65	5245.37
Mn 257.610	524.033	522.887	523.442
Mo 202.032	103.610	105.167	104.384
Na 330.237	5289.31	4951.87	5193.04
Ni 231.604	104.597	106.186	106.457
Pb 220.353	541.292	538.039	533.929
Sb 206.834	49.3311	55.9888	57.2411
Se 196.026	100.003	96.8473	93.4169
Si 288.158	-7.0953u	-4.1091	-5.6479
Sn 189.925	105.351	106.367	102.109
Sr 216.596	106.564	104.528	105.300
Ti 334.941	102.091	102.032	102.223

Label	Replicates Concentration		
Tl 190.794	41.0886	39.8260	36.4665
V 292.401	103.068	102.663	102.978
Zn 206.200	112.552	108.329	111.287

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.1313	ppb	0.0711	0.1	1781.17
Al 308.215	5080.44	ppb	3.7754	0.1	12140.8
As 188.980	101.431	ppb	3.9254	3.9	26.5967
B 249.678	209.414	ppb	0.4842	0.2	1306.92
Ba 389.178	101.066	ppb	1.0904	1.1	923.968
Be 313.042	53.9537	ppb	0.0696	0.1	43739.6
Ca 370.602	5186	ppb	5.801	0.1	10852
Cd 226.502	53.7388	ppb	0.0880	0.2	827.784
Co 228.615	51.5689	ppb	0.5478	1.1	232.191
Cr 267.716	105.157	ppb	0.1255	0.1	2288.26
Cu 324.754	105.564	ppb	0.5239	0.5	4055.03
Fe 271.441	5206.66	ppb	7.1541	0.1	3928.17
K 766.491	8009.81	ppb	9.1327	0.1	198435
Mg 279.078	5244.77	ppb	9.1856	0.2	7241.07
Mn 257.610	523.454	ppb	0.5732	0.1	50664.8
Mo 202.032	104.387	ppb	0.7787	0.7	219.501
Na 330.237	5144.74	ppb	173.827	3.4	171.119
Ni 231.604	105.747	ppb	1.0047	1.0	134.382
Pb 220.353	537.753	ppb	3.6896	0.7	285.972
Sb 206.834	54.1870	ppb	4.2517	7.8	27.6968
Se 196.026	96.7558	ppb	3.2940	3.4	16.4686
Si 288.158	-5.6174uv	ppb	1.4933	26.6	338.482
Sn 189.925	104.609	ppb	2.2238	2.1	30.8988
Sr 216.596	105.464	ppb	1.0277	1.0	407.732
Ti 334.941	102.115	ppb	0.0978	0.1	11189.8
Tl 190.794	39.1270	ppb	2.3890	6.1	6.3672
V 292.401	102.903	ppb	0.2124	0.2	1337.89
Zn 206.200	110.723	ppb	2.1672	2.0	62.6770

680-161757-C-5-A (Samp) **12/15/2018, 3:59:45 PM** **Rack 2, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0164u	-0.0528u	-0.1927u
Al 308.215	386.445	384.068	381.927
As 188.980	2.7249	14.7743	-1.0001u
B 249.678	25.4417	25.1481	25.2119
Ba 389.178	50.5877	50.0447	50.7856
Be 313.042	0.2719	0.2760	0.2774
Ca 370.602	1529	1526	1525
Cd 226.502	-0.0222	-0.3253	-0.2396
Co 228.615	0.1576	-0.8121u	1.0800
Cr 267.716	1.8745	1.9881	1.6320
Cu 324.754	0.2920	0.5184	0.2023
Fe 271.441	13421.2	13418.1	13449.6
K 766.491	1051.79	1052.19	1049.14
Mg 279.078	1659.38	1654.78	1650.52
Mn 257.610	16.2452	16.2376	16.2873
Mo 202.032	0.3630	-0.9317u	-0.7005u

Label	Replicates Concentration		
Na 330.237	13791.5	13870.2	13379.4
Ni 231.604	1.5105	1.9195	-0.4901u
Pb 220.353	5.7512	-6.2346u	-9.3151u
Sb 206.834	-2.9502u	2.9363	-9.3606u
Se 196.026	5.6992	-4.0327u	-6.5449u
Si 288.158	6970.90	6976.18	6984.66
Sn 189.925	-2.6381u	-0.2414u	2.9676
Sr 216.596	18.3881	18.0656	17.4891
Ti 334.941	0.1013	0.2616	0.0794
Tl 190.794	6.5356	0.4968u	3.5086
V 292.401	4.4077	3.6548	3.9779
Zn 206.200	3.9314	4.5948	3.0923

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0873	ppb	0.0931	106.6	-35.4936
Al 308.215	384.147	ppb	2.2603	0.6	1061.53
As 188.980	5.4997	ppb	8.2451	149.9	2.3817
B 249.678	25.2673	ppb	0.1544	0.6	86.1037
Ba 389.178	50.4727	ppb	0.3836	0.8	438.210
Be 313.042	0.2751	ppb	0.0029	1.0	39.6093
Ca 370.602	1527	ppb	2.453	0.2	3185
Cd 226.502	-0.1957	ppb	0.1562	79.8	12.6640
Co 228.615	0.1418	ppb	0.9461	667.1	-6.4221
Cr 267.716	1.8316	ppb	0.1819	9.9	60.7567
Cu 324.754	0.3375	ppb	0.1629	48.3	239.481
Fe 271.441	13429.6	ppb	17.3798	0.1	10095.1
K 766.491	1051.04	ppb	1.6555	0.2	26252.5
Mg 279.078	1654.89	ppb	4.4333	0.3	2299.67
Mn 257.610	16.2567	ppb	0.0268	0.2	1621.68
Mo 202.032	-0.4231	ppb	0.6905	163.2	1.6409
Na 330.237	13680.4	ppb	263.601	1.9	380.528
Ni 231.604	0.9800	ppb	1.2894	131.6	-0.3069
Pb 220.353	-3.2662	ppb	7.9597	243.7	4.4784
Sb 206.834	-3.1248	ppb	6.1504	196.8	4.5743
Se 196.026	-1.6261	ppb	6.4671	397.7	-1.4089
Si 288.158	6977.25	ppb	6.9397	0.1	33275.6
Sn 189.925	0.0294	ppb	2.8127	9570.8	-0.1963
Sr 216.596	17.9809	ppb	0.4555	2.5	77.3798
Ti 334.941	0.1475	ppb	0.0995	67.5	-15.2142
Tl 190.794	3.5137	ppb	3.0194	85.9	-3.9292
V 292.401	4.0135	ppb	0.3777	9.4	53.1162
Zn 206.200	3.8728	ppb	0.7529	19.4	2.5244

680-161757-C-5-Asd (Samp) **12/15/2018, 4:04:27 PM** **Rack 2, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5535u	0.2882	0.3263
Al 308.215	76.6383	70.4892	74.8261
As 188.980	5.0626	-3.0755u	-1.8722u
B 249.678	5.4436	5.6436	6.5189
Ba 389.178	7.9883	9.8882	10.8493
Be 313.042	0.0390	0.0380	0.0378
Ca 370.602	294.9	300.5	297.2

Label	Replicates Concentration		
Cd 226.502	0.1888	-0.0478	-0.3645u
Co 228.615	-0.5017u	-0.8299u	0.1844
Cr 267.716	0.1715	0.5667	0.1165
Cu 324.754	0.3967	0.0833	1.0067
Fe 271.441	2601.04	2620.20	2611.34
K 766.491	200.749	200.877	200.440
Mg 279.078	318.594	326.958	323.816
Mn 257.610	3.1062	3.0546	3.1148
Mo 202.032	0.4322	1.4993	0.8531
Na 330.237	2774.95	2436.61	2710.50
Ni 231.604	1.1355	3.0914	0.1415
Pb 220.353	-5.0055u	2.8076	6.2882
Sb 206.834	-2.3365u	0.0342	-10.7104u
Se 196.026	-10.6324u	-10.0364u	-21.5165u
Si 288.158	1348.46	1355.37	1358.43
Sn 189.925	-3.3610u	3.7716	2.6645
Sr 216.596	2.6240	4.2127	3.8151
Ti 334.941	0.1196	0.0079	-0.1465u
Tl 190.794	-5.3236u	3.8314	-0.6346u
V 292.401	-0.1121u	0.8062	1.4483
Zn 206.200	0.4674	-0.1720u	-1.4365u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0203	ppb	0.4973	2443.9	-29.4701
Al 308.215	73.9846	ppb	3.1598	4.3	329.601
As 188.980	0.0383	ppb	4.3926	11469.4	0.9787
B 249.678	5.8687	ppb	0.5719	9.7	-30.8925
Ba 389.178	9.5753	ppb	1.4560	15.2	42.6031
Be 313.042	0.0383	ppb	0.0006	1.6	-152.890
Ca 370.602	297.6	ppb	2.818	0.9	643.0
Cd 226.502	-0.0745	ppb	0.2776	372.5	6.6143
Co 228.615	-0.3824	ppb	0.5176	135.4	-9.1783
Cr 267.716	0.2849	ppb	0.2456	86.2	26.1452
Cu 324.754	0.4956	ppb	0.4695	94.7	242.914
Fe 271.441	2610.86	ppb	9.5911	0.4	1976.77
K 766.491	200.689	ppb	0.2245	0.1	5212.07
Mg 279.078	323.123	ppb	4.2248	1.3	464.404
Mn 257.610	3.0919	ppb	0.0326	1.1	332.727
Mo 202.032	0.9282	ppb	0.5375	57.9	4.6063
Na 330.237	2640.68	ppb	179.648	6.8	110.179
Ni 231.604	1.4561	ppb	1.5009	103.1	0.3063
Pb 220.353	1.3634	ppb	5.7837	424.2	6.8399
Sb 206.834	-4.3375	ppb	5.6449	130.1	3.9477
Se 196.026	-14.0617	ppb	6.4629	46.0	-3.7006
Si 288.158	1354.09	ppb	5.1065	0.4	6729.97
Sn 189.925	1.0250	ppb	3.8386	374.5	0.0985
Sr 216.596	3.5506	ppb	0.8267	23.3	19.7061
Ti 334.941	-0.0063	ppb	0.1336	2105.5	-36.1817
Tl 190.794	-0.7089	ppb	4.5780	645.8	-4.6553
V 292.401	0.7141	ppb	0.7843	109.8	7.5825
Zn 206.200	-0.3803	ppb	0.9689	254.7	0.2790

680-161757-C-5-Apds (Samp) **12/15/2018, 4:09:08 PM** **Rack 2, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.2436	50.6150	51.1211
Al 308.215	5320.39	5326.19	5319.65
As 188.980	102.947	103.479	108.766
B 249.678	225.257	225.610	226.050
Ba 389.178	147.151	147.062	146.262
Be 313.042	53.1744	53.1009	53.0872
Ca 370.602	6484	6490	6489
Cd 226.502	51.4341	52.0982	52.0036
Co 228.615	51.1016	51.5266	51.4830
Cr 267.716	104.481	104.239	104.343
Cu 324.754	102.645	103.640	102.919
Fe 271.441	18192.4	18194.2	18183.5
K 766.491	8970.75	8954.14	8945.00
Mg 279.078	6691.96	6703.44	6694.03
Mn 257.610	526.705	526.613	526.396
Mo 202.032	102.961	99.2725	101.509
Na 330.237	18808.9	18830.7	18808.9
Ni 231.604	102.722	103.101	105.915
Pb 220.353	521.817	521.728	516.933
Sb 206.834	49.0689	55.9139	55.2933
Se 196.026	111.106	111.521	96.6918
Si 288.158	6854.78	6854.33	6858.38
Sn 189.925	91.4862	97.9326	101.887
Sr 216.596	118.824	119.832	119.022
Ti 334.941	99.3220	99.3922	99.4093
Tl 190.794	30.5805	31.5503	39.5622
V 292.401	103.735	103.180	103.699
Zn 206.200	106.982	111.798	108.350

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.6599	ppb	0.4405	0.9	1727.29
Al 308.215	5322.07	ppb	3.5848	0.1	12711.1
As 188.980	105.064	ppb	3.2168	3.1	27.5422
B 249.678	225.639	ppb	0.3974	0.2	1400.87
Ba 389.178	146.825	ppb	0.4897	0.3	1366.80
Be 313.042	53.1208	ppb	0.0469	0.1	43061.1
Ca 370.602	6488	ppb	3.387	0.1	13540
Cd 226.502	51.8453	ppb	0.3592	0.7	808.432
Co 228.615	51.3704	ppb	0.2338	0.5	231.638
Cr 267.716	104.355	ppb	0.1213	0.1	2272.48
Cu 324.754	103.068	ppb	0.5138	0.5	3967.27
Fe 271.441	18190.0	ppb	5.7533	0.0	13670.8
K 766.491	8956.63	ppb	13.0548	0.1	221862
Mg 279.078	6696.48	ppb	6.1171	0.1	9241.75
Mn 257.610	526.571	ppb	0.1589	0.0	50985.0
Mo 202.032	101.248	ppb	1.8583	1.8	212.789
Na 330.237	18816.2	ppb	12.5749	0.1	505.974
Ni 231.604	103.913	ppb	1.7443	1.7	132.024
Pb 220.353	520.159	ppb	2.7943	0.5	276.873
Sb 206.834	53.4254	ppb	3.7856	7.1	27.5341
Se 196.026	106.440	ppb	8.4444	7.9	18.2665
Si 288.158	6855.83	ppb	2.2184	0.0	32729.4

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	97.1021	ppb	5.2501	5.4	28.6683
Sr 216.596	119.226	ppb	0.5343	0.4	463.388
Ti 334.941	99.3745	ppb	0.0463	0.0	10893.4
Tl 190.794	33.8977	ppb	4.9295	14.5	4.3965
V 292.401	103.538	ppb	0.3105	0.3	1349.10
Zn 206.200	109.043	ppb	2.4816	2.3	61.5576

680-161757-C-5-B MS (Samp) **12/15/2018, 4:13:49 PM** **Rack 2, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.8149	52.2996	52.6573
Al 308.215	5507.40	5507.72	5500.03
As 188.980	117.507	100.218	101.288
B 249.678	233.287	232.404	233.577
Ba 389.178	150.823	150.164	153.290
Be 313.042	55.0632	55.0380	54.9709
Ca 370.602	6679	6674	6688
Cd 226.502	53.9635	53.9781	54.1926
Co 228.615	54.2554	52.0379	52.6056
Cr 267.716	107.867	108.538	107.275
Cu 324.754	106.616	107.196	105.665
Fe 271.441	18486.6	18496.3	18478.1
K 766.491	9267.60	9263.96	9270.15
Mg 279.078	6903.56	6900.03	6882.69
Mn 257.610	545.417	545.727	545.192
Mo 202.032	105.028	104.809	104.710
Na 330.237	19341.2	19005.5	19395.0
Ni 231.604	106.877	107.298	108.531
Pb 220.353	539.619	555.483	533.248
Sb 206.834	49.1662	56.2898	60.3085
Se 196.026	71.0409	89.9956	64.7693
Si 288.158	6920.54	6911.23	6914.32
Sn 189.925	113.878	108.219	102.448
Sr 216.596	122.241	121.738	121.896
Ti 334.941	103.126	102.818	103.145
Tl 190.794	32.4533	35.7064	39.2176
V 292.401	107.655	108.057	107.386
Zn 206.200	117.421	114.379	117.960

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.5906	ppb	0.2641	0.5	1794.33
Al 308.215	5505.05	ppb	4.3496	0.1	13142.8
As 188.980	106.337	ppb	9.6880	9.1	27.8638
B 249.678	233.090	ppb	0.6106	0.3	1449.64
Ba 389.178	151.426	ppb	1.6482	1.1	1411.11
Be 313.042	55.0240	ppb	0.0477	0.1	44610.4
Ca 370.602	6680	ppb	6.827	0.1	13942
Cd 226.502	54.0447	ppb	0.1282	0.2	842.129
Co 228.615	52.9663	ppb	1.1519	2.2	239.059
Cr 267.716	107.894	ppb	0.6317	0.6	2348.84
Cu 324.754	106.492	ppb	0.7727	0.7	4091.54
Fe 271.441	18487.0	ppb	9.1097	0.0	13893.7
K 766.491	9267.24	ppb	3.1076	0.0	229547

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6895.42	ppb	11.1724	0.2	9515.71
Mn 257.610	545.445	ppb	0.2683	0.0	52810.9
Mo 202.032	104.849	ppb	0.1625	0.2	220.267
Na 330.237	19247.3	ppb	211.065	1.1	516.521
Ni 231.604	107.568	ppb	0.8596	0.8	136.724
Pb 220.353	542.783	ppb	11.4505	2.1	288.648
Sb 206.834	55.2548	ppb	5.6428	10.2	28.2771
Se 196.026	75.2686	ppb	13.1338	17.4	12.6115
Si 288.158	6915.36	ppb	4.7416	0.1	33011.5
Sn 189.925	108.181	ppb	5.7149	5.3	31.9626
Sr 216.596	121.959	ppb	0.2573	0.2	473.824
Ti 334.941	103.029	ppb	0.1837	0.2	11295.3
Tl 190.794	35.7924	ppb	3.3830	9.5	4.9120
V 292.401	107.699	ppb	0.3377	0.3	1403.36
Zn 206.200	116.587	ppb	1.9308	1.7	65.7945

680-161757-C-5-C MSD (Samp) **12/15/2018, 4:18:30 PM** **Rack 2, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.2310	50.8921	50.2183
Al 308.215	5355.67	5371.53	5357.21
As 188.980	108.667	94.2991	108.828
B 249.678	226.663	229.568	228.697
Ba 389.178	148.031	147.178	147.946
Be 313.042	53.6203	53.7163	53.6674
Ca 370.602	6505	6522	6514
Cd 226.502	52.8128	52.7921	52.3843
Co 228.615	50.3026	51.1991	51.1429
Cr 267.716	104.895	104.816	104.723
Cu 324.754	103.068	103.503	104.066
Fe 271.441	18116.7	18105.4	18103.5
K 766.491	9024.52	9020.80	9009.80
Mg 279.078	6726.54	6738.70	6719.48
Mn 257.610	530.510	530.828	531.047
Mo 202.032	102.732	103.858	103.025
Na 330.237	18374.0	18787.0	18624.3
Ni 231.604	103.990	107.931	103.865
Pb 220.353	528.515	528.495	525.951
Sb 206.834	52.0297	50.5179	44.5411
Se 196.026	80.5535	78.9604	57.7633
Si 288.158	6781.25	6788.77	6774.81
Sn 189.925	101.337	97.5991	102.746
Sr 216.596	120.135	119.943	119.270
Ti 334.941	100.568	100.447	100.603
Tl 190.794	40.7453	28.4655	38.2868
V 292.401	105.108	105.186	104.632
Zn 206.200	109.218	112.346	107.471

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.4471	ppb	0.3854	0.8	1719.92
Al 308.215	5361.47	ppb	8.7492	0.2	12804.1
As 188.980	103.931	ppb	8.3422	8.0	27.2552
B 249.678	228.310	ppb	1.4909	0.7	1418.55

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	147.718	ppb	0.4696	0.3	1375.36
Be 313.042	53.6680	ppb	0.0480	0.1	43506.5
Ca 370.602	6514	ppb	8.368	0.1	13595
Cd 226.502	52.6631	ppb	0.2417	0.5	820.815
Co 228.615	50.8815	ppb	0.5021	1.0	229.358
Cr 267.716	104.811	ppb	0.0861	0.1	2282.31
Cu 324.754	103.546	ppb	0.5006	0.5	3984.59
Fe 271.441	18108.5	ppb	7.1384	0.0	13609.6
K 766.491	9018.37	ppb	7.6556	0.1	223390
Mg 279.078	6728.24	ppb	9.7209	0.1	9285.48
Mn 257.610	530.795	ppb	0.2701	0.1	51393.4
Mo 202.032	103.205	ppb	0.5838	0.6	216.857
Na 330.237	18595.1	ppb	208.030	1.1	500.547
Ni 231.604	105.262	ppb	2.3122	2.2	133.759
Pb 220.353	527.654	ppb	1.4747	0.3	280.773
Sb 206.834	49.0296	ppb	3.9600	8.1	25.7047
Se 196.026	72.4257	ppb	12.7230	17.6	12.0930
Si 288.158	6781.61	ppb	6.9864	0.1	32379.1
Sn 189.925	100.561	ppb	2.6598	2.6	29.6966
Sr 216.596	119.783	ppb	0.4544	0.4	465.465
Ti 334.941	100.539	ppb	0.0816	0.1	11021.4
Tl 190.794	35.8325	ppb	6.4974	18.1	4.9325
V 292.401	104.975	ppb	0.3002	0.3	1367.79
Zn 206.200	109.678	ppb	2.4700	2.3	61.9157

680-161757-C-6-A (Samp) **12/15/2018, 4:23:11 PM** **Rack 2, Tube 8**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4546	-0.6169u	-0.6092u
Al 308.215	369.530	375.685	373.229
As 188.980	1.6683	-0.4934u	-0.6878u
B 249.678	25.5160	25.8240	25.9469
Ba 389.178	51.2677	47.9646	49.8182
Be 313.042	0.2574	0.2577	0.2661
Ca 370.602	1495	1502	1502
Cd 226.502	0.0588	-0.2557	-0.2026
Co 228.615	0.3691	-0.5719u	-0.6558u
Cr 267.716	1.9076	2.5209	2.1345
Cu 324.754	0.6333	0.5423	0.4853
Fe 271.441	13104.8	13089.3	13098.8
K 766.491	1042.34	1040.67	1040.80
Mg 279.078	1624.69	1622.20	1620.88
Mn 257.610	15.9859	16.0537	15.9894
Mo 202.032	-1.3494u	0.2107	0.1320
Na 330.237	13428.4	13902.2	13545.7
Ni 231.604	0.0375	1.7675	1.8995
Pb 220.353	1.1885	0.0222	-4.7910u
Sb 206.834	-5.5020u	-5.4074u	-4.7612u
Se 196.026	-11.8102u	-7.0326u	-4.8383u
Si 288.158	6947.34	6959.98	6946.47
Sn 189.925	6.5360	5.6044	-6.0046u
Sr 216.596	16.6170	16.7059	17.7167
Ti 334.941	0.1891	0.1666	0.1114

Label	Replicates Concentration		
Tl 190.794	-14.3541u	-10.4291u	-3.6887u
V 292.401	3.7030	3.7946	3.7709
Zn 206.200	6.0110	4.5475	4.1573

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2572	ppb	0.6164	239.7	-41.3273
Al 308.215	372.815	ppb	3.0984	0.8	1034.78
As 188.980	0.1624	ppb	1.3078	805.4	1.0312
B 249.678	25.7623	ppb	0.2220	0.9	89.6995
Ba 389.178	49.6835	ppb	1.6556	3.3	430.534
Be 313.042	0.2604	ppb	0.0050	1.9	27.6680
Ca 370.602	1500	ppb	4.239	0.3	3130
Cd 226.502	-0.1332	ppb	0.1683	126.4	13.3685
Co 228.615	-0.2862	ppb	0.5691	198.8	-8.4171
Cr 267.716	2.1876	ppb	0.3101	14.2	68.3972
Cu 324.754	0.5536	ppb	0.0747	13.5	247.242
Fe 271.441	13097.6	ppb	7.8119	0.1	9845.97
K 766.491	1041.27	ppb	0.9320	0.1	26010.8
Mg 279.078	1622.59	ppb	1.9352	0.1	2255.15
Mn 257.610	16.0097	ppb	0.0382	0.2	1597.33
Mo 202.032	-0.3356	ppb	0.8789	261.9	1.8276
Na 330.237	13625.4	ppb	246.774	1.8	379.206
Ni 231.604	1.2348	ppb	1.0390	84.1	0.0213
Pb 220.353	-1.1935	ppb	3.1697	265.6	5.5560
Sb 206.834	-5.2235	ppb	0.4032	7.7	3.7053
Se 196.026	-7.8937	ppb	3.5648	45.2	-2.5476
Si 288.158	6951.26	ppb	7.5603	0.1	33152.5
Sn 189.925	2.0453	ppb	6.9869	341.6	0.4031
Sr 216.596	17.0132	ppb	0.6109	3.6	73.6005
Ti 334.941	0.1557	ppb	0.0400	25.7	-14.4117
Tl 190.794	-9.4906	ppb	5.3943	56.8	-7.4980
V 292.401	3.7561	ppb	0.0476	1.3	49.6843
Zn 206.200	4.9052	ppb	0.9772	19.9	3.1096

680-161757-C-7-A (Samp) **12/15/2018, 4:27:53 PM** **Rack 2, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0153u	-0.2675u	-0.2663u
Al 308.215	0.4656	3.2327	3.3450
As 188.980	5.7153	3.6041	2.1442
B 249.678	22.6164	24.1291	23.1522
Ba 389.178	7.9988	7.5345	7.0253
Be 313.042	-0.0237u	-0.0101u	-0.0159u
Ca 370.602	23736	23714	23710
Cd 226.502	-0.2560u	-0.4944u	-0.2835u
Co 228.615	-1.1643u	-0.9779u	-1.3988u
Cr 267.716	0.6545	0.1403	0.3933
Cu 324.754	0.4334	0.3782	0.3320
Fe 271.441	7.8790	13.5059	5.5458
K 766.491	2892.68	2886.78	2886.22
Mg 279.078	8421.16	8434.60	8426.73
Mn 257.610	0.0461	-0.0408	0.0265
Mo 202.032	2.2699	-0.3791u	1.2411

Label	Replicates Concentration		
Na 330.237	14177.6	14020.9	14191.8
Ni 231.604	0.5639	-0.3482u	-1.0465u
Pb 220.353	-2.7336u	-7.5517u	-0.6600u
Sb 206.834	-4.0897u	-7.0456u	-1.3658u
Se 196.026	-25.4752u	-7.8104u	-7.9452u
Si 288.158	23364.5	23343.7	23300.1
Sn 189.925	2.3635	0.5678	1.1598
Sr 216.596	338.851	339.476	339.955
Ti 334.941	-0.0697	-0.0971	0.0072
Tl 190.794	-3.4014u	0.2351	-8.8321u
V 292.401	-0.2435u	-0.2553u	0.0642
Zn 206.200	8.4426	10.0933	12.1446

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1729	ppb	0.1629	94.3	-36.8977
Al 308.215	2.3478	ppb	1.6309	69.5	160.542
As 188.980	3.8212	ppb	1.7954	47.0	1.9301
B 249.678	23.2992	ppb	0.7670	3.3	86.4776
Ba 389.178	7.5195	ppb	0.4869	6.5	30.7525
Be 313.042	-0.0166	ppb	0.0068	41.0	-194.683
Ca 370.602	23720	ppb	14.00	0.1	49524
Cd 226.502	-0.3446	ppb	0.1304	37.8	0.6183
Co 228.615	-1.1803	ppb	0.2109	17.9	-12.9579
Cr 267.716	0.3960	ppb	0.2571	64.9	28.3433
Cu 324.754	0.3812	ppb	0.0508	13.3	238.213
Fe 271.441	8.9769	ppb	4.0920	45.6	24.3082
K 766.491	2888.56	ppb	3.5798	0.1	71718.5
Mg 279.078	8427.50	ppb	6.7566	0.1	11634.0
Mn 257.610	0.0106	ppb	0.0456	428.4	67.7341
Mo 202.032	1.0439	ppb	1.3354	127.9	4.8848
Na 330.237	14130.1	ppb	94.8552	0.7	392.752
Ni 231.604	-0.2769	ppb	0.8076	291.6	-1.9220
Pb 220.353	-3.6484	ppb	3.5357	96.9	4.2197
Sb 206.834	-4.1670	ppb	2.8407	68.2	3.9900
Se 196.026	-13.7436	ppb	10.1601	73.9	-3.6511
Si 288.158	23336.1	ppb	32.8542	0.1	110502
Sn 189.925	1.3637	ppb	0.9150	67.1	0.2005
Sr 216.596	339.428	ppb	0.5535	0.2	1303.41
Ti 334.941	-0.0532	ppb	0.0541	101.6	-14.9415
Tl 190.794	-3.9995	ppb	4.5631	114.1	-5.4571
V 292.401	-0.1449	ppb	0.1811	125.0	-4.2294
Zn 206.200	10.2269	ppb	1.8546	18.1	6.2803

680-161757-C-1-A (Samp) **12/15/2018, 4:32:35 PM** **Rack 2, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4405u	-0.5152u	0.0244
Al 308.215	659.808	657.582	662.846
As 188.980	3.9422	2.7051	-0.2347u
B 249.678	32.2506	32.4772	33.0949
Ba 389.178	62.7869	63.2644	62.1658
Be 313.042	0.7194	0.7232	0.7286
Ca 370.602	1177	1176	1183

Label	Replicates Concentration		
Cd 226.502	-0.0092	0.1343	0.0890
Co 228.615	0.0367	-0.3351u	0.3289
Cr 267.716	1.7231	1.4749	1.9153
Cu 324.754	1.8133	1.5574	1.8043
Fe 271.441	1160.92	1170.83	1178.41
K 766.491	471.859	470.961	470.933
Mg 279.078	2039.59	2037.01	2052.88
Mn 257.610	4.3088	4.2954	4.3530
Mo 202.032	-1.5665u	0.2816	-0.6722u
Na 330.237	8677.00	8407.96	8558.99
Ni 231.604	1.7518	1.7109	0.7017
Pb 220.353	0.1508	-3.0545u	5.4806
Sb 206.834	2.8680	-14.0936u	7.7771
Se 196.026	1.9889	-9.6269u	4.1309
Si 288.158	28171.5	28157.9	28183.6
Sn 189.925	-2.5682u	0.2871	2.2948
Sr 216.596	29.3602	28.4550	29.0451
Ti 334.941	0.1933	0.1348	0.3142
Tl 190.794	-2.2803u	-1.8732u	-5.2241u
V 292.401	0.6059	1.1702	-0.3298u
Zn 206.200	4.4664	6.5761	4.1724

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3104	ppb	0.2923	94.2	-40.7609
Al 308.215	660.079	ppb	2.6425	0.4	1711.67
As 188.980	2.1375	ppb	2.1455	100.4	1.5067
B 249.678	32.6076	ppb	0.4370	1.3	146.618
Ba 389.178	62.7390	ppb	0.5509	0.9	552.550
Be 313.042	0.7237	ppb	0.0046	0.6	405.153
Ca 370.602	1179	ppb	3.914	0.3	2485
Cd 226.502	0.0714	ppb	0.0734	102.8	7.8071
Co 228.615	0.0102	ppb	0.3328	3271.6	-7.3726
Cr 267.716	1.7044	ppb	0.2208	13.0	56.6454
Cu 324.754	1.7250	ppb	0.1452	8.4	287.155
Fe 271.441	1170.05	ppb	8.7670	0.7	895.642
K 766.491	471.251	ppb	0.5268	0.1	11906.6
Mg 279.078	2043.16	ppb	8.5167	0.4	2834.86
Mn 257.610	4.3191	ppb	0.0301	0.7	457.455
Mo 202.032	-0.6524	ppb	0.9242	141.7	1.3433
Na 330.237	8547.99	ppb	134.857	1.6	255.470
Ni 231.604	1.3881	ppb	0.5948	42.9	0.2183
Pb 220.353	0.8590	ppb	4.3114	501.9	6.5643
Sb 206.834	-1.1495	ppb	11.4755	998.3	5.2700
Se 196.026	-1.1690	ppb	7.4027	633.2	-1.3648
Si 288.158	28171.0	ppb	12.8153	0.0	133326
Sn 189.925	0.0046	ppb	2.4438	53184.0	-0.2043
Sr 216.596	28.9534	ppb	0.4595	1.6	116.527
Ti 334.941	0.2141	ppb	0.0915	42.7	-6.4814
Tl 190.794	-3.1259	ppb	1.8285	58.5	-5.2583
V 292.401	0.4821	ppb	0.7576	157.1	4.3148
Zn 206.200	5.0717	ppb	1.3111	25.9	3.3642

Cont Calib Verif (CCV) **12/15/2018, 4:37:18 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	491.412	486.017	486.767
Al 308.215	9887.61	9879.85	9880.95
As 188.980	512.103	521.494	511.613
B 249.678	508.133	508.252	508.318
Ba 389.178	486.323	486.314	484.563
Be 313.042	525.527	524.897	524.864
Ca 370.602	10093	10090	10073
Cd 226.502	514.779	513.018	513.375
Co 228.615	505.302	507.331	508.957
Cr 267.716	503.460	502.487	502.814
Cu 324.754	508.540	503.674	504.894
Fe 271.441	10093.6	10069.0	10069.7
K 766.491	9838.17	9843.83	9846.17
Mg 279.078	10256.5	10247.4	10254.9
Mn 257.610	506.111	505.571	505.554
Mo 202.032	502.709	501.613	504.161
Na 330.237	10395.3	10187.7	10259.7
Ni 231.604	513.410	516.620	516.630
Pb 220.353	529.765	520.778	534.338
Sb 206.834	501.984	504.260	505.324
Se 196.026	507.932	519.510	512.806
Si 288.158	4928.42	4932.64	4922.55
Sn 189.925	499.308	506.488	500.919
Sr 216.596	510.285	509.297	510.741
Ti 334.941	496.240	496.605	496.150
Tl 190.794	504.833	503.122	506.545
V 292.401	499.783	500.733	501.375
Zn 206.200	1048.60	1053.93	1053.68

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	488.066	ppb	2.9224	0.6	16924.1	97.61315
Al 308.215	9882.80	ppb	4.1988	0.0	23483.5	98.82802
As 188.980	515.070	ppb	5.5685	1.1	131.103	103.01400
B 249.678	508.234	ppb	0.0935	0.0	3269.85	101.64687
Ba 389.178	485.733	ppb	1.0138	0.2	4611.34	97.14663
Be 313.042	525.096	ppb	0.3735	0.1	427314	105.01920
Ca 370.602	10085	ppb	10.44	0.1	21076	100.85226
Cd 226.502	513.724	ppb	0.9311	0.2	7832.57	102.74485
Co 228.615	507.197	ppb	1.8311	0.4	2349.19	101.43941
Cr 267.716	502.920	ppb	0.4951	0.1	10863.6	100.58400
Cu 324.754	505.703	ppb	2.5316	0.5	18571.9	101.14053
Fe 271.441	10077.4	ppb	13.9808	0.1	7611.14	100.72384
K 766.491	9842.72	ppb	4.1127	0.0	243787	98.42724
Mg 279.078	10252.9	ppb	4.8758	0.0	14142.6	102.52943
Mn 257.610	505.745	ppb	0.3166	0.1	48987.0	101.14902
Mo 202.032	502.828	ppb	1.2777	0.3	1047.18	100.56551
Na 330.237	10280.9	ppb	105.439	1.0	294.226	102.80917
Ni 231.604	515.553	ppb	1.8560	0.4	660.970	103.11068
Pb 220.353	528.294	ppb	6.8987	1.3	280.736	105.65877
Sb 206.834	503.856	ppb	1.7060	0.3	211.908	100.77113
Se 196.026	513.416	ppb	5.8135	1.1	92.1079	102.68319
Si 288.158	4927.87	ppb	5.0668	0.1	23735.6	98.55743

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	502.239	ppb	3.7674	0.8	149.132	100.44771
Sr 216.596	510.108	ppb	0.7384	0.1	1947.36	102.02157
Ti 334.941	496.332	ppb	0.2409	0.0	54479.2	99.26639
Tl 190.794	504.833	ppb	1.7116	0.3	134.971	100.96667
V 292.401	500.630	ppb	0.8009	0.2	6514.89	100.12610
Zn 206.200	1052.07	ppb	3.0087	0.3	591.865	105.20691

Cont Calib Blank (CCB) **12/15/2018, 4:42:01 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0616	-0.2201u	0.2836
Al 308.215	0.7191	-0.6014u	-2.4570u
As 188.980	6.7695	0.8332	11.4661
B 249.678	3.6232	2.2849	4.0288
Ba 389.178	0.4736	-0.9293u	-1.9192u
Be 313.042	0.0126	0.0054	0.0373
Ca 370.602	-7.278u	-2.469u	-3.463u
Cd 226.502	-0.0326u	0.2389	-0.5327u
Co 228.615	-0.0717u	0.3108	-1.3151u
Cr 267.716	0.1464	0.1049	-0.3669u
Cu 324.754	-0.1194u	0.7647	0.5395
Fe 271.441	-15.6843u	-8.2779u	12.3488
K 766.491	0.8021	0.9765	0.7200
Mg 279.078	4.1276	6.1870	4.6861
Mn 257.610	0.0060	0.0638	0.0392
Mo 202.032	1.0383	-0.3314u	0.2828
Na 330.237	70.1410	-41.0977u	-38.1519u
Ni 231.604	1.3706	0.4986	1.1167
Pb 220.353	5.4435	0.3604	-2.3434u
Sb 206.834	0.5613	-3.8627u	7.6590
Se 196.026	-7.9231u	-8.5883u	2.9943
Si 288.158	-3.5703u	-3.1985u	-2.7176u
Sn 189.925	-0.3578u	0.4584	7.2510
Sr 216.596	0.5841	0.1934	1.2968
Ti 334.941	0.2000	0.1457	0.0828
Tl 190.794	7.7216	-5.8020u	-2.1545u
V 292.401	0.4602	0.0037	-0.0824u
Zn 206.200	0.9321	0.2042	1.3159

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0417	ppb	0.2524	605.5	-28.1769	0.04169
Al 308.215	-0.7798	ppb	1.5955	204.6	153.155	-0.77980
As 188.980	6.3563	ppb	5.3284	83.8	2.5714	6.35627
B 249.678	3.3123	ppb	0.9125	27.6	-45.1288	3.31230
Ba 389.178	-0.7916	ppb	1.2023	151.9	-57.6256	-0.79162
Be 313.042	0.0184	ppb	0.0167	90.9	-168.906	0.01842
Ca 370.602	-4.403	ppb	2.539	57.7	18.29	-4.40338
Cd 226.502	-0.1088	ppb	0.3914	359.7	4.1833	-0.10882
Co 228.615	-0.3587	ppb	0.8501	237.0	-9.1309	-0.35869
Cr 267.716	-0.0386	ppb	0.2851	739.5	18.8668	-0.03855
Cu 324.754	0.3949	ppb	0.4594	116.3	238.684	0.39495
Fe 271.441	-3.8711	ppb	14.5269	375.3	14.7172	-3.87114
K 766.491	0.8329	ppb	0.1310	15.7	266.999	0.83288

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	5.0003	ppb	1.0650	21.3	26.0093	5.00026
Mn 257.610	0.0363	ppb	0.0290	79.9	33.4203	0.03633
Mo 202.032	0.3299	ppb	0.6861	208.0	3.4013	0.32989
Na 330.237	-3.0360	ppb	63.3904	2088.0	45.4335	-3.03600
Ni 231.604	0.9953	ppb	0.4485	45.1	-0.2866	0.99532
Pb 220.353	1.1535	ppb	3.9536	342.8	6.7192	1.15347
Sb 206.834	1.4525	ppb	5.8123	400.1	6.3213	1.45255
Se 196.026	-4.5057	ppb	6.5037	144.3	-1.9745	-4.50570
Si 288.158	-3.1622uv	ppb	0.4275	13.5	322.553	-3.16216
Sn 189.925	2.4505	ppb	4.1773	170.5	0.5220	2.45053
Sr 216.596	0.6914	ppb	0.5595	80.9	8.1899	0.69143
Ti 334.941	0.1429	ppb	0.0587	41.1	-20.7868	0.14285
Tl 190.794	-0.0783	ppb	6.9968	8934.0	-4.3733	-0.07832
V 292.401	0.1272	ppb	0.2916	229.2	-0.5777	0.12720
Zn 206.200	0.8174	ppb	0.5647	69.1	0.9882	0.81740

680-161757-C-2-A (Samp) **12/15/2018, 4:46:42 PM** **Rack 2, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1526	0.3757	0.0072u
Al 308.215	521.825	519.276	521.195
As 188.980	-3.6921u	-0.6021u	-3.2617u
B 249.678	25.3482	24.7320	24.3514
Ba 389.178	97.7841	96.9147	95.8722
Be 313.042	0.5122	0.5066	0.5018
Ca 370.602	1426	1432	1425
Cd 226.502	0.0949	-0.0358	0.0670
Co 228.615	0.3016	-0.4156u	1.1287
Cr 267.716	0.9872	1.1607	1.0871
Cu 324.754	0.1202	1.0124	1.0567
Fe 271.441	7373.29	7360.12	7360.25
K 766.491	623.106	623.134	621.623
Mg 279.078	2067.69	2056.64	2058.64
Mn 257.610	12.7922	12.7954	12.8036
Mo 202.032	-0.8332u	0.8531	0.3197
Na 330.237	6205.82	6053.66	6236.96
Ni 231.604	3.3853	2.1217	1.7121
Pb 220.353	-2.0082u	2.1397	1.7117
Sb 206.834	-7.0198u	-1.1444u	-8.3119u
Se 196.026	-0.1335u	1.0185	11.2598
Si 288.158	6321.04	6308.67	6320.28
Sn 189.925	-2.0725u	-0.1971u	1.7837
Sr 216.596	26.4778	26.9244	25.6634
Ti 334.941	-0.0033	0.2421	0.0898
Tl 190.794	-0.1559u	-2.3480u	-8.0378u
V 292.401	1.9904	1.7935	1.5382
Zn 206.200	6.3328	8.0265	5.0058

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1785	ppb	0.1856	104.0	-25.0382
Al 308.215	520.765	ppb	1.3278	0.3	1383.42
As 188.980	-2.5186	ppb	1.6737	66.5	0.3416
B 249.678	24.8105	ppb	0.5030	2.0	89.1276

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	96.8570	ppb	0.9573	1.0	880.646
Be 313.042	0.5069	ppb	0.0052	1.0	228.630
Ca 370.602	1428	ppb	3.600	0.3	2991
Cd 226.502	0.0420	ppb	0.0688	163.8	11.8748
Co 228.615	0.3382	ppb	0.7728	228.5	-5.6862
Cr 267.716	1.0783	ppb	0.0871	8.1	43.8077
Cu 324.754	0.7298	ppb	0.5283	72.4	252.416
Fe 271.441	7364.55	ppb	7.5666	0.1	5543.93
K 766.491	622.621	ppb	0.8642	0.1	15652.0
Mg 279.078	2060.99	ppb	5.8830	0.3	2859.37
Mn 257.610	12.7971	ppb	0.0058	0.0	1283.13
Mo 202.032	0.1132	ppb	0.8619	761.3	2.8438
Na 330.237	6165.48	ppb	98.0860	1.6	196.370
Ni 231.604	2.4064	ppb	0.8722	36.2	1.5277
Pb 220.353	0.6144	ppb	2.2813	371.3	6.4678
Sb 206.834	-5.4920	ppb	3.8202	69.6	3.5267
Se 196.026	4.0483	ppb	6.2719	154.9	-0.3980
Si 288.158	6316.66	ppb	6.9315	0.1	30156.8
Sn 189.925	-0.1620	ppb	1.9283	1190.5	-0.2541
Sr 216.596	26.3552	ppb	0.6394	2.4	107.993
Ti 334.941	0.1095	ppb	0.1239	113.1	-17.8235
Tl 190.794	-3.5139	ppb	4.0682	115.8	-5.6181
V 292.401	1.7740	ppb	0.2267	12.8	22.4951
Zn 206.200	6.4550	ppb	1.5141	23.5	4.0592

680-161757-C-3-A (Samp) **12/15/2018, 4:51:25 PM** **Rack 2, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.9668u	0.3170	-0.1115u
Al 308.215	195.474	200.499	192.464
As 188.980	1.2426	3.6675	0.4911
B 249.678	18.9160	19.1010	19.8312
Ba 389.178	73.1491	73.2487	73.9693
Be 313.042	0.1936	0.1937	0.2022
Ca 370.602	919.6	918.6	914.8
Cd 226.502	-0.4987u	-0.1706u	0.0771
Co 228.615	-1.4107u	-0.9842u	-0.1886u
Cr 267.716	1.8728	1.2357	1.6115
Cu 324.754	0.3466	0.5085	0.3631
Fe 271.441	2956.35	2965.73	2970.32
K 766.491	880.056	881.538	881.630
Mg 279.078	886.581	888.224	886.967
Mn 257.610	9.6794	9.5432	9.5123
Mo 202.032	0.0108u	0.4007	0.7026
Na 330.237	6954.06	6877.77	7145.39
Ni 231.604	-1.0975u	1.3881	3.8945
Pb 220.353	-0.7612u	-3.0453u	4.9273
Sb 206.834	0.1068	0.6573	-2.7627u
Se 196.026	-7.7035u	-2.4152u	3.7935
Si 288.158	8516.03	8512.05	8504.06
Sn 189.925	4.8331	1.2219	1.1705
Sr 216.596	19.3037	19.4431	19.6585
Ti 334.941	0.9593	0.9285	0.9688

Label	Replicates Concentration		
Tl 190.794	0.7026	5.1430	-8.6430u
V 292.401	1.3623	1.5112	0.8454
Zn 206.200	4.2232	2.4772	1.5823

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2538	ppb	0.6536	257.6	-39.1127
Al 308.215	196.146	ppb	4.0593	2.1	617.708
As 188.980	1.8004	ppb	1.6600	92.2	1.4250
B 249.678	19.2827	ppb	0.4839	2.5	57.0979
Ba 389.178	73.4557	ppb	0.4476	0.6	654.343
Be 313.042	0.1965	ppb	0.0049	2.5	-24.1817
Ca 370.602	917.7	ppb	2.571	0.3	1936
Cd 226.502	-0.1974	ppb	0.2888	146.3	4.9963
Co 228.615	-0.8612	ppb	0.6203	72.0	-11.3771
Cr 267.716	1.5733	ppb	0.3203	20.4	54.0055
Cu 324.754	0.4061	ppb	0.0891	21.9	239.727
Fe 271.441	2964.13	ppb	7.1187	0.2	2241.86
K 766.491	881.075	ppb	0.8832	0.1	22047.0
Mg 279.078	887.258	ppb	0.8594	0.1	1241.81
Mn 257.610	9.5783	ppb	0.0889	0.9	962.604
Mo 202.032	0.3714	ppb	0.3469	93.4	3.4443
Na 330.237	6992.41	ppb	137.873	2.0	217.089
Ni 231.604	1.3950	ppb	2.4960	178.9	0.2278
Pb 220.353	0.3736	ppb	4.1056	1098.9	6.3254
Sb 206.834	-0.6662	ppb	1.8364	275.7	5.4783
Se 196.026	-2.1084	ppb	5.7546	272.9	-1.5293
Si 288.158	8510.71	ppb	6.0961	0.1	40514.8
Sn 189.925	2.4085	ppb	2.0999	87.2	0.5103
Sr 216.596	19.4685	ppb	0.1788	0.9	80.6617
Ti 334.941	0.9522	ppb	0.0211	2.2	70.7707
Tl 190.794	-0.9325	ppb	7.0369	754.6	-4.7283
V 292.401	1.2396	ppb	0.3494	28.2	14.5587
Zn 206.200	2.7609	ppb	1.3431	48.6	2.0406

680-161757-C-4-A (Samp) **12/15/2018, 4:56:07 PM** **Rack 2, Tube 13**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2432u	-0.2829u	-0.0487u
Al 308.215	1351.82	1349.42	1347.37
As 188.980	0.6390	4.6150	-2.3417u
B 249.678	29.6789	30.4105	29.7767
Ba 389.178	96.6603	96.5164	97.5040
Be 313.042	2.0079	2.0095	1.9941
Ca 370.602	11273	11298	11295
Cd 226.502	-0.5035	-0.0209	-0.2820
Co 228.615	0.5743	1.9896	1.2471
Cr 267.716	3.5002	3.7037	3.7619
Cu 324.754	0.8777	0.9372	-0.2629u
Fe 271.441	37280.3	37366.4	37335.9
K 766.491	1134.90	1132.93	1135.11
Mg 279.078	7993.87	8022.86	8015.75
Mn 257.610	52.8531	53.0482	52.9744
Mo 202.032	0.6384	-0.3131u	-0.2849u

Label	Replicates Concentration		
Na 330.237	12340.0	12412.7	12338.8
Ni 231.604	7.3537	8.1351	9.1566
Pb 220.353	5.5896	-2.6355u	3.2478
Sb 206.834	-4.2616u	-3.1013u	-12.7960u
Se 196.026	-14.5715u	7.4608	-3.6323u
Si 288.158	23600.2	23609.5	23623.9
Sn 189.925	-0.1404u	5.0298	1.0102
Sr 216.596	152.116	153.332	152.040
Ti 334.941	0.0302	-0.0427	0.2007
Tl 190.794	6.3676	14.1740	-4.7754u
V 292.401	3.3481	3.7410	4.0084
Zn 206.200	12.4254	14.5299	15.0005

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1916	ppb	0.1253	65.4	-44.5474
Al 308.215	1349.53	ppb	2.2273	0.2	3339.06
As 188.980	0.9708	ppb	3.4902	359.5	1.2843
B 249.678	29.9554	ppb	0.3972	1.3	93.2439
Ba 389.178	96.8935	ppb	0.5335	0.6	895.567
Be 313.042	2.0038	ppb	0.0084	0.4	1448.31
Ca 370.602	11289	ppb	13.81	0.1	23507
Cd 226.502	-0.2688	ppb	0.2415	89.9	29.0675
Co 228.615	1.2703	ppb	0.7079	55.7	-0.5101
Cr 267.716	3.6553	ppb	0.1374	3.8	102.713
Cu 324.754	0.5173	ppb	0.6763	130.7	251.197
Fe 271.441	37327.5	ppb	43.6374	0.1	28027.9
K 766.491	1134.31	ppb	1.2007	0.1	28312.9
Mg 279.078	8010.82	ppb	15.1101	0.2	11058.9
Mn 257.610	52.9586	ppb	0.0985	0.2	5220.64
Mo 202.032	0.0135	ppb	0.5414	4022.0	2.2007
Na 330.237	12363.8	ppb	42.2945	0.3	346.036
Ni 231.604	8.2151	ppb	0.9041	11.0	8.9972
Pb 220.353	2.0673	ppb	4.2377	205.0	7.3575
Sb 206.834	-6.7196	ppb	5.2942	78.8	3.3302
Se 196.026	-3.5810	ppb	11.0163	307.6	-1.6867
Si 288.158	23611.2	ppb	11.9110	0.1	111800
Sn 189.925	1.9665	ppb	2.7145	138.0	0.3795
Sr 216.596	152.496	ppb	0.7252	0.5	597.146
Ti 334.941	0.0627	ppb	0.1250	199.2	-3.5021
Tl 190.794	5.2554	ppb	9.5236	181.2	-4.4245
V 292.401	3.6992	ppb	0.3321	9.0	53.9895
Zn 206.200	13.9853	ppb	1.3712	9.8	7.8891

680-161765-A-6-A (Samp) **12/15/2018, 5:00:48 PM** **Rack 2, Tube 14**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1349u	-0.5285u	-0.3435u
Al 308.215	4.0839	5.1301	5.4652
As 188.980	23.3031	22.2073	25.7594
B 249.678	1235.59	1233.11	1234.36
Ba 389.178	921.576	924.018	924.368
Be 313.042	-0.0318u	-0.0323u	-0.0342u
Ca 370.602	132842	132741	132653

Label	Replicates Concentration		
Cd 226.502	-0.1134	-0.4155	-0.0918
Co 228.615	-1.1952u	-0.8233u	-1.0449u
Cr 267.716	-0.7881u	-0.4523u	-0.7279u
Cu 324.754	0.0647	0.3186	-0.0029
Fe 271.441	29437.5	29418.2	29407.1
K 766.491	12431.4	12412.3	12425.3
Mg 279.078	29340.3	29306.0	29325.1
Mn 257.610	1226.84	1225.05	1225.78
Mo 202.032	-0.2312u	-0.4817u	0.5119
Na 330.237	174249x	173781x	173878x
Ni 231.604	1.5935	-1.7987u	-0.1472u
Pb 220.353	-9.6515u	1.2940	-5.0267u
Sb 206.834	-10.5367u	0.7077	-1.9005u
Se 196.026	0.1017	16.7214	-10.0561u
Si 288.158	10448.9	10448.5	10462.3
Sn 189.925	3.9455	-4.3443u	6.4792
Sr 216.596	760.798	758.506	758.034
Ti 334.941	-0.5261	-0.4516	-0.3230
Tl 190.794	-11.3580u	-2.0770u	1.5677u
V 292.401	1.3307	0.7900	0.8979
Zn 206.200	3.3533	1.3225	3.7891

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3356b	ppb	0.1969	58.7	-47.7724
Al 308.215	4.8931b	ppb	0.7205	14.7	167.675
As 188.980	23.7566b	ppb	1.8190	7.7	7.0314
B 249.678	1234.35b	ppb	1.2417	0.1	8032.32
Ba 389.178	923.321b	ppb	1.5214	0.2	8821.02
Be 313.042	-0.0327b	ppb	0.0013	3.8	-199.579
Ca 370.602	132746b	ppb	94.41	0.1	276989
Cd 226.502	-0.2069b	ppb	0.1810	87.5	23.9406
Co 228.615	-1.0211b	ppb	0.1871	18.3	-11.3789
Cr 267.716	-0.6561b	ppb	0.1791	27.3	12.3921
Cu 324.754	0.1268b	ppb	0.1695	133.7	235.336
Fe 271.441	29420.9b	ppb	15.4147	0.1	22094.7
K 766.491	12423.0b	ppb	9.7875	0.1	307631
Mg 279.078	29323.8b	ppb	17.2184	0.1	40420.8
Mn 257.610	1225.89b	ppb	0.9007	0.1	118700
Mo 202.032	-0.0670b	ppb	0.5167	771.3	2.1491
Na 330.237	173969xb	ppb	246.723	0.1	4318.46
Ni 231.604	-0.1174b	ppb	1.6963	1444.4	-1.7175
Pb 220.353	-4.4614b	ppb	5.4946	123.2	4.0172
Sb 206.834	-3.9098b	ppb	5.8853	150.5	4.3987
Se 196.026	2.2557b	ppb	13.5181	599.3	-0.5453
Si 288.158	10453.2b	ppb	7.8495	0.1	49684.4
Sn 189.925	2.0268b	ppb	5.6611	279.3	0.4166
Sr 216.596	759.113b	ppb	1.4783	0.2	2914.93
Ti 334.941	-0.4336b	ppb	0.1027	23.7	7.5887
Tl 190.794	-3.9558b	ppb	6.6645	168.5	-6.3502
V 292.401	1.0062b	ppb	0.2862	28.4	16.6928
Zn 206.200	2.8216b	ppb	1.3164	46.7	1.7189

680-161765-A-1-A (Samp) **12/15/2018, 5:05:29 PM** **Rack 2, Tube 15**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1421u	-0.7692u	-1.0574u
Al 308.215	9.2051	7.9872	10.5970
As 188.980	4.4960	-2.3552u	5.0214
B 249.678	435.336	433.200	433.384
Ba 389.178	325.304	322.819	323.178
Be 313.042	-0.0430	-0.0613u	-0.0597u
Ca 370.602	252613	252357	252129
Cd 226.502	0.1243	-0.4868u	-0.0597
Co 228.615	-1.1054u	-0.7355u	-0.1800u
Cr 267.716	-0.4009u	-0.6180u	-0.1496
Cu 324.754	-0.2385u	-0.2043u	0.3242
Fe 271.441	3953.88	3957.56	3957.43
K 766.491	25371.5	25410.2	25403.4
Mg 279.078	21270.6	21289.4	21308.2
Mn 257.610	2247.91	2250.07	2246.15
Mo 202.032	-3.7184u	-0.2728u	1.1899
Na 330.237	14955.7	15227.2	15358.9
Ni 231.604	0.7853	2.0433	1.4232
Pb 220.353	7.9680	-0.7604u	3.5149
Sb 206.834	-5.6244u	-2.1898u	-7.0099u
Se 196.026	-0.0839	3.6035	-4.7224u
Si 288.158	21988.2	22004.9	21972.5
Sn 189.925	3.0693	2.1663	8.2355
Sr 216.596	1336.26	1334.74	1333.61
Ti 334.941	-0.0948	0.0319	0.0276
Tl 190.794	3.6955	-8.8990u	-6.3161u
V 292.401	-0.1816u	1.2211	-0.1997u
Zn 206.200	9.1404	13.2214	11.2418

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6562	ppb	0.4680	71.3	-53.4761
Al 308.215	9.2631	ppb	1.3059	14.1	176.986
As 188.980	2.3874	ppb	4.1156	172.4	1.5757
B 249.678	433.973	ppb	1.1840	0.3	2786.97
Ba 389.178	323.767	ppb	1.3432	0.4	3070.44
Be 313.042	-0.0547	ppb	0.0101	18.5	-191.500
Ca 370.602	252367	ppb	242.1	0.1	526673
Cd 226.502	-0.1407	ppb	0.3135	222.8	6.6613
Co 228.615	-0.6736	ppb	0.4658	69.1	-10.4656
Cr 267.716	-0.3895	ppb	0.2344	60.2	16.1985
Cu 324.754	-0.0395	ppb	0.3155	798.2	223.771
Fe 271.441	3956.29	ppb	2.0901	0.1	2986.37
K 766.491	25395.0	ppb	20.6619	0.1	628600
Mg 279.078	21289.4	ppb	18.8301	0.1	29337.0
Mn 257.610	2248.04	ppb	1.9657	0.1	217458
Mo 202.032	-0.9338	ppb	2.5201	269.9	0.7184
Na 330.237	15180.6	ppb	205.630	1.4	418.219
Ni 231.604	1.4173	ppb	0.6290	44.4	0.2561
Pb 220.353	3.5742	ppb	4.3645	122.1	8.1497
Sb 206.834	-4.9414	ppb	2.4816	50.2	3.7238
Se 196.026	-0.4009	ppb	4.1720	1040.6	-1.0133
Si 288.158	21988.6	ppb	16.2100	0.1	104141

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	4.4904	ppb	3.2746	72.9	1.1303
Sr 216.596	1334.87	ppb	1.3260	0.1	5110.62
Ti 334.941	-0.0118	ppb	0.0719	610.5	31.8759
Tl 190.794	-3.8399	ppb	6.6523	173.2	-5.0144
V 292.401	0.2799	ppb	0.8152	291.2	2.3733
Zn 206.200	11.2012	ppb	2.0408	18.2	6.7753

680-161765-A-2-A (Samp) **12/15/2018, 5:10:10 PM** **Rack 2, Tube 16**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2377u	-0.6078u	-0.0229u
Al 308.215	8.9132	9.6445	4.5320
As 188.980	-1.3130u	-1.2318u	7.3685
B 249.678	397.952	397.890	399.131
Ba 389.178	158.301	156.441	156.660
Be 313.042	-0.0339u	-0.0320u	-0.0512u
Ca 370.602	148391	148395	148353
Cd 226.502	-0.0916	0.2189	-0.0807
Co 228.615	0.7425	0.5112	0.1968
Cr 267.716	0.0260	0.3551	-0.0313
Cu 324.754	0.5867	-0.1611u	-0.2387u
Fe 271.441	1853.52	1865.84	1843.54
K 766.491	4877.55	4884.75	4884.93
Mg 279.078	31649.0	31652.4	31624.0
Mn 257.610	463.101	463.081	462.747
Mo 202.032	1.7944	2.1352	2.3559
Na 330.237	11850.9	11694.9	11274.9
Ni 231.604	4.2852	0.9056	0.2096
Pb 220.353	-1.3148u	3.2660	4.8339
Sb 206.834	-4.2529u	3.5962	2.3491
Se 196.026	-15.6165u	4.9677	3.1380
Si 288.158	13092.5	13093.9	13097.1
Sn 189.925	0.5592	4.2980	-1.1123u
Sr 216.596	626.215	623.379	622.991
Ti 334.941	-0.4721	-0.6654	-0.5893
Tl 190.794	-0.6445u	-7.0884u	-13.4882u
V 292.401	1.7605	0.6580	0.4268
Zn 206.200	4.6096	2.8843	4.7719

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2895	ppb	0.2958	102.2	-41.5872
Al 308.215	7.6966	ppb	2.7648	35.9	173.272
As 188.980	1.6079	ppb	4.9890	310.3	1.3740
B 249.678	398.324	ppb	0.6997	0.2	2554.26
Ba 389.178	157.134	ppb	1.0163	0.6	1486.85
Be 313.042	-0.0390	ppb	0.0106	27.1	-194.201
Ca 370.602	148380	ppb	23.09	0.0	309656
Cd 226.502	0.0155	ppb	0.1762	1134.8	7.5735
Co 228.615	0.4835	ppb	0.2739	56.7	-5.1832
Cr 267.716	0.1166	ppb	0.2085	178.9	23.3955
Cu 324.754	0.0623	ppb	0.4558	731.6	227.058
Fe 271.441	1854.30	ppb	11.1719	0.6	1409.12
K 766.491	4882.41	ppb	4.2112	0.1	121053

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	31641.8	ppb	15.5251	0.0	43623.5
Mn 257.610	462.977	ppb	0.1989	0.0	44928.7
Mo 202.032	2.0951	ppb	0.2829	13.5	7.0417
Na 330.237	11606.9	ppb	297.925	2.6	330.592
Ni 231.604	1.8001	ppb	2.1801	121.1	0.7476
Pb 220.353	2.2617	ppb	3.1950	141.3	7.3352
Sb 206.834	0.5641	ppb	4.2180	747.7	5.9567
Se 196.026	-2.5036	ppb	11.3929	455.1	-1.5632
Si 288.158	13094.5	ppb	2.3524	0.0	62154.0
Sn 189.925	1.2483	ppb	2.7702	221.9	0.1659
Sr 216.596	624.195	ppb	1.7602	0.3	2392.68
Ti 334.941	-0.5756	ppb	0.0974	16.9	4.2852
Tl 190.794	-7.0737	ppb	6.4219	90.8	-6.2626
V 292.401	0.9484	ppb	0.7127	75.1	10.5726
Zn 206.200	4.0886	ppb	1.0461	25.6	2.8029

680-161765-A-3-A (Samp) **12/15/2018, 5:14:51 PM** **Rack 2, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1705	-0.2117u	0.2638
Al 308.215	8.0109	7.6631	7.1096
As 188.980	5.3006	9.2813	7.3571
B 249.678	194.641	194.099	194.469
Ba 389.178	79.3886	79.1470	77.3957
Be 313.042	-0.0159u	-0.0212u	-0.0331u
Ca 370.602	73857	73865	73740
Cd 226.502	0.6689	0.4338	0.6297
Co 228.615	-0.4586u	-1.1154u	-1.2986u
Cr 267.716	-0.1002u	-0.0580u	-0.3847u
Cu 324.754	0.7831	1.0597	1.3292
Fe 271.441	981.836	979.714	972.905
K 766.491	5455.15	5465.79	5449.62
Mg 279.078	8426.00	8425.56	8418.63
Mn 257.610	52.1537	52.2447	51.8835
Mo 202.032	-1.6085u	0.8585	0.7433
Na 330.237	12409.3	12378.4	12376.4
Ni 231.604	1.6128	0.4186	-1.2994u
Pb 220.353	-7.5170u	-4.1394u	-2.2160u
Sb 206.834	-3.5960u	-1.5269u	-6.7323u
Se 196.026	-10.4061u	6.2059	9.5882
Si 288.158	6297.31	6298.60	6289.33
Sn 189.925	-1.5745u	0.1270	-2.7316u
Sr 216.596	288.716	291.319	289.991
Ti 334.941	0.0934	0.0337	0.0296
Tl 190.794	-15.9340u	0.0477u	-1.6155u
V 292.401	0.2789	0.2143	0.5553
Zn 206.200	8.5099	8.2862	8.0730

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0742	ppb	0.2519	339.6	-28.2630
Al 308.215	7.5946	ppb	0.4545	6.0	172.942
As 188.980	7.3130	ppb	1.9907	27.2	2.8154
B 249.678	194.403	ppb	0.2771	0.1	1212.28

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	78.6437	ppb	1.0876	1.4	711.347
Be 313.042	-0.0234	ppb	0.0088	37.6	-192.399
Ca 370.602	73821	ppb	70.06	0.1	154067
Cd 226.502	0.5775	ppb	0.1259	21.8	15.3557
Co 228.615	-0.9575	ppb	0.4417	46.1	-11.8781
Cr 267.716	-0.1810	ppb	0.1777	98.2	16.0940
Cu 324.754	1.0573	ppb	0.2731	25.8	262.903
Fe 271.441	978.152	ppb	4.6659	0.5	751.584
K 766.491	5456.85	ppb	8.2142	0.2	135266
Mg 279.078	8423.40	ppb	4.1327	0.0	11627.8
Mn 257.610	52.0940	ppb	0.1879	0.4	5104.08
Mo 202.032	-0.0022	ppb	1.3923	62318.1	2.6971
Na 330.237	12388.1	ppb	18.4599	0.1	349.856
Ni 231.604	0.2440	ppb	1.4639	600.1	-1.2524
Pb 220.353	-4.6241	ppb	2.6836	58.0	3.7201
Sb 206.834	-3.9517	ppb	2.6209	66.3	4.1014
Se 196.026	1.7960	ppb	10.7018	595.9	-0.8229
Si 288.158	6295.08	ppb	5.0201	0.1	30055.1
Sn 189.925	-1.3930	ppb	1.4379	103.2	-0.6194
Sr 216.596	290.009	ppb	1.3019	0.4	1114.69
Ti 334.941	0.0522	ppb	0.0357	68.3	-3.3483
Tl 190.794	-5.8339	ppb	8.7864	150.6	-5.9858
V 292.401	0.3495	ppb	0.1811	51.8	2.5834
Zn 206.200	8.2897	ppb	0.2184	2.6	5.1780

680-161765-A-5-A (Samp) **12/15/2018, 5:19:32 PM** **Rack 2, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3204u	-0.3803u	0.0530u
Al 308.215	7.3470	6.6067	5.1472
As 188.980	7.2285	2.4316	8.3634
B 249.678	143.127	141.792	141.204
Ba 389.178	1560.41	1555.32	1553.80
Be 313.042	-0.0477u	-0.0509u	-0.0521u
Ca 370.602	229411	229199	229156
Cd 226.502	0.0124	-0.0634u	0.2215
Co 228.615	-1.6073u	-1.2725u	-0.6429u
Cr 267.716	-0.7301u	-0.3616u	-0.7642u
Cu 324.754	0.4081	0.1462	0.4539
Fe 271.441	546.376	553.068	552.914
K 766.491	10173.0	10156.0	10141.6
Mg 279.078	63242.5	63286.7	63301.7
Mn 257.610	1092.15	1090.74	1091.40
Mo 202.032	-0.0568u	-0.5566u	0.1020
Na 330.237	180900x	181067x	181397x
Ni 231.604	1.4300	0.7372	0.5577
Pb 220.353	1.7139	-0.4150u	-2.0937u
Sb 206.834	-5.0124u	-7.5253u	1.3311
Se 196.026	5.6749	1.7939	-8.2549u
Si 288.158	5959.22	5953.77	5964.28
Sn 189.925	5.1977	2.1909	-0.5410u
Sr 216.596	2708.32	2697.30	2704.78
Ti 334.941	-1.3671	-1.3143	-1.3464

Label	Replicates Concentration		
Tl 190.794	-5.0646u	-1.0648u	-13.3655u
V 292.401	0.3424	0.3385	-0.0588u
Zn 206.200	3.7395	5.2455	4.3795

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2159b	ppb	0.2348	108.8	-44.9589
Al 308.215	6.3670b	ppb	1.1193	17.6	170.034
As 188.980	6.0078b	ppb	3.1486	52.4	2.4845
B 249.678	142.041b	ppb	0.9856	0.7	867.889
Ba 389.178	1556.51b	ppb	3.4630	0.2	14905.6
Be 313.042	-0.0502b	ppb	0.0023	4.6	-199.571
Ca 370.602	229255b	ppb	136.2	0.1	478433
Cd 226.502	0.0568b	ppb	0.1475	259.6	7.0513
Co 228.615	-1.1742b	ppb	0.4897	41.7	-12.8973
Cr 267.716	-0.6186b	ppb	0.2232	36.1	9.8883
Cu 324.754	0.3361b	ppb	0.1660	49.4	236.663
Fe 271.441	550.786b	ppb	3.8201	0.7	430.887
K 766.491	10156.9b	ppb	15.7264	0.2	251560
Mg 279.078	63277.0b	ppb	30.7880	0.0	87217.0
Mn 257.610	1091.43b	ppb	0.7093	0.1	105821
Mo 202.032	-0.1705b	ppb	0.3437	201.6	2.3536
Na 330.237	181121xb	ppb	252.937	0.1	4496.78
Ni 231.604	0.9083b	ppb	0.4606	50.7	-0.3978
Pb 220.353	-0.2649b	ppb	1.9082	720.3	6.0575
Sb 206.834	-3.7355b	ppb	4.5642	122.2	4.1832
Se 196.026	-0.2620b	ppb	7.1889	2743.5	-1.1033
Si 288.158	5959.09b	ppb	5.2552	0.1	28469.2
Sn 189.925	2.2825b	ppb	2.8705	125.8	0.4934
Sr 216.596	2703.47b	ppb	5.6269	0.2	10343.0
Ti 334.941	-1.3426b	ppb	0.0266	2.0	19.4387
Tl 190.794	-6.4983b	ppb	6.2744	96.6	-5.8942
V 292.401	0.2074b	ppb	0.2305	111.2	0.3443
Zn 206.200	4.4548b	ppb	0.7558	17.0	3.0268

660-91250-B-1-A (Samp) **12/15/2018, 5:24:13 PM** **Rack 2, Tube 19**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5605	-0.0867u	-0.4885u
Al 308.215	26.7789	19.6160	25.5831
As 188.980	2.7435	2.6455	5.7762
B 249.678	43.3779	42.0114	43.6394
Ba 389.178	8.6996	8.8433	8.6306
Be 313.042	-0.0313u	-0.0305u	-0.0394u
Ca 370.602	87349	87389	87291
Cd 226.502	0.0654	0.3188	-0.5422u
Co 228.615	-0.2401u	-0.5921u	-1.1678u
Cr 267.716	0.1821	-0.8455u	0.2196
Cu 324.754	1.3309	0.2487	0.7505
Fe 271.441	16.5838	14.7856	17.9196
K 766.491	3268.44	3265.83	3264.90
Mg 279.078	1739.34	1733.29	1737.05
Mn 257.610	2.1709	2.0924	2.1635
Mo 202.032	0.2947	-0.2743u	-0.7228u

Label	Replicates Concentration		
Na 330.237	26172.3	25754.0	25744.3
Ni 231.604	-0.3758u	0.5112	1.4266
Pb 220.353	0.8085	-3.4936u	4.9539
Sb 206.834	-4.7127u	-6.7284u	-8.3441u
Se 196.026	-2.2146u	-2.5925u	-6.4271u
Si 288.158	12804.8	12821.0	12813.6
Sn 189.925	1.3582	0.0009	3.5314
Sr 216.596	542.825	546.377	540.679
Ti 334.941	0.4831	0.6158	0.4981
Tl 190.794	-8.5740u	-4.7663u	-4.8487u
V 292.401	5.2796	5.2509	5.4326
Zn 206.200	9.6263	4.9456	9.9538

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0049	ppb	0.5293	10757.7	-31.7582
Al 308.215	23.9926	ppb	3.8372	16.0	211.731
As 188.980	3.7217	ppb	1.7799	47.8	1.9052
B 249.678	43.0095	ppb	0.8743	2.0	216.276
Ba 389.178	8.7245	ppb	0.1085	1.2	35.2321
Be 313.042	-0.0337	ppb	0.0049	14.6	-199.046
Ca 370.602	87343	ppb	49.33	0.1	182286
Cd 226.502	-0.0527	ppb	0.4425	840.1	5.0037
Co 228.615	-0.6667	ppb	0.4684	70.3	-10.5534
Cr 267.716	-0.1479	ppb	0.6044	408.6	16.6944
Cu 324.754	0.7767	ppb	0.5416	69.7	252.489
Fe 271.441	16.4297	ppb	1.5727	9.6	29.9648
K 766.491	3266.39	ppb	1.8349	0.1	81067.2
Mg 279.078	1736.56	ppb	3.0578	0.2	2412.44
Mn 257.610	2.1422	ppb	0.0433	2.0	245.006
Mo 202.032	-0.2341	ppb	0.5100	217.8	2.2283
Na 330.237	25890.2	ppb	244.346	0.9	681.778
Ni 231.604	0.5207	ppb	0.9012	173.1	-0.8969
Pb 220.353	0.7563	ppb	4.2240	558.5	6.5123
Sb 206.834	-6.5951	ppb	1.8194	27.6	2.9962
Se 196.026	-3.7447	ppb	2.3307	62.2	-1.8361
Si 288.158	12813.1	ppb	8.1311	0.1	60825.1
Sn 189.925	1.6302	ppb	1.7809	109.2	0.2811
Sr 216.596	543.293	ppb	2.8776	0.5	2082.95
Ti 334.941	0.5324	ppb	0.0727	13.6	26.9455
Tl 190.794	-6.0630	ppb	2.1750	35.9	-6.0174
V 292.401	5.3210	ppb	0.0976	1.8	67.4192
Zn 206.200	8.1753	ppb	2.8017	34.3	5.1266

660-91250-B-2-A (Samp) **12/15/2018, 5:28:54 PM** **Rack 2, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4899u	-0.4344u	-0.5562u
Al 308.215	219.926	222.649	220.221
As 188.980	-0.4191u	0.0876	2.2465
B 249.678	587.636	587.429	587.504
Ba 389.178	18.3328	17.9284	18.8821
Be 313.042	-0.0208	-0.0336u	-0.0305u
Ca 370.602	160546	160547	160426

Label	Replicates Concentration		
Cd 226.502	-0.2427u	0.0732	-0.1111u
Co 228.615	-0.5976u	-0.4842u	-0.5974u
Cr 267.716	2.0526	1.7876	2.0393
Cu 324.754	-0.0115u	0.2894	0.7086
Fe 271.441	1044.10	1050.37	1056.75
K 766.491	15402.7	15420.9	15421.0
Mg 279.078	8224.93	8227.46	8225.01
Mn 257.610	41.5870	41.6300	41.6264
Mo 202.032	1.5611	1.7890	1.8270
Na 330.237	36487.0	36233.3	36385.0
Ni 231.604	3.4518	3.2333	3.9271
Pb 220.353	1.7981	-2.0663u	-0.1902u
Sb 206.834	-9.3546u	2.1672	-5.6600u
Se 196.026	-9.7898u	-9.8022u	-8.2732u
Si 288.158	15422.9	15420.1	15409.4
Sn 189.925	5.1613	-4.6528u	-0.1169u
Sr 216.596	1031.50	1028.50	1026.78
Ti 334.941	4.8564	4.8738	4.8710
Tl 190.794	-8.4642u	-10.7044u	2.1638
V 292.401	1.5381	2.0756	1.4967
Zn 206.200	2.9790	5.1060	6.7486

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4935	ppb	0.0610	12.4	-50.6679
Al 308.215	220.932	ppb	1.4943	0.7	676.122
As 188.980	0.6384	ppb	1.4156	221.8	1.1270
B 249.678	587.523	ppb	0.1044	0.0	3801.01
Ba 389.178	18.3811	ppb	0.4787	2.6	134.717
Be 313.042	-0.0283	ppb	0.0067	23.7	-184.454
Ca 370.602	160506	ppb	69.71	0.0	334954
Cd 226.502	-0.0935	ppb	0.1587	169.7	5.1500
Co 228.615	-0.5597	ppb	0.0654	11.7	-10.0000
Cr 267.716	1.9598	ppb	0.1493	7.6	62.4138
Cu 324.754	0.3288	ppb	0.3617	110.0	236.527
Fe 271.441	1050.41	ppb	6.3242	0.6	805.835
K 766.491	15414.9	ppb	10.5350	0.1	381660
Mg 279.078	8225.80	ppb	1.4392	0.0	11355.6
Mn 257.610	41.6145	ppb	0.0238	0.1	4090.70
Mo 202.032	1.7257	ppb	0.1438	8.3	6.2859
Na 330.237	36368.5	ppb	127.651	0.4	939.212
Ni 231.604	3.5374	ppb	0.3547	10.0	2.9830
Pb 220.353	-0.1528	ppb	1.9324	1264.7	6.0432
Sb 206.834	-4.2825	ppb	5.8831	137.4	3.9545
Se 196.026	-9.2884	ppb	0.8792	9.5	-2.8355
Si 288.158	15417.5	ppb	7.1136	0.0	73120.0
Sn 189.925	0.1305	ppb	4.9117	3763.3	-0.1635
Sr 216.596	1028.93	ppb	2.3889	0.2	3940.07
Ti 334.941	4.8671	ppb	0.0093	0.2	523.840
Tl 190.794	-5.6683	ppb	6.8746	121.3	-5.9463
V 292.401	1.7035	ppb	0.3230	19.0	20.1080
Zn 206.200	4.9445	ppb	1.8900	38.2	3.2947

Cont Calib Verif (CCV) **12/15/2018, 5:33:38 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	492.228	486.038	487.402
Al 308.215	9898.50	9880.83	9892.12
As 188.980	519.890	513.384	523.002
B 249.678	509.617	512.619	513.701
Ba 389.178	486.898	486.086	485.625
Be 313.042	526.690	526.002	526.437
Ca 370.602	10094	10069	10096
Cd 226.502	512.740	512.520	512.315
Co 228.615	508.422	507.877	509.561
Cr 267.716	503.244	501.909	502.203
Cu 324.754	504.969	500.472	504.502
Fe 271.441	10113.2	10101.7	10076.8
K 766.491	9874.87	9875.48	9886.69
Mg 279.078	10310.7	10289.3	10288.0
Mn 257.610	505.670	504.542	504.970
Mo 202.032	500.044	498.519	498.421
Na 330.237	10178.8	10074.6	10349.7
Ni 231.604	512.886	514.948	513.910
Pb 220.353	516.731	514.596	518.491
Sb 206.834	515.630	509.395	501.213
Se 196.026	518.894	536.370	525.082
Si 288.158	4937.09	4927.66	4934.68
Sn 189.925	503.537	504.702	504.806
Sr 216.596	505.840	506.485	510.130
Ti 334.941	497.072	496.364	496.772
Tl 190.794	493.439	507.279	489.400
V 292.401	501.133	500.733	499.255
Zn 206.200	1063.00	1058.91	1065.39

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	488.556	ppb	3.2522	0.7	16941.1	97.71117
Al 308.215	9890.49	ppb	8.9480	0.1	23501.5	98.90486
As 188.980	518.759	ppb	4.9075	0.9	132.036	103.75177
B 249.678	511.979	ppb	2.1158	0.4	3294.49	102.39577
Ba 389.178	486.203	ppb	0.6442	0.1	4615.87	97.24056
Be 313.042	526.377	ppb	0.3479	0.1	428357	105.27533
Ca 370.602	10087	ppb	14.86	0.1	21079	100.86594
Cd 226.502	512.525	ppb	0.2127	0.0	7814.33	102.50500
Co 228.615	508.620	ppb	0.8595	0.2	2355.84	101.72401
Cr 267.716	502.452	ppb	0.7019	0.1	10853.6	100.49039
Cu 324.754	503.314	ppb	2.4729	0.5	18485.2	100.66289
Fe 271.441	10097.2	ppb	18.5972	0.2	7626.06	100.92188
K 766.491	9879.01	ppb	6.6541	0.1	244685	98.79013
Mg 279.078	10296.0	ppb	12.7406	0.1	14202.0	102.95989
Mn 257.610	505.061	ppb	0.5697	0.1	48921.0	101.01214
Mo 202.032	498.995	ppb	0.9104	0.2	1039.21	99.79895
Na 330.237	10201.0	ppb	138.897	1.4	292.233	102.01022
Ni 231.604	513.915	ppb	1.0307	0.2	658.861	102.78294
Pb 220.353	516.606	ppb	1.9502	0.4	274.653	103.32117
Sb 206.834	508.746	ppb	7.2303	1.4	213.958	101.74921
Se 196.026	526.782	ppb	8.8613	1.7	94.5339	105.35637
Si 288.158	4933.14	ppb	4.8982	0.1	23759.8	98.66288

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	504.348	ppb	0.7046	0.1	149.759	100.86961
Sr 216.596	507.485	ppb	2.3129	0.5	1937.39	101.49703
Ti 334.941	496.736	ppb	0.3549	0.1	54523.6	99.34717
Tl 190.794	496.706	ppb	9.3765	1.9	132.738	99.34115
V 292.401	500.373	ppb	0.9893	0.2	6511.80	100.07469
Zn 206.200	1062.43	ppb	3.2740	0.3	597.695	106.24345

Cont Calib Blank (CCB) **12/15/2018, 5:38:20 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1786u	0.3359	-0.2590u
Al 308.215	-0.6202u	-0.0283u	-0.6562u
As 188.980	0.8881	-0.1942u	-1.2194u
B 249.678	3.9061	4.4402	4.4935
Ba 389.178	-1.1000u	-0.6177u	-0.4311u
Be 313.042	0.0146	0.0110	0.0240
Ca 370.602	-0.4249u	4.410	0.1074
Cd 226.502	0.0889	-0.0373u	0.0078
Co 228.615	-1.0222u	-0.3960u	-0.4688u
Cr 267.716	-0.2882u	-0.7014u	-0.8221u
Cu 324.754	-0.0978u	0.2690	0.4813
Fe 271.441	-0.0620u	-0.5623u	-4.0240u
K 766.491	1.7112	0.8151	1.4160
Mg 279.078	0.3583	-1.1783u	5.5162
Mn 257.610	0.0404	0.0014	-0.0016u
Mo 202.032	0.2032	-0.5897u	-0.1172u
Na 330.237	-250.190u	236.596	81.8243
Ni 231.604	1.5865	0.4181	-0.3930u
Pb 220.353	-2.0192u	4.6320	2.0972
Sb 206.834	-7.7684u	-2.8374u	1.0535
Se 196.026	-17.0389u	-17.5550u	-5.6426u
Si 288.158	-3.0208u	-2.9287u	-4.6977u
Sn 189.925	3.6138	2.6178	4.9367
Sr 216.596	0.1541	-0.4318u	0.3991
Ti 334.941	0.2275	0.0500	0.1065
Tl 190.794	-1.1645u	-3.3760u	-9.2554u
V 292.401	0.0433	0.1136	0.3573
Zn 206.200	-0.4436u	1.2298	-1.3783u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0339	ppb	0.3228	952.1	-30.8005	-0.03390
Al 308.215	-0.4349	ppb	0.3526	81.1	153.972	-0.43491
As 188.980	-0.1752	ppb	1.0539	601.6	0.9196	-0.17518
B 249.678	4.2799	ppb	0.3249	7.6	-38.7571	4.27994
Ba 389.178	-0.7163	ppb	0.3452	48.2	-56.9065	-0.71625
Be 313.042	0.0165	ppb	0.0067	40.6	-170.458	0.01653
Ca 370.602	1.364	ppb	2.651	194.3	30.33	1.36403
Cd 226.502	0.0198	ppb	0.0640	322.9	6.1413	0.01981
Co 228.615	-0.6290	ppb	0.3425	54.4	-10.3894	-0.62899
Cr 267.716	-0.6039	ppb	0.2800	46.4	6.6794	-0.60389
Cu 324.754	0.2175	ppb	0.2930	134.7	232.252	0.21750
Fe 271.441	-1.5494	ppb	2.1576	139.2	16.4433	-1.54943
K 766.491	1.3141	ppb	0.4567	34.8	278.905	1.31407

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	1.5654	ppb	3.5067	224.0	21.2752	1.56541
Mn 257.610	0.0134	ppb	0.0234	175.0	31.1930	0.01339
Mo 202.032	-0.1679	ppb	0.3989	237.6	2.3671	-0.16789
Na 330.237	22.7433	ppb	248.713	1093.6	46.0681	22.74332
Ni 231.604	0.5372	ppb	0.9951	185.2	-0.8755	0.53722
Pb 220.353	1.5700	ppb	3.3568	213.8	6.9359	1.56997
Sb 206.834	-3.1841	ppb	4.4212	138.9	4.4018	-3.18407
Se 196.026	-13.4122	ppb	6.7336	50.2	-3.5910	-13.41216Z
Si 288.158	-3.5491uv	ppb	0.9958	28.1	320.816	-3.54910
Sn 189.925	3.7228	ppb	1.1633	31.2	0.9003	3.72277
Sr 216.596	0.0405	ppb	0.4269	1054.7	5.6993	0.04048
Ti 334.941	0.1280	ppb	0.0907	70.8	-22.4271	0.12800
Tl 190.794	-4.5986	ppb	4.1817	90.9	-5.6191	-4.59864
V 292.401	0.1714	ppb	0.1648	96.1	-0.0021	0.17139
Zn 206.200	-0.1974	ppb	1.3214	669.5	0.4176	-0.19738

680-161765-A-4-A (Samp) **12/15/2018, 5:43:01 PM** **Rack 2, Tube 21**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0209u	-0.3105u	-0.4189u
Al 308.215	5.9811	5.9185	5.7895
As 188.980	63.1561	60.9167	54.6326
B 249.678	567.873	569.218	571.657
Ba 389.178	675.953	674.524	674.442
Be 313.042	-0.0451u	-0.0422u	-0.0371u
Ca 370.602	190980	190869	190924
Cd 226.502	-0.3713	0.0276	-0.0047
Co 228.615	-0.5843u	-1.0410u	0.8490
Cr 267.716	-0.2376	-0.4049u	-0.4987u
Cu 324.754	0.0136	-0.0251	-0.0163
Fe 271.441	45144.2	45245.2	45237.8
K 766.491	11349.4	11342.2	11329.4
Mg 279.078	46903.1	46995.6	46933.0
Mn 257.610	1477.80	1478.92	1477.60
Mo 202.032	-1.3966u	0.0052u	0.2964u
Na 330.237	25229.4	25142.4	25078.1
Ni 231.604	-1.5850u	-0.4621u	1.3262
Pb 220.353	-0.8005u	-0.2972	2.4269
Sb 206.834	6.3762	3.2566	-10.5609u
Se 196.026	15.5134	13.9146	-0.5985
Si 288.158	14512.8	14545.1	14519.5
Sn 189.925	1.6996	3.2592	-2.6451u
Sr 216.596	1073.24	1075.99	1075.01
Ti 334.941	-0.8497	-0.9586	-0.9380
Tl 190.794	-9.0116u	-1.3644u	-2.8565u
V 292.401	0.7929	0.6379	1.0280
Zn 206.200	5.7028	2.0995	2.6874

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2362	ppb	0.2291	97.0	-48.3524
Al 308.215	5.8964	ppb	0.0977	1.7	170.629
As 188.980	59.5685	ppb	4.4188	7.4	16.1198
B 249.678	569.583	ppb	1.9185	0.3	3639.02

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	674.973	ppb	0.8497	0.1	6468.33
Be 313.042	-0.0415	ppb	0.0041	9.9	-191.198
Ca 370.602	190925	ppb	55.05	0.0	398362
Cd 226.502	-0.1161	ppb	0.2216	190.8	37.2298
Co 228.615	-0.2588	ppb	0.9861	381.1	-7.3936
Cr 267.716	-0.3804	ppb	0.1322	34.8	19.4134
Cu 324.754	-0.0093	ppb	0.0203	219.1	233.820
Fe 271.441	45209.0	ppb	56.3111	0.1	33942.0
K 766.491	11340.3	ppb	10.1568	0.1	280842
Mg 279.078	46943.9	ppb	47.2054	0.1	64702.4
Mn 257.610	1478.11	ppb	0.7076	0.0	143175
Mo 202.032	-0.3650	ppb	0.9052	248.0	1.3010
Na 330.237	25150.0	ppb	75.9404	0.3	659.608
Ni 231.604	-0.2403	ppb	1.4682	611.0	-1.8763
Pb 220.353	0.4430	ppb	1.7364	391.9	6.6608
Sb 206.834	-0.3094	ppb	9.0141	2913.7	6.0476
Se 196.026	9.6098	ppb	8.8768	92.4	0.8611
Si 288.158	14525.8	ppb	17.0596	0.1	68910.4
Sn 189.925	0.7712	ppb	3.0597	396.7	0.0256
Sr 216.596	1074.75	ppb	1.3941	0.1	4125.45
Ti 334.941	-0.9154	ppb	0.0578	6.3	16.8906
Tl 190.794	-4.4108	ppb	4.0536	91.9	-7.0614
V 292.401	0.8196	ppb	0.1965	24.0	18.1934
Zn 206.200	3.4965	ppb	1.9331	55.3	1.8858

680-161991-C-2-A (Samp) **12/15/2018, 5:47:43 PM** **Rack 2, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0025	-0.2943u	-0.8072u
Al 308.215	12.9907	14.2673	16.7170
As 188.980	2.3465	-3.1148u	6.8418
B 249.678	66.0496	64.3323	64.5483
Ba 389.178	9.7809	9.3867	8.8767
Be 313.042	0.0053	-0.0009	0.0013
Ca 370.602	112027	111929	112217
Cd 226.502	0.3166	0.0604	0.4514
Co 228.615	40.7331	41.5775	42.3194
Cr 267.716	-0.4002u	-0.8462u	-0.8616u
Cu 324.754	48.4930	48.2408	48.0681
Fe 271.441	4516.65	4508.88	4522.68
K 766.491	6917.99	6912.08	6919.51
Mg 279.078	104707	104756	104878
Mn 257.610	3436.58	3435.82	3442.45
Mo 202.032	1.1359	3.1196	-0.8894u
Na 330.237	50479.2	50453.7	50496.8
Ni 231.604	213.549	217.654	213.946
Pb 220.353	5.4792	-5.3120u	-7.2026u
Sb 206.834	-2.2250u	5.3405	-0.6233u
Se 196.026	5.0821	-9.7565u	-21.6017u
Si 288.158	7129.75	7123.98	7142.57
Sn 189.925	2.5795	2.9608	-1.5278u
Sr 216.596	251.886	253.717	252.616
Ti 334.941	-2.5739	-2.4956	-2.5383

Label	Replicates Concentration		
Tl 190.794	3.0292	-3.4862u	-2.6610
V 292.401	0.7067	1.0361	0.5797
Zn 206.200	114.853	115.042	110.105

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3663	ppb	0.4096	111.8	-37.7108
Al 308.215	14.6583	ppb	1.8937	12.9	189.670
As 188.980	2.0245	ppb	4.9861	246.3	1.4849
B 249.678	64.9768	ppb	0.9354	1.4	356.456
Ba 389.178	9.3481	ppb	0.4533	4.8	150.835
Be 313.042	0.0019	ppb	0.0032	168.6	-169.814
Ca 370.602	112058	ppb	146.4	0.1	233912
Cd 226.502	0.2762	ppb	0.1986	71.9	13.7743
Co 228.615	41.5433	ppb	0.7937	1.9	185.717
Cr 267.716	-0.7027	ppb	0.2621	37.3	12.0835
Cu 324.754	48.2673	ppb	0.2137	0.4	1975.73
Fe 271.441	4516.07	ppb	6.9181	0.2	3408.80
K 766.491	6916.53	ppb	3.9250	0.1	171383
Mg 279.078	104780	ppb	88.1721	0.1	144393
Mn 257.610	3438.28	ppb	3.6323	0.1	332888
Mo 202.032	1.1220	ppb	2.0046	178.7	4.9812
Na 330.237	50476.6	ppb	21.6724	0.0	1285.37
Ni 231.604	215.050	ppb	2.2642	1.1	274.967
Pb 220.353	-2.3451	ppb	6.8417	291.7	5.1406
Sb 206.834	0.8307	ppb	3.9868	479.9	6.1030
Se 196.026	-8.7587	ppb	13.3699	152.6	-2.4202
Si 288.158	7132.10	ppb	9.5133	0.1	34006.8
Sn 189.925	1.3375	ppb	2.4888	186.1	0.1970
Sr 216.596	252.740	ppb	0.9215	0.4	971.110
Ti 334.941	-2.5359	ppb	0.0392	1.5	28.6729
Tl 190.794	-1.0393	ppb	3.5476	341.3	-3.9029
V 292.401	0.7742	ppb	0.2356	30.4	9.2104
Zn 206.200	113.333	ppb	2.7973	2.5	64.2138

680-161991-C-1-A (Samp) **12/15/2018, 5:52:25 PM** **Rack 2, Tube 23**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4857u	-0.7593u	-0.5620u
Al 308.215	10.3889	7.9619	6.2121
As 188.980	-2.1083u	-2.8953u	1.5282
B 249.678	21.6259	22.7634	21.6983
Ba 389.178	72.2013	71.8713	72.2884
Be 313.042	-0.0187u	-0.0284u	-0.0385u
Ca 370.602	64671	64737	64624
Cd 226.502	-0.1054u	-0.2662u	0.1897
Co 228.615	0.0228	-0.6414u	-0.3325u
Cr 267.716	-0.0572u	0.2782	-0.2969u
Cu 324.754	0.4482	0.2600	1.4287
Fe 271.441	8.6705	-1.2874u	-11.0950u
K 766.491	2410.53	2411.87	2409.77
Mg 279.078	57574.4	57542.7	57513.6
Mn 257.610	13.9928	14.0737	13.9779
Mo 202.032	-0.3070u	-0.2145u	1.1433

Label	Replicates Concentration		
Na 330.237	61398.6	61021.1	61924.7
Ni 231.604	11.1877	14.0087	12.1877
Pb 220.353	4.5256	3.1672	-0.5109u
Sb 206.834	6.1854	-4.1429u	2.0361
Se 196.026	2.5805	-3.3579u	2.3001
Si 288.158	6675.17	6675.18	6672.86
Sn 189.925	2.3107	-2.2306u	-5.4623u
Sr 216.596	260.239	260.905	257.374
Ti 334.941	-1.4717	-1.3968	-1.2931
Tl 190.794	2.7190	-4.4600u	-7.2718u
V 292.401	0.5971	0.6264	0.9919
Zn 206.200	8.1739	8.4657	5.4091

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6023	ppb	0.1412	23.4	-51.8734
Al 308.215	8.1876	ppb	2.0975	25.6	174.323
As 188.980	-1.1585	ppb	2.3597	203.7	0.6709
B 249.678	22.0292	ppb	0.6369	2.9	78.1265
Ba 389.178	72.1203	ppb	0.2200	0.3	700.369
Be 313.042	-0.0285	ppb	0.0099	34.6	-201.029
Ca 370.602	64677	ppb	56.74	0.1	134990
Cd 226.502	-0.0606	ppb	0.2312	381.4	5.0822
Co 228.615	-0.3171	ppb	0.3324	104.8	-8.9364
Cr 267.716	-0.0253	ppb	0.2888	1141.5	19.6395
Cu 324.754	0.7123	ppb	0.6276	88.1	250.192
Fe 271.441	-1.2373	ppb	9.8828	798.8	16.7070
K 766.491	2410.72	ppb	1.0596	0.0	59895.3
Mg 279.078	57543.6	ppb	30.4546	0.1	79326.4
Mn 257.610	14.0148	ppb	0.0516	0.4	1635.38
Mo 202.032	0.2073	ppb	0.8119	391.7	3.1464
Na 330.237	61448.1	ppb	453.857	0.7	1555.67
Ni 231.604	12.4614	ppb	1.4303	11.5	14.4597
Pb 220.353	2.3940	ppb	2.6058	108.8	7.3657
Sb 206.834	1.3595	ppb	5.1973	382.3	6.2813
Se 196.026	0.5076	ppb	3.3505	660.1	-1.0630
Si 288.158	6674.40	ppb	1.3339	0.0	31845.7
Sn 189.925	-1.7941	ppb	3.9048	217.6	-0.7329
Sr 216.596	259.506	ppb	1.8761	0.7	997.710
Ti 334.941	-1.3872	ppb	0.0897	6.5	-0.9740
Tl 190.794	-3.0043	ppb	5.1520	171.5	-5.1746
V 292.401	0.7385	ppb	0.2200	29.8	7.5347
Zn 206.200	7.3496	ppb	1.6868	23.0	4.6623

680-161765-A-8-A (Samp) **12/15/2018, 5:57:08 PM** **Rack 2, Tube 24**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0446	-0.4166u	-0.6176u
Al 308.215	5.9953	9.6425	7.3570
As 188.980	231.423	233.291	228.415
B 249.678	5140.11	5157.49	5166.87
Ba 389.178	386.609	385.096	384.480
Be 313.042	-0.0457u	-0.0486u	-0.0423u
Ca 370.602	165940	166002	166108

Label	Replicates Concentration		
Cd 226.502	-0.2019	0.2604	0.3210
Co 228.615	0.0041	-1.2547u	-0.5515u
Cr 267.716	-0.8821u	-0.9235u	-0.6017u
Cu 324.754	-0.2968u	0.0850	0.1562
Fe 271.441	9993.52	10003.8	10022.7
K 766.491	20028.2	19994.7	19988.6
Mg 279.078	48663.8	48659.9	48772.9
Mn 257.610	3055.26	3058.61	3060.84
Mo 202.032	-0.3924u	0.9008	0.9153
Na 330.237	83890.7	83886.9	84478.4
Ni 231.604	-0.7157u	-0.6852u	0.9834
Pb 220.353	4.4347	2.2005	-2.4819u
Sb 206.834	-1.3094u	6.0278	-5.1943u
Se 196.026	-12.8176u	-1.2159	-1.8305u
Si 288.158	7750.04	7771.77	7773.56
Sn 189.925	3.8329	8.6955	-1.3317u
Sr 216.596	694.844	692.098	695.880
Ti 334.941	-0.9800	-1.1218	-1.0959
Tl 190.794	-8.2521u	-0.8847	-2.6442u
V 292.401	0.2668	0.8762	0.2654
Zn 206.200	4.0617	2.8165	3.1392

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3299	ppb	0.3395	102.9	-39.5844
Al 308.215	7.6649	ppb	1.8430	24.0	173.468
As 188.980	231.043	ppb	2.4600	1.1	59.4137
B 249.678	5154.82	ppb	13.5764	0.3	33868.8
Ba 389.178	385.395	ppb	1.0956	0.3	3690.45
Be 313.042	-0.0455	ppb	0.0031	6.9	-201.142
Ca 370.602	166016	ppb	85.08	0.1	346489
Cd 226.502	0.1265	ppb	0.2860	226.1	15.1345
Co 228.615	-0.6007	ppb	0.6309	105.0	-9.9719
Cr 267.716	-0.8024	ppb	0.1750	21.8	10.0328
Cu 324.754	-0.0185	ppb	0.2436	1313.6	225.863
Fe 271.441	10006.7	ppb	14.8200	0.1	7526.52
K 766.491	20003.8	ppb	21.3433	0.1	495205
Mg 279.078	48698.9	ppb	64.1421	0.1	67104.6
Mn 257.610	3058.24	ppb	2.8096	0.1	295908
Mo 202.032	0.4746	ppb	0.7509	158.2	3.5565
Na 330.237	84085.3	ppb	340.403	0.4	2111.14
Ni 231.604	-0.1392	ppb	0.9723	698.6	-1.7456
Pb 220.353	1.3844	ppb	3.5298	255.0	7.0929
Sb 206.834	-0.1586	ppb	5.6988	3592.4	5.7519
Se 196.026	-5.2880	ppb	6.5280	123.5	-1.8081
Si 288.158	7765.12	ppb	13.0938	0.2	36995.0
Sn 189.925	3.7323	ppb	5.0144	134.4	0.9130
Sr 216.596	694.274	ppb	1.9542	0.3	2662.55
Ti 334.941	-1.0659	ppb	0.0755	7.1	4.4254
Tl 190.794	-3.9270	ppb	3.8476	98.0	-5.0879
V 292.401	0.4695	ppb	0.3523	75.0	5.9740
Zn 206.200	3.3391	ppb	0.6462	19.4	2.2718

660-91250-B-3-A (Samp) **12/15/2018, 6:01:50 PM** **Rack 2, Tube 25**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4242u	0.6174	-0.5760u
Al 308.215	14.6382	9.0476	8.6997
As 188.980	0.1517	1.6107	3.4405
B 249.678	110.106	109.748	107.322
Ba 389.178	9.6777	11.0317	10.6825
Be 313.042	-0.0339u	-0.0369u	-0.0252
Ca 370.602	144704	144753	144754
Cd 226.502	-0.3587u	-0.4207u	0.0595
Co 228.615	0.0732	0.3357	-2.5375u
Cr 267.716	0.0827	0.4611	0.2074
Cu 324.754	0.7735	0.0013	0.2656
Fe 271.441	276.403	278.468	267.652
K 766.491	5312.09	5312.55	5301.82
Mg 279.078	5276.53	5270.09	5283.51
Mn 257.610	17.7449	17.6516	17.7567
Mo 202.032	2.2958	3.2270	0.9132
Na 330.237	12365.1	12581.0	12210.0
Ni 231.604	0.8796	4.1988	2.0770
Pb 220.353	0.5137	0.2006	4.7683
Sb 206.834	1.9461	1.9284	4.0962
Se 196.026	-5.9397u	-2.0652u	11.4674
Si 288.158	23833.7	23842.9	23862.8
Sn 189.925	1.9720	0.1289	-2.6174u
Sr 216.596	938.236	936.864	937.974
Ti 334.941	0.5403	0.3805	0.3783
Tl 190.794	-7.0248u	-1.2122u	8.3026
V 292.401	0.9064	1.5952	0.6287
Zn 206.200	1.0377	1.6027	3.0607

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1276	ppb	0.6496	509.2	-37.4892
Al 308.215	10.7952	ppb	3.3327	30.9	180.525
As 188.980	1.7343	ppb	1.6479	95.0	1.4028
B 249.678	109.059	ppb	1.5149	1.4	650.976
Ba 389.178	10.4640	ppb	0.7029	6.7	55.6642
Be 313.042	-0.0320	ppb	0.0061	19.0	-188.577
Ca 370.602	144737	ppb	28.08	0.0	302049
Cd 226.502	-0.2400	ppb	0.2612	108.8	2.3825
Co 228.615	-0.7095	ppb	1.5885	223.9	-10.7691
Cr 267.716	0.2504	ppb	0.1928	77.0	25.2492
Cu 324.754	0.3468	ppb	0.3924	113.1	237.030
Fe 271.441	274.175	ppb	5.7420	2.1	223.344
K 766.491	5308.82	ppb	6.0663	0.1	131604
Mg 279.078	5276.71	ppb	6.7113	0.1	7291.37
Mn 257.610	17.7177	ppb	0.0576	0.3	1766.76
Mo 202.032	2.1454	ppb	1.1642	54.3	7.1692
Na 330.237	12385.4	ppb	186.326	1.5	349.867
Ni 231.604	2.3852	ppb	1.6809	70.5	1.5012
Pb 220.353	1.8275	ppb	2.5516	139.6	7.0718
Sb 206.834	2.6569	ppb	1.2465	46.9	6.8052
Se 196.026	1.1542	ppb	9.1392	791.8	-0.9447
Si 288.158	23846.5	ppb	14.8742	0.1	112911

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.1722	ppb	2.3095	1341.2	-0.2564
Sr 216.596	937.691	ppb	0.7284	0.1	3591.03
Ti 334.941	0.4330	ppb	0.0929	21.4	28.0732
Tl 190.794	0.0219	ppb	7.7379	35358.1	-4.3548
V 292.401	1.0434	ppb	0.4976	47.7	11.3268
Zn 206.200	1.9004	ppb	1.0438	54.9	1.5937

680-161756-G-11-B (Samp) **12/15/2018, 6:06:31 PM** **Rack 2, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5981u	-0.2748u	-1.3827u
Al 308.215	7.6912	7.9677	10.4677
As 188.980	5.8902	1.1468	2.9864
B 249.678	351.845	351.800	351.886
Ba 389.178	132.069	132.792	133.022
Be 313.042	-0.0427u	-0.0322u	-0.0438u
Ca 370.602	154914	154657	154633
Cd 226.502	0.0895	-0.1365	-0.2075
Co 228.615	-0.4734u	0.6886	-0.0898u
Cr 267.716	-0.0775	0.2362	0.1913
Cu 324.754	-0.2589u	-0.6414u	0.7738
Fe 271.441	7754.40	7710.61	7751.73
K 766.491	7279.74	7271.34	7293.80
Mg 279.078	15511.3	15439.1	15443.9
Mn 257.610	823.648	816.362	818.176
Mo 202.032	-1.6727u	0.0749	0.3832
Na 330.237	15751.4	15538.3	15853.4
Ni 231.604	0.8655	-1.1993u	1.3346
Pb 220.353	-7.8685u	-4.0306u	9.7660
Sb 206.834	-3.4153u	-4.9989u	-1.8429u
Se 196.026	-16.2628u	13.4791	2.2728
Si 288.158	17911.7	17836.7	17846.9
Sn 189.925	-1.6148u	-0.5007u	-1.8352u
Sr 216.596	589.534	587.705	586.067
Ti 334.941	0.1086	0.2453	0.2103
Tl 190.794	1.5482	-0.6420u	-5.2839u
V 292.401	1.5129	1.6652	0.9236
Zn 206.200	1.7155	3.9470	5.4721

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7519	ppb	0.5697	75.8	-57.8985
Al 308.215	8.7089	ppb	1.5294	17.6	175.857
As 188.980	3.3411	ppb	2.3915	71.6	1.8245
B 249.678	351.844	ppb	0.0429	0.0	2242.36
Ba 389.178	132.628	ppb	0.4974	0.4	1237.00
Be 313.042	-0.0396	ppb	0.0064	16.2	-193.581
Ca 370.602	154735	ppb	155.3	0.1	322911
Cd 226.502	-0.0848	ppb	0.1551	182.8	10.2300
Co 228.615	0.0418	ppb	0.5921	1416.3	-7.0412
Cr 267.716	0.1167	ppb	0.1696	145.4	24.7490
Cu 324.754	-0.0421	ppb	0.7321	1737.2	224.490
Fe 271.441	7738.91	ppb	24.5503	0.3	5824.85
K 766.491	7281.63	ppb	11.3502	0.2	180417

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	15464.8	ppb	40.3334	0.3	21324.3
Mn 257.610	819.395	ppb	3.7928	0.5	79320.7
Mo 202.032	-0.4049	ppb	1.1087	273.8	1.7622
Na 330.237	15714.4	ppb	160.742	1.0	431.019
Ni 231.604	0.3336	ppb	1.3481	404.1	-1.1383
Pb 220.353	-0.7110	ppb	9.2741	1304.3	5.8400
Sb 206.834	-3.4190	ppb	1.5780	46.2	4.3890
Se 196.026	-0.1703	ppb	15.0207	8821.4	-1.0894
Si 288.158	17865.1	ppb	40.7002	0.2	84674.1
Sn 189.925	-1.3169	ppb	0.7154	54.3	-0.5964
Sr 216.596	587.769	ppb	1.7344	0.3	2254.79
Ti 334.941	0.1881	ppb	0.0710	37.8	34.6252
Tl 190.794	-1.4592	ppb	3.4886	239.1	-4.8662
V 292.401	1.3672	ppb	0.3917	28.6	17.3577
Zn 206.200	3.7115	ppb	1.8893	50.9	2.5118

MB 680-551744/1-A (Samp) **12/15/2018, 6:11:13 PM** **Rack 2, Tube 27**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5312u	-0.1958u	-0.0537u
Al 308.215	1.4634	3.0569	-0.8925u
As 188.980	-3.3193u	1.8656	3.7658
B 249.678	7.6819	7.0107	7.4352
Ba 389.178	0.2658	0.3915	-0.7487u
Be 313.042	-0.0273u	-0.0062u	-0.0035u
Ca 370.602	8.180	10.52	14.01
Cd 226.502	0.3961	0.2269	-0.0334u
Co 228.615	-1.2235u	-0.1562u	0.0806
Cr 267.716	-0.4131u	-0.2936u	-0.1486u
Cu 324.754	0.0363	0.2247	0.4840
Fe 271.441	-8.3497u	-8.8346u	-0.7535u
K 766.491	1.7254	1.8860	1.4901
Mg 279.078	3.5256	4.2258	3.9304
Mn 257.610	0.2007	0.1589	0.1159
Mo 202.032	0.4253	0.7331	-0.3965u
Na 330.237	-147.810u	-75.4583u	81.0106
Ni 231.604	1.0731	1.9516	1.5984
Pb 220.353	0.3808	3.7044	-1.1773u
Sb 206.834	5.2283	-2.0740u	6.0309
Se 196.026	-8.1881u	-9.5787u	5.8371
Si 288.158	-3.8007u	-2.3828u	-3.5751u
Sn 189.925	-0.7324u	3.0765	4.5907
Sr 216.596	0.5082	0.0756	0.1477
Ti 334.941	0.0217	0.0715	-0.0262u
Tl 190.794	-6.0907u	1.1321	5.4948
V 292.401	0.1857	0.2946	-0.4329u
Zn 206.200	0.9168	-1.1711u	-1.0714u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2603	ppb	0.2452	94.2	-38.6671
Al 308.215	1.2093	ppb	1.9869	164.3	157.842
As 188.980	0.7707	ppb	3.6672	475.8	1.1588
B 249.678	7.3759	ppb	0.3395	4.6	18.3634

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.0304	ppb	0.6252	2053.6	-50.3461
Be 313.042	-0.0124	ppb	0.0130	105.2	-193.965
Ca 370.602	10.90	ppb	2.933	26.9	50.24
Cd 226.502	0.1965	ppb	0.2163	110.1	8.8272
Co 228.615	-0.4331	ppb	0.6947	160.4	-9.4793
Cr 267.716	-0.2851	ppb	0.1324	46.4	13.5510
Cu 324.754	0.2483	ppb	0.2248	90.5	233.369
Fe 271.441	-5.9793	ppb	4.5322	75.8	13.1355
K 766.491	1.7005	ppb	0.1991	11.7	288.467
Mg 279.078	3.8939	ppb	0.3515	9.0	24.4826
Mn 257.610	0.1585	ppb	0.0424	26.7	45.2217
Mo 202.032	0.2539	ppb	0.5840	230.0	3.2436
Na 330.237	-47.4194	ppb	116.959	246.6	44.3439
Ni 231.604	1.5410	ppb	0.4421	28.7	0.4152
Pb 220.353	0.9693	ppb	2.4935	257.2	6.6232
Sb 206.834	3.0617	ppb	4.4657	145.9	6.9853
Se 196.026	-3.9766	ppb	8.5273	214.4	-1.8784
Si 288.158	-3.2529uv	ppb	0.7619	23.4	322.274
Sn 189.925	2.3116	ppb	2.7428	118.7	0.4807
Sr 216.596	0.2439	ppb	0.2317	95.0	6.4649
Ti 334.941	0.0223	ppb	0.0489	218.8	-34.0155
Tl 190.794	0.1787	ppb	5.8513	3273.7	-4.3024
V 292.401	0.0158	ppb	0.3924	2482.5	-2.0409
Zn 206.200	-0.4419	ppb	1.1778	266.5	0.2800

LCS 680-551744/2-A (Samp) **12/15/2018, 6:15:55 PM** **Rack 2, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.7021	50.3406	50.9555
Al 308.215	4977.98	4982.67	4981.24
As 188.980	98.4973	101.296	105.987
B 249.678	208.880	208.836	209.736
Ba 389.178	98.1139	97.2895	98.1719
Be 313.042	52.5541	52.5446	52.5471
Ca 370.602	5042	5045	5053
Cd 226.502	52.9594	52.9821	53.0374
Co 228.615	50.8708	52.1866	50.7062
Cr 267.716	102.626	102.518	102.841
Cu 324.754	103.475	102.840	102.405
Fe 271.441	5138.58	5141.02	5129.93
K 766.491	8379.36	8385.16	8390.42
Mg 279.078	5210.42	5205.38	5210.64
Mn 257.610	511.950	511.506	512.053
Mo 202.032	100.172	100.627	101.266
Na 330.237	5072.61	5308.53	5566.38
Ni 231.604	106.583	105.280	102.912
Pb 220.353	522.842	530.680	536.669
Sb 206.834	48.2268	49.9010	52.6648
Se 196.026	108.197	100.953	118.033
Si 288.158	-9.7198u	-10.6042u	-10.3889u
Sn 189.925	101.717	102.246	97.9279
Sr 216.596	104.087	103.686	102.649
Ti 334.941	99.8122	99.7246	99.7938

Label	Replicates Concentration		
Tl 190.794	38.6504	31.8727	40.5075
V 292.401	100.270	101.127	100.449
Zn 206.200	106.202	102.980	105.246

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.6661	ppb	0.3091	0.6	1730.26
Al 308.215	4980.63	ppb	2.4068	0.0	11905.3
As 188.980	101.927	ppb	3.7847	3.7	26.7226
B 249.678	209.151	ppb	0.5074	0.2	1305.27
Ba 389.178	97.8584	ppb	0.4935	0.5	893.212
Be 313.042	52.5486	ppb	0.0049	0.0	42595.7
Ca 370.602	5047	ppb	5.890	0.1	10560
Cd 226.502	52.9930	ppb	0.0401	0.1	816.370
Co 228.615	51.2546	ppb	0.8114	1.6	230.738
Cr 267.716	102.662	ppb	0.1644	0.2	2234.45
Cu 324.754	102.907	ppb	0.5379	0.5	3958.59
Fe 271.441	5136.51	ppb	5.8276	0.1	3875.50
K 766.491	8384.98	ppb	5.5335	0.1	207717
Mg 279.078	5208.82	ppb	2.9748	0.1	7191.65
Mn 257.610	511.837	ppb	0.2906	0.1	49541.4
Mo 202.032	100.688	ppb	0.5495	0.5	211.817
Na 330.237	5315.84	ppb	246.966	4.6	175.348
Ni 231.604	104.925	ppb	1.8607	1.8	133.326
Pb 220.353	530.064	ppb	6.9337	1.3	281.970
Sb 206.834	50.2642	ppb	2.2412	4.5	26.0939
Se 196.026	109.061	ppb	8.5728	7.9	18.7007
Si 288.158	-10.2377uv	ppb	0.4612	4.5	316.549
Sn 189.925	100.630	ppb	2.3550	2.3	29.7157
Sr 216.596	103.474	ppb	0.7422	0.7	400.159
Ti 334.941	99.7768	ppb	0.0461	0.0	10933.0
Tl 190.794	37.0102	ppb	4.5450	12.3	5.7867
V 292.401	100.615	ppb	0.4520	0.4	1308.16
Zn 206.200	104.809	ppb	1.6550	1.6	59.3531

490-164778-D-1-A (Samp) **12/15/2018, 6:20:36 PM** **Rack 2, Tube 29**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2450	0.4444	-0.5622u
Al 308.215	335.939	333.986	335.086
As 188.980	6.0351	2.0403	-3.1017u
B 249.678	7.4014	6.8000	7.1218
Ba 389.178	7.8551	10.8462	10.3032
Be 313.042	0.0086	0.0065	0.0052
Ca 370.602	10828	10822	10833
Cd 226.502	0.4237	0.1083	-0.0607u
Co 228.615	-0.8228u	-0.4149u	-0.1574u
Cr 267.716	0.4710	0.2605	0.2125
Cu 324.754	5.2000	4.3761	4.5424
Fe 271.441	416.989	414.590	415.007
K 766.491	570.176	568.289	569.450
Mg 279.078	2062.52	2067.04	2067.56
Mn 257.610	9.6052	9.5896	9.5482
Mo 202.032	-0.2816u	0.3271	0.8034

Label	Replicates Concentration		
Na 330.237	888.895	958.277	874.119
Ni 231.604	2.8497	3.7572	2.0317
Pb 220.353	-5.1429u	4.4634	-2.2068u
Sb 206.834	-10.5668u	0.4070	-6.2572u
Se 196.026	-2.7234u	-16.5270u	-10.0498u
Si 288.158	1022.09	1029.62	1029.45
Sn 189.925	-2.9954u	-3.9793u	3.6484
Sr 216.596	11.4101	12.5969	10.9834
Ti 334.941	8.2817	8.3871	8.5498
Tl 190.794	-4.3884u	-12.6539u	4.9277
V 292.401	1.3108	1.0257	0.7764
Zn 206.200	41.3344	44.3630	40.6589

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0424	ppb	0.5330	1257.7	-28.2909
Al 308.215	335.004	ppb	0.9789	0.3	945.067
As 188.980	1.6579	ppb	4.5804	276.3	1.3839
B 249.678	7.1077	ppb	0.3009	4.2	-20.5486
Ba 389.178	9.6682	ppb	1.5935	16.5	44.7116
Be 313.042	0.0068	ppb	0.0017	25.7	-176.812
Ca 370.602	10828	ppb	5.859	0.1	22621
Cd 226.502	0.1571	ppb	0.2459	156.5	8.5565
Co 228.615	-0.4650	ppb	0.3355	72.1	-9.5430
Cr 267.716	0.3146	ppb	0.1375	43.7	26.5578
Cu 324.754	4.7062	ppb	0.4357	9.3	395.116
Fe 271.441	415.529	ppb	1.2818	0.3	329.426
K 766.491	569.305	ppb	0.9519	0.2	14332.8
Mg 279.078	2065.70	ppb	2.7713	0.1	2865.94
Mn 257.610	9.5810	ppb	0.0295	0.3	965.735
Mo 202.032	0.2830	ppb	0.5438	192.2	3.2976
Na 330.237	907.097	ppb	44.9344	5.0	67.6540
Ni 231.604	2.8795	ppb	0.8631	30.0	2.1369
Pb 220.353	-0.9621	ppb	4.9226	511.7	5.6151
Sb 206.834	-5.4724	ppb	5.5289	101.0	3.4619
Se 196.026	-9.7667	ppb	6.9061	70.7	-2.9272
Si 288.158	1027.05	ppb	4.3000	0.4	5186.57
Sn 189.925	-1.1087	ppb	4.1491	374.2	-0.5362
Sr 216.596	11.6635	ppb	0.8361	7.2	50.2162
Ti 334.941	8.4062	ppb	0.1351	1.6	893.038
Tl 190.794	-4.0382	ppb	8.7960	217.8	-5.4787
V 292.401	1.0376	ppb	0.2674	25.8	11.4598
Zn 206.200	42.1188	ppb	1.9727	4.7	24.2131

490-164778-D-1-B MS (Samp) **12/15/2018, 6:25:18 PM** **Rack 2, Tube 30**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.3240	50.2889	50.2275
Al 308.215	5289.11	5302.18	5297.23
As 188.980	99.3618	105.439	107.300
B 249.678	207.282	207.234	207.059
Ba 389.178	105.860	108.438	108.613
Be 313.042	51.6769	51.8823	51.8262
Ca 370.602	15756	15803	15774

Label	Replicates Concentration		
Cd 226.502	52.7600	52.4591	52.5908
Co 228.615	49.2757	50.3096	50.7753
Cr 267.716	101.033	102.228	102.286
Cu 324.754	105.487	105.173	104.963
Fe 271.441	5482.41	5506.96	5494.06
K 766.491	8851.71	8869.63	8895.85
Mg 279.078	7161.75	7175.01	7176.04
Mn 257.610	513.028	513.815	513.625
Mo 202.032	99.2637	100.401	98.2207
Na 330.237	5870.41	5996.46	5999.58
Ni 231.604	103.270	105.168	100.687
Pb 220.353	522.138	525.745	532.686
Sb 206.834	49.5535	59.0351	52.4521
Se 196.026	104.777	101.461	113.123
Si 288.158	1135.62	1144.12	1149.02
Sn 189.925	102.429	106.610	104.381
Sr 216.596	111.431	112.708	112.438
Ti 334.941	110.300	110.585	110.433
Tl 190.794	38.5123	45.7815	45.2199
V 292.401	100.436	100.449	101.023
Zn 206.200	147.700	151.366	148.613

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.2802	ppb	0.0488	0.1	1716.72
Al 308.215	5296.18	ppb	6.6015	0.1	12649.4
As 188.980	104.034	ppb	4.1516	4.0	27.2566
B 249.678	207.192	ppb	0.1175	0.1	1292.02
Ba 389.178	107.637	ppb	1.5415	1.4	988.902
Be 313.042	51.7951	ppb	0.1062	0.2	41983.9
Ca 370.602	15777	ppb	23.61	0.1	32952
Cd 226.502	52.6033	ppb	0.1508	0.3	810.714
Co 228.615	50.1202	ppb	0.7675	1.5	225.592
Cr 267.716	101.849	ppb	0.7074	0.7	2216.99
Cu 324.754	105.208	ppb	0.2636	0.3	4042.07
Fe 271.441	5494.48	ppb	12.2793	0.2	4144.04
K 766.491	8872.40	ppb	22.1978	0.3	219778
Mg 279.078	7170.93	ppb	7.9663	0.1	9895.80
Mn 257.610	513.489	ppb	0.4105	0.1	49710.3
Mo 202.032	99.2951	ppb	1.0904	1.1	208.918
Na 330.237	5955.48	ppb	73.6894	1.2	190.915
Ni 231.604	103.042	ppb	2.2492	2.2	130.905
Pb 220.353	526.856	ppb	5.3615	1.0	280.298
Sb 206.834	53.6802	ppb	4.8587	9.1	27.5221
Se 196.026	106.453	ppb	6.0091	5.6	18.2287
Si 288.158	1142.92	ppb	6.7836	0.6	5760.34
Sn 189.925	104.473	ppb	2.0917	2.0	30.8586
Sr 216.596	112.192	ppb	0.6730	0.6	433.609
Ti 334.941	110.439	ppb	0.1423	0.1	12109.9
Tl 190.794	43.1712	ppb	4.0445	9.4	7.4704
V 292.401	100.636	ppb	0.3350	0.3	1308.73
Zn 206.200	149.226	ppb	1.9084	1.3	84.3321

Cont Calib Verif (CCV) **12/15/2018, 6:30:01 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	489.040	484.933	485.681
Al 308.215	9885.55	9903.05	9885.05
As 188.980	522.368	514.121	515.720
B 249.678	515.552	515.747	516.052
Ba 389.178	485.051	483.445	482.226
Be 313.042	526.681	526.510	526.399
Ca 370.602	10084	10081	10087
Cd 226.502	514.119	514.389	513.499
Co 228.615	508.112	506.422	507.924
Cr 267.716	499.915	501.131	501.148
Cu 324.754	508.412	499.928	507.008
Fe 271.441	10101.9	10098.7	10075.6
K 766.491	9943.17	9948.17	9942.34
Mg 279.078	10320.9	10322.6	10311.6
Mn 257.610	503.986	504.312	504.131
Mo 202.032	497.065	496.674	499.954
Na 330.237	10619.0	10596.9	11015.7
Ni 231.604	513.413	515.765	510.451
Pb 220.353	521.996	511.563	514.546
Sb 206.834	496.704	507.137	507.959
Se 196.026	520.778	508.084	516.148
Si 288.158	4925.76	4933.79	4928.81
Sn 189.925	504.160	498.411	499.820
Sr 216.596	508.452	509.476	508.078
Ti 334.941	495.220	495.338	494.817
Tl 190.794	487.318	491.863	498.667
V 292.401	500.241	500.168	501.813
Zn 206.200	1059.05	1077.62	1074.28

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	486.551	ppb	2.1876	0.4	16871.5	97.31028
Al 308.215	9891.22	ppb	10.2476	0.1	23503.2	98.91217
As 188.980	517.403	ppb	4.3739	0.8	131.694	103.48061
B 249.678	515.784	ppb	0.2519	0.0	3319.56	103.15672
Ba 389.178	483.574	ppb	1.4169	0.3	4590.74	96.71484
Be 313.042	526.530	ppb	0.1422	0.0	428482	105.30603
Ca 370.602	10084	ppb	3.044	0.0	21073	100.83820
Cd 226.502	514.002	ppb	0.4564	0.1	7836.81	102.80048
Co 228.615	507.486	ppb	0.9264	0.2	2350.56	101.49726
Cr 267.716	500.731	ppb	0.7070	0.1	10816.5	100.14622
Cu 324.754	505.116	ppb	4.5475	0.9	18550.5	101.02322
Fe 271.441	10092.1	ppb	14.3345	0.1	7622.13	100.87024
K 766.491	9944.56	ppb	3.1528	0.0	246307	99.44562
Mg 279.078	10318.4	ppb	5.9046	0.1	14232.8	103.18362
Mn 257.610	504.143	ppb	0.1636	0.0	48832.3	100.82861
Mo 202.032	497.898	ppb	1.7918	0.4	1036.93	99.57954
Na 330.237	10743.9	ppb	235.676	2.2	305.557	107.43900
Ni 231.604	513.210	ppb	2.6628	0.5	657.956	102.64197
Pb 220.353	516.035	ppb	5.3734	1.0	274.356	103.20693
Sb 206.834	503.933	ppb	6.2743	1.2	211.964	100.78668
Se 196.026	515.003	ppb	6.4242	1.2	92.3959	103.00065
Si 288.158	4929.45	ppb	4.0528	0.1	23742.5	98.58902

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	500.797	ppb	2.9965	0.6	148.703	100.15941
Sr 216.596	508.669	ppb	0.7242	0.1	1941.93	101.73372
Ti 334.941	495.125	ppb	0.2731	0.1	54346.8	99.02498
Tl 190.794	492.616	ppb	5.7120	1.2	131.610	98.52321
V 292.401	500.741	ppb	0.9296	0.2	6516.65	100.14815
Zn 206.200	1070.32	ppb	9.8988	0.9	602.130	107.03180

Cont Calib Blank (CCB) **12/15/2018, 6:34:44 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1646	-0.7037u	-0.6763u
Al 308.215	0.0012	-0.3113u	3.0778
As 188.980	0.6097	-2.1293u	9.7357
B 249.678	4.9389	4.9235	3.1765
Ba 389.178	-0.2021u	1.5411	0.8177
Be 313.042	0.0310	0.0087	0.0237
Ca 370.602	4.146	3.802	-0.2685u
Cd 226.502	-0.2607u	-0.4260u	0.1508
Co 228.615	-0.7966u	-1.1407u	-0.4332u
Cr 267.716	-0.1697u	-0.1970u	-0.5316u
Cu 324.754	0.1413	0.2368	0.2333
Fe 271.441	-3.2717u	3.5656	-2.1270u
K 766.491	0.2912	-0.1321u	0.7234
Mg 279.078	2.5245	0.8286	4.1830
Mn 257.610	-0.0362u	0.0067	0.0236
Mo 202.032	0.9507	1.0231	0.6225
Na 330.237	60.3086	-449.045u	-341.397u
Ni 231.604	0.2499	-0.2098u	1.5244
Pb 220.353	3.1204	5.1133	2.0860
Sb 206.834	0.7663	-10.7158u	2.5853
Se 196.026	0.1261	-10.1464u	-6.4998u
Si 288.158	-4.7389u	-2.7158u	-1.8611u
Sn 189.925	0.3173	2.2115	0.4479
Sr 216.596	0.0214	-0.2594u	-0.5165u
Ti 334.941	0.2044	0.1154	0.0878
Tl 190.794	-3.8345u	-1.9360u	-1.4168u
V 292.401	0.0451	0.5355	0.6756
Zn 206.200	-0.5166u	0.3167	0.3428

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.4051	ppb	0.4936	121.8	-43.6978	-0.40514
Al 308.215	0.9226	ppb	1.8730	203.0	157.188	0.92255
As 188.980	2.7387	ppb	6.2124	226.8	1.6564	2.73868
B 249.678	4.3463	ppb	1.0131	23.3	-38.3174	4.34631
Ba 389.178	0.7189	ppb	0.8758	121.8	-43.1785	0.71886
Be 313.042	0.0211	ppb	0.0114	53.7	-166.717	0.02114
Ca 370.602	2.560	ppb	2.455	95.9	32.83	2.55956
Cd 226.502	-0.1786	ppb	0.2970	166.2	3.1196	-0.17864
Co 228.615	-0.7902	ppb	0.3538	44.8	-11.1440	-0.79015
Cr 267.716	-0.2994	ppb	0.2016	67.3	13.2401	-0.29943
Cu 324.754	0.2038	ppb	0.0542	26.6	231.763	0.20381
Fe 271.441	-0.6110	ppb	3.6621	599.3	17.1352	-0.61101
K 766.491	0.2942	ppb	0.4278	145.4	253.669	0.29416

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	2.5120	ppb	1.6772	66.8	22.5801	2.51203
Mn 257.610	-0.0020	ppb	0.0308	1551.7	29.7040	-0.00199
Mo 202.032	0.8654	ppb	0.2135	24.7	4.5140	0.86542
Na 330.237	-243.378	ppb	268.451	110.3	39.5286	-243.37773
Ni 231.604	0.5215	ppb	0.8985	172.3	-0.8955	0.52149
Pb 220.353	3.4399	ppb	1.5388	44.7	7.9092	3.43990
Sb 206.834	-2.4547	ppb	7.2119	293.8	4.6998	-2.45472
Se 196.026	-5.5067	ppb	5.2078	94.6	-2.1562	-5.50669
Si 288.158	-3.1053uv	ppb	1.4779	47.6	323.086	-3.10527
Sn 189.925	0.9922	ppb	1.0579	106.6	0.0884	0.99223
Sr 216.596	-0.2515	ppb	0.2690	107.0	4.5689	-0.25150
Ti 334.941	0.1358	ppb	0.0609	44.8	-21.5573	0.13584
Tl 190.794	-2.3957	ppb	1.2728	53.1	-5.0131	-2.39575
V 292.401	0.4187	ppb	0.3311	79.1	3.2003	0.41874
Zn 206.200	0.0476	ppb	0.4888	1026.4	0.5554	0.04762

490-164778-D-1-C MSD (Samp) **12/15/2018, 6:39:24 PM** **Rack 2, Tube 31**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	49.8176	49.6822	50.2141
Al 308.215	5299.84	5305.68	5309.65
As 188.980	98.9639	105.862	105.341
B 249.678	207.046	209.668	208.170
Ba 389.178	107.471	108.493	108.894
Be 313.042	51.8926	51.9038	51.9976
Ca 370.602	15658	15677	15677
Cd 226.502	52.1298	52.4954	52.3448
Co 228.615	51.3198	49.8228	51.2678
Cr 267.716	101.577	101.958	102.180
Cu 324.754	106.153	104.989	106.020
Fe 271.441	5501.74	5493.69	5491.75
K 766.491	8871.51	8894.13	8882.10
Mg 279.078	7159.47	7144.18	7163.09
Mn 257.610	513.794	514.519	514.253
Mo 202.032	98.7071	98.8928	98.7486
Na 330.237	6426.68	6133.61	5973.37
Ni 231.604	102.844	105.334	103.337
Pb 220.353	533.899	521.483	524.246
Sb 206.834	48.0416	50.2964	58.8451
Se 196.026	99.5236	116.785	100.016
Si 288.158	1154.03	1162.86	1157.64
Sn 189.925	93.8602	97.5990	100.042
Sr 216.596	111.871	112.347	112.061
Ti 334.941	111.408	110.999	110.878
Tl 190.794	47.5061	51.6764	42.1304
V 292.401	100.110	100.954	100.108
Zn 206.200	149.795	148.249	147.186

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.9047	ppb	0.2765	0.6	1703.67
Al 308.215	5305.06	ppb	4.9340	0.1	12670.4
As 188.980	103.389	ppb	3.8412	3.7	27.0935
B 249.678	208.295	ppb	1.3157	0.6	1299.28

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	108.286	ppb	0.7339	0.7	995.099
Be 313.042	51.9313	ppb	0.0577	0.1	42094.8
Ca 370.602	15671	ppb	11.11	0.1	32729
Cd 226.502	52.3233	ppb	0.1838	0.4	806.457
Co 228.615	50.8035	ppb	0.8497	1.7	228.773
Cr 267.716	101.905	ppb	0.3047	0.3	2218.19
Cu 324.754	105.721	ppb	0.6373	0.6	4060.68
Fe 271.441	5495.73	ppb	5.3004	0.1	4145.02
K 766.491	8882.58	ppb	11.3163	0.1	220030
Mg 279.078	7155.58	ppb	10.0366	0.1	9874.63
Mn 257.610	514.189	ppb	0.3669	0.1	49777.9
Mo 202.032	98.7829	ppb	0.0975	0.1	207.854
Na 330.237	6177.88	ppb	229.877	3.7	196.384
Ni 231.604	103.838	ppb	1.3187	1.3	131.929
Pb 220.353	526.543	ppb	6.5192	1.2	280.134
Sb 206.834	52.3944	ppb	5.6991	10.9	26.9888
Se 196.026	105.441	ppb	9.8266	9.3	18.0451
Si 288.158	1158.18	ppb	4.4351	0.4	5831.79
Sn 189.925	97.1672	ppb	3.1137	3.2	28.6861
Sr 216.596	112.093	ppb	0.2396	0.2	433.226
Ti 334.941	111.095	ppb	0.2780	0.3	12181.8
Tl 190.794	47.1043	ppb	4.7857	10.2	8.5542
V 292.401	100.391	ppb	0.4883	0.5	1305.50
Zn 206.200	148.410	ppb	1.3121	0.9	83.8728

680-162050-B-2-A (Samp) **12/15/2018, 6:44:06 PM** **Rack 2, Tube 32**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4404u	-0.4240u	-0.0619u
Al 308.215	20.7223	19.6969	19.3381
As 188.980	4.2109	9.9584	-2.6720u
B 249.678	4.4461	2.6978	4.5387
Ba 389.178	16.6793	17.8670	16.4601
Be 313.042	0.0195	0.0182	0.0068u
Ca 370.602	84509	84515	84610
Cd 226.502	0.0773	-0.0886u	-0.4244u
Co 228.615	-0.7296u	-0.5258u	-0.4307u
Cr 267.716	-0.0552	0.2945	0.3497
Cu 324.754	11.7558	12.3679	11.7590
Fe 271.441	13.5340	10.1342	11.1084
K 766.491	34011.9	34052.6	34025.2
Mg 279.078	7905.49	7921.15	7916.81
Mn 257.610	0.5826	0.6113	0.5477
Mo 202.032	-1.5706u	2.3702	0.0418
Na 330.237	441196x	435528x	436559x
Ni 231.604	-0.9741u	0.8795	3.3203
Pb 220.353	0.0254	4.5418	2.4087
Sb 206.834	-4.3409u	-5.7182u	-0.0606u
Se 196.026	-5.9704u	-0.6843u	3.1432
Si 288.158	2387.63	2378.11	2390.86
Sn 189.925	-2.7949u	2.1932	-2.9725u
Sr 216.596	127.971	130.570	128.600
Ti 334.941	0.6979	0.3526	0.5815

Label	Replicates Concentration		
Tl 190.794	0.9988	-3.0022u	-1.2397u
V 292.401	0.7801	1.1418	0.6294
Zn 206.200	19.7662	21.0741	20.2280

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3087b	ppb	0.2140	69.3	-40.9211
Al 308.215	19.9191b	ppb	0.7184	3.6	201.994
As 188.980	3.8324b	ppb	6.3237	165.0	1.9331
B 249.678	3.8942b	ppb	1.0371	26.6	-41.2686
Ba 389.178	17.0021b	ppb	0.7570	4.5	120.904
Be 313.042	0.0148b	ppb	0.0070	47.3	-180.029
Ca 370.602	84545b	ppb	57.03	0.1	176447
Cd 226.502	-0.1452b	ppb	0.2556	176.0	2.7512
Co 228.615	-0.5620b	ppb	0.1528	27.2	-10.0631
Cr 267.716	0.1963b	ppb	0.2196	111.8	27.1844
Cu 324.754	11.9609b	ppb	0.3525	2.9	658.116
Fe 271.441	11.5922b	ppb	1.7508	15.1	26.3153
K 766.491	34029.9b	ppb	20.7395	0.1	842254
Mg 279.078	7914.49b	ppb	8.0851	0.1	10927.0
Mn 257.610	0.5806b	ppb	0.0318	5.5	119.997
Mo 202.032	0.2805b	ppb	1.9812	706.3	3.2984
Na 330.237	437761xb	ppb	3019.07	0.7	10804.1
Ni 231.604	1.0752b	ppb	2.1539	200.3	-0.1837
Pb 220.353	2.3253b	ppb	2.2594	97.2	7.3288
Sb 206.834	-3.3732b	ppb	2.9503	87.5	4.3247
Se 196.026	-1.1705b	ppb	4.5762	391.0	-1.3690
Si 288.158	2385.54b	ppb	6.6280	0.3	11598.9
Sn 189.925	-1.1914b	ppb	2.9325	246.1	-0.5092
Sr 216.596	129.047b	ppb	1.3560	1.1	498.979
Ti 334.941	0.5440b	ppb	0.1757	32.3	36.8563
Tl 190.794	-1.0810b	ppb	2.0052	185.5	-4.6498
V 292.401	0.8504b	ppb	0.2633	31.0	7.3871
Zn 206.200	20.3561b	ppb	0.6633	3.3	11.9778

680-162050-B-2-Asd (Samp) **12/15/2018, 6:48:47 PM** **Rack 2, Tube 33**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0154u	0.0882	0.3091
Al 308.215	0.9562	4.4975	3.7424
As 188.980	-2.7865u	4.7539	8.0560
B 249.678	2.7834	1.7641	2.5696
Ba 389.178	2.6126	0.3056	2.1542
Be 313.042	-0.0078u	0.0004u	-0.0175u
Ca 370.602	16049	16230	16328
Cd 226.502	0.1600	0.1284	0.0008u
Co 228.615	-0.9214u	-0.6978u	-0.2253u
Cr 267.716	-0.1001u	0.1194	0.0101
Cu 324.754	2.5178	2.7514	2.0411
Fe 271.441	5.4458	12.1040	14.7095
K 766.491	5354.30	5409.94	5454.20
Mg 279.078	1533.37	1555.55	1561.34
Mn 257.610	0.0912	0.0918	0.1285
Mo 202.032	0.2681	0.5047	0.6813

Label	Replicates Concentration		
Na 330.237	73043.5	73882.0	75157.9
Ni 231.604	2.0975	-1.2489u	-0.0888u
Pb 220.353	4.5549	-0.8313u	8.4259
Sb 206.834	-1.9965u	-11.1593u	-5.2654u
Se 196.026	-6.6855u	-12.3005u	-14.0943u
Si 288.158	450.387	457.261	459.068
Sn 189.925	1.3599	-1.7005u	1.3382
Sr 216.596	23.8806	24.4715	25.4775
Ti 334.941	0.0291	0.0708	0.0412
Tl 190.794	-9.4552u	-4.7920u	0.3020
V 292.401	-0.2114u	-0.0789u	0.0420
Zn 206.200	4.5858	3.8129	-0.3478u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1273	ppb	0.1657	130.2	-25.3126
Al 308.215	3.0654	ppb	1.8652	60.8	162.218
As 188.980	3.3411	ppb	5.5576	166.3	1.8089
B 249.678	2.3723	ppb	0.5375	22.7	-51.3181
Ba 389.178	1.6908	ppb	1.2213	72.2	-32.2523
Be 313.042	-0.0083	ppb	0.0090	107.7	-191.776
Ca 370.602	16202	ppb	141.4	0.9	33837
Cd 226.502	0.0964	ppb	0.0843	87.5	7.1629
Co 228.615	-0.6148	ppb	0.3554	57.8	-10.3206
Cr 267.716	0.0098	ppb	0.1097	1118.9	20.4593
Cu 324.754	2.4368	ppb	0.3620	14.9	312.734
Fe 271.441	10.7531	ppb	4.7774	44.4	25.6750
K 766.491	5406.14	ppb	50.0578	0.9	134012
Mg 279.078	1550.09	ppb	14.7626	1.0	2155.47
Mn 257.610	0.1038	ppb	0.0214	20.6	46.6091
Mo 202.032	0.4847	ppb	0.2073	42.8	3.7230
Na 330.237	74027.8	ppb	1064.75	1.4	1864.85
Ni 231.604	0.2533	ppb	1.6992	671.0	-1.2407
Pb 220.353	4.0498	ppb	4.6492	114.8	8.2267
Sb 206.834	-6.1404	ppb	4.6437	75.6	3.1805
Se 196.026	-11.0268	ppb	3.8652	35.1	-3.1580
Si 288.158	455.572	ppb	4.5805	1.0	2487.89
Sn 189.925	0.3325	ppb	1.7606	529.5	-0.0990
Sr 216.596	24.6099	ppb	0.8074	3.3	99.6520
Ti 334.941	0.0471	ppb	0.0215	45.6	-28.3068
Tl 190.794	-4.6484	ppb	4.8802	105.0	-5.6331
V 292.401	-0.0828	ppb	0.1267	153.1	-3.5842
Zn 206.200	2.6836	ppb	2.6536	98.9	2.0379

680-162050-B-2-Apds (Samp) **12/15/2018, 6:53:29 PM** **Rack 2, Tube 34**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.5788	52.6629	52.7749
Al 308.215	5244.17	5241.05	5235.44
As 188.980	109.509	106.283	109.305
B 249.678	211.702	211.450	212.241
Ba 389.178	116.832	114.546	117.195
Be 313.042	53.1943	53.1827	53.0453
Ca 370.602	87676	87867	87841

Label	Replicates Concentration		
Cd 226.502	53.2247	52.6791	53.6454
Co 228.615	51.8818	51.6097	51.7877
Cr 267.716	103.136	103.312	103.682
Cu 324.754	117.541	116.080	117.134
Fe 271.441	5145.45	5148.96	5164.17
K 766.491	43193.2x	43136.0x	43222.6x
Mg 279.078	12921.5	12927.6	12927.5
Mn 257.610	513.240	513.179	513.346
Mo 202.032	101.832	101.471	100.372
Na 330.237	435596x	436357x	433921x
Ni 231.604	105.415	105.197	100.368
Pb 220.353	523.454	528.150	536.560
Sb 206.834	45.7422	47.7592	45.9266
Se 196.026	116.056	99.1346	126.184
Si 288.158	2365.40	2366.13	2370.56
Sn 189.925	105.567	107.557	97.8832
Sr 216.596	226.756	225.832	227.939
Ti 334.941	101.480	101.434	101.748
Tl 190.794	28.3221	28.3247	40.8019
V 292.401	102.194	102.484	103.290
Zn 206.200	129.539	128.532	127.569

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.3389b	ppb	0.6606	1.3	1787.83
Al 308.215	5240.22b	ppb	4.4244	0.1	12517.5
As 188.980	108.366b	ppb	1.8063	1.7	28.3509
B 249.678	211.798b	ppb	0.4040	0.2	1322.73
Ba 389.178	116.191b	ppb	1.4361	1.2	1076.70
Be 313.042	53.1407b	ppb	0.0829	0.2	43069.6
Ca 370.602	87795b	ppb	104.0	0.1	183231
Cd 226.502	53.1831b	ppb	0.4845	0.9	818.408
Co 228.615	51.7597b	ppb	0.1382	0.3	233.112
Cr 267.716	103.377b	ppb	0.2783	0.3	2253.07
Cu 324.754	116.918b	ppb	0.7543	0.6	4466.70
Fe 271.441	5152.86b	ppb	9.9479	0.2	3887.81
K 766.491	43183.9xb	ppb	44.0620	0.1	1068754
Mg 279.078	12925.5b	ppb	3.4480	0.0	17826.9
Mn 257.610	513.255b	ppb	0.0845	0.0	49711.7
Mo 202.032	101.225b	ppb	0.7604	0.8	212.932
Na 330.237	435291xb	ppb	1246.65	0.3	10742.6
Ni 231.604	103.660b	ppb	2.8530	2.8	131.698
Pb 220.353	529.388b	ppb	6.6404	1.3	281.615
Sb 206.834	46.4760b	ppb	1.1151	2.4	24.5291
Se 196.026	113.792b	ppb	13.6662	12.0	19.5595
Si 288.158	2367.36b	ppb	2.7924	0.1	11540.5
Sn 189.925	103.669b	ppb	5.1084	4.9	30.6702
Sr 216.596	226.842b	ppb	1.0565	0.5	871.888
Ti 334.941	101.554b	ppb	0.1697	0.2	11141.3
Tl 190.794	32.4829b	ppb	7.2045	22.2	4.5418
V 292.401	102.656b	ppb	0.5678	0.6	1333.40
Zn 206.200	128.547b	ppb	0.9851	0.8	72.7042

680-162050-B-2-B MS (Samp) **12/15/2018, 6:58:12 PM** **Rack 2, Tube 35**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.6530	51.7767	51.1407
Al 308.215	5133.60	5139.29	5147.56
As 188.980	108.277	106.530	110.201
B 249.678	208.080	207.595	207.051
Ba 389.178	112.729	116.428	114.725
Be 313.042	52.2377	52.1804	52.1095
Ca 370.602	91313	91456	91337
Cd 226.502	52.0659	52.2738	51.8421
Co 228.615	49.1564	50.4777	50.9791
Cr 267.716	101.872	101.471	101.114
Cu 324.754	114.916	115.343	115.201
Fe 271.441	5047.86	5052.65	5074.95
K 766.491	44713.7x	44735.9x	44819.0x
Mg 279.078	13171.2	13173.9	13160.6
Mn 257.610	502.141	503.085	502.297
Mo 202.032	99.9573	102.063	98.7459
Na 330.237	458282x	458936x	456814x
Ni 231.604	100.104	101.161	104.100
Pb 220.353	518.325	519.935	525.834
Sb 206.834	54.9947	53.1490	44.1912
Se 196.026	92.5159	102.631	115.803
Si 288.158	2470.10	2469.39	2468.71
Sn 189.925	105.032	98.4614	100.656
Sr 216.596	231.493	232.713	229.107
Ti 334.941	99.2384	99.1591	99.3403
Tl 190.794	40.5248	31.1223	34.5172
V 292.401	101.363	100.080	100.764
Zn 206.200	127.614	127.833	130.520

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.5234b	ppb	0.3372	0.7	1759.48
Al 308.215	5140.15b	ppb	7.0199	0.1	12281.5
As 188.980	108.336b	ppb	1.8360	1.7	28.3436
B 249.678	207.575b	ppb	0.5146	0.2	1295.02
Ba 389.178	114.627b	ppb	1.8515	1.6	1061.96
Be 313.042	52.1758b	ppb	0.0642	0.1	42283.5
Ca 370.602	91369b	ppb	76.97	0.1	190688
Cd 226.502	52.0606b	ppb	0.2159	0.4	801.205
Co 228.615	50.2044b	ppb	0.9416	1.9	225.870
Cr 267.716	101.486b	ppb	0.3793	0.4	2212.44
Cu 324.754	115.153b	ppb	0.2175	0.2	4402.67
Fe 271.441	5058.48b	ppb	14.4558	0.3	3816.90
K 766.491	44756.2xb	ppb	55.5047	0.1	1107657
Mg 279.078	13168.6b	ppb	7.0496	0.1	18162.0
Mn 257.610	502.507b	ppb	0.5060	0.1	48673.5
Mo 202.032	100.256b	ppb	1.6787	1.7	210.920
Na 330.237	458011xb	ppb	1086.79	0.2	11301.0
Ni 231.604	101.788b	ppb	2.0704	2.0	129.293
Pb 220.353	521.365b	ppb	3.9536	0.8	277.440
Sb 206.834	50.7783b	ppb	5.7788	11.4	26.3071
Se 196.026	103.650b	ppb	11.6769	11.3	17.7175
Si 288.158	2469.40b	ppb	0.6960	0.0	12021.8

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	101.383b	ppb	3.3450	3.3	29.9932
Sr 216.596	231.104b	ppb	1.8341	0.8	888.189
Ti 334.941	99.2459b	ppb	0.0908	0.1	10888.1
Tl 190.794	35.3881b	ppb	4.7614	13.5	5.3407
V 292.401	100.736b	ppb	0.6417	0.6	1308.25
Zn 206.200	128.656b	ppb	1.6180	1.3	72.7678

680-162050-B-2-C MSD (Samp) **12/15/2018, 7:02:54 PM** **Rack 2, Tube 36**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.5948	52.6237	52.4296
Al 308.215	5281.29	5275.62	5268.23
As 188.980	108.389	113.992	104.887
B 249.678	211.788	212.253	213.183
Ba 389.178	116.993	117.263	117.477
Be 313.042	53.3396	53.3125	53.3802
Ca 370.602	91431	91505	91366
Cd 226.502	53.0972	52.7074	53.2198
Co 228.615	49.9979	52.3315	50.3959
Cr 267.716	103.575	103.658	103.130
Cu 324.754	117.846	117.311	117.338
Fe 271.441	5186.53	5164.92	5169.45
K 766.491	44987.0x	44918.0x	44974.5x
Mg 279.078	13276.8	13284.1	13290.0
Mn 257.610	514.373	514.469	514.311
Mo 202.032	103.014	102.049	103.340
Na 330.237	454238x	456488x	453761x
Ni 231.604	102.946	106.834	103.033
Pb 220.353	532.018	528.047	532.351
Sb 206.834	53.6867	62.1245	61.6606
Se 196.026	116.483	118.338	124.061
Si 288.158	2453.84	2452.76	2453.43
Sn 189.925	98.7377	101.966	111.387
Sr 216.596	230.779	230.915	233.025
Ti 334.941	101.606	101.595	101.731
Tl 190.794	33.0263	34.7183	39.2341
V 292.401	103.376	104.176	103.226
Zn 206.200	130.108	131.341	130.313

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.5494b	ppb	0.1048	0.2	1795.11
Al 308.215	5275.05b	ppb	6.5489	0.1	12599.7
As 188.980	109.089b	ppb	4.5931	4.2	28.5337
B 249.678	212.408b	ppb	0.7103	0.3	1326.73
Ba 389.178	117.244b	ppb	0.2428	0.2	1087.15
Be 313.042	53.3441b	ppb	0.0341	0.1	43234.7
Ca 370.602	91434b	ppb	69.61	0.1	190824
Cd 226.502	53.0081b	ppb	0.2676	0.5	815.719
Co 228.615	50.9085b	ppb	1.2484	2.5	229.137
Cr 267.716	103.454b	ppb	0.2838	0.3	2254.89
Cu 324.754	117.498b	ppb	0.3016	0.3	4487.78
Fe 271.441	5173.63b	ppb	11.3977	0.2	3903.36
K 766.491	44959.8xb	ppb	36.7466	0.1	1112696

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	13283.6b	ppb	6.6385	0.0	18320.4
Mn 257.610	514.384b	ppb	0.0799	0.0	49822.4
Mo 202.032	102.801b	ppb	0.6716	0.7	216.206
Na 330.237	454829xb	ppb	1456.14	0.3	11222.8
Ni 231.604	104.271b	ppb	2.2201	2.1	132.485
Pb 220.353	530.805b	ppb	2.3949	0.5	282.352
Sb 206.834	59.1573b	ppb	4.7433	8.0	29.7549
Se 196.026	119.627b	ppb	3.9497	3.3	20.6189
Si 288.158	2453.34b	ppb	0.5441	0.0	11946.7
Sn 189.925	104.030b	ppb	6.5721	6.3	30.7800
Sr 216.596	231.573b	ppb	1.2592	0.5	889.945
Ti 334.941	101.644b	ppb	0.0754	0.1	11151.7
Tl 190.794	35.6595b	ppb	3.2092	9.0	5.4132
V 292.401	103.593b	ppb	0.5104	0.5	1345.48
Zn 206.200	130.587b	ppb	0.6610	0.5	73.8518

680-162073-C-1-A (Samp) **12/15/2018, 7:07:36 PM** **Rack 2, Tube 37**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2990u	-0.3731u	-0.1131u
Al 308.215	42539.5	42598.6	42505.0
As 188.980	0.0132u	6.8080	-0.0122u
B 249.678	113.007	112.978	112.954
Ba 389.178	82.3523	81.6080	80.6413
Be 313.042	0.0044	0.0018	0.0017
Ca 370.602	241292	241335	241011
Cd 226.502	0.1416	0.2878	-0.2907u
Co 228.615	-1.4731u	-0.4629u	0.1036u
Cr 267.716	4.9466	4.4330	4.2232
Cu 324.754	31.9105	31.8884	32.3482
Fe 271.441	3817.34	3834.08	3842.24
K 766.491	4358.80	4367.80	4364.75
Mg 279.078	8704.60	8698.67	8705.27
Mn 257.610	25.4826	25.3683	25.4174
Mo 202.032	166.233	165.067	166.571
Na 330.237	342912x	339563x	341725x
Ni 231.604	14.4775	12.1888	13.2843
Pb 220.353	2.0153	1.4108	-1.0427u
Sb 206.834	-4.4696u	-4.9963u	-2.6279u
Se 196.026	32.4835	22.8728	29.4357
Si 288.158	10352.5	10359.2	10355.2
Sn 189.925	-0.9374u	-7.6348u	0.8024
Sr 216.596	1575.18	1566.91	1568.30
Ti 334.941	39.6653	39.7208	39.8408
Tl 190.794	-31.0513u	-30.1019u	-31.4798u
V 292.401	8.8936	9.4566	9.1459
Zn 206.200	335.053	333.748	333.235

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2617b	ppb	0.1340	51.2	-45.1091
Al 308.215	42547.7b	ppb	47.2939	0.1	100496
As 188.980	2.2697b	ppb	3.9304	173.2	1.5237
B 249.678	112.980b	ppb	0.0265	0.0	673.267

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	81.5339b	ppb	0.8579	1.1	740.414
Be 313.042	0.0026b	ppb	0.0015	58.4	-170.056
Ca 370.602	241213b	ppb	176.2	0.1	503358
Cd 226.502	0.0462b	ppb	0.3008	650.8	10.5803
Co 228.615	-0.6108b	ppb	0.7987	130.8	-11.6124
Cr 267.716	4.5343b	ppb	0.3722	8.2	120.661
Cu 324.754	32.0490b	ppb	0.2593	0.8	1390.67
Fe 271.441	3831.22b	ppb	12.6932	0.3	2892.65
K 766.491	4363.78b	ppb	4.5784	0.1	108220
Mg 279.078	8702.85b	ppb	3.6357	0.0	12004.9
Mn 257.610	25.4228b	ppb	0.0573	0.2	2530.54
Mo 202.032	165.957b	ppb	0.7892	0.5	347.462
Na 330.237	341400xb	ppb	1698.00	0.5	8434.73
Ni 231.604	13.3169b	ppb	1.1447	8.6	15.5685
Pb 220.353	0.7945b	ppb	1.6195	203.8	6.0108
Sb 206.834	-4.0312b	ppb	1.2436	30.8	2.7405
Se 196.026	28.2640b	ppb	4.9113	17.4	3.9875
Si 288.158	10355.6b	ppb	3.4098	0.0	49248.7
Sn 189.925	-2.5899b	ppb	4.4547	172.0	-0.9363
Sr 216.596	1570.13b	ppb	4.4313	0.3	6007.89
Ti 334.941	39.7423b	ppb	0.0897	0.2	4345.73
Tl 190.794	-30.8777b	ppb	0.7052	2.3	-13.2305
V 292.401	9.1654b	ppb	0.2820	3.1	105.454
Zn 206.200	334.012b	ppb	0.9373	0.3	188.345

MB 680-551755/1-A (Samp) **12/15/2018, 7:12:18 PM** **Rack 2, Tube 38**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1703u	-0.3499u	0.1676
Al 308.215	3.9628	6.3497	10.1858
As 188.980	-2.3725u	-2.0315u	1.7678
B 249.678	1.2407	2.2659	1.1871
Ba 389.178	-0.9585u	-1.7958u	0.3073
Be 313.042	-0.0117u	-0.0056u	-0.0065u
Ca 370.602	11.79	16.31	22.02
Cd 226.502	-0.1351u	0.0943	-0.0453u
Co 228.615	-1.4422u	-0.1457u	0.8379
Cr 267.716	0.0806	-0.1714u	0.0993
Cu 324.754	0.2899	0.3831	0.6621
Fe 271.441	-7.7910u	-3.2155u	-3.7279u
K 766.491	1.1990	2.2621	3.1273
Mg 279.078	3.6846	0.6931	2.2479
Mn 257.610	0.1301	0.0676	0.0329
Mo 202.032	-0.0921u	0.0026	0.6500
Na 330.237	-22.2610u	152.586	-163.108u
Ni 231.604	-0.3047u	2.0804	1.2387
Pb 220.353	-0.0107u	-4.2882u	-4.5379u
Sb 206.834	-6.4611u	-6.4034u	-3.3438u
Se 196.026	-12.6614u	-5.9092u	17.5908
Si 288.158	-2.3255u	-0.8738u	-4.3466u
Sn 189.925	2.8421	-3.9946u	0.5981
Sr 216.596	0.8705	0.8404	-0.5345u
Ti 334.941	-0.0544u	0.0562	0.0819

Label	Replicates Concentration		
Tl 190.794	-7.5346u	-6.5867u	-3.7178u
V 292.401	0.6494	0.3146	0.2878
Zn 206.200	-2.0280u	-0.4168u	-1.2226u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1176	ppb	0.2628	223.5	-33.7127
Al 308.215	6.8328	ppb	3.1395	45.9	171.114
As 188.980	-0.8787	ppb	2.2983	261.5	0.7417
B 249.678	1.5646	ppb	0.6080	38.9	-56.6378
Ba 389.178	-0.8157	ppb	1.0588	129.8	-57.8567
Be 313.042	-0.0079	ppb	0.0033	41.8	-190.344
Ca 370.602	16.71	ppb	5.125	30.7	62.34
Cd 226.502	-0.0287	ppb	0.1156	402.5	5.4027
Co 228.615	-0.2500	ppb	1.1436	457.5	-8.6256
Cr 267.716	0.0028	ppb	0.1512	5352.5	19.7585
Cu 324.754	0.4450	ppb	0.1937	43.5	240.496
Fe 271.441	-4.9115	ppb	2.5069	51.0	13.9415
K 766.491	2.1961	ppb	0.9658	44.0	300.730
Mg 279.078	2.2086	ppb	1.4961	67.7	22.1598
Mn 257.610	0.0769	ppb	0.0492	64.0	37.3309
Mo 202.032	0.1868	ppb	0.4039	216.2	3.1041
Na 330.237	-10.9273	ppb	158.152	1447.3	45.2433
Ni 231.604	1.0048	ppb	1.2096	120.4	-0.2745
Pb 220.353	-2.9456	ppb	2.5447	86.4	4.5854
Sb 206.834	-5.4028	ppb	1.7833	33.0	3.4871
Se 196.026	-0.3266	ppb	15.8800	4862.4	-1.2159
Si 288.158	-2.5153uv	ppb	1.7442	69.3	325.396
Sn 189.925	-0.1848	ppb	3.4850	1885.8	-0.2616
Sr 216.596	0.3922	ppb	0.8026	204.7	7.0388
Ti 334.941	0.0279	ppb	0.0724	259.5	-33.4080
Tl 190.794	-5.9464	ppb	1.9873	33.4	-5.9892
V 292.401	0.4173	ppb	0.2015	48.3	3.2273
Zn 206.200	-1.2225	ppb	0.8056	65.9	-0.1591

LCS 680-551755/2-A (Samp) **12/15/2018, 7:17:00 PM** **Rack 2, Tube 39**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	48.7306	49.1808	49.1419
Al 308.215	4859.92	4866.59	4866.40
As 188.980	102.501	110.076	101.050
B 249.678	203.648	203.905	201.896
Ba 389.178	94.4635	96.5539	94.2643
Be 313.042	51.7877	51.8792	51.7781
Ca 370.602	4929	4922	4935
Cd 226.502	51.2249	51.5247	50.8356
Co 228.615	49.5270	49.9592	49.2079
Cr 267.716	99.9557	100.020	99.8439
Cu 324.754	100.526	101.513	100.612
Fe 271.441	4975.86	5005.62	4982.04
K 766.491	7875.91	7879.97	7869.85
Mg 279.078	5081.31	5068.59	5080.87
Mn 257.610	497.760	497.894	497.551
Mo 202.032	98.3409	99.8426	98.6311

Label	Replicates Concentration		
Na 330.237	5028.20	5363.08	5178.87
Ni 231.604	103.511	104.622	102.384
Pb 220.353	516.916	519.224	522.985
Sb 206.834	63.6664	44.7983	55.6828
Se 196.026	101.445	91.5507	99.4780
Si 288.158	-7.0875u	-10.6496u	-10.5547u
Sn 189.925	104.555	100.529	96.9520
Sr 216.596	101.045	99.1227	99.9316
Ti 334.941	97.2684	97.4385	97.3610
Tl 190.794	41.8542	42.4007	43.3915
V 292.401	98.4470	97.5489	97.5221
Zn 206.200	107.438	105.954	99.6903

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.0178	ppb	0.2495	0.5	1673.00
Al 308.215	4864.30	ppb	3.7980	0.1	11630.9
As 188.980	104.542	ppb	4.8469	4.6	27.3844
B 249.678	203.150	ppb	1.0932	0.5	1265.90
Ba 389.178	95.0939	ppb	1.2683	1.3	866.581
Be 313.042	51.8150	ppb	0.0558	0.1	41998.4
Ca 370.602	4928	ppb	6.171	0.1	10314
Cd 226.502	51.1951	ppb	0.3455	0.7	788.893
Co 228.615	49.5647	ppb	0.3771	0.8	222.880
Cr 267.716	99.9400	ppb	0.0893	0.1	2175.73
Cu 324.754	100.884	ppb	0.5466	0.5	3885.17
Fe 271.441	4987.84	ppb	15.7065	0.3	3763.83
K 766.491	7875.24	ppb	5.0955	0.1	195105
Mg 279.078	5076.92	ppb	7.2205	0.1	7010.05
Mn 257.610	497.735	ppb	0.1727	0.0	48177.4
Mo 202.032	98.9382	ppb	0.7966	0.8	208.184
Na 330.237	5190.05	ppb	167.721	3.2	172.271
Ni 231.604	103.506	ppb	1.1192	1.1	131.502
Pb 220.353	519.708	ppb	3.0633	0.6	276.581
Sb 206.834	54.7158	ppb	9.4711	17.3	27.9399
Se 196.026	97.4911	ppb	5.2377	5.4	16.5990
Si 288.158	-9.4306uv	ppb	2.0297	21.5	319.579
Sn 189.925	100.678	ppb	3.8035	3.8	29.7300
Sr 216.596	100.033	ppb	0.9651	1.0	387.006
Ti 334.941	97.3560	ppb	0.0852	0.1	10666.9
Tl 190.794	42.5488	ppb	0.7793	1.8	7.3126
V 292.401	97.8393	ppb	0.5264	0.5	1271.95
Zn 206.200	104.361	ppb	4.1124	3.9	59.1046

680-162184-B-14-D (Samp) **12/15/2018, 7:21:42 PM** **Rack 2, Tube 40**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.0069u	-0.5734u	-0.0765u
Al 308.215	62.4079	63.6455	60.7696
As 188.980	9.8652	0.8464	-3.6595u
B 249.678	88.0536	88.0935	86.6161
Ba 389.178	118.074	115.920	117.108
Be 313.042	-0.0221u	-0.0089	-0.0097u
Ca 370.602	56139	56009	55970

Label	Replicates Concentration		
Cd 226.502	-0.3687u	0.0758	-0.3538u
Co 228.615	-1.8729u	-0.5906u	-0.8001u
Cr 267.716	0.3711	0.2950	0.3973
Cu 324.754	1.6963	2.1675	1.7099
Fe 271.441	115.401	115.126	116.037
K 766.491	4892.78	4886.47	4884.07
Mg 279.078	13608.5	13584.7	13577.7
Mn 257.610	23.4865	23.5272	23.4674
Mo 202.032	3.8672	3.2222	2.3872
Na 330.237	8108.33	8012.38	7753.10
Ni 231.604	2.3642	2.3870	0.4315
Pb 220.353	1.7801	7.0165	6.4353
Sb 206.834	-0.6622u	-1.3409u	2.0134
Se 196.026	383.478	392.969	372.228
Si 288.158	6272.17	6244.58	6242.56
Sn 189.925	1.5110	3.6599	-2.8641u
Sr 216.596	353.107	352.936	350.750
Ti 334.941	1.2072	1.0018	0.8149
Tl 190.794	-6.5611u	-4.7125u	4.4609
V 292.401	0.5749	0.3473	0.4821
Zn 206.200	10.4552	9.7889	10.3863

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5523	ppb	0.4656	84.3	-50.1474
Al 308.215	62.2743	ppb	1.4426	2.3	301.918
As 188.980	2.3507	ppb	6.8867	293.0	1.5582
B 249.678	87.5878	ppb	0.8417	1.0	509.729
Ba 389.178	117.034	ppb	1.0792	0.9	1083.77
Be 313.042	-0.0136	ppb	0.0074	54.6	-187.284
Ca 370.602	56039	ppb	88.70	0.2	116964
Cd 226.502	-0.2156	ppb	0.2524	117.1	2.7019
Co 228.615	-1.0878	ppb	0.6879	63.2	-12.5375
Cr 267.716	0.3545	ppb	0.0531	15.0	27.4587
Cu 324.754	1.8579	ppb	0.2682	14.4	291.825
Fe 271.441	115.521	ppb	0.4677	0.4	104.276
K 766.491	4887.77	ppb	4.4970	0.1	121185
Mg 279.078	13590.3	ppb	16.1743	0.1	18749.2
Mn 257.610	23.4937	ppb	0.0305	0.1	2360.69
Mo 202.032	3.1589	ppb	0.7420	23.5	9.2772
Na 330.237	7957.94	ppb	183.764	2.3	241.050
Ni 231.604	1.7276	ppb	1.1225	65.0	0.6558
Pb 220.353	5.0773	ppb	2.8702	56.5	8.7620
Sb 206.834	0.0035	ppb	1.7734	51244.7	5.6972
Se 196.026	382.892	ppb	10.3829	2.7	68.3426
Si 288.158	6253.10	ppb	16.5420	0.3	29857.4
Sn 189.925	0.7689	ppb	3.3247	432.4	0.0229
Sr 216.596	352.265	ppb	1.3142	0.4	1352.48
Ti 334.941	1.0080	ppb	0.1962	19.5	118.676
Tl 190.794	-2.2709	ppb	5.9027	259.9	-4.9815
V 292.401	0.4681	ppb	0.1144	24.4	3.7348
Zn 206.200	10.2101	ppb	0.3664	3.6	6.2696

Cont Calib Verif (CCV) **12/15/2018, 7:26:25 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	487.693	487.652	493.843
Al 308.215	9928.91	9902.30	9936.26
As 188.980	532.240	521.963	525.237
B 249.678	517.189	515.717	515.576
Ba 389.178	481.904	482.826	483.815
Be 313.042	528.285	528.977	529.367
Ca 370.602	10106	10083	10112
Cd 226.502	512.786	514.216	515.834
Co 228.615	509.688	507.646	509.475
Cr 267.716	502.359	502.421	503.281
Cu 324.754	505.841	503.728	515.144
Fe 271.441	10093.7	10104.8	10129.9
K 766.491	9993.34	9975.16	9989.13
Mg 279.078	10374.2	10380.0	10407.9
Mn 257.610	504.443	505.065	505.983
Mo 202.032	496.916	495.323	500.541
Na 330.237	11014.5	10952.3	10321.2
Ni 231.604	517.351	513.868	513.021
Pb 220.353	524.829	522.644	533.397
Sb 206.834	513.097	503.161	502.595
Se 196.026	529.182	530.381	544.168
Si 288.158	4935.22	4939.92	4943.03
Sn 189.925	505.189	498.635	523.545
Sr 216.596	503.479	506.401	507.584
Ti 334.941	495.990	495.810	496.354
Tl 190.794	494.073	486.711	491.928
V 292.401	500.635	500.763	500.806
Zn 206.200	1069.38	1069.27	1069.66

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	489.729	ppb	3.5631	0.7	16981.9	97.94582
Al 308.215	9922.49	ppb	17.8690	0.2	23577.0	99.22488
As 188.980	526.480	ppb	5.2497	1.0	133.989	105.29604
B 249.678	516.161	ppb	0.8938	0.2	3322.02	103.23212
Ba 389.178	482.848	ppb	0.9556	0.2	4583.87	96.56969
Be 313.042	528.876	ppb	0.5481	0.1	430392	105.77519
Ca 370.602	10100	ppb	15.44	0.2	21107	101.00136
Cd 226.502	514.279	ppb	1.5247	0.3	7841.02	102.85571
Co 228.615	508.936	ppb	1.1225	0.2	2357.31	101.78728
Cr 267.716	502.687	ppb	0.5152	0.1	10858.6	100.53743
Cu 324.754	508.238	ppb	6.0736	1.2	18663.7	101.64756
Fe 271.441	10109.5	ppb	18.5432	0.2	7635.29	101.04445
K 766.491	9985.88	ppb	9.5134	0.1	247329	99.85875
Mg 279.078	10387.3	ppb	18.0191	0.2	14327.9	103.87335
Mn 257.610	505.164	ppb	0.7748	0.2	48931.4	101.03281
Mo 202.032	497.593	ppb	2.6740	0.5	1036.30	99.51865
Na 330.237	10762.7	ppb	383.591	3.6	306.018	107.62660
Ni 231.604	514.747	ppb	2.2951	0.4	659.931	102.94932
Pb 220.353	526.957	ppb	5.6835	1.1	280.040	105.39136
Sb 206.834	506.284	ppb	5.9071	1.2	212.946	101.25685
Se 196.026	534.577	ppb	8.3275	1.6	95.9488	106.91541
Si 288.158	4939.39	ppb	3.9275	0.1	23789.8	98.78782

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	509.123	ppb	12.9126	2.5	151.179	101.82457
Sr 216.596	505.822	ppb	2.1130	0.4	1931.04	101.16432
Ti 334.941	496.051	ppb	0.2775	0.1	54448.7	99.21023
Tl 190.794	490.904	ppb	3.7864	0.8	131.141	98.18074
V 292.401	500.735	ppb	0.0889	0.0	6516.54	100.14693
Zn 206.200	1069.43	ppb	0.1999	0.0	601.632	106.94341

Cont Calib Blank (CCB) **12/15/2018, 7:31:08 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	-1.0758u	0.1711	0.0971
Al 308.215	0.8160	0.4766	3.3327
As 188.980	4.3437	-0.9598u	-2.6504u
B 249.678	4.2890	2.7443	2.5053
Ba 389.178	-1.8233u	0.5912	-0.7571u
Be 313.042	0.0202	0.0417	0.0301
Ca 370.602	-4.255u	-4.995u	0.8705
Cd 226.502	-0.1190u	-0.2513u	-0.0621u
Co 228.615	0.2614	0.5329	-1.2442u
Cr 267.716	-0.4626u	-0.1559u	-0.0569u
Cu 324.754	0.0316	0.6247	1.2922
Fe 271.441	2.4163	-0.4104u	-6.2693u
K 766.491	1.2518	0.3261	0.9575
Mg 279.078	-0.4272u	1.0119	0.6099
Mn 257.610	0.0027	0.0777	0.0946
Mo 202.032	-0.8753u	-0.2611u	0.2757
Na 330.237	257.990	150.252	-267.264u
Ni 231.604	-0.4566u	0.7441	-1.6548u
Pb 220.353	-0.3516u	-3.5461u	-2.6537u
Sb 206.834	-9.8995u	-5.9367u	0.4402
Se 196.026	-0.8671u	-0.3212u	-15.8504u
Si 288.158	-0.7593u	-1.7472u	-3.5217u
Sn 189.925	3.1660	3.7894	-2.0955u
Sr 216.596	-0.8615u	0.3671	1.5980
Ti 334.941	0.1175	0.1865	0.1934
Tl 190.794	-1.0432u	4.3118	5.0168
V 292.401	0.1722	-0.0965u	0.0704
Zn 206.200	1.7115	-1.0182u	0.6982

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2692	ppb	0.6995	259.8	-38.9785	-0.26920
Al 308.215	1.5418	ppb	1.5602	101.2	158.622	1.54176
As 188.980	0.2445	ppb	3.6493	1492.5	1.0258	0.24451
B 249.678	3.1796	ppb	0.9682	30.5	-46.0006	3.17957
Ba 389.178	-0.6631	ppb	1.2100	182.5	-56.3990	-0.66308
Be 313.042	0.0307	ppb	0.0108	35.1	-158.918	0.03067
Ca 370.602	-2.793	ppb	3.194	114.4	21.66	-2.79309
Cd 226.502	-0.1442	ppb	0.0971	67.4	3.6441	-0.14415
Co 228.615	-0.1500	ppb	0.9573	638.4	-8.1575	-0.14995
Cr 267.716	-0.2251	ppb	0.2115	93.9	14.8449	-0.22513
Cu 324.754	0.6495	ppb	0.6307	97.1	247.909	0.64950
Fe 271.441	-1.4211	ppb	4.4301	311.7	16.5660	-1.42114
K 766.491	0.8452	ppb	0.4730	56.0	267.302	0.84515

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	0.3982	ppb	0.7425	186.5	19.6652	0.39822
Mn 257.610	0.0583	ppb	0.0489	83.8	35.5401	0.05835
Mo 202.032	-0.2869	ppb	0.5759	200.7	2.1199	-0.28690
Na 330.237	46.9923	ppb	277.434	590.4	46.6625	46.99225
Ni 231.604	-0.4558	ppb	1.1994	263.2	-2.1531	-0.45575
Pb 220.353	-2.1838	ppb	1.6483	75.5	4.9820	-2.18381
Sb 206.834	-5.1320	ppb	5.2166	101.6	3.6006	-5.13199
Se 196.026	-5.6796	ppb	8.8124	155.2	-2.1875	-5.67958
Si 288.158	-2.0094uv	ppb	1.3997	69.7	327.871	-2.00941
Sn 189.925	1.6200	ppb	3.2328	199.6	0.2751	1.61997
Sr 216.596	0.3679	ppb	1.2297	334.3	6.9610	0.36787
Ti 334.941	0.1658	ppb	0.0420	25.3	-18.2752	0.16579
Tl 190.794	2.7618	ppb	3.3140	120.0	-3.5902	2.76181
V 292.401	0.0487	ppb	0.1356	278.5	-1.5789	0.04870
Zn 206.200	0.4638	ppb	1.3798	297.5	0.7895	0.46382

680-162184-B-14-Dsd (Samp) **12/15/2018, 7:35:49 PM** **Rack 2, Tube 41**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4095u	0.0213	-0.4193u
Al 308.215	13.8759	9.3076	10.1659
As 188.980	-1.8298u	6.7639	-1.9803u
B 249.678	17.6495	18.2594	18.2979
Ba 389.178	22.0551	22.7387	22.2621
Be 313.042	-0.0157u	-0.0125u	-0.0181u
Ca 370.602	11096	11080	11082
Cd 226.502	0.0602	-0.1244u	0.2072
Co 228.615	-0.2183u	-0.4010u	0.5129
Cr 267.716	-0.2799u	-0.1904u	-0.3237u
Cu 324.754	-0.2047u	1.4760	0.9537
Fe 271.441	25.1473	8.1421	13.0175
K 766.491	941.649	942.215	943.018
Mg 279.078	2695.14	2692.38	2687.79
Mn 257.610	4.6082	4.5862	4.6173
Mo 202.032	0.8993	0.3531	-0.8129u
Na 330.237	1953.14	1073.15	1524.55
Ni 231.604	-0.9567u	1.3847	-2.0282u
Pb 220.353	2.9202	-2.3210u	1.1658
Sb 206.834	-5.5562u	-6.7432u	-8.8858u
Se 196.026	83.8311	80.7813	56.0066
Si 288.158	1237.47	1233.41	1232.84
Sn 189.925	3.2071	0.5228	-1.3499u
Sr 216.596	72.1570	70.7495	68.1177
Ti 334.941	0.2367	0.1084	0.1003
Tl 190.794	8.8131	-7.1700u	-0.4804u
V 292.401	0.5165	0.5700	0.2385
Zn 206.200	3.2795	2.2591	2.8270

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2692	ppb	0.2516	93.5	-39.2418
Al 308.215	11.1165	ppb	2.4280	21.8	181.221
As 188.980	0.9846	ppb	5.0056	508.4	1.2130
B 249.678	18.0689	ppb	0.3637	2.0	52.0304

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	22.3520	ppb	0.3505	1.6	166.585
Be 313.042	-0.0154	ppb	0.0028	17.9	-194.891
Ca 370.602	11086	ppb	8.990	0.1	23161
Cd 226.502	0.0477	ppb	0.1662	348.7	6.5892
Co 228.615	-0.0355	ppb	0.4836	1362.9	-7.6288
Cr 267.716	-0.2647	ppb	0.0680	25.7	14.0122
Cu 324.754	0.7417	ppb	0.8602	116.0	251.261
Fe 271.441	15.4356	ppb	8.7567	56.7	29.2282
K 766.491	942.294	ppb	0.6879	0.1	23561.7
Mg 279.078	2691.77	ppb	3.7095	0.1	3728.91
Mn 257.610	4.6039	ppb	0.0160	0.3	486.750
Mo 202.032	0.1465	ppb	0.8746	597.1	3.0199
Na 330.237	1516.94	ppb	440.044	29.0	82.7808
Ni 231.604	-0.5334	ppb	1.7454	327.2	-2.2531
Pb 220.353	0.5884	ppb	2.6679	453.5	6.4251
Sb 206.834	-7.0617	ppb	1.6875	23.9	2.8008
Se 196.026	73.5397	ppb	15.2605	20.8	12.1916
Si 288.158	1234.57	ppb	2.5240	0.2	6165.87
Sn 189.925	0.7933	ppb	2.2905	288.7	0.0294
Sr 216.596	70.3414	ppb	2.0504	2.9	274.525
Ti 334.941	0.1485	ppb	0.0765	51.5	-11.3725
Tl 190.794	0.3876	ppb	8.0268	2071.1	-4.2437
V 292.401	0.4416	ppb	0.1780	40.3	3.5554
Zn 206.200	2.7885	ppb	0.5112	18.3	2.0967

680-162184-B-14-Dpds (Samp) **12/15/2018, 7:40:30 PM** **Rack 2, Tube 42**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.7796	50.7403	50.8340
Al 308.215	5138.97	5134.88	5110.56
As 188.980	107.699	106.921	111.602
B 249.678	296.724	297.794	295.782
Ba 389.178	213.411	212.936	213.711
Be 313.042	53.9948	54.0635	53.9697
Ca 370.602	60164	60120	59975
Cd 226.502	52.9449	53.2425	53.0583
Co 228.615	50.2184	51.6571	51.4343
Cr 267.716	103.571	103.605	103.779
Cu 324.754	105.151	105.725	105.225
Fe 271.441	5309.67	5306.19	5307.49
K 766.491	13257.0	13259.3	13237.2
Mg 279.078	18678.4	18649.5	18645.4
Mn 257.610	538.089	538.725	538.603
Mo 202.032	106.041	106.641	104.070
Na 330.237	13340.8	13478.4	13134.4
Ni 231.604	106.566	105.225	105.269
Pb 220.353	528.262	535.686	522.109
Sb 206.834	52.8922	50.0807	63.0134
Se 196.026	485.803	485.127	476.016
Si 288.158	6210.99	6204.93	6190.88
Sn 189.925	106.341	94.8521	100.842
Sr 216.596	447.404	446.091	447.489
Ti 334.941	101.564	101.704	101.424

Label	Replicates Concentration		
Tl 190.794	39.2000	48.2708	32.5067
V 292.401	101.263	102.259	102.147
Zn 206.200	117.931	119.118	116.376

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.1180	ppb	0.5749	1.1	1744.64
Al 308.215	5128.14	ppb	15.3584	0.3	12253.3
As 188.980	108.741	ppb	2.5082	2.3	28.4455
B 249.678	296.766	ppb	1.0066	0.3	1882.07
Ba 389.178	213.353	ppb	0.3904	0.2	2012.18
Be 313.042	54.0093	ppb	0.0486	0.1	43792.4
Ca 370.602	60086	ppb	99.19	0.2	125411
Cd 226.502	53.0819	ppb	0.1502	0.3	817.908
Co 228.615	51.1033	ppb	0.7744	1.5	230.015
Cr 267.716	103.652	ppb	0.1119	0.1	2255.92
Cu 324.754	105.367	ppb	0.3127	0.3	4047.93
Fe 271.441	5307.78	ppb	1.7591	0.0	4004.03
K 766.491	13251.2	ppb	12.1741	0.1	328122
Mg 279.078	18657.8	ppb	18.0152	0.1	25726.9
Mn 257.610	538.472	ppb	0.3374	0.1	52175.4
Mo 202.032	105.584	ppb	1.3452	1.3	221.986
Na 330.237	13317.8	ppb	173.139	1.3	371.958
Ni 231.604	105.686	ppb	0.7619	0.7	134.305
Pb 220.353	528.686	ppb	6.7983	1.3	281.252
Sb 206.834	55.3288	ppb	6.8019	12.3	28.1558
Se 196.026	482.316	ppb	5.4658	1.1	86.4513
Si 288.158	6202.27	ppb	10.3161	0.2	29644.6
Sn 189.925	100.678	ppb	5.7461	5.7	29.7310
Sr 216.596	446.995	ppb	0.7836	0.2	1713.66
Ti 334.941	101.564	ppb	0.1398	0.1	11173.2
Tl 190.794	39.9925	ppb	7.9119	19.8	6.6027
V 292.401	101.890	ppb	0.5453	0.5	1324.62
Zn 206.200	117.808	ppb	1.3753	1.2	66.6618

680-162184-B-14-E MS (Samp) **12/15/2018, 7:45:12 PM** **Rack 2, Tube 43**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.4080	50.9489	50.7631
Al 308.215	5095.94	5103.16	5100.08
As 188.980	109.006	107.124	105.205
B 249.678	296.441	294.638	296.002
Ba 389.178	212.195	212.133	212.260
Be 313.042	53.7085	53.7983	53.8038
Ca 370.602	60184	60314	60230
Cd 226.502	53.0234	52.8261	52.8019
Co 228.615	49.9612	50.4765	49.2619
Cr 267.716	102.746	102.810	103.610
Cu 324.754	106.200	104.576	105.588
Fe 271.441	5243.60	5256.51	5262.34
K 766.491	13219.0	13227.8	13231.8
Mg 279.078	18661.9	18686.2	18682.7
Mn 257.610	535.790	536.278	535.983
Mo 202.032	104.942	104.778	102.639

Label	Replicates Concentration		
Na 330.237	13229.7	13258.6	12794.7
Ni 231.604	103.983	104.097	102.793
Pb 220.353	519.732	536.448	530.902
Sb 206.834	45.2875	53.6696	49.9095
Se 196.026	480.162	487.628	491.397
Si 288.158	6222.47	6228.38	6217.49
Sn 189.925	108.635	94.4555	99.9529
Sr 216.596	449.658	448.157	449.805
Ti 334.941	100.803	100.740	100.867
Tl 190.794	34.2194	36.9436	38.3076
V 292.401	100.949	101.604	100.982
Zn 206.200	118.019	113.184	114.389

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.0400	ppb	0.3319	0.7	1741.93
Al 308.215	5099.73	ppb	3.6229	0.1	12186.3
As 188.980	107.112	ppb	1.9005	1.8	28.0336
B 249.678	295.694	ppb	0.9403	0.3	1875.06
Ba 389.178	212.196	ppb	0.0636	0.0	2001.12
Be 313.042	53.7702	ppb	0.0535	0.1	43597.8
Ca 370.602	60242	ppb	65.85	0.1	125737
Cd 226.502	52.8838	ppb	0.1215	0.2	814.856
Co 228.615	49.8999	ppb	0.6096	1.2	224.419
Cr 267.716	103.055	ppb	0.4817	0.5	2243.06
Cu 324.754	105.455	ppb	0.8203	0.8	4051.10
Fe 271.441	5254.15	ppb	9.5881	0.2	3963.71
K 766.491	13226.2	ppb	6.5539	0.0	327504
Mg 279.078	18676.9	ppb	13.1069	0.1	25753.4
Mn 257.610	536.017	ppb	0.2457	0.0	51938.0
Mo 202.032	104.120	ppb	1.2848	1.2	218.946
Na 330.237	13094.3	ppb	259.893	2.0	366.478
Ni 231.604	103.625	ppb	0.7220	0.7	131.655
Pb 220.353	529.027	ppb	8.5139	1.6	281.431
Sb 206.834	49.6222	ppb	4.1984	8.5	25.7981
Se 196.026	486.396	ppb	5.7178	1.2	87.1914
Si 288.158	6222.78	ppb	5.4519	0.1	29741.5
Sn 189.925	101.015	ppb	7.1493	7.1	29.8310
Sr 216.596	449.206	ppb	0.9121	0.2	1722.13
Ti 334.941	100.803	ppb	0.0636	0.1	11089.8
Tl 190.794	36.4902	ppb	2.0815	5.7	5.6372
V 292.401	101.178	ppb	0.3694	0.4	1315.33
Zn 206.200	115.197	ppb	2.5166	2.2	65.1942

680-162184-B-14-F MS (Samp) **12/15/2018, 7:49:54 PM** **Rack 2, Tube 44**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.0377	50.8947	51.2921
Al 308.215	5098.46	5097.47	5093.60
As 188.980	104.905	107.850	110.178
B 249.678	297.783	297.120	298.616
Ba 389.178	212.983	212.617	212.842
Be 313.042	53.8683	53.7765	53.6566
Ca 370.602	60854	60809	60722

Label	Replicates Concentration		
Cd 226.502	52.7152	52.9243	52.6717
Co 228.615	50.6830	51.0014	50.8827
Cr 267.716	103.272	103.053	103.608
Cu 324.754	104.953	105.198	104.919
Fe 271.441	5292.15	5284.01	5264.85
K 766.491	13272.3	13314.1	13277.9
Mg 279.078	18848.8	18813.5	18774.2
Mn 257.610	536.719	535.626	535.802
Mo 202.032	103.218	104.789	104.263
Na 330.237	13035.1	13342.6	13259.8
Ni 231.604	104.911	106.138	104.380
Pb 220.353	520.780	516.645	531.508
Sb 206.834	54.1573	47.4021	48.8110
Se 196.026	497.185	476.751	491.351
Si 288.158	6314.22	6289.19	6287.91
Sn 189.925	102.778	106.289	100.753
Sr 216.596	449.278	453.511	450.729
Ti 334.941	101.236	100.956	100.654
Tl 190.794	45.4077	34.2087	43.4208
V 292.401	101.710	101.000	101.667
Zn 206.200	116.550	114.680	118.633

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.0749	ppb	0.2013	0.4	1743.13
Al 308.215	5096.51	ppb	2.5647	0.1	12178.7
As 188.980	107.644	ppb	2.6425	2.5	28.1682
B 249.678	297.840	ppb	0.7498	0.3	1889.17
Ba 389.178	212.814	ppb	0.1844	0.1	2007.17
Be 313.042	53.7671	ppb	0.1061	0.2	43595.4
Ca 370.602	60795	ppb	67.26	0.1	126890
Cd 226.502	52.7704	ppb	0.1351	0.3	813.144
Co 228.615	50.8557	ppb	0.1609	0.3	228.868
Cr 267.716	103.311	ppb	0.2799	0.3	2248.57
Cu 324.754	105.023	ppb	0.1520	0.1	4035.44
Fe 271.441	5280.34	ppb	14.0147	0.3	3983.41
K 766.491	13288.1	ppb	22.6792	0.2	329036
Mg 279.078	18812.2	ppb	37.3397	0.2	25939.7
Mn 257.610	536.049	ppb	0.5869	0.1	51941.8
Mo 202.032	104.090	ppb	0.7997	0.8	218.883
Na 330.237	13212.5	ppb	159.072	1.2	369.376
Ni 231.604	105.143	ppb	0.9015	0.9	133.606
Pb 220.353	522.978	ppb	7.6714	1.5	278.282
Sb 206.834	50.1235	ppb	3.5637	7.1	26.0110
Se 196.026	488.429	ppb	10.5257	2.2	87.5605
Si 288.158	6297.11	ppb	14.8349	0.2	30092.5
Sn 189.925	103.273	ppb	2.8008	2.7	30.5025
Sr 216.596	451.173	ppb	2.1513	0.5	1729.64
Ti 334.941	100.948	ppb	0.2912	0.3	11106.2
Tl 190.794	41.0124	ppb	5.9753	14.6	6.8844
V 292.401	101.459	ppb	0.3981	0.4	1319.05
Zn 206.200	116.621	ppb	1.9776	1.7	65.9948

680-162184-D-12-B (Samp) **12/15/2018, 7:54:36 PM** **Rack 2, Tube 45**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0784u	-0.0841u	-0.5977u
Al 308.215	3.8190	6.5413	5.8425
As 188.980	-1.8104u	0.7097	3.5924
B 249.678	16.9865	19.3070	16.7612
Ba 389.178	24.5052	22.2462	23.6763
Be 313.042	-0.0441u	-0.0498u	-0.0297u
Ca 370.602	60330	60343	60243
Cd 226.502	-0.1096u	0.0835	0.0807
Co 228.615	-2.2726u	-1.2499u	-1.2325u
Cr 267.716	1.4774	2.0316	1.5684
Cu 324.754	0.6957	1.3454	0.5349
Fe 271.441	-9.7314u	3.0521	-6.5817u
K 766.491	539.129	538.748	538.044
Mg 279.078	23102.7	23099.6	23047.5
Mn 257.610	0.9311	0.9335	0.9267
Mo 202.032	0.1365	0.3046	0.8587
Na 330.237	26781.3	26630.3	26566.4
Ni 231.604	-0.6762u	1.8115	2.3929
Pb 220.353	3.6216	-4.4664u	-7.1269u
Sb 206.834	-8.0027u	-4.3190u	-2.7552u
Se 196.026	-0.6009u	-14.3476u	12.0599
Si 288.158	4478.44	4484.06	4469.01
Sn 189.925	2.6177	-4.2331u	0.8714
Sr 216.596	248.291	247.936	248.159
Ti 334.941	-0.5037	-0.3775	-0.3742
Tl 190.794	-13.0281u	6.7431	-5.3863u
V 292.401	0.7968	0.6068	0.4896
Zn 206.200	2.8376	4.6741	5.4011

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2534	ppb	0.2982	117.7	-39.5005
Al 308.215	5.4009	ppb	1.4139	26.2	167.761
As 188.980	0.8306	ppb	2.7034	325.5	1.1736
B 249.678	17.6849	ppb	1.4093	8.0	49.5126
Ba 389.178	23.4759	ppb	1.1428	4.9	198.779
Be 313.042	-0.0412	ppb	0.0104	25.2	-209.823
Ca 370.602	60305	ppb	54.51	0.1	125866
Cd 226.502	0.0182	ppb	0.1107	608.1	6.1824
Co 228.615	-1.5850	ppb	0.5956	37.6	-14.8324
Cr 267.716	1.6925	ppb	0.2972	17.6	56.3864
Cu 324.754	0.8586	ppb	0.4291	50.0	255.507
Fe 271.441	-4.4203	ppb	6.6602	150.7	14.2406
K 766.491	538.641	ppb	0.5504	0.1	13574.1
Mg 279.078	23083.3	ppb	31.0029	0.1	31832.8
Mn 257.610	0.9304	ppb	0.0035	0.4	220.492
Mo 202.032	0.4333	ppb	0.3779	87.2	3.6159
Na 330.237	26659.3	ppb	110.389	0.4	700.691
Ni 231.604	1.1761	ppb	1.6302	138.6	-0.0529
Pb 220.353	-2.6572	ppb	5.5980	210.7	4.7360
Sb 206.834	-5.0256	ppb	2.6942	53.6	3.6445
Se 196.026	-0.9629	ppb	13.2075	1371.7	-1.3312
Si 288.158	4477.17	ppb	7.6051	0.2	21473.2

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.2480	ppb	3.5599	1435.6	-0.2772
Sr 216.596	248.129	ppb	0.1796	0.1	954.306
Ti 334.941	-0.4185	ppb	0.0738	17.6	-7.1989
Tl 190.794	-3.8904	ppb	9.9701	256.3	-5.4254
V 292.401	0.6310	ppb	0.1550	24.6	5.9869
Zn 206.200	4.3043	ppb	1.3212	30.7	2.9484

680-162184-B-13-B (Samp) **12/15/2018, 7:59:18 PM** **Rack 2, Tube 46**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3266u	0.3532	-0.0729u
Al 308.215	3.0851	0.4285	1.7392
As 188.980	25.3874	24.0675	18.3668
B 249.678	26.0756	27.1727	26.7735
Ba 389.178	49.3940	47.8095	49.8498
Be 313.042	-0.0388u	-0.0295u	-0.0222u
Ca 370.602	47505	47572	47548
Cd 226.502	0.0284	0.2688	-0.3949u
Co 228.615	-0.8032u	-1.7062u	-0.0548u
Cr 267.716	-0.0063u	-0.2593u	-0.2271u
Cu 324.754	1.4015	0.7488	1.7228
Fe 271.441	24.5350	13.0924	15.0600
K 766.491	719.323	717.828	721.150
Mg 279.078	8076.55	8064.88	8054.93
Mn 257.610	2.1689	2.2055	2.2656
Mo 202.032	3.8258	3.2141	5.2272
Na 330.237	11530.8	11331.0	11433.5
Ni 231.604	-1.9263u	1.5243	-3.3129u
Pb 220.353	5.0895	-1.8171u	-1.6166u
Sb 206.834	11.5034	-5.6412u	3.8492
Se 196.026	-2.1829u	1.1902	2.2667
Si 288.158	6162.62	6167.68	6174.32
Sn 189.925	1.0311	-2.5358u	1.3387
Sr 216.596	212.631	212.289	212.889
Ti 334.941	0.0788	-0.0609	3.3509
Tl 190.794	-2.5922u	0.9126	-8.5699u
V 292.401	0.2220	0.7549	-0.2156u
Zn 206.200	2.2115	-0.0071u	3.8257

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0154	ppb	0.3435	2225.8	-30.9963
Al 308.215	1.7509	ppb	1.3283	75.9	159.195
As 188.980	22.6072	ppb	3.7311	16.5	6.6807
B 249.678	26.6739	ppb	0.5553	2.1	108.703
Ba 389.178	49.0178	ppb	1.0709	2.2	427.317
Be 313.042	-0.0302	ppb	0.0083	27.6	-202.104
Ca 370.602	47542	ppb	34.09	0.1	99233
Cd 226.502	-0.0325	ppb	0.3360	1032.5	5.3690
Co 228.615	-0.8547	ppb	0.8269	96.7	-11.4694
Cr 267.716	-0.1642	ppb	0.1377	83.9	16.2484
Cu 324.754	1.2910	ppb	0.4963	38.4	271.265
Fe 271.441	17.5625	ppb	6.1180	34.8	30.7717
K 766.491	719.433	ppb	1.6637	0.2	18047.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	8065.45	ppb	10.8208	0.1	11135.0
Mn 257.610	2.2134	ppb	0.0488	2.2	279.214
Mo 202.032	4.0890	ppb	1.0321	25.2	11.2114
Na 330.237	11431.8	ppb	99.8839	0.9	326.455
Ni 231.604	-1.2383	ppb	2.4909	201.2	-3.1587
Pb 220.353	0.5519	ppb	3.9309	712.2	6.4049
Sb 206.834	3.2371	ppb	8.5887	265.3	7.0232
Se 196.026	0.4247	ppb	2.3215	546.6	-1.0793
Si 288.158	6168.21	ppb	5.8676	0.1	29456.7
Sn 189.925	-0.0553	ppb	2.1537	3893.8	-0.2217
Sr 216.596	212.603	ppb	0.3012	0.1	818.437
Ti 334.941	1.1229	ppb	1.9308	171.9	113.004
Tl 190.794	-3.4165	ppb	4.7947	140.3	-5.2992
V 292.401	0.2538	ppb	0.4860	191.5	0.7962
Zn 206.200	2.0100	ppb	1.9243	95.7	1.6590

680-162183-B-1-B (Samp) **12/15/2018, 8:04:00 PM** **Rack 2, Tube 47**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0576u	-0.2446u	-0.3511u
Al 308.215	10.5111	17.7167	12.3392
As 188.980	22.9243	20.2111	21.7625
B 249.678	339.121	338.998	337.252
Ba 389.178	174.785	176.697	175.464
Be 313.042	-0.0314u	-0.0418u	-0.0377u
Ca 370.602	188824	188484	187930
Cd 226.502	0.2752	-0.3623u	-0.4989u
Co 228.615	4.0139	4.4476	4.0088
Cr 267.716	2.5439	2.6716	2.6991
Cu 324.754	3.8693	3.4891	3.6031
Fe 271.441	4488.80	4481.42	4475.79
K 766.491	87504.1x	87486.3x	87153.1x
Mg 279.078	42709.9	42622.6	42531.0
Mn 257.610	1823.02	1819.76	1814.57
Mo 202.032	3.0434	1.7026	3.0377
Na 330.237	61953.8	61566.9	61818.0
Ni 231.604	36.5489	35.6150	38.5673
Pb 220.353	3.9475	-0.0153	1.3684
Sb 206.834	-3.3448u	-7.6691u	-5.2039u
Se 196.026	7.4360	5.5495	1.4834
Si 288.158	20218.9	20160.1	20098.5
Sn 189.925	1.9890	-1.2191u	0.3631
Sr 216.596	855.715	853.011	854.365
Ti 334.941	-0.7092	-0.6242	-0.6960
Tl 190.794	-10.4809u	-0.3964	-0.2274
V 292.401	2.2142	2.2751	1.7740
Zn 206.200	12.5094	8.9720	10.6210

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2178b	ppb	0.1486	68.2	-37.6934
Al 308.215	13.5223b	ppb	3.7457	27.7	187.146
As 188.980	21.6326b	ppb	1.3612	6.3	6.4430
B 249.678	338.457b	ppb	1.0451	0.3	2157.52

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	175.649b	ppb	0.9694	0.6	1676.15
Be 313.042	-0.0370b	ppb	0.0053	14.2	-190.902
Ca 370.602	188413b	ppb	451.2	0.2	393212
Cd 226.502	-0.1953b	ppb	0.4132	211.5	6.2221
Co 228.615	4.1568b	ppb	0.2519	6.1	11.9830
Cr 267.716	2.6382b	ppb	0.0828	3.1	81.0419
Cu 324.754	3.6538b	ppb	0.1951	5.3	357.871
Fe 271.441	4482.00b	ppb	6.5291	0.1	3381.14
K 766.491	87381.2xb	ppb	197.752	0.2	2162334
Mg 279.078	42621.2b	ppb	89.5045	0.2	58741.2
Mn 257.610	1819.11b	ppb	4.2600	0.2	176084
Mo 202.032	2.5946b	ppb	0.7725	29.8	8.0411
Na 330.237	61779.6b	ppb	196.300	0.3	1563.41
Ni 231.604	36.9104b	ppb	1.5090	4.1	45.8992
Pb 220.353	1.7668b	ppb	2.0112	113.8	7.1805
Sb 206.834	-5.4059b	ppb	2.1692	40.1	3.5202
Se 196.026	4.8229b	ppb	3.0421	63.1	-0.1023
Si 288.158	20159.2b	ppb	60.2368	0.3	95504.8
Sn 189.925	0.3777b	ppb	1.6041	424.7	-0.0871
Sr 216.596	854.364b	ppb	1.3518	0.2	3273.06
Ti 334.941	-0.6765b	ppb	0.0457	6.8	27.6853
Tl 190.794	-3.7015b	ppb	5.8717	158.6	-5.0990
V 292.401	2.0877b	ppb	0.2734	13.1	25.8344
Zn 206.200	10.7008b	ppb	1.7701	16.5	6.4852

680-162183-A-2-B (Samp) **12/15/2018, 8:08:43 PM** **Rack 2, Tube 48**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4371u	-0.4630u	-0.6063u
Al 308.215	8.1979	9.1537	7.9137
As 188.980	25.0462	17.6448	22.3964
B 249.678	351.038	353.936	352.577
Ba 389.178	177.057	175.290	176.347
Be 313.042	-0.0623u	-0.0410u	-0.0283
Ca 370.602	194011	194221	193887
Cd 226.502	-0.2944u	0.0834	0.2077
Co 228.615	3.7924	4.3599	4.3583
Cr 267.716	0.0565	0.4188	-0.0388
Cu 324.754	1.0888	0.5479	0.3973
Fe 271.441	2608.75	2631.28	2622.15
K 766.491	91434.2x	91470.8x	91267.0x
Mg 279.078	44212.3	44292.5	44208.5
Mn 257.610	1850.10	1853.12	1850.86
Mo 202.032	2.9757	3.9125	2.0612
Na 330.237	64196.2	64354.1	63903.6
Ni 231.604	33.9904	33.8101	34.5047
Pb 220.353	-0.6937u	3.6380	4.0322
Sb 206.834	-8.9185u	-0.6153u	-1.4843u
Se 196.026	0.2742	-4.6502u	14.8367
Si 288.158	21004.4	21002.5	20990.7
Sn 189.925	-7.6862u	-4.6147u	-3.7693u
Sr 216.596	880.184	881.221	875.540
Ti 334.941	-0.7924	-0.8672	-0.6696

Label	Replicates Concentration		
Tl 190.794	-6.6728u	-5.1204u	-8.3179u
V 292.401	1.0211	1.4705	0.9412
Zn 206.200	8.1932	10.1474	10.2983

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5021b	ppb	0.0912	18.2	-47.2198
Al 308.215	8.4218b	ppb	0.6496	7.7	175.022
As 188.980	21.6958b	ppb	3.7501	17.3	6.4555
B 249.678	352.517b	ppb	1.4498	0.4	2251.96
Ba 389.178	176.231b	ppb	0.8889	0.5	1682.93
Be 313.042	-0.0439b	ppb	0.0172	39.3	-195.917
Ca 370.602	194040b	ppb	168.9	0.1	404958
Cd 226.502	-0.0011b	ppb	0.2615	23908.5	7.8268
Co 228.615	4.1702b	ppb	0.3272	7.8	11.9905
Cr 267.716	0.1455b	ppb	0.2414	166.0	27.1828
Cu 324.754	0.6780b	ppb	0.3636	53.6	249.566
Fe 271.441	2620.72b	ppb	11.3330	0.4	1984.46
K 766.491	91390.6xb	ppb	108.648	0.1	2261542
Mg 279.078	44237.8b	ppb	47.4781	0.1	60968.9
Mn 257.610	1851.36b	ppb	1.5736	0.1	179207
Mo 202.032	2.9831b	ppb	0.9256	31.0	8.8756
Na 330.237	64151.3b	ppb	228.543	0.4	1621.87
Ni 231.604	34.1018b	ppb	0.3604	1.1	42.2869
Pb 220.353	2.3255b	ppb	2.6221	112.8	7.4646
Sb 206.834	-3.6727b	ppb	4.5638	124.3	4.2060
Se 196.026	3.4869b	ppb	10.1329	290.6	-0.3476
Si 288.158	20999.2b	ppb	7.4353	0.0	99469.6
Sn 189.925	-5.3567b	ppb	2.0612	38.5	-1.7919
Sr 216.596	878.982b	ppb	3.0254	0.3	3366.78
Ti 334.941	-0.7764b	ppb	0.0997	12.8	22.0234
Tl 190.794	-6.7037b	ppb	1.5990	23.9	-5.8424
V 292.401	1.1443b	ppb	0.2853	24.9	13.1156
Zn 206.200	9.5463b	ppb	1.1742	12.3	5.8623

680-162183-B-7-B (Samp) **12/15/2018, 8:13:25 PM** **Rack 2, Tube 49**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2003u	0.1826	-0.1601u
Al 308.215	17.5690	20.0254	20.8548
As 188.980	13.6255	3.2210	1.1657
B 249.678	302.677	301.701	303.209
Ba 389.178	363.573	361.612	363.649
Be 313.042	-0.0364u	-0.0344u	-0.0354u
Ca 370.602	164122	163609	163743
Cd 226.502	0.0283	-0.2241	-0.0235
Co 228.615	-1.6544u	-1.6407u	-2.4838u
Cr 267.716	2.9364	2.7907	2.7495
Cu 324.754	0.6484	1.3766	0.5634
Fe 271.441	9922.33	9916.93	9896.91
K 766.491	51220.6x	51163.3x	51013.4x
Mg 279.078	49721.9	49608.6	49605.4
Mn 257.610	670.340	668.477	668.452
Mo 202.032	-1.3612u	0.8545	-1.0616u

Label	Replicates Concentration		
Na 330.237	48056.2	48074.2	47793.9
Ni 231.604	1.0124	0.3669	3.4888
Pb 220.353	-0.4360u	0.4241	-8.8016u
Sb 206.834	-1.3038u	-17.1377u	-6.1381u
Se 196.026	-4.7914u	11.4059	1.2286
Si 288.158	21895.5	21825.5	21849.2
Sn 189.925	-0.1917u	-0.8148u	7.3336
Sr 216.596	915.454	907.057	910.918
Ti 334.941	-0.8063	-0.8024	-0.6826
Tl 190.794	6.6643	-8.4741u	4.1690
V 292.401	0.3576	0.6320	0.6585
Zn 206.200	2.0552	3.1947	4.7937

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0592b	ppb	0.2104	355.2	-35.9815
Al 308.215	19.4831b	ppb	1.7087	8.8	201.330
As 188.980	6.0041b	ppb	6.6799	111.3	2.5019
B 249.678	302.529b	ppb	0.7647	0.3	1915.50
Ba 389.178	362.944b	ppb	1.1547	0.3	3476.64
Be 313.042	-0.0354b	ppb	0.0010	2.9	-191.913
Ca 370.602	163825b	ppb	265.8	0.2	341872
Cd 226.502	-0.0731b	ppb	0.1333	182.3	12.1078
Co 228.615	-1.9263b	ppb	0.4828	25.1	-16.1116
Cr 267.716	2.8255b	ppb	0.0982	3.5	83.3361
Cu 324.754	0.8628b	ppb	0.4470	51.8	257.787
Fe 271.441	9912.06b	ppb	13.3941	0.1	7455.43
K 766.491	51132.5xb	ppb	106.991	0.2	1265426
Mg 279.078	49645.3b	ppb	66.3402	0.1	68434.1
Mn 257.610	669.090b	ppb	1.0830	0.2	64940.6
Mo 202.032	-0.5228b	ppb	1.2022	230.0	1.4858
Na 330.237	47974.8b	ppb	156.900	0.3	1223.68
Ni 231.604	1.6227b	ppb	1.6480	101.6	0.5218
Pb 220.353	-2.9378b	ppb	5.0964	173.5	4.6817
Sb 206.834	-8.1932b	ppb	8.1145	99.0	2.4469
Se 196.026	2.6144b	ppb	8.1871	313.2	-0.5907
Si 288.158	21856.7b	ppb	35.6142	0.2	103518
Sn 189.925	2.1090b	ppb	4.5353	215.0	0.4261
Sr 216.596	911.143b	ppb	4.2028	0.5	3491.76
Ti 334.941	-0.7638b	ppb	0.0703	9.2	41.6749
Tl 190.794	0.7864b	ppb	8.1163	1032.1	-4.3787
V 292.401	0.5494b	ppb	0.1666	30.3	7.1193
Zn 206.200	3.3479b	ppb	1.3756	41.1	2.2762

680-162183-A-5-B (Samp) **12/15/2018, 8:18:07 PM** **Rack 2, Tube 50**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2097u	-0.5006u	-0.4073u
Al 308.215	14.5522	8.4469	9.8297
As 188.980	-3.0709u	8.3554	2.2920
B 249.678	267.816	267.136	265.699
Ba 389.178	144.818	146.908	144.314
Be 313.042	-0.0762u	-0.0702	-0.0684
Ca 370.602	464192	464048	465372

Label	Replicates Concentration		
Cd 226.502	-0.1058	0.0789	-0.1622
Co 228.615	0.7980	3.7031	3.0580
Cr 267.716	1.1927	1.3390	1.4517
Cu 324.754	12.2262	12.1902	12.2012
Fe 271.441	46659.3	46731.3	46667.0
K 766.491	23975.9	23959.7	24776.6
Mg 279.078	56371.7	56417.8	56317.8
Mn 257.610	3961.64	3961.32	3959.88
Mo 202.032	12.4883	14.4580	11.9075
Na 330.237	169117x	169209x	169007x
Ni 231.604	497.080	504.325	494.716
Pb 220.353	2.0136	3.5579	-1.3912u
Sb 206.834	1.7246	-7.1879u	-1.8935u
Se 196.026	17.8989	4.9608	8.3372
Si 288.158	18512.3	18535.2	18491.5
Sn 189.925	12.2558	-0.2645u	2.4399
Sr 216.596	898.465	901.457	903.816
Ti 334.941	-0.7699	-0.6996	-0.6528
Tl 190.794	-3.9495u	-16.9703u	-6.3474u
V 292.401	1.0722	1.9173	1.4854
Zn 206.200	46.4545	49.3885	49.8136

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3726b	ppb	0.1485	39.9	-47.8170
Al 308.215	10.9430b	ppb	3.2013	29.3	182.811
As 188.980	2.5255b	ppb	5.7167	226.4	1.6948
B 249.678	266.884b	ppb	1.0808	0.4	1644.29
Ba 389.178	145.346b	ppb	1.3753	0.9	1412.41
Be 313.042	-0.0716b	ppb	0.0041	5.7	-181.892
Ca 370.602	464537b	ppb	726.3	0.2	969351
Cd 226.502	-0.0630b	ppb	0.1261	200.1	38.8139
Co 228.615	2.5197b	ppb	1.5255	60.5	5.4275
Cr 267.716	1.3278b	ppb	0.1299	9.8	62.2759
Cu 324.754	12.2059b	ppb	0.0184	0.2	677.357
Fe 271.441	46685.9b	ppb	39.5245	0.1	35050.4
K 766.491	24237.4b	ppb	467.035	1.9	599957
Mg 279.078	56369.1b	ppb	50.0634	0.1	77666.4
Mn 257.610	3960.95b	ppb	0.9358	0.0	383248
Mo 202.032	12.9513b	ppb	1.3368	10.3	28.9470
Na 330.237	169111xb	ppb	101.120	0.1	4197.43
Ni 231.604	498.707b	ppb	5.0069	1.0	639.820
Pb 220.353	1.3934b	ppb	2.5322	181.7	7.3256
Sb 206.834	-2.4522b	ppb	4.4824	182.8	5.0737
Se 196.026	10.3990b	ppb	6.7109	64.5	1.2339
Si 288.158	18513.0b	ppb	21.8983	0.1	87734.5
Sn 189.925	4.8104b	ppb	6.5882	137.0	1.2436
Sr 216.596	901.246b	ppb	2.6819	0.3	3457.85
Ti 334.941	-0.7074b	ppb	0.0589	8.3	66.4001
Tl 190.794	-9.0891b	ppb	6.9298	76.2	-7.8059
V 292.401	1.4916b	ppb	0.4226	28.3	25.8388
Zn 206.200	48.5522b	ppb	1.8290	3.8	27.2078

Cont Calib Verif (CCV) **12/15/2018, 8:22:50 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	487.068	489.042	489.994
Al 308.215	9915.76	9920.32	9939.51
As 188.980	526.137	530.437	518.245
B 249.678	521.393	520.497	521.804
Ba 389.178	481.778	480.219	480.935
Be 313.042	531.874	531.817	532.521
Ca 370.602	10107	10094	10108
Cd 226.502	515.351	514.064	513.574
Co 228.615	506.409	506.630	510.631
Cr 267.716	500.416	501.459	502.341
Cu 324.754	502.247	511.012	503.044
Fe 271.441	10119.5	10106.5	10096.0
K 766.491	10015.2	10027.9	10017.0
Mg 279.078	10400.5	10402.0	10434.9
Mn 257.610	504.445	504.263	504.247
Mo 202.032	493.661	495.461	496.363
Na 330.237	10374.9	10468.5	10419.9
Ni 231.604	511.889	513.288	514.779
Pb 220.353	513.651	508.704	519.821
Sb 206.834	510.369	507.181	517.087
Se 196.026	506.678	522.268	534.970
Si 288.158	4949.10	4944.59	4948.97
Sn 189.925	496.815	510.047	502.230
Sr 216.596	506.940	502.264	505.397
Ti 334.941	495.634	495.143	495.854
Tl 190.794	493.088	503.028	505.362
V 292.401	501.146	498.592	500.799
Zn 206.200	1072.57	1079.80	1062.47

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	488.701	ppb	1.4924	0.3	16946.2	97.74023
Al 308.215	9925.20	ppb	12.5993	0.1	23583.3	99.25198
As 188.980	524.940	ppb	6.1836	1.2	133.600	104.98798
B 249.678	521.232	ppb	0.6683	0.1	3355.42	104.24632
Ba 389.178	480.977	ppb	0.7807	0.2	4565.99	96.19543
Be 313.042	532.071	ppb	0.3912	0.1	432993	106.41411
Ca 370.602	10103	ppb	7.818	0.1	21113	101.03082
Cd 226.502	514.330	ppb	0.9179	0.2	7841.79	102.86591
Co 228.615	507.890	ppb	2.3762	0.5	2352.46	101.57805
Cr 267.716	501.405	ppb	0.9636	0.2	10831.0	100.28101
Cu 324.754	505.434	ppb	4.8466	1.0	18562.0	101.08683
Fe 271.441	10107.3	ppb	11.7511	0.1	7633.59	101.02259
K 766.491	10020.0	ppb	6.8487	0.1	248174	100.20029
Mg 279.078	10412.4	ppb	19.4280	0.2	14362.5	104.12441
Mn 257.610	504.318	ppb	0.1101	0.0	48849.7	100.86367
Mo 202.032	495.162	ppb	1.3755	0.3	1031.25	99.03239
Na 330.237	10421.1	ppb	46.8255	0.4	297.618	104.21098
Ni 231.604	513.319	ppb	1.4456	0.3	658.095	102.66373
Pb 220.353	514.059	ppb	5.5697	1.1	273.327	102.81173
Sb 206.834	511.546	ppb	5.0564	1.0	215.136	102.30919
Se 196.026	521.305	ppb	14.1704	2.7	93.5398	104.26107
Si 288.158	4947.55	ppb	2.5682	0.1	23827.7	98.95103

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	503.031	ppb	6.6522	1.3	149.368	100.60612
Sr 216.596	504.867	ppb	2.3828	0.5	1927.41	100.97334
Ti 334.941	495.544	ppb	0.3640	0.1	54393.1	99.10871
Tl 190.794	500.493	ppb	6.5182	1.3	133.783	100.09851
V 292.401	500.179	ppb	1.3854	0.3	6509.43	100.03575
Zn 206.200	1071.61	ppb	8.7075	0.8	602.857	107.16113

Cont Calib Blank (CCB) **12/15/2018, 8:27:33 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4147u	-0.2178u	-0.1229u
Al 308.215	1.5857	2.9691	-0.4693u
As 188.980	4.6988	0.7926	1.2568
B 249.678	4.3201	2.9897	3.5952
Ba 389.178	0.1250	-2.0858u	1.4740
Be 313.042	0.0271	0.0303	0.0260
Ca 370.602	1.531	4.754	2.619
Cd 226.502	-0.0451u	0.0434	0.0516
Co 228.615	-1.1910u	0.4522	-1.0066u
Cr 267.716	-0.0387u	-0.5343u	-0.3680u
Cu 324.754	0.8015	0.7314	1.2151
Fe 271.441	7.6034	3.8109	-2.7080u
K 766.491	3.5889	3.9591	3.6311
Mg 279.078	-0.2057u	3.2364	7.5192
Mn 257.610	-0.0116u	0.0188	0.0494
Mo 202.032	-0.1259u	0.3352	-1.2146u
Na 330.237	126.761	-93.6546u	-290.955u
Ni 231.604	-1.1237u	1.6049	0.8801
Pb 220.353	3.6701	8.6746	-1.8430u
Sb 206.834	-15.3632u	-1.8459u	2.6881
Se 196.026	-2.5872u	10.3407	0.7858
Si 288.158	-3.2989u	-0.8062u	-3.3301u
Sn 189.925	5.8457	4.8510	4.9973
Sr 216.596	0.0714	-0.7482u	-0.4002u
Ti 334.941	0.1774	0.1298	0.1616
Tl 190.794	-4.9671u	-3.9414u	-0.4715u
V 292.401	-0.3675u	0.0168	0.1106
Zn 206.200	-0.9002u	0.7311	-2.5916u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2518	ppb	0.1488	59.1	-38.3747	-0.25179
Al 308.215	1.3618	ppb	1.7301	127.0	158.194	1.36183
As 188.980	2.2494	ppb	2.1339	94.9	1.5328	2.24940
B 249.678	3.6350	ppb	0.6661	18.3	-43.0095	3.63498
Ba 389.178	-0.1623	ppb	1.7972	1107.5	-51.6091	-0.16227
Be 313.042	0.0278	ppb	0.0022	8.0	-161.243	0.02781
Ca 370.602	2.968	ppb	1.640	55.2	33.66	2.96809
Cd 226.502	0.0166	ppb	0.0536	322.3	6.0974	0.01664
Co 228.615	-0.5818	ppb	0.9002	154.7	-10.1661	-0.58180
Cr 267.716	-0.3137	ppb	0.2522	80.4	12.9363	-0.31367
Cu 324.754	0.9160	ppb	0.2614	28.5	257.577	0.91601
Fe 271.441	2.9021	ppb	5.2154	179.7	19.7888	2.90208
K 766.491	3.7264	ppb	0.2026	5.4	338.592	3.72635

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	3.5166	ppb	3.8701	110.1	23.9641	3.51665
Mn 257.610	0.0188	ppb	0.0305	162.0	31.7168	0.01883
Mo 202.032	-0.3351	ppb	0.7958	237.5	2.0197	-0.33508
Na 330.237	-85.9493	ppb	208.965	243.1	43.3990	-85.94933
Ni 231.604	0.4538	ppb	1.4134	311.5	-0.9829	0.45377
Pb 220.353	3.5005	ppb	5.2609	150.3	7.9409	3.50054
Sb 206.834	-4.8403	ppb	9.3909	194.0	3.7223	-4.84032
Se 196.026	2.8464	ppb	6.7058	235.6	-0.6400	2.84644
Si 288.158	-2.4784uv	ppb	1.4483	58.4	326.255	-2.47841
Sn 189.925	5.2313	ppb	0.5371	10.3	1.3489	5.23132
Sr 216.596	-0.3590	ppb	0.4114	114.6	4.1709	-0.35901
Ti 334.941	0.1563	ppb	0.0243	15.5	-19.3240	0.15628
Tl 190.794	-3.1267	ppb	2.3559	75.4	-5.2133	-3.12667
V 292.401	-0.0801	ppb	0.2533	316.5	-3.2684	-0.08006
Zn 206.200	-0.9202	ppb	1.6614	180.5	0.0108	-0.92024

680-162179-D-4-B (Samp) **12/15/2018, 8:32:14 PM** **Rack 2, Tube 51**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4651	-0.6061u	-0.8597u
Al 308.215	15.0621	7.7376	11.0402
As 188.980	-2.7737u	0.9154	8.1387
B 249.678	31.3403	30.7190	31.9611
Ba 389.178	61.8727	62.0001	62.1321
Be 313.042	-0.0055	-0.0141u	-0.0271u
Ca 370.602	47110	47070	46921
Cd 226.502	-0.0248	0.2254	-0.1547u
Co 228.615	0.3975	-0.1256u	0.3335
Cr 267.716	0.0902	-0.1586u	0.0546
Cu 324.754	1.3416	2.1994	1.1678
Fe 271.441	1349.90	1357.75	1356.20
K 766.491	3374.01	3366.55	3366.54
Mg 279.078	8541.29	8517.16	8493.06
Mn 257.610	401.170	400.809	400.011
Mo 202.032	-1.3488u	0.4555	0.9210
Na 330.237	27085.3	27154.8	26693.4
Ni 231.604	-0.1942u	-0.2290u	2.3577
Pb 220.353	3.9275	0.6232	-6.4626u
Sb 206.834	-9.4304u	0.9604	-5.3125u
Se 196.026	2.0220	-4.5177u	-6.3996u
Si 288.158	6549.19	6547.08	6547.58
Sn 189.925	3.6631	3.7358	4.2894
Sr 216.596	188.089	187.055	186.055
Ti 334.941	0.1056	0.1631	0.1870
Tl 190.794	-7.5854u	-3.9330u	-7.3401u
V 292.401	0.7122	0.9628	0.9175
Zn 206.200	6.7335	5.0101	6.3337

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3336	ppb	0.7032	210.8	-41.3989
Al 308.215	11.2800	ppb	3.6681	32.5	181.668
As 188.980	2.0935	ppb	5.5508	265.1	1.4961
B 249.678	31.3401	ppb	0.6210	2.0	138.103

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	62.0016	ppb	0.1297	0.2	552.345
Be 313.042	-0.0156	ppb	0.0109	70.1	-190.865
Ca 370.602	47034	ppb	99.73	0.2	98177
Cd 226.502	0.0153	ppb	0.1932	1262.3	7.0444
Co 228.615	0.2018	ppb	0.2853	141.4	-6.4857
Cr 267.716	-0.0046	ppb	0.1346	2942.1	20.7211
Cu 324.754	1.5696	ppb	0.5523	35.2	281.572
Fe 271.441	1354.62	ppb	4.1526	0.3	1034.15
K 766.491	3369.03	ppb	4.3098	0.1	83606.9
Mg 279.078	8517.17	ppb	24.1152	0.3	11753.4
Mn 257.610	400.663	ppb	0.5927	0.1	38802.7
Mo 202.032	0.0092	ppb	1.1989	12962.4	2.7154
Na 330.237	26977.8	ppb	248.742	0.9	708.399
Ni 231.604	0.6448	ppb	1.4835	230.1	-0.7381
Pb 220.353	-0.6373	ppb	5.3085	833.0	5.8201
Sb 206.834	-4.5942	ppb	5.2325	113.9	3.8344
Se 196.026	-2.9651	ppb	4.4203	149.1	-1.6543
Si 288.158	6547.95	ppb	1.1056	0.0	31248.8
Sn 189.925	3.8961	ppb	0.3425	8.8	0.9550
Sr 216.596	187.066	ppb	1.0172	0.5	721.136
Ti 334.941	0.1519	ppb	0.0418	27.5	7.4362
Tl 190.794	-6.2862	ppb	2.0416	32.5	-6.0379
V 292.401	0.8642	ppb	0.1336	15.5	9.3129
Zn 206.200	6.0258	ppb	0.9021	15.0	3.8995

680-162179-C-4-B (Samp) **12/15/2018, 8:36:56 PM** **Rack 2, Tube 52**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3190u	0.0581	-0.4001u
Al 308.215	8.2383	5.5639	8.4637
As 188.980	4.4113	11.5186	2.5071
B 249.678	31.5230	30.3777	31.2750
Ba 389.178	61.8222	61.4572	61.1676
Be 313.042	-0.0275u	-0.0277u	-0.0176u
Ca 370.602	47435	47402	47352
Cd 226.502	0.2554	-0.1608u	0.1929
Co 228.615	0.6409	0.6642	0.6686
Cr 267.716	-0.0140	-0.3166u	-0.4412u
Cu 324.754	1.7021	1.6970	1.4288
Fe 271.441	1137.30	1139.71	1151.36
K 766.491	3385.72	3383.76	3387.75
Mg 279.078	8650.09	8643.53	8634.87
Mn 257.610	373.556	372.724	372.519
Mo 202.032	-0.3529u	0.9299	0.1475
Na 330.237	26875.4	26688.8	26648.9
Ni 231.604	1.3676	-0.3472u	2.7028
Pb 220.353	1.8569	4.0557	-0.9888u
Sb 206.834	-12.9691u	-4.5724u	-10.9353u
Se 196.026	-12.9882u	-1.0156u	-9.8341u
Si 288.158	6757.01	6736.47	6743.12
Sn 189.925	4.3196	-3.0702u	2.1569
Sr 216.596	189.908	189.106	187.235
Ti 334.941	-0.1025	-0.1826	-0.1541

Label	Replicates Concentration		
Tl 190.794	-0.2407u	7.6672	-2.0931u
V 292.401	0.2112	0.9327	0.4425
Zn 206.200	4.6463	6.7413	5.8402

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2203	ppb	0.2445	111.0	-37.4862
Al 308.215	7.4220	ppb	1.6131	21.7	172.558
As 188.980	6.1456	ppb	4.7495	77.3	2.5204
B 249.678	31.0586	ppb	0.6026	1.9	136.464
Ba 389.178	61.4823	ppb	0.3280	0.5	547.453
Be 313.042	-0.0243	ppb	0.0058	23.9	-197.895
Ca 370.602	47396	ppb	42.13	0.1	98934
Cd 226.502	0.0958	ppb	0.2244	234.2	8.1138
Co 228.615	0.6579	ppb	0.0149	2.3	-4.3784
Cr 267.716	-0.2573	ppb	0.2197	85.4	15.1947
Cu 324.754	1.6093	ppb	0.1564	9.7	282.972
Fe 271.441	1142.79	ppb	7.5210	0.7	875.214
K 766.491	3385.74	ppb	1.9919	0.1	84020.4
Mg 279.078	8642.83	ppb	7.6341	0.1	11926.9
Mn 257.610	372.933	ppb	0.5494	0.1	36122.2
Mo 202.032	0.2415	ppb	0.6466	267.7	3.2011
Na 330.237	26737.7	ppb	120.921	0.5	702.515
Ni 231.604	1.2411	ppb	1.5289	123.2	0.0284
Pb 220.353	1.6413	ppb	2.5292	154.1	7.0031
Sb 206.834	-9.4922	ppb	4.3804	46.1	1.8034
Se 196.026	-7.9460	ppb	6.2056	78.1	-2.5615
Si 288.158	6745.53	ppb	10.4793	0.2	32181.6
Sn 189.925	1.1354	ppb	3.7993	334.6	0.1341
Sr 216.596	188.749	ppb	1.3716	0.7	727.519
Ti 334.941	-0.1464	ppb	0.0406	27.7	-24.8766
Tl 190.794	1.7778	ppb	5.1838	291.6	-3.8149
V 292.401	0.5288	ppb	0.3684	69.7	4.8554
Zn 206.200	5.7426	ppb	1.0509	18.3	3.7433

680-162179-A-6-B (Samp) **12/15/2018, 8:41:38 PM** **Rack 2, Tube 53**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0458u	-0.8376u	-0.1799u
Al 308.215	9.7157	11.7405	13.5886
As 188.980	3.6164	-3.3008u	-1.6083u
B 249.678	8.9617	9.7381	9.2149
Ba 389.178	555.767	556.808	554.280
Be 313.042	-0.0058	-0.0142	0.0086
Ca 370.602	124404	124068	124059
Cd 226.502	0.0003	0.0768	-0.0470u
Co 228.615	-0.3582u	-1.6839u	-0.9136u
Cr 267.716	-0.3372u	-0.0565	-0.6180u
Cu 324.754	1.7637	2.7952	1.7311
Fe 271.441	-2.0254u	-0.4628u	0.4320
K 766.491	8346.37	8337.78	8336.89
Mg 279.078	67083.1	66912.1	66888.9
Mn 257.610	590.140	589.242	588.652
Mo 202.032	-0.3924u	0.3218	0.0662

Label	Replicates Concentration		
Na 330.237	55557.0	55447.2	55256.1
Ni 231.604	6.8385	8.2386	9.0372
Pb 220.353	1.6947	0.6211	5.5131
Sb 206.834	-12.6197u	-3.7015u	-7.9564u
Se 196.026	10.4715	-0.7944u	13.2207
Si 288.158	12310.7	12275.6	12263.9
Sn 189.925	-1.1263u	1.1473	-4.0181u
Sr 216.596	910.370	904.996	905.952
Ti 334.941	-1.6142	-1.7362	-1.6593
Tl 190.794	3.2677	-3.2805u	-2.4322u
V 292.401	0.8533	0.4324	0.7798
Zn 206.200	6.8802	7.6196	9.1156

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3545	ppb	0.4238	119.6	-44.4282
Al 308.215	11.6816	ppb	1.9371	16.6	182.560
As 188.980	-0.4309	ppb	3.6058	836.8	0.8550
B 249.678	9.3049	ppb	0.3959	4.3	-5.6596
Ba 389.178	555.618	ppb	1.2707	0.2	5335.10
Be 313.042	-0.0038	ppb	0.0115	304.1	-171.844
Ca 370.602	124177	ppb	196.5	0.2	259157
Cd 226.502	0.0100	ppb	0.0625	622.2	6.2190
Co 228.615	-0.9852	ppb	0.6658	67.6	-12.0338
Cr 267.716	-0.3372	ppb	0.2807	83.3	13.9852
Cu 324.754	2.0967	ppb	0.6051	28.9	300.384
Fe 271.441	-0.6854	ppb	1.2438	181.5	17.0757
K 766.491	8340.34	ppb	5.2362	0.1	206613
Mg 279.078	66961.4	ppb	106.030	0.2	92300.1
Mn 257.610	589.345	ppb	0.7493	0.1	57296.5
Mo 202.032	-0.0015	ppb	0.3619	24848.8	2.7127
Na 330.237	55420.1	ppb	152.273	0.3	1407.52
Ni 231.604	8.0381	ppb	1.1130	13.8	8.7718
Pb 220.353	2.6096	ppb	2.5712	98.5	7.5172
Sb 206.834	-8.0925	ppb	4.4607	55.1	2.3781
Se 196.026	7.6326	ppb	7.4264	97.3	0.2824
Si 288.158	12283.4	ppb	24.4051	0.2	58324.2
Sn 189.925	-1.3324	ppb	2.5889	194.3	-0.5963
Sr 216.596	907.106	ppb	2.8669	0.3	3474.00
Ti 334.941	-1.6699	ppb	0.0617	3.7	-1.1243
Tl 190.794	-0.8150	ppb	3.5611	437.0	-4.4295
V 292.401	0.6885	ppb	0.2248	32.6	6.9892
Zn 206.200	7.8718	ppb	1.1388	14.5	4.9560

680-162179-A-5-B (Samp) **12/15/2018, 8:46:20 PM** **Rack 2, Tube 54**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1665	-0.5930u	-0.3304u
Al 308.215	4.0819	6.2316	7.0420
As 188.980	2.5257	-2.5079u	0.2832
B 249.678	32.1200	32.5733	31.4158
Ba 389.178	136.511	132.065	132.004
Be 313.042	-0.0191u	-0.0276u	-0.0226u
Ca 370.602	39845	39742	39757

Label	Replicates Concentration		
Cd 226.502	-0.2163	-0.0737	-0.2768
Co 228.615	3.6188	1.0471	2.1394
Cr 267.716	-1.1250u	-0.8645u	-0.5330u
Cu 324.754	1.2332	0.9948	0.9979
Fe 271.441	6694.89	6696.21	6711.07
K 766.491	4271.54	4260.82	4260.01
Mg 279.078	11165.6	11171.4	11156.9
Mn 257.610	3239.40	3235.89	3232.97
Mo 202.032	1.1631	0.9808	-0.7984u
Na 330.237	5742.02	6040.70	5821.64
Ni 231.604	-0.5535u	3.4130	3.2764
Pb 220.353	9.5529	5.6194	1.6876
Sb 206.834	-7.2435u	-4.7644u	6.2290
Se 196.026	-7.6207u	4.0050	4.3324
Si 288.158	5358.51	5355.87	5352.93
Sn 189.925	-0.4503u	-2.8234u	-1.4785u
Sr 216.596	249.441	247.598	248.266
Ti 334.941	-0.0979	-0.1791	-0.0754
Tl 190.794	5.9833	-5.0648u	-8.8984u
V 292.401	0.2637	0.5221	0.8663
Zn 206.200	18.4915	14.0071	17.4776

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2523	ppb	0.3857	152.9	-33.9080
Al 308.215	5.7852	ppb	1.5297	26.4	168.909
As 188.980	0.1003	ppb	2.5218	2513.5	1.0027
B 249.678	32.0364	ppb	0.5833	1.8	137.381
Ba 389.178	133.527	ppb	2.5848	1.9	1240.77
Be 313.042	-0.0231	ppb	0.0043	18.6	-197.645
Ca 370.602	39782	ppb	55.72	0.1	83086
Cd 226.502	-0.1889	ppb	0.1043	55.2	7.8936
Co 228.615	2.2684	ppb	1.2907	56.9	3.2621
Cr 267.716	-0.8408	ppb	0.2967	35.3	8.6099
Cu 324.754	1.0753	ppb	0.1367	12.7	264.817
Fe 271.441	6700.73	ppb	8.9852	0.1	5045.93
K 766.491	4264.12	ppb	6.4405	0.2	105754
Mg 279.078	11164.7	ppb	7.2912	0.1	15372.5
Mn 257.610	3236.09	ppb	3.2191	0.1	312935
Mo 202.032	0.4485	ppb	1.0837	241.6	3.5504
Na 330.237	5868.12	ppb	154.670	2.6	189.094
Ni 231.604	2.0453	ppb	2.2517	110.1	1.0610
Pb 220.353	5.6200	ppb	3.9327	70.0	9.2932
Sb 206.834	-1.9263	ppb	7.1707	372.3	4.9857
Se 196.026	0.2389	ppb	6.8086	2849.5	-0.7991
Si 288.158	5355.77	ppb	2.7916	0.1	25620.4
Sn 189.925	-1.5841	ppb	1.1900	75.1	-0.6770
Sr 216.596	248.435	ppb	0.9329	0.4	957.007
Ti 334.941	-0.1175	ppb	0.0546	46.5	-12.8957
Tl 190.794	-2.6600	ppb	7.7268	290.5	-4.5544
V 292.401	0.5507	ppb	0.3023	54.9	6.3797
Zn 206.200	16.6588	ppb	2.3517	14.1	9.8082

680-162179-A-7-B (Samp) **12/15/2018, 8:51:01 PM** **Rack 2, Tube 55**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7372	0.4894	-0.2577u
Al 308.215	8.1226	9.8395	10.0027
As 188.980	3.9968	3.3949	7.9409
B 249.678	9.3091	8.1209	7.4185
Ba 389.178	686.977	687.716	687.719
Be 313.042	-0.0152	-0.0080	-0.0281u
Ca 370.602	123612	123745	123549
Cd 226.502	1.1775	0.6514	0.9682
Co 228.615	0.3843	-0.8610u	-0.2776u
Cr 267.716	-0.4346u	-0.6501u	-0.4464u
Cu 324.754	0.3803	0.9426	1.2055
Fe 271.441	-5.8606u	2.6737	3.6142
K 766.491	7720.15	7729.88	7716.08
Mg 279.078	68413.1	68410.1	68351.8
Mn 257.610	169.499	169.819	169.579
Mo 202.032	-0.0688u	-0.1396u	-0.7370u
Na 330.237	50386.8	50145.2	50477.1
Ni 231.604	10.8148	11.2615	9.5471
Pb 220.353	-1.1984u	-3.7823u	-0.1222u
Sb 206.834	-0.3052u	-8.3649u	-6.5662u
Se 196.026	-11.6459u	-2.5997u	-12.4525u
Si 288.158	11899.9	11921.3	11906.7
Sn 189.925	-6.5098u	5.1018	1.0218
Sr 216.596	885.749	886.844	887.553
Ti 334.941	-1.4889	-1.6599	-1.6148
Tl 190.794	0.2744	3.7406	-10.0789u
V 292.401	1.3462	0.9471	0.3829
Zn 206.200	11.6113	11.5021	10.5087

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3229	ppb	0.5179	160.4	-21.7111
Al 308.215	9.3216	ppb	1.0415	11.2	177.000
As 188.980	5.1109	ppb	2.4693	48.3	2.2565
B 249.678	8.2828	ppb	0.9556	11.5	-12.3993
Ba 389.178	687.471	ppb	0.4280	0.1	6597.85
Be 313.042	-0.0171	ppb	0.0102	59.5	-182.504
Ca 370.602	123635	ppb	100.1	0.1	258020
Cd 226.502	0.9323	ppb	0.2649	28.4	20.2808
Co 228.615	-0.2514	ppb	0.6230	247.8	-8.6228
Cr 267.716	-0.5104	ppb	0.1212	23.7	9.4013
Cu 324.754	0.8428	ppb	0.4216	50.0	254.912
Fe 271.441	0.1424	ppb	5.2200	3664.5	17.7368
K 766.491	7722.04	ppb	7.0910	0.1	191314
Mg 279.078	68391.7	ppb	34.5460	0.1	94275.8
Mn 257.610	169.632	ppb	0.1664	0.1	16726.9
Mo 202.032	-0.3151	ppb	0.3671	116.5	2.0608
Na 330.237	50336.4	ppb	171.603	0.3	1282.57
Ni 231.604	10.5411	ppb	0.8894	8.4	11.9902
Pb 220.353	-1.7010	ppb	1.8811	110.6	5.2450
Sb 206.834	-5.0788	ppb	4.2307	83.3	3.6243
Se 196.026	-8.8994	ppb	5.4706	61.5	-2.7563
Si 288.158	11909.3	ppb	10.9644	0.1	56558.6

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.1287	ppb	5.8907	4575.8	-0.2390
Sr 216.596	886.715	ppb	0.9087	0.1	3396.02
Ti 334.941	-1.5879	ppb	0.0886	5.6	12.7445
Tl 190.794	-2.0213	ppb	7.1901	355.7	-4.8647
V 292.401	0.8921	ppb	0.4840	54.3	9.6973
Zn 206.200	11.2074	ppb	0.6076	5.4	6.8322

680-162179-A-3-B (Samp) **12/15/2018, 8:55:43 PM** **Rack 2, Tube 56**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0483u	-0.3699u	-0.5603u
Al 308.215	11.9561	10.5194	8.5513
As 188.980	-0.4491u	-1.8560u	3.4602
B 249.678	9.9974	9.8747	9.4066
Ba 389.178	573.915	578.245	574.987
Be 313.042	-0.0139	0.0045	-0.0126
Ca 370.602	122118	122142	122024
Cd 226.502	0.4133	0.3790	-0.0341u
Co 228.615	1.9249	1.5613	0.9455
Cr 267.716	0.2154	-0.1735u	-0.4883u
Cu 324.754	2.2600	2.6371	2.7416
Fe 271.441	138.401	157.436	181.030
K 766.491	11241.4	11238.1	11247.8
Mg 279.078	70488.9	70522.9	70475.8
Mn 257.610	75.2248	75.2102	75.1376
Mo 202.032	0.7176	0.3033	1.3307
Na 330.237	81380.5	81823.3	81997.0
Ni 231.604	18.9126	17.4242	16.6916
Pb 220.353	-4.1058u	2.3396	2.8442
Sb 206.834	-7.8776u	-2.9001u	-4.7618u
Se 196.026	7.4874	16.0791	2.6395
Si 288.158	10766.4	10779.1	10756.1
Sn 189.925	-5.7081u	-3.5809u	3.1424
Sr 216.596	901.738	902.023	898.411
Ti 334.941	-1.7746	-1.8719	-1.7507
Tl 190.794	-2.3832u	2.6448	-3.0814u
V 292.401	1.3286	1.4414	0.6636
Zn 206.200	38.1962	34.1975	38.0291

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3262	ppb	0.2588	79.3	-44.5648
Al 308.215	10.3422	ppb	1.7093	16.5	179.432
As 188.980	0.3850	ppb	2.7545	715.4	1.0615
B 249.678	9.7596	ppb	0.3118	3.2	-2.8301
Ba 389.178	575.715	ppb	2.2550	0.4	5531.11
Be 313.042	-0.0073	ppb	0.0103	139.6	-176.423
Ca 370.602	122095	ppb	62.47	0.1	254804
Cd 226.502	0.2527	ppb	0.2490	98.5	9.9981
Co 228.615	1.4772	ppb	0.4951	33.5	-0.5976
Cr 267.716	-0.1488	ppb	0.3525	236.9	17.2649
Cu 324.754	2.5462	ppb	0.2533	9.9	316.741
Fe 271.441	158.956	ppb	21.3553	13.4	137.014
K 766.491	11242.4	ppb	4.9517	0.0	278420

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	70495.9	ppb	24.2996	0.0	97176.8
Mn 257.610	75.1909	ppb	0.0467	0.1	7605.98
Mo 202.032	0.7839	ppb	0.5169	65.9	4.3418
Na 330.237	81733.6	ppb	317.869	0.4	2054.13
Ni 231.604	17.6761	ppb	1.1318	6.4	21.1647
Pb 220.353	0.3593	ppb	3.8751	1078.4	6.3110
Sb 206.834	-5.1798	ppb	2.5149	48.6	3.5753
Se 196.026	8.7353	ppb	6.8061	77.9	0.4365
Si 288.158	10767.2	ppb	11.5051	0.1	51167.3
Sn 189.925	-2.0489	ppb	4.6199	225.5	-0.8062
Sr 216.596	900.724	ppb	2.0082	0.2	3449.53
Ti 334.941	-1.7991	ppb	0.0642	3.6	-4.4271
Tl 190.794	-0.9399	ppb	3.1240	332.4	-4.5951
V 292.401	1.1445	ppb	0.4203	36.7	12.8557
Zn 206.200	36.8076	ppb	2.2619	6.1	21.2293

680-162179-A-2-B (Samp) **12/15/2018, 9:00:25 PM** **Rack 2, Tube 57**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5327u	-0.3418u	-0.2655u
Al 308.215	5.1103	1.3119	7.3661
As 188.980	5.6779	4.7602	-1.4184u
B 249.678	4.4223	4.4454	3.3612
Ba 389.178	51.0465	50.3009	52.1798
Be 313.042	-0.0261u	-0.0259u	-0.0209u
Ca 370.602	30840	30830	30805
Cd 226.502	-0.2463u	-0.0685u	0.1060
Co 228.615	-0.5258u	-1.5952u	0.0238
Cr 267.716	3.3504	3.1064	3.2120
Cu 324.754	0.7192	2.5101	1.5298
Fe 271.441	-3.7238u	-6.0719u	4.6646
K 766.491	2730.35	2730.10	2725.88
Mg 279.078	15993.9	15995.8	15985.4
Mn 257.610	0.1736	0.0853	0.1361
Mo 202.032	-0.0734u	-1.2976u	0.0338
Na 330.237	15051.8	14918.4	14688.4
Ni 231.604	-0.2855u	0.6397	0.7825
Pb 220.353	4.9162	-0.2220u	-8.0952u
Sb 206.834	-2.9083u	-6.6303u	-1.6383u
Se 196.026	-0.4707u	6.1580	-5.2114u
Si 288.158	15840.1	15734.5	15814.0
Sn 189.925	3.9040	8.1100	0.1097
Sr 216.596	133.070	133.410	129.593
Ti 334.941	-0.3812	-0.3807	-0.3341
Tl 190.794	-3.4444u	5.1595	-1.9313u
V 292.401	1.2090	1.8272	0.7921
Zn 206.200	-2.2035u	-1.5607u	1.8630

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3800	ppb	0.1376	36.2	-43.4209
Al 308.215	4.5961	ppb	3.0597	66.6	165.865
As 188.980	3.0065	ppb	3.8595	128.4	1.7238
B 249.678	4.0763	ppb	0.6194	15.2	-40.0993

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	51.1758	ppb	0.9461	1.8	456.281
Be 313.042	-0.0243	ppb	0.0030	12.2	-199.912
Ca 370.602	30825	ppb	17.87	0.1	64350
Cd 226.502	-0.0696	ppb	0.1762	253.2	4.8345
Co 228.615	-0.6991	ppb	0.8233	117.8	-10.7059
Cr 267.716	3.2229	ppb	0.1224	3.8	89.2902
Cu 324.754	1.5864	ppb	0.8968	56.5	281.875
Fe 271.441	-1.7104	ppb	5.6443	330.0	16.3322
K 766.491	2728.78	ppb	2.5102	0.1	67765.0
Mg 279.078	15991.7	ppb	5.5345	0.0	22059.1
Mn 257.610	0.1317	ppb	0.0443	33.7	112.278
Mo 202.032	-0.4457	ppb	0.7397	165.9	1.7895
Na 330.237	14886.2	ppb	183.842	1.2	411.361
Ni 231.604	0.3789	ppb	0.5798	153.0	-1.0792
Pb 220.353	-1.1337	ppb	6.5534	578.1	5.5290
Sb 206.834	-3.7256	ppb	2.5945	69.6	4.1946
Se 196.026	0.1586	ppb	5.7108	3600.5	-1.1278
Si 288.158	15796.2	ppb	55.0202	0.3	74907.7
Sn 189.925	4.0412	ppb	4.0019	99.0	0.9967
Sr 216.596	132.025	ppb	2.1123	1.6	510.376
Ti 334.941	-0.3653	ppb	0.0270	7.4	-24.3844
Tl 190.794	-0.0721	ppb	4.5934	6372.6	-4.3706
V 292.401	1.2761	ppb	0.5208	40.8	14.4664
Zn 206.200	-0.6337	ppb	2.1860	344.9	0.1700

680-162182-B-4-B (Samp) **12/15/2018, 9:05:07 PM** **Rack 2, Tube 58**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2756u	-0.3246u	0.0568
Al 308.215	12.4016	10.2502	10.6670
As 188.980	-0.4406u	1.1086	8.2330
B 249.678	72.0616	73.5676	73.5885
Ba 389.178	128.290	130.003	128.194
Be 313.042	-0.0199u	-0.0131u	-0.0043
Ca 370.602	76035	75910	75977
Cd 226.502	0.2836	-0.1877u	-0.1517u
Co 228.615	59.6584	59.0895	59.3975
Cr 267.716	-0.5188u	-0.4356u	-0.0390
Cu 324.754	3.6643	4.0067	5.3667
Fe 271.441	10.4151	-4.8185u	-5.2076u
K 766.491	10147.5	10153.1	10159.7
Mg 279.078	74964.5	74869.7	74974.5
Mn 257.610	3968.99	3966.16	3965.90
Mo 202.032	3.9867	3.7419	5.1276
Na 330.237	71052.4	70277.4	70509.7
Ni 231.604	124.066	120.762	120.116
Pb 220.353	4.9865	3.9105	4.2698
Sb 206.834	7.1067	-8.3526u	5.8448
Se 196.026	-4.8488u	-9.6952u	-3.7504u
Si 288.158	9315.67	9309.65	9322.29
Sn 189.925	2.7266	0.4205	-4.4763u
Sr 216.596	300.626	299.456	299.741
Ti 334.941	-1.9968	-1.9299	-1.9901

Label	Replicates Concentration		
Tl 190.794	3.6371	-9.7688u	-7.4092u
V 292.401	0.4063	-0.0582u	0.2531
Zn 206.200	50.1357	47.2041	46.4807

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1811	ppb	0.2075	114.6	-29.1424
Al 308.215	11.1062	ppb	1.1410	10.3	181.114
As 188.980	2.9670	ppb	4.6258	155.9	1.7137
B 249.678	73.0726	ppb	0.8756	1.2	414.258
Ba 389.178	128.829	ppb	1.0179	0.8	1261.01
Be 313.042	-0.0124	ppb	0.0079	63.3	-187.817
Ca 370.602	75974	ppb	62.68	0.1	158636
Cd 226.502	-0.0186	ppb	0.2624	1409.7	5.7974
Co 228.615	59.3818	ppb	0.2847	0.5	268.452
Cr 267.716	-0.3311	ppb	0.2564	77.4	20.7815
Cu 324.754	4.3459	ppb	0.9005	20.7	382.047
Fe 271.441	0.1296	ppb	8.9096	6872.5	21.0847
K 766.491	10153.5	ppb	6.1245	0.1	251475
Mg 279.078	74936.3	ppb	57.8761	0.1	103256
Mn 257.610	3967.02	ppb	1.7129	0.0	383868
Mo 202.032	4.2854	ppb	0.7396	17.3	11.6194
Na 330.237	70613.2	ppb	397.716	0.6	1780.82
Ni 231.604	121.648	ppb	2.1187	1.7	154.824
Pb 220.353	4.3889	ppb	0.5478	12.5	8.6549
Sb 206.834	1.5330	ppb	8.5844	560.0	6.3218
Se 196.026	-6.0981	ppb	3.1632	51.9	-1.9034
Si 288.158	9315.87	ppb	6.3251	0.1	44316.3
Sn 189.925	-0.4431	ppb	3.6783	830.2	-0.3301
Sr 216.596	299.941	ppb	0.6104	0.2	1151.33
Ti 334.941	-1.9723	ppb	0.0369	1.9	-8.5669
Tl 190.794	-4.5136	ppb	7.1567	158.6	-4.5188
V 292.401	0.2004	ppb	0.2367	118.1	0.2517
Zn 206.200	47.9402	ppb	1.9355	4.0	27.4928

x (Samp) **12/15/2018, 9:09:49 PM** **Rack 2, Tube 59**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.3597	11.6445	11.0007
Al 308.215	225.877	229.163	229.041
As 188.980	21.2595	17.6320	15.2691
B 249.678	120.152	119.202	120.013
Ba 389.178	10.5410	10.0710	9.3920
Be 313.042	4.8450	4.8595	4.8289
Ca 370.602	593.4	591.8	595.5
Cd 226.502	5.8409	5.9588	6.0022
Co 228.615	11.1407	11.4824	10.7870
Cr 267.716	11.7291	11.5734	11.2723
Cu 324.754	24.1565	24.5492	23.6240
Fe 271.441	49.9428	54.8084	58.6021
K 766.491	1139.88	1137.68	1138.68
Mg 279.078	603.654	608.102	602.404
Mn 257.610	12.2717	12.1353	12.2641
Mo 202.032	11.2752	12.6571	11.4403

Label	Replicates Concentration		
Na 330.237	1113.44	1449.94	1090.96
Ni 231.604	47.9029	48.0477	47.2787
Pb 220.353	6.7016	13.0135	22.8256
Sb 206.834	14.5907	18.6731	26.5869
Se 196.026	17.4405	4.4213	31.2500
Si 288.158	120.476	120.549	117.880
Sn 189.925	51.5285	58.9393	59.8694
Sr 216.596	12.1292	10.8377	11.9204
Ti 334.941	11.4157	11.3994	11.5037
Tl 190.794	24.9957	26.1566	28.3125
V 292.401	11.5482	11.3603	11.3908
Zn 206.200	23.0344	26.7539	23.0770

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.3350	ppb	0.3226	2.8	364.147
Al 308.215	228.027	ppb	1.8631	0.8	693.245
As 188.980	18.0535	ppb	3.0174	16.7	5.5264
B 249.678	119.789	ppb	0.5129	0.4	721.845
Ba 389.178	10.0013	ppb	0.5777	5.8	46.2990
Be 313.042	4.8444	ppb	0.0153	0.3	3759.79
Ca 370.602	593.5	ppb	1.876	0.3	1267
Cd 226.502	5.9340	ppb	0.0835	1.4	96.2037
Co 228.615	11.1367	ppb	0.3477	3.1	44.2592
Cr 267.716	11.5249	ppb	0.2323	2.0	268.187
Cu 324.754	24.1099	ppb	0.4644	1.9	1098.85
Fe 271.441	54.4511	ppb	4.3407	8.0	59.1849
K 766.491	1138.75	ppb	1.1019	0.1	28422.7
Mg 279.078	604.720	ppb	2.9947	0.5	852.379
Mn 257.610	12.2237	ppb	0.0766	0.6	1214.54
Mo 202.032	11.7909	ppb	0.7547	6.4	27.2104
Na 330.237	1218.12	ppb	201.084	16.5	75.3720
Ni 231.604	47.7431	ppb	0.4087	0.9	59.8244
Pb 220.353	14.1803	ppb	8.1250	57.3	13.4905
Sb 206.834	19.9502	ppb	6.0992	30.6	13.9167
Se 196.026	17.7039	ppb	13.4163	75.8	2.0580
Si 288.158	119.635	ppb	1.5206	1.3	909.407
Sn 189.925	56.7791	ppb	4.5708	8.1	16.6764
Sr 216.596	11.6291	ppb	0.6933	6.0	49.4589
Ti 334.941	11.4396	ppb	0.0561	0.5	1221.21
Tl 190.794	26.4883	ppb	1.6831	6.4	2.9569
V 292.401	11.4331	ppb	0.1008	0.9	146.523
Zn 206.200	24.2885	ppb	2.1353	8.8	14.1827

x (Samp) **12/15/2018, 9:14:32 PM** **Rack 2, Tube 60**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.2998	11.6941	11.5201
Al 308.215	231.000	234.270	233.526
As 188.980	24.9880	25.5259	20.8924
B 249.678	119.692	119.784	118.797
Ba 389.178	9.5795	10.5238	10.2635
Be 313.042	4.8493	4.8340	4.8346
Ca 370.602	587.5	592.7	593.1

Label	Replicates Concentration		
Cd 226.502	5.8565	6.1266	6.2109
Co 228.615	10.0174	11.6904	10.9139
Cr 267.716	11.4197	11.6132	11.3265
Cu 324.754	24.0379	24.3285	23.9580
Fe 271.441	60.8436	62.1418	68.5394
K 766.491	1139.50	1138.91	1136.17
Mg 279.078	606.402	598.620	606.698
Mn 257.610	12.2946	12.2775	12.3505
Mo 202.032	11.2708	11.2224	10.9350
Na 330.237	1065.54	1057.20	1151.20
Ni 231.604	49.8206	47.7095	47.3245
Pb 220.353	16.1472	13.1731	13.9671
Sb 206.834	17.4911	22.3770	25.7344
Se 196.026	9.4097	6.3227	34.1737
Si 288.158	116.698	116.022	118.854
Sn 189.925	66.3156	49.0234	56.5191
Sr 216.596	11.1520	13.6227	11.2408
Ti 334.941	11.3925	11.4155	11.4520
Tl 190.794	27.6566	32.3119	17.9186
V 292.401	11.6868	11.1673	12.0027
Zn 206.200	24.6908	25.7932	26.4262

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.5047	ppb	0.1976	1.7	370.043
Al 308.215	232.932	ppb	1.7141	0.7	704.809
As 188.980	23.8021	ppb	2.5342	10.6	6.9803
B 249.678	119.424	ppb	0.5453	0.5	719.426
Ba 389.178	10.1223	ppb	0.4877	4.8	47.4541
Be 313.042	4.8393	ppb	0.0087	0.2	3755.64
Ca 370.602	591.1	ppb	3.115	0.5	1261
Cd 226.502	6.0647	ppb	0.1851	3.1	98.2034
Co 228.615	10.8739	ppb	0.8372	7.7	43.0437
Cr 267.716	11.4531	ppb	0.1463	1.3	266.641
Cu 324.754	24.1081	ppb	0.1950	0.8	1098.78
Fe 271.441	63.8416	ppb	4.1199	6.5	66.2207
K 766.491	1138.19	ppb	1.7797	0.2	28408.9
Mg 279.078	603.907	ppb	4.5811	0.8	851.256
Mn 257.610	12.3075	ppb	0.0382	0.3	1222.63
Mo 202.032	11.1427	ppb	0.1815	1.6	25.8635
Na 330.237	1091.31	ppb	52.0303	4.8	72.2467
Ni 231.604	48.2848	ppb	1.3438	2.8	60.5213
Pb 220.353	14.4291	ppb	1.5399	10.7	13.6202
Sb 206.834	21.8675	ppb	4.1452	19.0	14.7132
Se 196.026	16.6354	ppb	15.2669	91.8	1.8641
Si 288.158	117.191	ppb	1.4791	1.3	897.614
Sn 189.925	57.2860	ppb	8.6715	15.1	16.8271
Sr 216.596	12.0052	ppb	1.4015	11.7	50.8979
Ti 334.941	11.4200	ppb	0.0300	0.3	1219.04
Tl 190.794	25.9624	ppb	7.3447	28.3	2.8119
V 292.401	11.6189	ppb	0.4218	3.6	148.994
Zn 206.200	25.6367	ppb	0.8782	3.4	14.9409

Cont Calib Verif (CCV) **12/15/2018, 9:19:16 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	490.331	493.196	489.753
Al 308.215	9931.22	9924.33	9937.94
As 188.980	524.703	543.649	518.625
B 249.678	521.756	522.437	525.278
Ba 389.178	478.664	478.195	479.789
Be 313.042	534.076	534.581	534.922
Ca 370.602	10108	10100	10094
Cd 226.502	517.630	518.230	515.177
Co 228.615	506.391	508.836	507.697
Cr 267.716	503.168	502.029	502.517
Cu 324.754	508.153	509.521	507.883
Fe 271.441	10117.7	10122.7	10107.9
K 766.491	10033.2	10032.0	10048.4
Mg 279.078	10445.5	10472.2	10444.9
Mn 257.610	504.928	505.039	504.799
Mo 202.032	497.454	497.300	495.302
Na 330.237	10784.9	10760.5	10680.6
Ni 231.604	514.758	519.228	510.579
Pb 220.353	520.803	519.289	519.096
Sb 206.834	506.256	493.287	507.977
Se 196.026	526.158	531.052	522.925
Si 288.158	4952.49	4958.50	4954.40
Sn 189.925	496.168	493.030	505.915
Sr 216.596	505.489	505.490	504.399
Ti 334.941	495.046	494.820	494.652
Tl 190.794	482.511	498.206	482.945
V 292.401	499.906	500.969	499.882
Zn 206.200	1077.53	1073.59	1062.94

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.093	ppb	1.8440	0.4	17029.3	98.21862
Al 308.215	9931.16	ppb	6.8059	0.1	23597.4	99.31164
As 188.980	528.992	ppb	13.0516	2.5	134.624	105.79850
B 249.678	523.157	ppb	1.8682	0.4	3368.09	104.63139
Ba 389.178	478.882	ppb	0.8192	0.2	4546.00	95.77648
Be 313.042	534.526	ppb	0.4257	0.1	434992	106.90521
Ca 370.602	10101	ppb	6.676	0.1	21109	101.00834
Cd 226.502	517.012	ppb	1.6175	0.3	7882.63	103.40243
Co 228.615	507.641	ppb	1.2235	0.2	2351.29	101.52824
Cr 267.716	502.571	ppb	0.5714	0.1	10856.1	100.51427
Cu 324.754	508.519	ppb	0.8785	0.2	18673.9	101.70381
Fe 271.441	10116.1	ppb	7.5397	0.1	7640.18	101.11055
K 766.491	10037.9	ppb	9.1570	0.1	248616	100.37881
Mg 279.078	10454.2	ppb	15.5617	0.1	14420.0	104.54192
Mn 257.610	504.922	ppb	0.1204	0.0	48908.2	100.98441
Mo 202.032	496.685	ppb	1.2001	0.2	1034.41	99.33704
Na 330.237	10742.0	ppb	54.5777	0.5	305.506	107.41990
Ni 231.604	514.855	ppb	4.3253	0.8	660.071	102.97099
Pb 220.353	519.729	ppb	0.9350	0.2	276.279	103.94586
Sb 206.834	502.507	ppb	8.0308	1.6	211.396	100.50130
Se 196.026	526.712	ppb	4.0916	0.8	94.5212	105.34237
Si 288.158	4955.13	ppb	3.0742	0.1	23863.6	99.10262

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	498.371	ppb	6.7193	1.3	147.982	99.67417
Sr 216.596	505.126	ppb	0.6296	0.1	1928.39	101.02519
Ti 334.941	494.839	ppb	0.1977	0.0	54315.9	98.96783
Tl 190.794	487.887	ppb	8.9386	1.8	130.308	97.57743
V 292.401	500.252	ppb	0.6204	0.1	6510.29	100.05049
Zn 206.200	1071.35	ppb	7.5484	0.7	602.710	107.13509

Cont Calib Blank (CCB) **12/15/2018, 9:23:58 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.1287u	0.2546	0.6265
Al 308.215	2.2017	5.6397	6.7307
As 188.980	3.7014	-1.4766u	3.7582
B 249.678	2.5631	4.1592	2.9973
Ba 389.178	-1.2831u	-0.7646u	-0.1331u
Be 313.042	0.0315	0.0336	0.0594
Ca 370.602	1.739	-2.208u	2.241
Cd 226.502	-0.3178u	0.1979	-0.0305u
Co 228.615	-1.2111u	-1.3311u	-1.0120u
Cr 267.716	-0.3394u	-0.4264u	-0.3342u
Cu 324.754	0.6380	0.6810	1.4057
Fe 271.441	-3.9879u	3.2537	-10.8689u
K 766.491	1.8761	1.9963	2.6429
Mg 279.078	7.2394	3.7351	10.6413
Mn 257.610	0.0558	0.0559	0.1624
Mo 202.032	0.3486	-1.6687u	0.5557
Na 330.237	361.965	-146.648u	-111.807u
Ni 231.604	-0.4713u	0.4728	0.9180
Pb 220.353	-5.4259u	-0.2733u	5.5142
Sb 206.834	0.9434	-5.8657u	2.0768
Se 196.026	9.8629	0.5863	12.0209
Si 288.158	-0.9406u	-3.9174u	-0.7329u
Sn 189.925	0.8080	-6.1656u	0.1898
Sr 216.596	0.4488	0.3485	0.5447
Ti 334.941	0.1443	0.1040	0.1817
Tl 190.794	-0.4191u	-0.9378u	5.2649
V 292.401	0.2765	-0.0736u	0.1684
Zn 206.200	0.3615	0.4265	0.5188

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0825	ppb	0.9249	1120.7	-32.4937	-0.08252
Al 308.215	4.8574	ppb	2.3637	48.7	166.447	4.85739
As 188.980	1.9943	ppb	3.0060	150.7	1.4683	1.99434
B 249.678	3.2399	ppb	0.8252	25.5	-45.6066	3.23987
Ba 389.178	-0.7269	ppb	0.5759	79.2	-57.0050	-0.72692
Be 313.042	0.0415	ppb	0.0155	37.4	-150.085	0.04152
Ca 370.602	0.5906	ppb	2.436	412.5	28.71	0.59056
Cd 226.502	-0.0501	ppb	0.2584	515.4	5.0770	-0.05014
Co 228.615	-1.1847	ppb	0.1612	13.6	-12.9662	-1.18473
Cr 267.716	-0.3666	ppb	0.0518	14.1	11.7944	-0.36665
Cu 324.754	0.9083	ppb	0.4314	47.5	257.293	0.90826
Fe 271.441	-3.8677	ppb	7.0620	182.6	14.6732	-3.86768
K 766.491	2.1718	ppb	0.4124	19.0	300.127	2.17176

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	7.2053	ppb	3.4533	47.9	29.0464	7.20528
Mn 257.610	0.0914	ppb	0.0615	67.3	38.7491	0.09136
Mo 202.032	-0.2548	ppb	1.2288	482.3	2.1865	-0.25479
Na 330.237	34.5033	ppb	284.125	823.5	46.3560	34.50331
Ni 231.604	0.3065	ppb	0.7094	231.5	-1.1717	0.30647
Pb 220.353	-0.0617	ppb	5.4731	8875.0	6.0869	-0.06167
Sb 206.834	-0.9485	ppb	4.2959	452.9	5.3296	-0.94851
Se 196.026	7.4900	ppb	6.0754	81.1	0.2028	7.49001
Si 288.158	-1.8636uv	ppb	1.7816	95.6	328.443	-1.86360
Sn 189.925	-1.7226	ppb	3.8601	224.1	-0.7188	-1.72263
Sr 216.596	0.4474	ppb	0.0981	21.9	7.2593	0.44737
Ti 334.941	0.1433	ppb	0.0388	27.1	-20.7305	0.14333
Tl 190.794	1.3027	ppb	3.4412	264.2	-3.9939	1.30266
V 292.401	0.1238	ppb	0.1793	144.8	-0.5947	0.12379
Zn 206.200	0.4356	ppb	0.0791	18.2	0.7736	0.43559

MB 680-550536/1-A (Samp) **12/15/2018, 9:28:40 PM** **Rack 3, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3623	-0.4995u	-0.1339u
Al 308.215	9.4252	16.6992	12.2929
As 188.980	3.0599	2.4784	1.2703
B 249.678	1.9619	2.5010	0.9946
Ba 389.178	-0.1717u	0.3590	-1.3565u
Be 313.042	-0.0284u	-0.0113u	-0.0113u
Ca 370.602	39.72	39.99	45.37
Cd 226.502	-0.3760u	-0.1193u	0.0352
Co 228.615	-1.0641u	-1.0245u	-1.4766u
Cr 267.716	-0.2626u	-0.1246u	-0.2592u
Cu 324.754	1.4270	0.7050	0.9102
Fe 271.441	36.6336	29.3866	26.3174
K 766.491	10.8621	11.9594	10.3813
Mg 279.078	12.1059	4.4777	5.4459
Mn 257.610	0.5699	0.5925	0.4772
Mo 202.032	0.6474	-0.2622u	-0.8424u
Na 330.237	220.438	163.771	381.020
Ni 231.604	1.1233	1.4538	0.7849
Pb 220.353	0.2697	-1.0887u	4.6957
Sb 206.834	0.8452	4.7047	1.1453
Se 196.026	-9.5456u	-11.4558u	-2.9645u
Si 288.158	6.2005	7.1272	7.1369
Sn 189.925	10.7667	10.9517	10.1378
Sr 216.596	1.0411	0.7612	-0.8235u
Ti 334.941	0.4628	0.3294	0.3152
Tl 190.794	0.8894	-8.5228u	-6.9522u
V 292.401	0.8856	0.0462	-0.2524u
Zn 206.200	6.4979	3.7608	1.2726

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0904	ppb	0.4326	478.7	-32.7724
Al 308.215	12.8057	ppb	3.6640	28.6	185.199
As 188.980	2.2695	ppb	0.9129	40.2	1.5379
B 249.678	1.8192	ppb	0.7633	42.0	-54.9971

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.3897	ppb	0.8783	225.4	-53.7689
Be 313.042	-0.0170	ppb	0.0099	58.2	-197.755
Ca 370.602	41.69	ppb	3.188	7.6	114.4
Cd 226.502	-0.1534	ppb	0.2077	135.4	3.5314
Co 228.615	-1.1884	ppb	0.2504	21.1	-12.9866
Cr 267.716	-0.2154	ppb	0.0787	36.5	15.0607
Cu 324.754	1.0141	ppb	0.3720	36.7	261.144
Fe 271.441	30.7792	ppb	5.2972	17.2	40.6637
K 766.491	11.0676	ppb	0.8089	7.3	520.238
Mg 279.078	7.3432	ppb	4.1530	56.6	29.2300
Mn 257.610	0.5465	ppb	0.0611	11.2	82.7897
Mo 202.032	-0.1524	ppb	0.7509	492.7	2.3988
Na 330.237	255.076	ppb	112.691	44.2	51.7669
Ni 231.604	1.1207	ppb	0.3345	29.8	-0.1244
Pb 220.353	1.2922	ppb	3.0248	234.1	6.7916
Sb 206.834	2.2317	ppb	2.1469	96.2	6.6440
Se 196.026	-7.9886	ppb	4.4546	55.8	-2.6065
Si 288.158	6.8216	ppb	0.5378	7.9	370.431
Sn 189.925	10.6187	ppb	0.4266	4.0	2.9508
Sr 216.596	0.3263	ppb	1.0055	308.2	6.7946
Ti 334.941	0.3691	ppb	0.0814	22.0	4.0501
Tl 190.794	-4.8618	ppb	5.0423	103.7	-5.6939
V 292.401	0.2265	ppb	0.5900	260.5	0.7266
Zn 206.200	3.8438	ppb	2.6137	68.0	2.6899

LCS 680-550536/2-A (Samp) **12/15/2018, 9:33:23 PM** **Rack 3, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	46.3245	47.4166	46.7100
Al 308.215	4721.16	4719.77	4731.57
As 188.980	94.2988	100.909	97.4726
B 249.678	195.744	194.682	193.399
Ba 389.178	90.3276	92.3695	89.5510
Be 313.042	50.7850	50.7925	50.8549
Ca 370.602	4832	4835	4832
Cd 226.502	50.4704	49.8758	49.7811
Co 228.615	46.6574	47.8593	47.8063
Cr 267.716	97.4266	97.3828	97.8977
Cu 324.754	97.8136	98.9503	98.5829
Fe 271.441	4883.43	4895.30	4899.63
K 766.491	7576.44	7581.10	7576.83
Mg 279.078	4955.31	4938.30	4952.15
Mn 257.610	484.871	484.315	484.733
Mo 202.032	95.7473	95.7766	95.2528
Na 330.237	4818.99	5323.50	5139.54
Ni 231.604	99.7668	97.8540	101.126
Pb 220.353	493.319	501.594	496.112
Sb 206.834	48.9445	61.9018	57.0182
Se 196.026	87.5889	95.0695	106.851
Si 288.158	3.4007	5.1794	4.6381
Sn 189.925	97.5453	107.511	105.348
Sr 216.596	96.4821	96.4638	97.4179
Ti 334.941	94.7038	94.6271	94.8682

Label	Replicates Concentration		
Tl 190.794	38.0604	39.5660	28.5775
V 292.401	94.6836	94.2301	94.3983
Zn 206.200	106.717	99.3804	112.427

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	46.8170	ppb	0.5539	1.2	1596.55
Al 308.215	4724.17	ppb	6.4529	0.1	11300.2
As 188.980	97.5600	ppb	3.3059	3.4	25.6192
B 249.678	194.608	ppb	1.1742	0.6	1209.74
Ba 389.178	90.7494	ppb	1.4558	1.6	824.851
Be 313.042	50.8108	ppb	0.0384	0.1	41181.0
Ca 370.602	4833	ppb	1.645	0.0	10115
Cd 226.502	50.0424	ppb	0.3737	0.7	771.276
Co 228.615	47.4410	ppb	0.6791	1.4	213.010
Cr 267.716	97.5690	ppb	0.2855	0.3	2124.59
Cu 324.754	98.4489	ppb	0.5800	0.6	3796.84
Fe 271.441	4892.78	ppb	8.3880	0.2	3692.36
K 766.491	7578.12	ppb	2.5855	0.0	187753
Mg 279.078	4948.59	ppb	9.0457	0.2	6833.34
Mn 257.610	484.640	ppb	0.2893	0.1	46910.7
Mo 202.032	95.5922	ppb	0.2943	0.3	201.234
Na 330.237	5094.01	ppb	255.315	5.0	169.920
Ni 231.604	99.5822	ppb	1.6437	1.7	126.458
Pb 220.353	497.008	ppb	4.2096	0.8	264.767
Sb 206.834	55.9548	ppb	6.5438	11.7	28.4639
Se 196.026	96.5030	ppb	9.7106	10.1	16.4182
Si 288.158	4.4060	ppb	0.9118	20.7	384.431
Sn 189.925	103.468	ppb	5.2422	5.1	30.5596
Sr 216.596	96.7879	ppb	0.5456	0.6	374.636
Ti 334.941	94.7330	ppb	0.1232	0.1	10378.5
Tl 190.794	35.4013	ppb	5.9573	16.8	5.3415
V 292.401	94.4373	ppb	0.2293	0.2	1227.58
Zn 206.200	106.175	ppb	6.5400	6.2	60.1272

680-161405-A-46-A (Samp) **12/15/2018, 9:38:05 PM** **Rack 3, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.0206	1.3477	0.8313
Al 308.215	113470	113463	113523
As 188.980	201.726	206.658	205.318
B 249.678	57.9063	60.4155	57.6474
Ba 389.178	1925.24	1926.69	1931.85
Be 313.042	6.2705	6.2545	6.2605
Ca 370.602	74526	74518	74527
Cd 226.502	11.5678	11.1529	11.1722
Co 228.615	83.2991	84.1565	82.1661
Cr 267.716	175.561	174.928	174.764
Cu 324.754	288.153	289.222	287.393
Fe 271.441	210474	210394	210065
K 766.491	14831.8	14838.8	14825.6
Mg 279.078	34319.1	34260.0	34267.3
Mn 257.610	12175.3	12159.1	12143.9
Mo 202.032	11.6202	10.7844	12.9676

Label	Replicates Concentration		
Na 330.237	642.667u	564.542u	388.714u
Ni 231.604	169.139	173.174	168.703
Pb 220.353	5337.48	5338.83	5361.66
Sb 206.834	6.8445	1.4453	-5.6955
Se 196.026	6.9019	11.6370	22.5708
Si 288.158	17400.4	17366.4	17352.7
Sn 189.925	113.543	111.101	112.609
Sr 216.596	269.967	269.363	268.117
Ti 334.941	1387.41	1384.35	1383.53
Tl 190.794	15.6748u	22.9036	7.8838u
V 292.401	253.062	252.983	253.303
Zn 206.200	3804.44	3802.42	3788.09

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.0665	ppb	0.2612	24.5	-13.0887
Al 308.215	113485	ppb	33.1433	0.0	267798
As 188.980	204.567	ppb	2.5502	1.2	53.0936
B 249.678	58.6564	ppb	1.5289	2.6	110.816
Ba 389.178	1927.92	ppb	3.4748	0.2	18485.9
Be 313.042	6.2618	ppb	0.0081	0.1	4930.44
Ca 370.602	74524	ppb	4.791	0.0	155360
Cd 226.502	11.2976	ppb	0.2342	2.1	335.995
Co 228.615	83.2072	ppb	0.9984	1.2	397.314
Cr 267.716	175.084	ppb	0.4209	0.2	3841.63
Cu 324.754	288.256	ppb	0.9189	0.3	10721.7
Fe 271.441	210311	ppb	216.647	0.1	157839
K 766.491	14832.0	ppb	6.5825	0.0	367238
Mg 279.078	34282.1	ppb	32.2500	0.1	47117.7
Mn 257.610	12159.5	ppb	15.7072	0.1	1175929
Mo 202.032	11.7907	ppb	1.1016	9.3	24.1100
Na 330.237	531.974	ppb	130.071	24.5	29.3590
Ni 231.604	170.339	ppb	2.4649	1.4	217.439
Pb 220.353	5345.99	ppb	13.5869	0.3	2788.99
Sb 206.834	0.8648	ppb	6.2901	727.4	8.6925
Se 196.026	13.7032	ppb	8.0362	58.6	3.0807
Si 288.158	17373.2	ppb	24.5774	0.1	82428.5
Sn 189.925	112.418	ppb	1.2320	1.1	33.2201
Sr 216.596	269.149	ppb	0.9434	0.4	1081.19
Ti 334.941	1385.10	ppb	2.0464	0.1	152119
Tl 190.794	15.4874	ppb	7.5117	48.5	-5.3936
V 292.401	253.116	ppb	0.1670	0.1	3360.54
Zn 206.200	3798.32	ppb	8.9137	0.2	2134.03

680-161405-A-46-Asd (Samp) **12/15/2018, 9:42:48 PM** **Rack 3, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.8588u	0.2156	0.4041
Al 308.215	22697.1	22685.9	22649.6
As 188.980	37.7621	45.2983	47.6479
B 249.678	12.7946	13.5472	12.6277
Ba 389.178	387.106	389.627	387.868
Be 313.042	1.2279	1.2152	1.2196
Ca 370.602	15188	15196	15127

Label	Replicates Concentration		
Cd 226.502	2.2862	2.7167	2.1360
Co 228.615	16.2246	15.0006	16.9751
Cr 267.716	35.3334	35.1578	35.4033
Cu 324.754	57.9225	58.5935	58.7067
Fe 271.441	43175.9	43213.6	43091.6
K 766.491	2832.67	2831.35	2829.13
Mg 279.078	6991.55	6986.23	6990.84
Mn 257.610	2548.73	2546.91	2548.81
Mo 202.032	2.9824	0.9706	3.6378
Na 330.237	138.407u	130.361u	316.584
Ni 231.604	34.8436	35.1459	33.7940
Pb 220.353	1099.87	1084.15	1103.38
Sb 206.834	-0.4535	-0.9077	8.8855
Se 196.026	9.5518	2.3163	-6.2381u
Si 288.158	3541.46	3538.38	3547.24
Sn 189.925	31.3362	24.0604	24.6892
Sr 216.596	54.5898	54.4429	54.1862
Ti 334.941	282.273	282.567	282.095
Tl 190.794	5.8587	-10.2752u	13.1000
V 292.401	51.2372	50.9249	51.1374
Zn 206.200	779.093	776.031	787.806

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0797	ppb	0.6813	854.4	-36.4950
Al 308.215	22677.5	ppb	24.8436	0.1	53637.6
As 188.980	43.5694	ppb	5.1647	11.9	12.0637
B 249.678	12.9898	ppb	0.4898	3.8	-24.1990
Ba 389.178	388.200	ppb	1.2929	0.3	3682.60
Be 313.042	1.2209	ppb	0.0065	0.5	813.397
Ca 370.602	15170	ppb	37.57	0.2	31648
Cd 226.502	2.3797	ppb	0.3014	12.7	74.5039
Co 228.615	16.0668	ppb	0.9966	6.2	70.8964
Cr 267.716	35.2982	ppb	0.1265	0.4	790.498
Cu 324.754	58.4075	ppb	0.4239	0.7	2351.49
Fe 271.441	43160.4	ppb	62.4387	0.1	32405.9
K 766.491	2831.05	ppb	1.7863	0.1	70295.6
Mg 279.078	6989.54	ppb	2.8923	0.0	9621.07
Mn 257.610	2548.15	ppb	1.0740	0.0	246451
Mo 202.032	2.5302	ppb	1.3899	54.9	7.3362
Na 330.237	195.117	ppb	105.270	54.0	44.3064
Ni 231.604	34.5945	ppb	0.7095	2.1	42.9122
Pb 220.353	1095.80	ppb	10.2443	0.9	576.554
Sb 206.834	2.5081	ppb	5.5277	220.4	7.2930
Se 196.026	1.8766	ppb	7.9041	421.2	-0.4521
Si 288.158	3542.36	ppb	4.4974	0.1	17076.1
Sn 189.925	26.6953	ppb	4.0314	15.1	7.7310
Sr 216.596	54.4063	ppb	0.2043	0.4	223.121
Ti 334.941	282.312	ppb	0.2383	0.1	30976.0
Tl 190.794	2.8945	ppb	11.9662	413.4	-4.6329
V 292.401	51.0998	ppb	0.1595	0.3	676.813
Zn 206.200	780.976	ppb	6.1093	0.8	439.202

680-161405-A-46-Apds (Samp) **12/15/2018, 9:47:31 PM** **Rack 3, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.9334	52.3117	52.9724
Al 308.215	116765	116920	116937
As 188.980	312.847	301.375	296.876
B 249.678	264.603	265.352	267.128
Ba 389.178	1986.69	1989.75	1992.38
Be 313.042	59.8304	59.8723	59.9168
Ca 370.602	78130	78299	78291
Cd 226.502	63.1347	63.4524	63.3535
Co 228.615	133.173	133.005	133.798
Cr 267.716	273.538	274.832	274.543
Cu 324.754	388.625	389.613	390.318
Fe 271.441	211226	211564	211514
K 766.491	23239.0	23248.3	23277.9
Mg 279.078	38943.9	38964.5	38940.0
Mn 257.610	12424.0	12440.3	12428.3
Mo 202.032	114.003	111.779	112.067
Na 330.237	5879.97	5745.53	5720.29
Ni 231.604	272.643	265.528	268.624
Pb 220.353	5754.12	5758.24	5753.66
Sb 206.834	52.6571	44.4520	56.2080
Se 196.026	120.065	110.626	103.148
Si 288.158	17061.0	17062.4	17077.8
Sn 189.925	225.206	209.631	217.845
Sr 216.596	365.493	365.401	366.817
Ti 334.941	1458.74	1459.23	1461.11
Tl 190.794	48.8850	35.1969	65.7008
V 292.401	348.842	348.213	348.244
Zn 206.200	3825.59	3839.97	3840.64

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.0725	ppb	1.0404	2.0	1758.99
Al 308.215	116874	ppb	94.7552	0.1	275794
As 188.980	303.699	ppb	8.2354	2.7	78.1380
B 249.678	265.694	ppb	1.2971	0.5	1473.10
Ba 389.178	1989.61	ppb	2.8476	0.1	19081.5
Be 313.042	59.8732	ppb	0.0432	0.1	48575.0
Ca 370.602	78240	ppb	95.41	0.1	163121
Cd 226.502	63.3135	ppb	0.1625	0.3	1128.65
Co 228.615	133.325	ppb	0.4180	0.3	629.897
Cr 267.716	274.304	ppb	0.6793	0.2	5981.27
Cu 324.754	389.519	ppb	0.8503	0.2	14395.5
Fe 271.441	211434	ppb	182.200	0.1	158685
K 766.491	23255.0	ppb	20.2809	0.1	575650
Mg 279.078	38949.5	ppb	13.1765	0.0	53546.7
Mn 257.610	12430.9	ppb	8.4518	0.1	1202191
Mo 202.032	112.616	ppb	1.2093	1.1	233.556
Na 330.237	5781.93	ppb	85.8409	1.5	158.123
Ni 231.604	268.932	ppb	3.5671	1.3	344.189
Pb 220.353	5755.34	ppb	2.5219	0.0	3002.00
Sb 206.834	51.1057	ppb	6.0296	11.8	29.0033
Se 196.026	111.279	ppb	8.4774	7.6	20.8193
Si 288.158	17067.1	ppb	9.3202	0.1	81009.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	217.561	ppb	7.7915	3.6	64.4842
Sr 216.596	365.903	ppb	0.7921	0.2	1449.24
Ti 334.941	1459.70	ppb	1.2530	0.1	160323
Tl 190.794	49.9275	ppb	15.2787	30.6	4.1366
V 292.401	348.433	ppb	0.3542	0.1	4600.62
Zn 206.200	3835.40	ppb	8.5026	0.2	2154.82

680-161405-A-46-B MS (Samp) **12/15/2018, 9:52:13 PM** **Rack 3, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	48.4480	48.4610	48.4812
Al 308.215	141368	141386	141368
As 188.980	412.819	405.808	404.068
B 249.678	404.660	404.625	405.565
Ba 389.178	1846.34	1844.94	1838.18
Be 313.042	108.017	107.894	107.978
Ca 370.602	54574	54547	54533
Cd 226.502	104.905	104.579	104.749
Co 228.615	195.322	195.486	195.542
Cr 267.716	382.695	382.165	382.267
Cu 324.754	493.289	489.123	491.468
Fe 271.441	320783	320488	320191
K 766.491	28697.4	28652.1	28735.3
Mg 279.078	55313.5	55249.3	55214.5
Mn 257.610	13521.4	13465.7	13436.9
Mo 202.032	193.231	193.034	188.391
Na 330.237	10316.9	10063.8	10315.8
Ni 231.604	386.755	383.204	384.066
Pb 220.353	6893.74	6944.81	6931.54
Sb 206.834	73.9228	80.5990	71.0914
Se 196.026	190.760	217.951	224.908
Si 288.158	14017.8	14007.3	13984.4
Sn 189.925	284.555	279.185	265.206
Sr 216.596	382.862	383.914	383.560
Ti 334.941	1442.09	1439.39	1436.82
Tl 190.794	68.1687	88.8200	86.8233
V 292.401	505.556	505.314	504.587
Zn 206.200	3007.45	3009.96	3001.43

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.4634	ppb	0.0167	0.0	1613.24
Al 308.215	141374	ppb	10.0816	0.0	333581
As 188.980	407.565	ppb	4.6328	1.1	104.599
B 249.678	404.950	ppb	0.5327	0.1	2282.08
Ba 389.178	1843.15	ppb	4.3651	0.2	17728.1
Be 313.042	107.963	ppb	0.0629	0.1	87722.1
Ca 370.602	54551	ppb	20.54	0.0	113482
Cd 226.502	104.745	ppb	0.1632	0.2	1839.85
Co 228.615	195.450	ppb	0.1145	0.1	920.701
Cr 267.716	382.376	ppb	0.2810	0.1	8324.70
Cu 324.754	491.293	ppb	2.0887	0.4	18110.3
Fe 271.441	320487	ppb	295.906	0.1	240522
K 766.491	28694.9	ppb	41.6907	0.1	710250

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	55259.1	ppb	50.1921	0.1	76009.2
Mn 257.610	13474.7	ppb	42.9463	0.3	1303276
Mo 202.032	191.552	ppb	2.7393	1.4	395.946
Na 330.237	10232.2	ppb	145.793	1.4	259.947
Ni 231.604	384.675	ppb	1.8525	0.5	492.987
Pb 220.353	6923.36	ppb	26.5010	0.4	3610.24
Sb 206.834	75.2044	ppb	4.8816	6.5	39.7884
Se 196.026	211.206	ppb	18.0457	8.5	39.3866
Si 288.158	14003.2	ppb	17.1075	0.1	66561.0
Sn 189.925	276.315	ppb	9.9887	3.6	81.9550
Sr 216.596	383.446	ppb	0.5353	0.1	1539.22
Ti 334.941	1439.43	ppb	2.6384	0.2	158153
Tl 190.794	81.2707	ppb	11.3905	14.0	8.6648
V 292.401	505.152	ppb	0.5042	0.1	6668.72
Zn 206.200	3006.28	ppb	4.3867	0.1	1686.94

680-161405-A-46-C MS (Samp) **12/15/2018, 9:56:56 PM** **Rack 3, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	47.1472	48.5659	48.1241
Al 308.215	133798	133684	133518
As 188.980	409.786	436.234	429.540
B 249.678	412.670	408.704	411.531
Ba 389.178	3533.51	3535.57	3530.15
Be 313.042	108.067	108.105	108.266
Ca 370.602	58327	58270	58282
Cd 226.502	109.749	109.040	109.818
Co 228.615	237.962	234.459	237.727
Cr 267.716	368.927	368.784	370.263
Cu 324.754	465.924	471.159	466.970
Fe 271.441	260185	260135	260533
K 766.491	30428.6	30503.7	30456.2
Mg 279.078	46957.0	46919.5	47021.1
Mn 257.610	29803.9x	29804.0x	29819.1x
Mo 202.032	202.657	202.096	200.583
Na 330.237	10198.3	10675.7	10819.7
Ni 231.604	383.284	384.752	384.019
Pb 220.353	19667.3x	19667.1x	19693.1x
Sb 206.834	68.8461	71.7650	57.1250
Se 196.026	198.932	196.200	201.915
Si 288.158	16678.2	16686.3	16716.3
Sn 189.925	390.147	385.508	391.262
Sr 216.596	417.536	416.674	417.457
Ti 334.941	1704.83	1704.73	1710.14
Tl 190.794	87.4056	85.0866	91.0442
V 292.401	492.098	491.987	492.655
Zn 206.200	3607.03	3602.31	3602.83

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	47.9457b	ppb	0.7260	1.5	1641.93
Al 308.215	133667b	ppb	140.486	0.1	315403
As 188.980	425.187b	ppb	13.7507	3.2	108.934
B 249.678	410.968b	ppb	2.0417	0.5	2381.33

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	3533.08b	ppb	2.7378	0.1	33867.7
Be 313.042	108.146b	ppb	0.1052	0.1	87867.6
Ca 370.602	58293b	ppb	29.95	0.1	121725
Cd 226.502	109.536b	ppb	0.4308	0.4	1868.58
Co 228.615	236.716b	ppb	1.9582	0.8	1113.01
Cr 267.716	369.325b	ppb	0.8157	0.2	8068.77
Cu 324.754	468.017b	ppb	2.7702	0.6	17253.5
Fe 271.441	260284b	ppb	216.733	0.1	195348
K 766.491	30462.8b	ppb	37.9613	0.1	753994
Mg 279.078	46965.8b	ppb	51.3768	0.1	64409.8
Mn 257.610	29809.0xb	ppb	8.7485	0.0	2882310
Mo 202.032	201.778b	ppb	1.0728	0.5	418.067
Na 330.237	10564.6b	ppb	325.244	3.1	271.689
Ni 231.604	384.019b	ppb	0.7336	0.2	492.099
Pb 220.353	19675.8xb	ppb	14.9421	0.1	10248.9
Sb 206.834	65.9120b	ppb	7.7485	11.8	35.2402
Se 196.026	199.015b	ppb	2.8586	1.4	38.4702
Si 288.158	16693.6b	ppb	20.0978	0.1	79284.4
Sn 189.925	388.972b	ppb	3.0513	0.8	115.453
Sr 216.596	417.222b	ppb	0.4765	0.1	1654.48
Ti 334.941	1706.57b	ppb	3.0941	0.2	187448
Tl 190.794	87.8454b	ppb	3.0030	3.4	17.0429
V 292.401	492.247b	ppb	0.3581	0.1	6487.90
Zn 206.200	3604.06b	ppb	2.5904	0.1	2023.98

680-161405-A-35-A (Samp) **12/15/2018, 10:01:39 PM** **Rack 3, Tube 8**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.9249	0.9680	0.6667u
Al 308.215	122546	122478	122714
As 188.980	404.747	395.354	390.815
B 249.678	57.7687	57.1443	57.6037
Ba 389.178	1495.12	1491.27	1495.94
Be 313.042	7.2195	7.2153	7.2280
Ca 370.602	37672	37631	37747
Cd 226.502	5.0865	4.8729	5.0439
Co 228.615	66.7514	66.8589	67.4954
Cr 267.716	169.916	170.480	171.137
Cu 324.754	190.475	190.510	191.460
Fe 271.441	203475	203042	203738
K 766.491	12823.2	12851.3	12839.2
Mg 279.078	34500.1	34455.8	34541.1
Mn 257.610	7151.64	7128.59	7166.93
Mo 202.032	8.5976	10.9192	10.0686
Na 330.237	699.381u	489.626u	547.810u
Ni 231.604	156.929	158.125	157.139
Pb 220.353	3261.73	3259.44	3254.41
Sb 206.834	0.0344	15.5228	4.7332
Se 196.026	-11.7803u	-3.2914	-0.3637
Si 288.158	13953.7	13915.6	13950.1
Sn 189.925	39.3280	36.3040	31.1317
Sr 216.596	144.382	146.554	146.600
Ti 334.941	1372.34	1369.60	1373.81

Label	Replicates Concentration		
Tl 190.794	5.1524u	9.4888u	13.2974u
V 292.401	244.008	243.628	243.809
Zn 206.200	1453.49	1448.09	1446.81

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.8532	ppb	0.1629	19.1	-29.1979
Al 308.215	122579	ppb	121.439	0.1	289244
As 188.980	396.972	ppb	7.1056	1.8	101.739
B 249.678	57.5056	ppb	0.3236	0.6	110.048
Ba 389.178	1494.11	ppb	2.4951	0.2	14334.6
Be 313.042	7.2209	ppb	0.0065	0.1	5706.86
Ca 370.602	37683	ppb	59.04	0.2	78407
Cd 226.502	5.0011	ppb	0.1130	2.3	235.561
Co 228.615	67.0352	ppb	0.4021	0.6	321.889
Cr 267.716	170.511	ppb	0.6112	0.4	3732.65
Cu 324.754	190.815	ppb	0.5589	0.3	7186.62
Fe 271.441	203418	ppb	351.487	0.2	152666
K 766.491	12837.9	ppb	14.0736	0.1	317897
Mg 279.078	34499.0	ppb	42.6735	0.1	47467.2
Mn 257.610	7149.05	ppb	19.2978	0.3	691539
Mo 202.032	9.8618	ppb	1.1745	11.9	20.2040
Na 330.237	578.939	ppb	108.287	18.7	36.9137
Ni 231.604	157.398	ppb	0.6381	0.4	200.813
Pb 220.353	3258.53	ppb	3.7412	0.1	1701.98
Sb 206.834	6.7635	ppb	7.9413	117.4	11.0550
Se 196.026	-5.1451	ppb	5.9298	115.3	-0.8159
Si 288.158	13939.8	ppb	21.0216	0.2	66213.3
Sn 189.925	35.5879	ppb	4.1448	11.6	10.3751
Sr 216.596	145.845	ppb	1.2673	0.9	608.283
Ti 334.941	1371.92	ppb	2.1355	0.2	150673
Tl 190.794	9.3129	ppb	4.0753	43.8	-8.0843
V 292.401	243.815	ppb	0.1898	0.1	3237.40
Zn 206.200	1449.46	ppb	3.5465	0.2	812.971

680-161405-A-38-A (Samp) **12/15/2018, 10:06:21 PM** **Rack 3, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3437u	-0.9390u	-1.5220u
Al 308.215	122327	122412	122334
As 188.980	66.6211	52.9086	53.3931
B 249.678	65.8097	66.3931	65.6019
Ba 389.178	1238.70	1240.24	1239.27
Be 313.042	6.1394	6.1455	6.1178
Ca 370.602	29152	29138	29121
Cd 226.502	1.7127	2.0075	1.8465
Co 228.615	117.341	117.249	117.238
Cr 267.716	176.199	176.049	176.901
Cu 324.754	195.861	196.340	196.773
Fe 271.441	236000	236027	236182
K 766.491	15380.1	15415.2	15402.9
Mg 279.078	48771.4	48739.1	48700.1
Mn 257.610	10045.9	10057.5	10056.9
Mo 202.032	6.0985	7.9450	5.1940

Label	Replicates Concentration		
Na 330.237	991.703	517.416u	-166.661u
Ni 231.604	246.930	241.195	241.862
Pb 220.353	126.788	114.560	121.661
Sb 206.834	8.9108	-1.1377	2.3182
Se 196.026	2.1556	6.7754	-8.2484
Si 288.158	12675.1	12650.5	12662.8
Sn 189.925	9.9159	17.2138	10.0939
Sr 216.596	145.226	146.745	145.684
Ti 334.941	2211.21	2206.76	2207.46
Tl 190.794	4.0457u	6.0120u	16.2890u
V 292.401	263.193	262.876	263.960
Zn 206.200	502.310	500.596	504.250

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9349	ppb	0.5892	63.0	-93.1248
Al 308.215	122358	ppb	47.3012	0.0	288723
As 188.980	57.6409	ppb	7.7808	13.5	15.9892
B 249.678	65.9349	ppb	0.4102	0.6	133.255
Ba 389.178	1239.40	ppb	0.7789	0.1	11922.2
Be 313.042	6.1342	ppb	0.0145	0.2	4820.87
Ca 370.602	29137	ppb	15.41	0.1	60580
Cd 226.502	1.8556	ppb	0.1476	8.0	211.220
Co 228.615	117.276	ppb	0.0568	0.0	563.701
Cr 267.716	176.383	ppb	0.4550	0.3	3869.06
Cu 324.754	196.325	ppb	0.4561	0.2	7393.29
Fe 271.441	236070	ppb	98.3699	0.0	177170
K 766.491	15399.4	ppb	17.8216	0.1	381277
Mg 279.078	48736.9	ppb	35.7358	0.1	67059.7
Mn 257.610	10053.4	ppb	6.5068	0.1	972431
Mo 202.032	6.4125	ppb	1.4021	21.9	12.5608
Na 330.237	447.486	ppb	582.339	130.1	32.3396
Ni 231.604	243.329	ppb	3.1360	1.3	311.275
Pb 220.353	121.003	ppb	6.1406	5.1	69.0435
Sb 206.834	3.3637	ppb	5.1052	151.8	10.0200
Se 196.026	0.2275	ppb	7.6953	3382.0	0.5230
Si 288.158	12662.8	ppb	12.3003	0.1	60221.5
Sn 189.925	12.4079	ppb	4.1630	33.6	3.4827
Sr 216.596	145.885	ppb	0.7794	0.5	615.182
Ti 334.941	2208.48	ppb	2.3924	0.1	242549
Tl 190.794	8.7823	ppb	6.5749	74.9	-8.7456
V 292.401	263.343	ppb	0.5574	0.2	3504.59
Zn 206.200	502.385	ppb	1.8286	0.4	279.826

680-161405-A-43-A (Samp) **12/15/2018, 10:11:04 PM** **Rack 3, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5256u	0.0836u	-0.3735u
Al 308.215	141983	142163	141707
As 188.980	199.305	191.559	182.129
B 249.678	53.7313	55.3401	54.0279
Ba 389.178	1943.06	1947.69	1940.39
Be 313.042	7.5430	7.5565	7.5663
Ca 370.602	37849	37860	37851

Label	Replicates Concentration		
Cd 226.502	6.1532	6.4231	6.1605
Co 228.615	98.1735	97.6240	98.2673
Cr 267.716	182.783	183.361	182.508
Cu 324.754	209.094	205.297	204.721
Fe 271.441	217052	217424	217071
K 766.491	14468.7	14451.6	14443.7
Mg 279.078	36774.0	36800.1	36778.0
Mn 257.610	17458.0	17489.4	17473.9
Mo 202.032	11.4974	10.6324	11.4369
Na 330.237	325.792u	384.131u	97.6574u
Ni 231.604	178.446	180.624	176.894
Pb 220.353	932.364	949.129	942.269
Sb 206.834	-2.1440	9.9257	2.1109
Se 196.026	8.4213	5.4786	4.1376
Si 288.158	15778.5	15799.7	15783.3
Sn 189.925	25.9901	39.6822	32.8107
Sr 216.596	199.814	201.208	198.474
Ti 334.941	1439.84	1440.14	1438.87
Tl 190.794	3.2941u	10.5719u	9.5283u
V 292.401	271.977	271.664	272.725
Zn 206.200	1417.82	1430.89	1422.86

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2718	ppb	0.3171	116.7	-49.4916
Al 308.215	141951	ppb	229.817	0.2	334928
As 188.980	190.998	ppb	8.6015	4.5	49.6747
B 249.678	54.3664	ppb	0.8561	1.6	75.7533
Ba 389.178	1943.71	ppb	3.6931	0.2	18641.5
Be 313.042	7.5553	ppb	0.0117	0.2	5979.29
Ca 370.602	37853	ppb	5.585	0.0	78926
Cd 226.502	6.2456	ppb	0.1537	2.5	265.382
Co 228.615	98.0216	ppb	0.3475	0.4	466.871
Cr 267.716	182.884	ppb	0.4355	0.2	4020.98
Cu 324.754	206.370	ppb	2.3761	1.2	7753.53
Fe 271.441	217183	ppb	209.354	0.1	162996
K 766.491	14454.7	ppb	12.7954	0.1	357901
Mg 279.078	36784.1	ppb	14.0614	0.0	50504.6
Mn 257.610	17473.8	ppb	15.6751	0.1	1689709
Mo 202.032	11.1889	ppb	0.4829	4.3	22.7560
Na 330.237	269.193	ppb	151.391	56.2	28.0878
Ni 231.604	178.654	ppb	1.8736	1.0	228.123
Pb 220.353	941.254	ppb	8.4282	0.9	496.330
Sb 206.834	3.2975	ppb	6.1217	185.6	9.7952
Se 196.026	6.0125	ppb	2.1912	36.4	2.1879
Si 288.158	15787.1	ppb	11.1405	0.1	74936.4
Sn 189.925	32.8277	ppb	6.8461	20.9	9.5544
Sr 216.596	199.832	ppb	1.3669	0.7	817.647
Ti 334.941	1439.62	ppb	0.6684	0.0	158113
Tl 190.794	7.7981	ppb	3.9353	50.5	-6.4362
V 292.401	272.122	ppb	0.5450	0.2	3611.07
Zn 206.200	1423.86	ppb	6.5933	0.5	798.375

Cont Calib Verif (CCV) **12/15/2018, 10:15:47 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	491.105	490.571	491.760
Al 308.215	9952.28	9947.45	9954.99
As 188.980	535.219	529.889	518.742
B 249.678	522.706	523.678	524.197
Ba 389.178	477.496	476.739	477.976
Be 313.042	536.609	536.455	535.860
Ca 370.602	10123	10115	10130
Cd 226.502	516.336	518.771	518.018
Co 228.615	510.376	508.887	507.407
Cr 267.716	503.840	503.454	503.607
Cu 324.754	511.628	507.965	506.201
Fe 271.441	10155.7	10178.5	10167.7
K 766.491	10080.1	10085.7	10070.9
Mg 279.078	10526.7	10507.4	10495.6
Mn 257.610	505.634	506.039	506.644
Mo 202.032	494.772	495.773	493.649
Na 330.237	10871.0	11135.1	10807.1
Ni 231.604	518.971	517.496	517.270
Pb 220.353	517.884	530.454	520.392
Sb 206.834	507.198	502.736	510.298
Se 196.026	521.195	522.082	522.547
Si 288.158	4979.22	4981.01	4984.81
Sn 189.925	508.968	519.850	514.357
Sr 216.596	508.190	507.590	503.366
Ti 334.941	495.968	496.160	496.532
Tl 190.794	499.171	497.666	484.984
V 292.401	500.460	499.810	499.938
Zn 206.200	1085.01	1089.55	1088.09

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.146	ppb	0.5957	0.1	17031.1	98.22911
Al 308.215	9951.57	ppb	3.8215	0.0	23645.5	99.51572
As 188.980	527.950	ppb	8.4077	1.6	134.361	105.59001
B 249.678	523.527	ppb	0.7565	0.1	3370.48	104.70537
Ba 389.178	477.404	ppb	0.6238	0.1	4531.92	95.48079
Be 313.042	536.308	ppb	0.3957	0.1	436443	107.26164
Ca 370.602	10123	ppb	7.283	0.1	21154	101.22649
Cd 226.502	517.708	ppb	1.2466	0.2	7893.27	103.54167
Co 228.615	508.890	ppb	1.4844	0.3	2357.11	101.77797
Cr 267.716	503.634	ppb	0.1944	0.0	10879.1	100.72678
Cu 324.754	508.598	ppb	2.7684	0.5	18676.8	101.71962
Fe 271.441	10167.3	ppb	11.3972	0.1	7678.64	101.62215
K 766.491	10078.9	ppb	7.4973	0.1	249630	100.78895
Mg 279.078	10509.9	ppb	15.7338	0.1	14496.8	105.09892
Mn 257.610	506.106	ppb	0.5079	0.1	49022.9	101.22114
Mo 202.032	494.731	ppb	1.0626	0.2	1030.35	98.94623
Na 330.237	10937.7	ppb	173.855	1.6	310.269	109.37746
Ni 231.604	517.912	ppb	0.9239	0.2	664.002	103.58247
Pb 220.353	522.910	ppb	6.6527	1.3	277.934	104.58201
Sb 206.834	506.744	ppb	3.8014	0.8	213.161	101.34887
Se 196.026	521.941	ppb	0.6870	0.1	93.6556	104.38828
Si 288.158	4981.68	ppb	2.8576	0.1	23990.1	99.63359

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	514.392	ppb	5.4407	1.1	152.746	102.87836
Sr 216.596	506.382	ppb	2.6295	0.5	1933.19	101.27641
Ti 334.941	496.220	ppb	0.2869	0.1	54467.6	99.24403
Tl 190.794	493.940	ppb	7.7928	1.6	131.977	98.78810
V 292.401	500.069	ppb	0.3443	0.1	6507.94	100.01382
Zn 206.200	1087.55	ppb	2.3156	0.2	611.821	108.75511

Cont Calib Blank (CCB) **12/15/2018, 10:20:30 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2687	-1.1871u	-0.2894u
Al 308.215	2.8724	5.1844	3.8977
As 188.980	2.2470	4.6576	-0.0002u
B 249.678	3.4724	2.6204	2.4659
Ba 389.178	0.5791	2.0078	0.6935
Be 313.042	0.0491	0.0563	0.0612
Ca 370.602	-2.078u	3.422	5.099
Cd 226.502	0.0792	0.0769	0.1352
Co 228.615	-1.3166u	-2.1079u	-0.5130u
Cr 267.716	-0.3430u	-0.5791u	-0.0858u
Cu 324.754	0.9700	1.2044	1.2701
Fe 271.441	0.6930	4.1164	12.1041
K 766.491	2.8770	2.1626	2.6332
Mg 279.078	7.6883	7.1298	8.0287
Mn 257.610	0.0699	0.1900	0.3371
Mo 202.032	0.2251	-0.6136u	1.0494
Na 330.237	-119.680u	-22.6753u	163.670
Ni 231.604	2.3224	-1.4931u	0.0811
Pb 220.353	1.0994	0.5835	2.4544
Sb 206.834	0.6950	3.4119	-0.9325u
Se 196.026	-6.4500u	-10.2990u	-3.3943u
Si 288.158	-2.6038u	1.4819	0.1697
Sn 189.925	1.8156	2.8739	0.6484
Sr 216.596	0.4582	0.7564	0.8077
Ti 334.941	0.2548	0.2337	0.2619
Tl 190.794	0.2537	-3.4801u	5.6028
V 292.401	-0.1854u	0.5127	0.5967
Zn 206.200	-0.0829u	0.4426	-3.0238u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.4026	ppb	0.7345	182.4	-43.6141	-0.40260
Al 308.215	3.9848	ppb	1.1585	29.1	164.402	3.98484
As 188.980	2.3015	ppb	2.3294	101.2	1.5460	2.30148
B 249.678	2.8529	ppb	0.5420	19.0	-48.1618	2.85291
Ba 389.178	1.0935	ppb	0.7939	72.6	-39.5857	1.09346
Be 313.042	0.0555	ppb	0.0061	10.9	-138.718	0.05552
Ca 370.602	2.148	ppb	3.755	174.8	31.95	2.14766
Cd 226.502	0.0971	ppb	0.0330	34.0	7.3234	0.09708
Co 228.615	-1.3125	ppb	0.7975	60.8	-13.5655	-1.31249
Cr 267.716	-0.3360	ppb	0.2467	73.4	12.4557	-0.33597
Cu 324.754	1.1482	ppb	0.1578	13.7	266.005	1.14818
Fe 271.441	5.6378	ppb	5.8557	103.9	21.8017	5.63782
K 766.491	2.5576	ppb	0.3631	14.2	309.674	2.55760

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	7.6156	ppb	0.4538	6.0	29.6105	7.61561
Mn 257.610	0.1990	ppb	0.1338	67.2	49.1766	0.19898
Mo 202.032	0.2203	ppb	0.8315	377.4	3.1735	0.22032
Na 330.237	7.1051	ppb	144.003	2026.8	45.6846	7.10514
Ni 231.604	0.3034	ppb	1.9175	631.9	-1.1755	0.30345
Pb 220.353	1.3791	ppb	0.9663	70.1	6.8367	1.37910
Sb 206.834	1.0581	ppb	2.1948	207.4	6.1553	1.05815
Se 196.026	-6.7144	ppb	3.4599	51.5	-2.3753	-6.71445
Si 288.158	-0.3174uv	ppb	2.0860	657.2	336.119	-0.31742
Sn 189.925	1.7793	ppb	1.1132	62.6	0.3224	1.77930
Sr 216.596	0.6741	ppb	0.1887	28.0	8.1203	0.67411
Ti 334.941	0.2501	ppb	0.0147	5.9	-8.9921	0.25015
Tl 190.794	0.7921	ppb	4.5653	576.3	-4.1356	0.79213
V 292.401	0.3080	ppb	0.4294	139.4	1.7798	0.30800
Zn 206.200	-0.8880	ppb	1.8682	210.4	0.0290	-0.88803

680-161405-A-48-A (Samp) **12/15/2018, 10:25:11 PM** **Rack 3, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-3.8955u	-3.7385u	-3.7559u
Al 308.215	105799	105927	105770
As 188.980	258.854	256.904	263.777
B 249.678	43.4786u	47.0293u	46.0812u
Ba 389.178	4140.57	4146.17	4148.58
Be 313.042	9.2060	9.2285	9.2097
Ca 370.602	39308	39381	39331
Cd 226.502	22.7811	23.0868	23.0082
Co 228.615	357.392	359.476	357.021
Cr 267.716	148.361	147.706	148.173
Cu 324.754	312.957	315.355	314.761
Fe 271.441	323799	323927	324228
K 766.491	12350.2	12365.8	12351.2
Mg 279.078	32130.7	32183.2	32200.1
Mn 257.610	64575.1x	64724.8x	64449.3x
Mo 202.032	30.6454	28.9508	27.0971
Na 330.237	360.550u	651.838u	453.034u
Ni 231.604	317.509	315.977	316.169
Pb 220.353	2880.33	2871.18	2880.66
Sb 206.834	0.7199	-1.3292	2.0538
Se 196.026	24.2535	17.1708	29.2363
Si 288.158	4126.66	4131.08	4140.07
Sn 189.925	68.1065	66.4415	76.7335
Sr 216.596	200.988	201.155	200.030
Ti 334.941	1102.59	1102.69	1104.63
Tl 190.794	52.1923	51.7538	59.1077
V 292.401	338.129	338.984	339.057
Zn 206.200	2664.18	2668.24	2651.99

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-3.7966b	ppb	0.0861	2.3	-93.9335
Al 308.215	105832b	ppb	83.4285	0.1	249756
As 188.980	259.845b	ppb	3.5422	1.4	67.3027
B 249.678	45.5297b	ppb	1.8385	4.0	-88.2504

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	4145.11b	ppb	4.1124	0.1	39723.4
Be 313.042	9.2147b	ppb	0.0121	0.1	7322.19
Ca 370.602	39340b	ppb	37.70	0.1	82672
Cd 226.502	22.9587b	ppb	0.1588	0.7	595.934
Co 228.615	357.963b	ppb	1.3235	0.4	1674.64
Cr 267.716	148.080b	ppb	0.3372	0.2	3372.86
Cu 324.754	314.358b	ppb	1.2491	0.4	11692.6
Fe 271.441	323985b	ppb	220.312	0.1	243154
K 766.491	12355.7b	ppb	8.7432	0.1	305966
Mg 279.078	32171.3b	ppb	36.1912	0.1	43661.2
Mn 257.610	64583.1xb	ppb	137.888	0.2	6244090
Mo 202.032	28.8978b	ppb	1.7747	6.1	57.9876
Na 330.237	488.474b	ppb	148.843	30.5	21.3363
Ni 231.604	316.552b	ppb	0.8342	0.3	405.200
Pb 220.353	2877.39b	ppb	5.3828	0.2	1508.20
Sb 206.834	0.4815b	ppb	1.7041	353.9	9.4640
Se 196.026	23.5535b	ppb	6.0631	25.7	9.9725
Si 288.158	4132.60b	ppb	6.8318	0.2	19908.2
Sn 189.925	70.4271b	ppb	5.5245	7.8	20.7343
Sr 216.596	200.724b	ppb	0.6068	0.3	844.019
Ti 334.941	1103.30b	ppb	1.1509	0.1	121178
Tl 190.794	54.3512b	ppb	4.1250	7.6	14.1239
V 292.401	338.723b	ppb	0.5161	0.2	4503.69
Zn 206.200	2661.47b	ppb	8.4543	0.3	1493.07

680-161405-A-40-A (Samp) **12/15/2018, 10:29:54 PM** **Rack 3, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.8856	1.6537	0.8869
Al 308.215	108201	108231	108515
As 188.980	184.860	169.798	175.352
B 249.678	52.0610	54.7787	54.6635
Ba 389.178	1258.48	1264.81	1262.22
Be 313.042	5.4434	5.4608	5.4771
Ca 370.602	48677	48728	48795
Cd 226.502	6.1553	6.2359	5.8817
Co 228.615	67.1236	67.4813	67.2586
Cr 267.716	157.908	157.589	158.280
Cu 324.754	234.168	234.424	235.900
Fe 271.441	169146	169284	169513
K 766.491	11338.0	11309.8	11339.6
Mg 279.078	36438.1	36455.0	36492.0
Mn 257.610	7458.01	7450.50	7445.50
Mo 202.032	6.4641	6.6082	7.1135
Na 330.237	246.867u	839.337u	455.293u
Ni 231.604	148.210	151.956	150.425
Pb 220.353	2280.84	2261.99	2262.34
Sb 206.834	3.6232	3.5247	-0.4468
Se 196.026	-12.1753u	-19.9847u	6.5388
Si 288.158	13219.8	13236.8	13254.1
Sn 189.925	103.476	98.2369	94.7904
Sr 216.596	148.019	146.200	148.275
Ti 334.941	1255.55	1256.80	1258.13

Label	Replicates Concentration		
Tl 190.794	15.8813u	16.2385u	5.9902u
V 292.401	210.981	210.868	211.636
Zn 206.200	2645.78	2654.49	2661.15

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1421	ppb	0.4431	38.8	-11.3610
Al 308.215	108316	ppb	173.576	0.2	255604
As 188.980	176.670	ppb	7.6170	4.3	45.9593
B 249.678	53.8344	ppb	1.5369	2.9	119.736
Ba 389.178	1261.84	ppb	3.1847	0.3	12105.4
Be 313.042	5.4604	ppb	0.0169	0.3	4274.66
Ca 370.602	48733	ppb	59.12	0.1	101538
Cd 226.502	6.0910	ppb	0.1857	3.0	226.657
Co 228.615	67.2878	ppb	0.1806	0.3	321.103
Cr 267.716	157.926	ppb	0.3454	0.2	3458.14
Cu 324.754	234.831	ppb	0.9347	0.4	8775.58
Fe 271.441	169314	ppb	185.237	0.1	127074
K 766.491	11329.1	ppb	16.7486	0.1	280565
Mg 279.078	36461.7	ppb	27.5736	0.1	50171.9
Mn 257.610	7451.34	ppb	6.2970	0.1	720736
Mo 202.032	6.7286	ppb	0.3410	5.1	14.1965
Na 330.237	513.832	ppb	300.542	58.5	35.4629
Ni 231.604	150.197	ppb	1.8832	1.3	191.550
Pb 220.353	2268.39	ppb	10.7835	0.5	1186.64
Sb 206.834	2.2337	ppb	2.3219	103.9	8.8325
Se 196.026	-8.5404	ppb	13.6302	159.6	-1.5099
Si 288.158	13236.9	ppb	17.1710	0.1	62894.2
Sn 189.925	98.8344	ppb	4.3735	4.4	29.1811
Sr 216.596	147.498	ppb	1.1313	0.8	606.890
Ti 334.941	1256.83	ppb	1.2932	0.1	138046
Tl 190.794	12.7033	ppb	5.8165	45.8	-5.6921
V 292.401	211.161	ppb	0.4144	0.2	2802.40
Zn 206.200	2653.81	ppb	7.7040	0.3	1490.84

680-161405-A-36-A (Samp) **12/15/2018, 10:34:36 PM** **Rack 3, Tube 13**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6653u	0.8510	0.5140u
Al 308.215	136177	136279	136258
As 188.980	325.222	312.922	316.505
B 249.678	54.5632	55.6971	57.1360
Ba 389.178	1702.48	1703.68	1705.22
Be 313.042	7.6254	7.5926	7.6178
Ca 370.602	34274	34248	34206
Cd 226.502	5.1712	5.1365	5.4774
Co 228.615	73.9401	73.6141	72.0372
Cr 267.716	180.466	180.116	179.708
Cu 324.754	195.370	194.458	194.439
Fe 271.441	218004	218025	217673
K 766.491	14739.0	14740.9	14751.1
Mg 279.078	36364.6	36317.5	36323.1
Mn 257.610	11070.4	11051.7	11046.9
Mo 202.032	7.8228	8.4301	10.1950

Label	Replicates Concentration		
Na 330.237	753.069u	701.798u	671.405u
Ni 231.604	170.850	168.248	170.623
Pb 220.353	2756.76	2764.61	2753.23
Sb 206.834	2.1828	1.2882	2.1625
Se 196.026	-16.0790u	13.6899	-4.8319
Si 288.158	15953.1	15954.9	15951.4
Sn 189.925	46.1689	46.0903	43.3360
Sr 216.596	147.451	146.902	147.791
Ti 334.941	1480.83	1480.04	1477.75
Tl 190.794	-0.4892u	9.2167u	10.2835u
V 292.401	270.623	270.199	269.222
Zn 206.200	1389.70	1399.75	1393.80

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2332	ppb	0.7962	341.4	-45.5478
Al 308.215	136238	ppb	53.7897	0.0	321455
As 188.980	318.217	ppb	6.3260	2.0	81.8497
B 249.678	55.7987	ppb	1.2894	2.3	84.5627
Ba 389.178	1703.79	ppb	1.3738	0.1	16346.3
Be 313.042	7.6119	ppb	0.0171	0.2	6025.28
Ca 370.602	34243	ppb	34.28	0.1	71273
Cd 226.502	5.2617	ppb	0.1876	3.6	250.612
Co 228.615	73.1971	ppb	1.0177	1.4	351.884
Cr 267.716	180.097	ppb	0.3789	0.2	3948.53
Cu 324.754	194.756	ppb	0.5318	0.3	7332.44
Fe 271.441	217901	ppb	197.423	0.1	163534
K 766.491	14743.7	ppb	6.5065	0.0	365052
Mg 279.078	36335.1	ppb	25.6982	0.1	49954.0
Mn 257.610	11056.4	ppb	12.4149	0.1	1069304
Mo 202.032	8.8160	ppb	1.2323	14.0	17.8172
Na 330.237	708.757	ppb	41.2743	5.8	38.8678
Ni 231.604	169.907	ppb	1.4414	0.8	216.897
Pb 220.353	2758.20	ppb	5.8249	0.2	1441.70
Sb 206.834	1.8779	ppb	0.5107	27.2	9.2177
Se 196.026	-2.4070	ppb	15.0318	624.5	0.0796
Si 288.158	15953.2	ppb	1.7370	0.0	75723.3
Sn 189.925	45.1984	ppb	1.6134	3.6	13.2328
Sr 216.596	147.381	ppb	0.4485	0.3	617.341
Ti 334.941	1479.54	ppb	1.6024	0.1	162493
Tl 190.794	6.3370	ppb	5.9357	93.7	-8.4945
V 292.401	270.015	ppb	0.7188	0.3	3584.03
Zn 206.200	1394.41	ppb	5.0510	0.4	781.807

680-161405-A-37-A (Samp) **12/15/2018, 10:39:19 PM** **Rack 3, Tube 14**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1313u	-0.3279u	-0.2913u
Al 308.215	144853	144707	144736
As 188.980	107.038	118.703	111.482
B 249.678	54.6337	53.4344	55.1830
Ba 389.178	1961.29	1963.63	1964.11
Be 313.042	7.8978	7.8989	7.8814
Ca 370.602	32412	32410	32424

Label	Replicates Concentration		
Cd 226.502	5.1723	5.9338	5.0719
Co 228.615	85.3067	85.0933	86.1859
Cr 267.716	180.464	180.053	181.028
Cu 324.754	157.646	159.791	159.138
Fe 271.441	230195	230135	230461
K 766.491	15660.2	15660.0	15664.0
Mg 279.078	37881.6	37881.3	37904.4
Mn 257.610	19603.8	19551.5	19583.5
Mo 202.032	10.4608	10.5065	10.2926
Na 330.237	204.111u	124.981u	382.987u
Ni 231.604	175.212	174.788	173.693
Pb 220.353	1291.43	1315.69	1303.57
Sb 206.834	-2.6266	14.8961	-5.8482
Se 196.026	14.2948	18.9316	3.7612
Si 288.158	14697.7	14679.4	14730.4
Sn 189.925	27.8318	33.5742	23.0752
Sr 216.596	153.454	155.570	155.337
Ti 334.941	1524.75	1522.78	1527.06
Tl 190.794	7.3901u	23.2568	26.8651
V 292.401	279.006	278.280	278.362
Zn 206.200	990.400	983.186	983.783

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2502	ppb	0.1046	41.8	-46.9339
Al 308.215	144766	ppb	77.2819	0.1	341567
As 188.980	112.408	ppb	5.8877	5.2	29.8263
B 249.678	54.4170	ppb	0.8942	1.6	63.1777
Ba 389.178	1963.01	ppb	1.5093	0.1	18830.8
Be 313.042	7.8927	ppb	0.0098	0.1	6252.96
Ca 370.602	32415	ppb	7.755	0.0	67593
Cd 226.502	5.3927	ppb	0.4713	8.7	262.004
Co 228.615	85.5286	ppb	0.5791	0.7	409.928
Cr 267.716	180.515	ppb	0.4894	0.3	3975.46
Cu 324.754	158.858	ppb	1.0995	0.7	6033.31
Fe 271.441	230264	ppb	173.602	0.1	172811
K 766.491	15661.4	ppb	2.2293	0.0	387760
Mg 279.078	37889.1	ppb	13.2190	0.0	52004.9
Mn 257.610	19579.6	ppb	26.3665	0.1	1893307
Mo 202.032	10.4200	ppb	0.1126	1.1	20.9682
Na 330.237	237.360	ppb	132.178	55.7	27.1564
Ni 231.604	174.565	ppb	0.7838	0.4	222.875
Pb 220.353	1303.56	ppb	12.1309	0.9	685.072
Sb 206.834	2.1404	ppb	11.1636	521.6	9.4424
Se 196.026	12.3292	ppb	7.7739	63.1	3.5655
Si 288.158	14702.5	ppb	25.8373	0.2	69820.0
Sn 189.925	28.1604	ppb	5.2572	18.7	8.1666
Sr 216.596	154.787	ppb	1.1605	0.7	648.432
Ti 334.941	1524.86	ppb	2.1410	0.1	167473
Tl 190.794	19.1707	ppb	10.3606	54.0	-3.3323
V 292.401	278.549	ppb	0.3972	0.1	3698.50
Zn 206.200	985.790	ppb	4.0041	0.4	551.801

680-161405-A-47-A (Samp) **12/15/2018, 10:44:02 PM** **Rack 3, Tube 15**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7592u	1.5924	1.3381
Al 308.215	117693	117659	117552
As 188.980	206.897	198.237	200.688
B 249.678	55.9952	55.1923	55.4863
Ba 389.178	1475.11	1475.13	1477.41
Be 313.042	6.3169	6.3146	6.3144
Ca 370.602	71100	71115	71055
Cd 226.502	8.6035	9.4223	9.4475
Co 228.615	73.7628	73.2048	72.7097
Cr 267.716	198.901	199.265	199.290
Cu 324.754	308.344	313.243	308.112
Fe 271.441	186366	186182	186002
K 766.491	15265.3	15284.3	15264.7
Mg 279.078	44530.0	44545.8	44507.4
Mn 257.610	6864.21	6830.22	6845.71
Mo 202.032	8.0151	8.4640	9.5568
Na 330.237	788.067u	805.104u	705.644u
Ni 231.604	173.094	176.773	174.002
Pb 220.353	4273.29	4284.46	4280.53
Sb 206.834	7.0846	11.3453	25.9669
Se 196.026	-4.8676	-4.0225	2.2565
Si 288.158	12543.3	12557.2	12540.7
Sn 189.925	96.8564	100.920	102.617
Sr 216.596	270.807	268.355	271.044
Ti 334.941	1309.41	1307.15	1309.31
Tl 190.794	4.8755u	6.5355u	-1.5184u
V 292.401	235.780	236.640	237.053
Zn 206.200	3729.95	3732.65	3717.54

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.2299	ppb	0.4270	34.7	-13.6060
Al 308.215	117635	ppb	73.8979	0.1	277582
As 188.980	201.940	ppb	4.4638	2.2	52.3774
B 249.678	55.5579	ppb	0.4062	0.7	114.395
Ba 389.178	1475.88	ppb	1.3193	0.1	14166.0
Be 313.042	6.3153	ppb	0.0014	0.0	4974.34
Ca 370.602	71090	ppb	31.32	0.0	148145
Cd 226.502	9.1578	ppb	0.4802	5.2	286.070
Co 228.615	73.2257	ppb	0.5269	0.7	349.634
Cr 267.716	199.152	ppb	0.2179	0.1	4347.59
Cu 324.754	309.900	ppb	2.8980	0.9	11501.4
Fe 271.441	186183	ppb	182.465	0.1	139733
K 766.491	15271.4	ppb	11.1427	0.1	378110
Mg 279.078	44527.7	ppb	19.3113	0.0	61293.1
Mn 257.610	6846.71	ppb	17.0170	0.2	662336
Mo 202.032	8.6786	ppb	0.7929	9.1	17.9985
Na 330.237	766.272	ppb	53.1915	6.9	37.4968
Ni 231.604	174.623	ppb	1.9161	1.1	222.960
Pb 220.353	4279.43	ppb	5.6680	0.1	2233.33
Sb 206.834	14.7989	ppb	9.9036	66.9	14.3117
Se 196.026	-2.2112	ppb	3.8921	176.0	-0.3641
Si 288.158	12547.1	ppb	8.8785	0.1	59640.8

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	100.131	ppb	2.9601	3.0	29.5666
Sr 216.596	270.068	ppb	1.4887	0.6	1079.17
Ti 334.941	1308.62	ppb	1.2773	0.1	143759
Tl 190.794	3.2975	ppb	4.2525	129.0	-9.0984
V 292.401	236.491	ppb	0.6494	0.3	3137.01
Zn 206.200	3726.71	ppb	8.0574	0.2	2094.07

680-161405-A-42-A (Samp) **12/15/2018, 10:48:44 PM** **Rack 3, Tube 16**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7629u	1.1930	1.3152
Al 308.215	129229	129417	129532
As 188.980	318.745	332.204	329.945
B 249.678	56.0631	55.0209	57.5274
Ba 389.178	1699.15	1696.15	1697.14
Be 313.042	6.8944	6.8877	6.8990
Ca 370.602	47694	47712	47709
Cd 226.502	6.3407	6.3900	5.9661
Co 228.615	65.2728	64.3397	65.4084
Cr 267.716	189.326	188.633	189.370
Cu 324.754	462.294	461.066	461.899
Fe 271.441	189856	189763	189432
K 766.491	13082.8	13084.7	13069.5
Mg 279.078	34434.6	34424.0	34416.7
Mn 257.610	7168.37	7164.73	7176.36
Mo 202.032	6.6578	7.5182	7.2794
Na 330.237	428.126u	864.835u	680.739u
Ni 231.604	161.595	165.668	164.052
Pb 220.353	1972.06	1965.83	1965.53
Sb 206.834	9.3124	-2.2730	-3.9008
Se 196.026	12.3726	-6.0285	2.6698
Si 288.158	15240.7	15228.3	15230.6
Sn 189.925	73.2696	64.9629	62.2325
Sr 216.596	210.669	210.410	210.696
Ti 334.941	1428.22	1426.58	1424.40
Tl 190.794	8.7090u	0.3776u	2.0361u
V 292.401	240.233	240.259	240.263
Zn 206.200	2155.56	2185.01	2182.18

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.0904	ppb	0.2901	26.6	-18.3188
Al 308.215	129393	ppb	153.371	0.1	305310
As 188.980	326.964	ppb	7.2075	2.2	84.0041
B 249.678	56.2038	ppb	1.2591	2.2	115.207
Ba 389.178	1697.48	ppb	1.5313	0.1	16276.0
Be 313.042	6.8937	ppb	0.0057	0.1	5442.74
Ca 370.602	47705	ppb	9.932	0.0	99349
Cd 226.502	6.2323	ppb	0.2318	3.7	244.523
Co 228.615	65.0070	ppb	0.5818	0.9	312.593
Cr 267.716	189.110	ppb	0.4135	0.2	4132.26
Cu 324.754	461.753	ppb	0.6270	0.1	17008.9
Fe 271.441	189684	ppb	222.768	0.1	142359
K 766.491	13079.0	ppb	8.2913	0.1	323862

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	34425.1	ppb	9.0033	0.0	47363.7
Mn 257.610	7169.82	ppb	5.9482	0.1	693535
Mo 202.032	7.1518	ppb	0.4442	6.2	14.7751
Na 330.237	657.900	ppb	219.249	33.3	38.2364
Ni 231.604	163.772	ppb	2.0508	1.3	209.014
Pb 220.353	1967.81	ppb	3.6856	0.2	1029.99
Sb 206.834	1.0462	ppb	7.2049	688.7	8.6423
Se 196.026	3.0046	ppb	9.2051	306.4	0.6225
Si 288.158	15233.2	ppb	6.5634	0.0	72323.3
Sn 189.925	66.8217	ppb	5.7485	8.6	19.6623
Sr 216.596	210.592	ppb	0.1582	0.1	852.661
Ti 334.941	1426.40	ppb	1.9151	0.1	156654
Tl 190.794	3.7076	ppb	4.4100	118.9	-9.0555
V 292.401	240.252	ppb	0.0160	0.0	3187.88
Zn 206.200	2174.25	ppb	16.2506	0.7	1220.82

680-161405-A-53-A (Samp) **12/15/2018, 10:53:27 PM** **Rack 3, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.9624	0.9560	0.8753
Al 308.215	92092.5	92128.3	91962.1
As 188.980	395.017	399.574	402.216
B 249.678	47.5057	49.2598	49.2430
Ba 389.178	1069.17	1069.97	1068.16
Be 313.042	4.5696	4.5749	4.5797
Ca 370.602	38905	38912	38936
Cd 226.502	10.6549	10.8363	10.8765
Co 228.615	56.7345	57.4000	57.4378
Cr 267.716	132.992	132.134	132.450
Cu 324.754	282.336	284.933	282.009
Fe 271.441	169541	169413	169543
K 766.491	9957.38	9948.64	9934.66
Mg 279.078	33069.1	33059.3	33072.8
Mn 257.610	6419.76	6422.34	6443.61
Mo 202.032	6.7178	8.3666	7.0197
Na 330.237	523.100u	538.299u	602.048u
Ni 231.604	150.236	154.462	154.589
Pb 220.353	4459.82	4453.59	4463.17
Sb 206.834	0.5953	-13.6463u	-4.2600
Se 196.026	2.6817	-6.7523u	13.6071
Si 288.158	5769.90	5763.73	5768.30
Sn 189.925	73.3493	62.3162	73.3679
Sr 216.596	133.802	134.896	134.379
Ti 334.941	915.937	917.247	918.093
Tl 190.794	-4.7480u	0.2380u	5.7667u
V 292.401	194.758	196.139	195.004
Zn 206.200	4929.43	4939.95	4945.65

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9312	ppb	0.0486	5.2	-20.4142
Al 308.215	92061.0	ppb	87.4640	0.1	217271
As 188.980	398.936	ppb	3.6419	0.9	102.173
B 249.678	48.6695	ppb	1.0079	2.1	85.5871

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1069.10	ppb	0.9090	0.1	10258.2
Be 313.042	4.5747	ppb	0.0050	0.1	3550.97
Ca 370.602	38918	ppb	16.27	0.0	81029
Cd 226.502	10.7892	ppb	0.1180	1.1	297.628
Co 228.615	57.1908	ppb	0.3956	0.7	271.165
Cr 267.716	132.525	ppb	0.4342	0.3	2908.22
Cu 324.754	283.093	ppb	1.6021	0.6	10525.9
Fe 271.441	169499	ppb	74.2597	0.0	127212
K 766.491	9946.89	ppb	11.4605	0.1	246364
Mg 279.078	33067.1	ppb	6.9684	0.0	45507.2
Mn 257.610	6428.57	ppb	13.0901	0.2	621839
Mo 202.032	7.3681	ppb	0.8779	11.9	15.5263
Na 330.237	554.483	ppb	41.8881	7.6	31.1501
Ni 231.604	153.096	ppb	2.4773	1.6	195.287
Pb 220.353	4458.86	ppb	4.8616	0.1	2326.99
Sb 206.834	-5.7703	ppb	7.2400	125.5	5.4311
Se 196.026	3.1788	ppb	10.1888	320.5	0.5249
Si 288.158	5767.31	ppb	3.2025	0.1	27613.5
Sn 189.925	69.6778	ppb	6.3753	9.1	20.5115
Sr 216.596	134.359	ppb	0.5473	0.4	556.646
Ti 334.941	917.092	ppb	1.0864	0.1	100742
Tl 190.794	0.4189	ppb	5.2597	1255.6	-9.3663
V 292.401	195.300	ppb	0.7367	0.4	2593.40
Zn 206.200	4938.34	ppb	8.2260	0.2	2775.83

680-161405-A-41-A (Samp) **12/15/2018, 10:58:09 PM** **Rack 3, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.1009	1.2845	1.2636
Al 308.215	137282	137358	137508
As 188.980	245.318	239.679	258.397
B 249.678	60.3210	62.0943	61.7849
Ba 389.178	1392.16	1396.58	1394.16
Be 313.042	6.6869	6.6981	6.6965
Ca 370.602	53820	53775	53819
Cd 226.502	9.4372	9.8634	9.8448
Co 228.615	66.8053	65.0153	65.5250
Cr 267.716	192.132	191.654	192.613
Cu 324.754	269.597	270.101	269.451
Fe 271.441	207515	207528	207518
K 766.491	14373.9	14361.8	14360.0
Mg 279.078	44263.1	44258.9	44268.7
Mn 257.610	5019.98	5014.64	5016.77
Mo 202.032	5.6787	7.8566	7.5340
Na 330.237	1281.21u	1197.66u	1539.99
Ni 231.604	175.488	172.056	170.652
Pb 220.353	2726.07	2717.60	2728.95
Sb 206.834	8.9599	-1.0738	5.6913
Se 196.026	13.5788	12.5919	9.6633
Si 288.158	14921.4	14923.8	14933.7
Sn 189.925	588.376	600.902	590.175
Sr 216.596	183.957	185.626	181.227
Ti 334.941	1609.30	1607.64	1608.75

Label	Replicates Concentration		
Tl 190.794	-11.4093u	5.8473u	4.2993u
V 292.401	259.301	258.962	259.710
Zn 206.200	5654.40	5644.87	5649.25

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.2163	ppb	0.1005	8.3	-22.4017
Al 308.215	137383	ppb	115.066	0.1	324154
As 188.980	247.798	ppb	9.6022	3.9	64.0190
B 249.678	61.4000	ppb	0.9472	1.5	131.733
Ba 389.178	1394.30	ppb	2.2133	0.2	13391.3
Be 313.042	6.6938	ppb	0.0060	0.1	5281.65
Ca 370.602	53805	ppb	25.54	0.0	112005
Cd 226.502	9.7152	ppb	0.2409	2.5	310.890
Co 228.615	65.7818	ppb	0.9222	1.4	318.156
Cr 267.716	192.133	ppb	0.4793	0.2	4195.30
Cu 324.754	269.716	ppb	0.3410	0.1	10048.6
Fe 271.441	207520	ppb	6.8576	0.0	155744
K 766.491	14365.2	ppb	7.5451	0.1	355688
Mg 279.078	44263.6	ppb	4.8848	0.0	60944.2
Mn 257.610	5017.13	ppb	2.6903	0.1	485486
Mo 202.032	7.0231	ppb	1.1754	16.7	14.2449
Na 330.237	1339.62	ppb	178.486	13.3	44.6799
Ni 231.604	172.732	ppb	2.4878	1.4	220.540
Pb 220.353	2724.20	ppb	5.8978	0.2	1423.52
Sb 206.834	4.5258	ppb	5.1174	113.1	10.3107
Se 196.026	11.9446	ppb	2.0364	17.0	2.1049
Si 288.158	14926.3	ppb	6.5296	0.0	70928.4
Sn 189.925	593.151	ppb	6.7728	1.1	176.163
Sr 216.596	183.603	ppb	2.2210	1.2	753.482
Ti 334.941	1608.56	ppb	0.8469	0.1	176682
Tl 190.794	-0.4209	ppb	9.5477	2268.3	-11.4431
V 292.401	259.324	ppb	0.3748	0.1	3442.42
Zn 206.200	5649.51	ppb	4.7730	0.1	3175.30

680-161405-A-49-A (Samp) **12/15/2018, 11:02:52 PM** **Rack 3, Tube 19**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	6.9540	7.0132	7.4757
Al 308.215	83524.4	83593.8	83618.6
As 188.980	560.600	559.360	562.139
B 249.678	56.4265	57.4905	57.8467
Ba 389.178	2074.29	2077.45	2075.39
Be 313.042	5.1979	5.1717	5.1678
Ca 370.602	124593	124603	124482
Cd 226.502	16.4048	16.5748	16.6451
Co 228.615	70.1572	70.8879	71.4239
Cr 267.716	155.856	155.741	155.728
Cu 324.754	544.245	546.319	544.519
Fe 271.441	150856	150580	150421
K 766.491	13477.9	13489.5	13519.2
Mg 279.078	35397.8	35368.5	35359.1
Mn 257.610	6363.54	6378.46	6368.48
Mo 202.032	11.3413	11.7899	11.1292

Label	Replicates Concentration		
Na 330.237	1651.40	1041.56u	794.142u
Ni 231.604	173.322	167.368	171.119
Pb 220.353	9508.22	9539.40	9483.16
Sb 206.834	0.1064	6.2048	11.6485
Se 196.026	17.0036	12.9793	-1.6286
Si 288.158	10517.9	10502.4	10486.5
Sn 189.925	157.982	165.925	164.079
Sr 216.596	492.118	489.887	490.665
Ti 334.941	1024.07	1022.44	1022.59
Tl 190.794	8.4147u	2.8714u	6.6554u
V 292.401	185.745	186.000	184.556
Zn 206.200	6744.12	6758.11	6766.41

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	7.1476	ppb	0.2857	4.0	197.867
Al 308.215	83578.9	ppb	48.8461	0.1	197267
As 188.980	560.700	ppb	1.3922	0.2	143.040
B 249.678	57.2546	ppb	0.7389	1.3	160.853
Ba 389.178	2075.71	ppb	1.6042	0.1	19884.2
Be 313.042	5.1791	ppb	0.0164	0.3	4054.69
Ca 370.602	124560	ppb	67.27	0.1	259777
Cd 226.502	16.5416	ppb	0.1235	0.7	371.041
Co 228.615	70.8230	ppb	0.6358	0.9	334.866
Cr 267.716	155.775	ppb	0.0702	0.0	3407.38
Cu 324.754	545.028	ppb	1.1270	0.2	20020.9
Fe 271.441	150619	ppb	220.243	0.1	113045
K 766.491	13495.5	ppb	21.2622	0.2	334169
Mg 279.078	35375.1	ppb	20.2325	0.1	48690.5
Mn 257.610	6370.16	ppb	7.6030	0.1	616186
Mo 202.032	11.4201	ppb	0.3373	3.0	24.2212
Na 330.237	1162.37	ppb	441.211	38.0	43.1746
Ni 231.604	170.603	ppb	3.0102	1.8	217.789
Pb 220.353	9510.26	ppb	28.1739	0.3	4956.28
Sb 206.834	5.9866	ppb	5.7742	96.5	10.1491
Se 196.026	9.4514	ppb	9.8043	103.7	1.5999
Si 288.158	10502.3	ppb	15.7343	0.1	49979.9
Sn 189.925	162.662	ppb	4.1571	2.6	48.1599
Sr 216.596	490.890	ppb	1.1327	0.2	1915.39
Ti 334.941	1023.03	ppb	0.9045	0.1	112379
Tl 190.794	5.9805	ppb	2.8326	47.4	-7.0637
V 292.401	185.434	ppb	0.7709	0.4	2459.90
Zn 206.200	6756.21	ppb	11.2669	0.2	3798.57

MB 680-551183/1-A (Samp) **12/15/2018, 11:07:35 PM** **Rack 3, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0328u	-0.7353u	-0.0695u
Al 308.215	9.4023	9.1140	11.8458
As 188.980	-1.1724u	4.5760	4.5386
B 249.678	1.5234	1.0715	0.5462
Ba 389.178	-0.7298u	-0.6940u	-0.5644u
Be 313.042	-0.0219u	-0.0070u	-0.0235u
Ca 370.602	17.02	19.25	17.39

Label	Replicates Concentration		
Cd 226.502	0.1473	0.0666	0.1040
Co 228.615	-0.9068u	-0.4377u	-0.7242u
Cr 267.716	0.1314	-0.0382u	-0.1761u
Cu 324.754	0.7356	0.9915	0.3153
Fe 271.441	18.1903	30.8137	9.7465
K 766.491	5.3926	6.4337	6.1983
Mg 279.078	0.7404	4.5355	3.4496
Mn 257.610	0.1833	0.2315	0.2389
Mo 202.032	0.1426	0.8094	0.5529
Na 330.237	12.0203	74.9770	46.2802
Ni 231.604	1.2942	-1.1527u	-1.9024u
Pb 220.353	-2.0781u	-5.6140u	3.0214
Sb 206.834	-5.0782u	-5.9995u	-4.2962u
Se 196.026	-7.4884u	-14.1361u	-0.5644u
Si 288.158	6.1287	5.6251	5.4699
Sn 189.925	-3.3408u	2.4308	6.4594
Sr 216.596	1.3577	0.4936	-0.8037u
Ti 334.941	0.5963	0.4920	0.5492
Tl 190.794	-12.0320u	-3.7643u	5.5635
V 292.401	-0.1318u	-0.0922u	-0.1608u
Zn 206.200	-1.0011u	0.5426	0.9835

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2792	ppb	0.3954	141.6	-39.3295
Al 308.215	10.1207	ppb	1.5009	14.8	178.856
As 188.980	2.6474	ppb	3.3081	125.0	1.6334
B 249.678	1.0470	ppb	0.4890	46.7	-60.0655
Ba 389.178	-0.6627	ppb	0.0870	13.1	-56.3872
Be 313.042	-0.0175	ppb	0.0091	52.2	-198.141
Ca 370.602	17.89	ppb	1.193	6.7	64.78
Cd 226.502	0.1060	ppb	0.0404	38.1	7.4670
Co 228.615	-0.6896	ppb	0.2364	34.3	-10.6672
Cr 267.716	-0.0277	ppb	0.1540	557.0	19.1055
Cu 324.754	0.6808	ppb	0.3414	50.2	249.060
Fe 271.441	19.5835	ppb	10.6025	54.1	32.3075
K 766.491	6.0082	ppb	0.5459	9.1	395.053
Mg 279.078	2.9085	ppb	1.9546	67.2	23.1219
Mn 257.610	0.2179	ppb	0.0302	13.8	51.0006
Mo 202.032	0.5016	ppb	0.3363	67.0	3.7579
Na 330.237	44.4258	ppb	31.5193	70.9	46.5989
Ni 231.604	-0.5870	ppb	1.6717	284.8	-2.3215
Pb 220.353	-1.5569	ppb	4.3413	278.8	5.3082
Sb 206.834	-5.1246	ppb	0.8526	16.6	3.6010
Se 196.026	-7.3963	ppb	6.7863	91.8	-2.4990
Si 288.158	5.7413	ppb	0.3444	6.0	364.814
Sn 189.925	1.8498	ppb	4.9259	266.3	0.3434
Sr 216.596	0.3492	ppb	1.0879	311.6	6.8923
Ti 334.941	0.5458	ppb	0.0522	9.6	23.4476
Tl 190.794	-3.4109	ppb	8.8031	258.1	-5.2928
V 292.401	-0.1283	ppb	0.0345	26.9	-3.9349
Zn 206.200	0.1750	ppb	1.0421	595.4	0.6266

Cont Calib Verif (CCV) **12/15/2018, 11:12:18 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	486.222	490.028	494.388
Al 308.215	9930.18	9948.63	9930.39
As 188.980	519.139	538.756	528.794
B 249.678	521.915	522.525	523.340
Ba 389.178	474.836	474.884	475.839
Be 313.042	537.170	537.987	537.556
Ca 370.602	10109	10101	10120
Cd 226.502	519.265	519.872	518.296
Co 228.615	507.707	509.004	506.860
Cr 267.716	502.303	502.225	502.508
Cu 324.754	503.725	507.620	512.557
Fe 271.441	10149.8	10137.6	10129.4
K 766.491	10082.9	10099.2	10082.1
Mg 279.078	10496.9	10511.8	10528.2
Mn 257.610	505.026	505.341	504.640
Mo 202.032	496.342	491.378	493.512
Na 330.237	10762.8	10953.6	10820.9
Ni 231.604	512.296	515.841	514.240
Pb 220.353	520.675	528.421	520.452
Sb 206.834	506.627	503.625	505.749
Se 196.026	520.533	533.090	530.932
Si 288.158	4983.65	4980.06	4982.24
Sn 189.925	498.036	508.078	500.772
Sr 216.596	504.052	502.889	502.903
Ti 334.941	494.401	494.243	494.789
Tl 190.794	489.698	514.339	496.115
V 292.401	499.313	499.176	499.486
Zn 206.200	1078.78	1077.33	1088.67

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	490.212	ppb	4.0863	0.8	16998.7	98.04250
Al 308.215	9936.40	ppb	10.5907	0.1	23609.7	99.36401
As 188.980	528.896	ppb	9.8093	1.9	134.600	105.77927
B 249.678	522.593	ppb	0.7150	0.1	3364.36	104.51864
Ba 389.178	475.186	ppb	0.5656	0.1	4510.70	95.03724
Be 313.042	537.571	ppb	0.4087	0.1	437471	107.51424
Ca 370.602	10110	ppb	9.862	0.1	21128	101.09927
Cd 226.502	519.144	ppb	0.7948	0.2	7915.10	103.82883
Co 228.615	507.857	ppb	1.0798	0.2	2352.31	101.57143
Cr 267.716	502.346	ppb	0.1459	0.0	10851.3	100.46912
Cu 324.754	507.967	ppb	4.4261	0.9	18653.9	101.59344
Fe 271.441	10138.9	ppb	10.2244	0.1	7657.30	101.33852
K 766.491	10088.1	ppb	9.6430	0.1	249858	100.88091
Mg 279.078	10512.3	ppb	15.6668	0.1	14500.1	105.12281
Mn 257.610	505.002	ppb	0.3516	0.1	48916.2	101.00049
Mo 202.032	493.744	ppb	2.4898	0.5	1028.30	98.74882
Na 330.237	10845.8	ppb	97.8159	0.9	308.025	108.45763
Ni 231.604	514.126	ppb	1.7749	0.3	659.133	102.82513
Pb 220.353	523.182	ppb	4.5378	0.9	278.077	104.63647
Sb 206.834	505.334	ppb	1.5434	0.3	212.582	101.06682
Se 196.026	528.185	ppb	6.7141	1.3	94.7887	105.63700
Si 288.158	4981.98	ppb	1.8092	0.0	23990.0	99.63969

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	502.295	ppb	5.1909	1.0	149.149	100.45909
Sr 216.596	503.281	ppb	0.6678	0.1	1921.37	100.65630
Ti 334.941	494.478	ppb	0.2814	0.1	54276.4	98.89552
Tl 190.794	500.051	ppb	12.7834	2.6	133.660	100.01014
V 292.401	499.325	ppb	0.1552	0.0	6498.27	99.86497
Zn 206.200	1081.59	ppb	6.1703	0.6	608.469	108.15902

Cont Calib Blank (CCB) **12/15/2018, 11:17:01 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2603u	-0.2018u	-0.2033u
Al 308.215	5.2727	-0.2096u	1.7926
As 188.980	-2.4728u	0.4698	-3.1072u
B 249.678	4.0965	3.2036	3.0249
Ba 389.178	0.3131	-0.4799u	-1.6718u
Be 313.042	0.0302	0.0341	0.0520
Ca 370.602	3.812	5.047	-1.500u
Cd 226.502	0.0317	-0.3529u	0.1028
Co 228.615	-1.2003u	-0.0602u	-1.0570u
Cr 267.716	-0.3985u	-0.6562u	-0.6526u
Cu 324.754	0.7382	0.2799	0.7593
Fe 271.441	-6.6011u	-4.1240u	-0.2123u
K 766.491	2.5639	2.0059	1.7788
Mg 279.078	0.5839	6.3739	4.5683
Mn 257.610	0.0267	0.0730	0.1024
Mo 202.032	0.8177	-1.2965u	1.0452
Na 330.237	455.582	204.062	89.1962
Ni 231.604	1.3751	0.5153	1.5076
Pb 220.353	0.2795	-1.8051u	4.3306
Sb 206.834	-9.1831u	-9.6933u	-4.7140u
Se 196.026	-11.7730u	2.6157	-5.1055u
Si 288.158	-2.2038u	0.9058	-1.0076u
Sn 189.925	-0.1277u	4.9537	-3.1534u
Sr 216.596	1.1088	0.0397	0.7500
Ti 334.941	0.1906	0.3317	0.3861
Tl 190.794	3.3879	-5.5217u	-2.4264u
V 292.401	-0.0344u	-0.5874u	0.4084
Zn 206.200	-0.1753u	-0.7233u	-0.0746u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2218	ppb	0.0333	15.0	-37.3342	-0.22179
Al 308.215	2.2852	ppb	2.7741	121.4	160.375	2.28522
As 188.980	-1.7034	ppb	1.9086	112.0	0.5332	-1.70338
B 249.678	3.4417	ppb	0.5741	16.7	-44.2740	3.44168
Ba 389.178	-0.6129	ppb	0.9991	163.0	-55.9166	-0.61286
Be 313.042	0.0388	ppb	0.0116	30.0	-152.340	0.03878
Ca 370.602	2.453	ppb	3.478	141.8	32.61	2.45316
Cd 226.502	-0.0728	ppb	0.2452	336.9	4.7300	-0.07276
Co 228.615	-0.7725	ppb	0.6210	80.4	-11.0530	-0.77253
Cr 267.716	-0.5691	ppb	0.1478	26.0	7.4301	-0.56911
Cu 324.754	0.5925	ppb	0.2709	45.7	245.848	0.59246
Fe 271.441	-3.6458	ppb	3.2211	88.4	14.8663	-3.64580
K 766.491	2.1162	ppb	0.4040	19.1	298.751	2.11617

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	3.8420	ppb	2.9625	77.1	24.4118	3.84204
Mn 257.610	0.0674	ppb	0.0382	56.7	36.4196	0.06735
Mo 202.032	0.1888	ppb	1.2913	684.0	3.1083	0.18879
Na 330.237	249.613	ppb	187.392	75.1	51.6458	249.61349
Ni 231.604	1.1326	ppb	0.5387	47.6	-0.1097	1.13263
Pb 220.353	0.9350	ppb	3.1199	333.7	6.6054	0.93502
Sb 206.834	-7.8635	ppb	2.7394	34.8	2.4686	-7.86350
Se 196.026	-4.7543	ppb	7.2008	151.5	-2.0196	-4.75430
Si 288.158	-0.7685uv	ppb	1.5685	204.1	333.833	-0.76852
Sn 189.925	0.5575	ppb	4.0968	734.8	-0.0408	0.55751
Sr 216.596	0.6328	ppb	0.5441	86.0	7.9584	0.63280
Ti 334.941	0.3028	ppb	0.1009	33.3	-3.2335	0.30279
Tl 190.794	-1.5201	ppb	4.5234	297.6	-4.7710	-1.52005
V 292.401	-0.0711	ppb	0.4989	701.3	-3.1690	-0.07113
Zn 206.200	-0.3244	ppb	0.3491	107.6	0.3462	-0.32441

LCS 680-551183/2-A (Samp) **12/15/2018, 11:21:42 PM** **Rack 3, Tube 21**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	46.9392	46.4058	47.4312
Al 308.215	4848.75	4849.08	4845.53
As 188.980	108.968	106.405	103.235
B 249.678	200.367	201.080	202.789
Ba 389.178	93.2980	91.5463	90.7208
Be 313.042	52.5686	52.5864	52.6598
Ca 370.602	4942	4926	4946
Cd 226.502	51.1520	51.4214	51.8173
Co 228.615	49.2046	48.2110	49.2723
Cr 267.716	100.017	99.9005	101.349
Cu 324.754	101.561	99.8670	100.871
Fe 271.441	5013.65	5046.16	5027.43
K 766.491	7779.34	7773.23	7771.82
Mg 279.078	5105.55	5116.91	5128.18
Mn 257.610	496.583	496.695	497.144
Mo 202.032	95.7700	99.0642	97.5143
Na 330.237	5541.69	5244.94	5575.82
Ni 231.604	101.493	99.4433	103.735
Pb 220.353	507.404	518.763	501.565
Sb 206.834	50.2387	52.6154	37.0625
Se 196.026	88.0953	80.8830	86.9855
Si 288.158	2.5750	2.1949	2.7495
Sn 189.925	106.474	107.990	110.338
Sr 216.596	98.5415	98.1668	100.812
Ti 334.941	97.2666	97.3989	97.6135
Tl 190.794	29.3103	41.8549	33.1877
V 292.401	97.3749	96.3630	95.6053
Zn 206.200	107.959	110.150	110.288

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	46.9254	ppb	0.5128	1.1	1600.30
Al 308.215	4847.79	ppb	1.9642	0.0	11591.9
As 188.980	106.202	ppb	2.8720	2.7	27.8045
B 249.678	201.412	ppb	1.2449	0.6	1254.42

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	91.8551	ppb	1.3161	1.4	835.640
Be 313.042	52.6049	ppb	0.0484	0.1	42641.7
Ca 370.602	4938	ppb	10.80	0.2	10334
Cd 226.502	51.4636	ppb	0.3346	0.7	793.008
Co 228.615	48.8960	ppb	0.5942	1.2	219.785
Cr 267.716	100.422	ppb	0.8047	0.8	2186.13
Cu 324.754	100.766	ppb	0.8519	0.8	3880.91
Fe 271.441	5029.08	ppb	16.3183	0.3	3794.73
K 766.491	7774.80	ppb	3.9971	0.1	192620
Mg 279.078	5116.88	ppb	11.3172	0.2	7065.12
Mn 257.610	496.807	ppb	0.2967	0.1	48087.8
Mo 202.032	97.4495	ppb	1.6480	1.7	205.091
Na 330.237	5454.15	ppb	181.985	3.3	178.744
Ni 231.604	101.557	ppb	2.1466	2.1	128.997
Pb 220.353	509.244	ppb	8.7454	1.7	271.135
Sb 206.834	46.6389	ppb	8.3781	18.0	24.6141
Se 196.026	85.3213	ppb	3.8835	4.6	14.3901
Si 288.158	2.5065	ppb	0.2836	11.3	376.329
Sn 189.925	108.267	ppb	1.9467	1.8	31.9866
Sr 216.596	99.1735	ppb	1.4315	1.4	383.758
Ti 334.941	97.4263	ppb	0.1751	0.2	10674.7
Tl 190.794	34.7843	ppb	6.4229	18.5	5.1713
V 292.401	96.4477	ppb	0.8879	0.9	1253.81
Zn 206.200	109.466	ppb	1.3069	1.2	61.9750

680-154549-A-19-A (Samp) **12/15/2018, 11:26:25 PM** **Rack 3, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	13.6736	13.7085	14.2414
Al 308.215	88440.4	88524.3	88541.1
As 188.980	443.200	456.220	455.078
B 249.678	79.7607	79.6607	81.1294
Ba 389.178	489.452	487.771	488.373
Be 313.042	4.9809	4.9699	4.9791
Ca 370.602	224251	224328	224348
Cd 226.502	33.6881	33.3386	33.1188
Co 228.615	43.1074	40.9100	42.9084
Cr 267.716	715.456	715.327	715.773
Cu 324.754	643.506	637.142	634.570
Fe 271.441	275754	275442	275808
K 766.491	8658.77	8661.47	8667.43
Mg 279.078	41445.9	41447.7	41452.1
Mn 257.610	2298.74	2300.91	2302.06
Mo 202.032	12.7878	12.9820	12.5721
Na 330.237	866.995u	998.656u	1605.07
Ni 231.604	149.229	144.891	145.382
Pb 220.353	856.340	862.482	855.065
Sb 206.834	0.4880	0.4316	12.5144
Se 196.026	24.7921	-13.1454u	10.5274
Si 288.158	16780.4	16794.8	16812.4
Sn 189.925	62.6900	53.8805	61.5601
Sr 216.596	613.287	611.621	611.819
Ti 334.941	689.109	689.415	689.758

Label	Replicates Concentration		
Tl 190.794	1.0298u	10.5717u	-16.0312u
V 292.401	229.373	229.471	228.807
Zn 206.200	1360.62	1371.97	1371.27

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	13.8745	ppb	0.3182	2.3	396.882
Al 308.215	88502.0	ppb	53.9255	0.1	208883
As 188.980	451.499	ppb	7.2101	1.6	115.591
B 249.678	80.1836	ppb	0.8206	1.0	187.934
Ba 389.178	488.532	ppb	0.8521	0.2	4743.00
Be 313.042	4.9766	ppb	0.0059	0.1	3906.45
Ca 370.602	224309	ppb	51.53	0.0	467580
Cd 226.502	33.3818	ppb	0.2871	0.9	718.694
Co 228.615	42.3086	ppb	1.2153	2.9	203.439
Cr 267.716	715.519	ppb	0.2298	0.0	15480.1
Cu 324.754	638.406	ppb	4.5999	0.7	23433.9
Fe 271.441	275668	ppb	198.047	0.1	206880
K 766.491	8662.56	ppb	4.4327	0.1	214586
Mg 279.078	41448.6	ppb	3.1939	0.0	57102.6
Mn 257.610	2300.57	ppb	1.6844	0.1	222898
Mo 202.032	12.7806	ppb	0.2051	1.6	25.2264
Na 330.237	1156.91	ppb	393.663	34.0	45.6175
Ni 231.604	146.501	ppb	2.3755	1.6	186.818
Pb 220.353	857.963	ppb	3.9658	0.5	453.021
Sb 206.834	4.4780	ppb	6.9598	155.4	12.6518
Se 196.026	7.3914	ppb	19.1622	259.3	1.2416
Si 288.158	16795.8	ppb	16.0271	0.1	79665.7
Sn 189.925	59.3769	ppb	4.7934	8.1	17.4487
Sr 216.596	612.242	ppb	0.9104	0.1	2408.20
Ti 334.941	689.427	ppb	0.3247	0.0	75779.4
Tl 190.794	-1.4766	ppb	13.4774	912.8	-15.2835
V 292.401	229.217	ppb	0.3583	0.2	3045.94
Zn 206.200	1367.95	ppb	6.3615	0.5	765.847

680-154549-A-19-Asd (Samp) **12/15/2018, 11:31:07 PM** **Rack 3, Tube 23**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	2.6628	2.7245	3.1385
Al 308.215	17679.6	17677.3	17716.9
As 188.980	93.6191	88.1699	78.1351
B 249.678	16.6138	16.0175	17.0787
Ba 389.178	99.4311	98.0364	97.8956
Be 313.042	0.9681	0.9594	0.9770
Ca 370.602	45330	45342	45358
Cd 226.502	7.0035	6.6049	6.5811
Co 228.615	8.3239	8.0266	7.6730
Cr 267.716	147.377	147.525	146.862
Cu 324.754	128.481	129.378	130.864
Fe 271.441	57280.2	57200.1	57193.8
K 766.491	1619.94	1622.96	1621.39
Mg 279.078	8503.55	8514.39	8516.35
Mn 257.610	476.501	476.310	476.393
Mo 202.032	3.3433	3.6319	3.0873

Label	Replicates Concentration		
Na 330.237	219.942u	73.3783u	51.7809u
Ni 231.604	29.7867	32.0590	28.9407
Pb 220.353	182.971	178.802	180.076
Sb 206.834	-10.2758u	-3.3934u	-2.3953
Se 196.026	-5.3756u	-10.0928u	-12.6354u
Si 288.158	3446.16	3439.57	3440.71
Sn 189.925	13.5681	16.6092	10.0331
Sr 216.596	126.862	126.238	125.563
Ti 334.941	140.853	140.473	140.412
Tl 190.794	-4.9865u	6.2234u	-0.3245u
V 292.401	47.2578	47.5998	46.8843
Zn 206.200	283.687	281.845	284.117

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.8419	ppb	0.2587	9.1	57.5882
Al 308.215	17691.3	ppb	22.2074	0.1	41879.2
As 188.980	86.6414	ppb	7.8543	9.1	22.9676
B 249.678	16.5700	ppb	0.5320	3.2	-14.5231
Ba 389.178	98.4544	ppb	0.8488	0.9	916.518
Be 313.042	0.9681	ppb	0.0088	0.9	612.126
Ca 370.602	45343	ppb	13.90	0.0	94539
Cd 226.502	6.7298	ppb	0.2373	3.5	150.745
Co 228.615	8.0078	ppb	0.3258	4.1	32.6850
Cr 267.716	147.255	ppb	0.3478	0.2	3201.52
Cu 324.754	129.574	ppb	1.2037	0.9	4935.38
Fe 271.441	57224.7	ppb	48.1830	0.1	42959.2
K 766.491	1621.43	ppb	1.5105	0.1	40365.7
Mg 279.078	8511.43	ppb	6.8916	0.1	11741.2
Mn 257.610	476.401	ppb	0.0958	0.0	46181.2
Mo 202.032	3.3542	ppb	0.2725	8.1	8.8456
Na 330.237	115.034	ppb	91.4926	79.5	42.4601
Ni 231.604	30.2621	ppb	1.6126	5.3	37.3475
Pb 220.353	180.616	ppb	2.1363	1.2	100.207
Sb 206.834	-5.3548	ppb	4.2908	80.1	4.5529
Se 196.026	-9.3679	ppb	3.6838	39.3	-2.6377
Si 288.158	3442.15	ppb	3.5203	0.1	16595.2
Sn 189.925	13.4035	ppb	3.2911	24.6	3.7788
Sr 216.596	126.221	ppb	0.6496	0.5	500.968
Ti 334.941	140.579	ppb	0.2387	0.2	15423.1
Tl 190.794	0.3041	ppb	5.6313	1851.6	-6.4546
V 292.401	47.2473	ppb	0.3578	0.8	626.111
Zn 206.200	283.216	ppb	1.2068	0.4	158.976

680-154549-A-19-Apds (Samp) **12/15/2018, 11:35:50 PM** **Rack 3, Tube 24**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	62.7972	64.3773	64.5117
Al 308.215	91822.0	92029.1	91933.6
As 188.980	551.548	542.235	540.053
B 249.678	278.836	279.746	280.110
Ba 389.178	569.726	572.152	572.398
Be 313.042	56.7226	56.7460	56.8844
Ca 370.602	224298	224514	224944

Label	Replicates Concentration		
Cd 226.502	81.6339	83.2659	83.4331
Co 228.615	88.1960	89.7786	88.7742
Cr 267.716	798.026	799.157	800.091
Cu 324.754	730.575	723.242	724.511
Fe 271.441	274431	274998	275304
K 766.491	17229.4	17217.6	17224.8
Mg 279.078	45701.4	45755.1	45798.8
Mn 257.610	2734.09	2738.61	2743.51
Mo 202.032	109.108	107.480	104.995
Na 330.237	6014.87	6472.05	6272.50
Ni 231.604	242.810	239.212	240.565
Pb 220.353	1329.15	1333.04	1331.53
Sb 206.834	64.1281	66.1489	62.8114
Se 196.026	97.9136	106.857	114.468
Si 288.158	16437.9	16471.8	16510.3
Sn 189.925	158.079	151.063	144.659
Sr 216.596	693.954	697.878	696.913
Ti 334.941	770.304	772.326	774.056
Tl 190.794	47.7404	38.8927	35.2558u
V 292.401	322.116	321.815	321.391
Zn 206.200	1447.95	1439.15	1438.96

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	63.8954	ppb	0.9534	1.5	2135.50
Al 308.215	91928.3	ppb	103.628	0.1	216967
As 188.980	544.612	ppb	6.1050	1.1	139.113
B 249.678	279.564	ppb	0.6562	0.2	1501.65
Ba 389.178	571.425	ppb	1.4767	0.3	5540.51
Be 313.042	56.7844	ppb	0.0874	0.2	46082.3
Ca 370.602	224585	ppb	329.0	0.1	468169
Cd 226.502	82.7777	ppb	0.9940	1.2	1470.11
Co 228.615	88.9162	ppb	0.8008	0.9	419.783
Cr 267.716	799.091	ppb	1.0340	0.1	17282.5
Cu 324.754	726.109	ppb	3.9188	0.5	26615.5
Fe 271.441	274911	ppb	442.958	0.2	206315
K 766.491	17224.0	ppb	5.9586	0.0	426422
Mg 279.078	45751.8	ppb	48.7913	0.1	63028.1
Mn 257.610	2738.74	ppb	4.7076	0.2	265278
Mo 202.032	107.194	ppb	2.0714	1.9	221.378
Na 330.237	6253.14	ppb	229.202	3.7	170.669
Ni 231.604	240.862	ppb	1.8171	0.8	308.130
Pb 220.353	1331.24	ppb	1.9603	0.1	699.306
Sb 206.834	64.3628	ppb	1.6811	2.6	36.9274
Se 196.026	106.413	ppb	8.2861	7.8	19.2520
Si 288.158	16473.3	ppb	36.2386	0.2	78168.2
Sn 189.925	151.267	ppb	6.7124	4.4	44.7723
Sr 216.596	696.248	ppb	2.0449	0.3	2727.19
Ti 334.941	772.228	ppb	1.8779	0.2	84882.5
Tl 190.794	40.6296	ppb	6.4210	15.8	-3.5236
V 292.401	321.774	ppb	0.3645	0.1	4250.31
Zn 206.200	1442.02	ppb	5.1414	0.4	807.470

680-154549-A-19-B MS (Samp) **12/15/2018, 11:40:33 PM** **Rack 3, Tube 25**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	59.8948	59.6586	59.3520
Al 308.215	107817	107875	107858
As 188.980	232.629	235.172	233.731
B 249.678	246.438	246.038	245.211
Ba 389.178	607.299	609.656	608.266
Be 313.042	57.8430	57.9536	57.8373
Ca 370.602	213778	214222	214020
Cd 226.502	78.4501	78.6587	78.7082
Co 228.615	70.6395	71.4476	70.7726
Cr 267.716	703.964	703.175	703.582
Cu 324.754	702.692	700.391	699.693
Fe 271.441	154157	154506	154093
K 766.491	17986.5	17979.5	17980.8
Mg 279.078	47912.9	48009.6	47947.4
Mn 257.610	1971.07	1975.90	1972.48
Mo 202.032	91.5957	91.2086	90.2906
Na 330.237	6361.40	6515.90	6498.07
Ni 231.604	191.052	192.392	191.970
Pb 220.353	1245.95	1237.07	1253.33
Sb 206.834	32.8892	29.7604	27.6087
Se 196.026	124.677	104.282	96.1818
Si 288.158	18565.3	18583.4	18566.3
Sn 189.925	152.372	153.668	136.109
Sr 216.596	679.610	682.178	678.777
Ti 334.941	840.010	840.286	841.237
Tl 190.794	37.2094	55.3793	27.1929
V 292.401	351.971	353.377	353.632
Zn 206.200	1353.95	1362.12	1342.57

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	59.6351	ppb	0.2721	0.5	2011.03
Al 308.215	107850	ppb	29.9355	0.0	254510
As 188.980	233.844	ppb	1.2754	0.5	60.2944
B 249.678	245.896	ppb	0.6259	0.3	1399.47
Ba 389.178	608.407	ppb	1.1848	0.2	5863.21
Be 313.042	57.8780	ppb	0.0656	0.1	46975.1
Ca 370.602	214007	ppb	222.6	0.1	446333
Cd 226.502	78.6056	ppb	0.1370	0.2	1319.50
Co 228.615	70.9532	ppb	0.4333	0.6	333.636
Cr 267.716	703.574	ppb	0.3948	0.1	15208.9
Cu 324.754	700.925	ppb	1.5693	0.2	25675.5
Fe 271.441	154252	ppb	222.585	0.1	115773
K 766.491	17982.3	ppb	3.7266	0.0	445185
Mg 279.078	47956.6	ppb	48.9787	0.1	66071.8
Mn 257.610	1973.15	ppb	2.4840	0.1	191159
Mo 202.032	91.0316	ppb	0.6703	0.7	189.540
Na 330.237	6458.46	ppb	84.5244	1.3	186.502
Ni 231.604	191.805	ppb	0.6849	0.4	245.059
Pb 220.353	1245.45	ppb	8.1416	0.7	653.845
Sb 206.834	30.0861	ppb	2.6553	8.8	21.3655
Se 196.026	108.380	ppb	14.6833	13.5	19.1686
Si 288.158	18571.7	ppb	10.1498	0.1	88074.2

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	147.383	ppb	9.7850	6.6	43.6174
Sr 216.596	680.188	ppb	1.7731	0.3	2638.83
Ti 334.941	840.511	ppb	0.6438	0.1	92385.4
Tl 190.794	39.9272	ppb	14.2884	35.8	1.0750
V 292.401	352.993	ppb	0.8944	0.3	4637.65
Zn 206.200	1352.88	ppb	9.8180	0.7	759.008

680-154549-A-19-C MS (Samp) **12/15/2018, 11:45:16 PM** **Rack 3, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	59.3410	59.1481	60.1674
Al 308.215	107380	107437	107547
As 188.980	242.966	221.982	248.042
B 249.678	241.373	241.450	243.799
Ba 389.178	541.050	537.593	539.089
Be 313.042	57.6956	57.5838	57.6516
Ca 370.602	235664	235720	235832
Cd 226.502	80.0533	80.3214	79.4062
Co 228.615	70.4587	68.2746	70.1251
Cr 267.716	706.067	704.597	705.319
Cu 324.754	679.041	682.510	673.184
Fe 271.441	153237	153286	153077
K 766.491	17203.9	17233.5	17221.0
Mg 279.078	46140.7	46067.4	46104.7
Mn 257.610	2072.76	2073.01	2072.41
Mo 202.032	93.5037	91.1514	92.8766
Na 330.237	6685.93	6329.84	6386.58
Ni 231.604	181.495	188.500	187.774
Pb 220.353	1251.12	1266.84	1250.42
Sb 206.834	33.7038	30.1621	34.0597
Se 196.026	92.4992	101.383	103.873
Si 288.158	17653.2	17630.9	17644.7
Sn 189.925	145.261	142.507	152.857
Sr 216.596	700.737	702.419	701.421
Ti 334.941	802.389	800.304	801.940
Tl 190.794	31.6788	48.7007	37.1141
V 292.401	336.354	335.968	335.669
Zn 206.200	1405.49	1397.66	1416.90

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	59.5522	ppb	0.5414	0.9	2008.54
Al 308.215	107454	ppb	84.8792	0.1	253578
As 188.980	237.663	ppb	13.8157	5.8	61.2574
B 249.678	242.207	ppb	1.3789	0.6	1376.28
Ba 389.178	539.244	ppb	1.7338	0.3	5199.34
Be 313.042	57.6437	ppb	0.0563	0.1	46787.2
Ca 370.602	235739	ppb	85.41	0.0	491685
Cd 226.502	79.9270	ppb	0.4705	0.6	1338.80
Co 228.615	69.6195	ppb	1.1766	1.7	327.041
Cr 267.716	705.328	ppb	0.7351	0.1	15246.8
Cu 324.754	678.245	ppb	4.7137	0.7	24853.0
Fe 271.441	153200	ppb	109.113	0.1	114983
K 766.491	17219.4	ppb	14.8326	0.1	426310

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	46104.3	ppb	36.6116	0.1	63517.8
Mn 257.610	2072.73	ppb	0.3030	0.0	200776
Mo 202.032	92.5106	ppb	1.2181	1.3	192.632
Na 330.237	6467.45	ppb	191.327	3.0	186.723
Ni 231.604	185.923	ppb	3.8519	2.1	237.496
Pb 220.353	1256.13	ppb	9.2833	0.7	659.412
Sb 206.834	32.6419	ppb	2.1549	6.6	22.4032
Se 196.026	99.2516	ppb	5.9787	6.0	17.5173
Si 288.158	17642.9	ppb	11.2662	0.1	83688.9
Sn 189.925	146.875	ppb	5.3602	3.6	43.4664
Sr 216.596	701.526	ppb	0.8456	0.1	2720.19
Ti 334.941	801.544	ppb	1.0973	0.1	88101.8
Tl 190.794	39.1645	ppb	8.6942	22.2	0.9160
V 292.401	335.997	ppb	0.3433	0.1	4414.33
Zn 206.200	1406.68	ppb	9.6768	0.7	789.284

680-154549-A-18-A (Samp) **12/15/2018, 11:49:58 PM** **Rack 3, Tube 27**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	4.6873	5.2878	5.6455
Al 308.215	44497.9	44499.9	44493.6
As 188.980	295.657	284.893	291.186
B 249.678	63.6792	65.8341	63.8337
Ba 389.178	348.210	345.411	347.782
Be 313.042	3.1061	3.1186	3.1247
Ca 370.602	291280	291450	291725
Cd 226.502	16.2214	16.0896	16.3648
Co 228.615	15.6677	14.9607	14.7627
Cr 267.716	289.278	289.730	289.773
Cu 324.754	343.179	343.300	344.783
Fe 271.441	84077.5	84144.4	84331.7
K 766.491	4673.26	4687.74	4678.05
Mg 279.078	16627.3	16604.1	16652.4
Mn 257.610	917.843	917.276	918.928
Mo 202.032	5.9978	6.1903	7.0469
Na 330.237	1318.61	662.002	832.039
Ni 231.604	77.1234	78.8407	77.4297
Pb 220.353	606.568	607.658	610.195
Sb 206.834	11.2077	9.6427	12.4827
Se 196.026	29.9313	-0.9956	3.2939
Si 288.158	10034.7	10028.3	10042.3
Sn 189.925	43.7049	43.3815	56.8865
Sr 216.596	536.009	537.603	535.712
Ti 334.941	497.654	497.388	498.986
Tl 190.794	-9.2435u	5.0365u	-14.1075u
V 292.401	145.623	144.336	144.428
Zn 206.200	1413.44	1398.69	1398.89

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	5.2069	ppb	0.4842	9.3	133.103
Al 308.215	44497.1	ppb	3.2030	0.0	105098
As 188.980	290.579	ppb	5.4075	1.9	74.5746
B 249.678	64.4490	ppb	1.2020	1.9	274.054

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	347.134	ppb	1.5072	0.4	3311.35
Be 313.042	3.1165	ppb	0.0095	0.3	2401.77
Ca 370.602	291485	ppb	224.4	0.1	608124
Cd 226.502	16.2253	ppb	0.1377	0.8	316.069
Co 228.615	15.1303	ppb	0.4758	3.1	69.7811
Cr 267.716	289.594	ppb	0.2745	0.1	6274.15
Cu 324.754	343.754	ppb	0.8935	0.3	12707.6
Fe 271.441	84184.5	ppb	131.798	0.2	63190.6
K 766.491	4679.69	ppb	7.3761	0.2	116037
Mg 279.078	16627.9	ppb	24.1370	0.1	22917.6
Mn 257.610	918.016	ppb	0.8395	0.1	88943.9
Mo 202.032	6.4117	ppb	0.5585	8.7	14.7869
Na 330.237	937.551	ppb	340.784	36.3	57.1927
Ni 231.604	77.7980	ppb	0.9159	1.2	98.4810
Pb 220.353	608.140	ppb	1.8609	0.3	322.523
Sb 206.834	11.1110	ppb	1.4225	12.8	12.0892
Se 196.026	10.7432	ppb	16.7552	156.0	1.1355
Si 288.158	10035.1	ppb	7.0192	0.1	47738.8
Sn 189.925	47.9910	ppb	7.7055	16.1	14.0632
Sr 216.596	536.441	ppb	1.0165	0.2	2075.25
Ti 334.941	498.009	ppb	0.8564	0.2	54685.1
Tl 190.794	-6.1049	ppb	9.9504	163.0	-9.1305
V 292.401	144.795	ppb	0.7181	0.5	1908.38
Zn 206.200	1403.67	ppb	8.4603	0.6	788.755

680-154549-A-20-A (Samp) **12/15/2018, 11:54:41 PM** **Rack 3, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.7194	12.8175	12.4068
Al 308.215	102153	102223	102430
As 188.980	65.5947	69.7221	62.6654
B 249.678	99.3335	99.2855	101.045
Ba 389.178	316.813	316.070	318.983
Be 313.042	6.0369	6.0344	6.0285
Ca 370.602	140139	140254	140350
Cd 226.502	19.1963	18.3653	18.4543
Co 228.615	21.9175	22.8309	23.1781
Cr 267.716	588.893	589.529	589.963
Cu 324.754	466.911	467.142	466.388
Fe 271.441	143061	143191	143251
K 766.491	8457.48	8461.06	8483.02
Mg 279.078	49060.7	49079.1	49104.1
Mn 257.610	1388.64	1387.64	1390.57
Mo 202.032	7.8210	7.6287	7.6325
Na 330.237	1210.92	667.290	1103.88
Ni 231.604	77.8737	80.0132	82.2060
Pb 220.353	672.230	663.532	666.797
Sb 206.834	8.5018	-2.3321	-8.9083u
Se 196.026	-12.2720u	-5.4831u	28.5584
Si 288.158	18944.2	18926.2	18958.7
Sn 189.925	46.6778	46.2922	44.0080
Sr 216.596	550.623	551.396	553.458
Ti 334.941	709.731	709.844	710.088

Label	Replicates Concentration		
Tl 190.794	-2.1737u	-9.1323u	-3.1704u
V 292.401	229.355	230.160	231.699
Zn 206.200	1138.34	1117.74	1128.03

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	12.3146	ppb	0.5548	4.5	368.579
Al 308.215	102268	ppb	143.892	0.1	241343
As 188.980	65.9941	ppb	3.5452	5.4	17.8515
B 249.678	99.8881	ppb	1.0025	1.0	448.999
Ba 389.178	317.289	ppb	1.5135	0.5	3076.32
Be 313.042	6.0333	ppb	0.0043	0.1	4756.37
Ca 370.602	140248	ppb	105.5	0.1	292429
Cd 226.502	18.6720	ppb	0.4562	2.4	399.001
Co 228.615	22.6422	ppb	0.6512	2.9	108.477
Cr 267.716	589.462	ppb	0.5379	0.1	12746.5
Cu 324.754	466.814	ppb	0.3867	0.1	17182.5
Fe 271.441	143168	ppb	97.5316	0.1	107452
K 766.491	8467.18	ppb	13.8290	0.2	209751
Mg 279.078	49081.3	ppb	21.7475	0.0	67629.0
Mn 257.610	1388.95	ppb	1.4900	0.1	134673
Mo 202.032	7.6941	ppb	0.1100	1.4	16.5788
Na 330.237	994.028	ppb	287.980	29.0	53.8622
Ni 231.604	80.0309	ppb	2.1662	2.7	101.355
Pb 220.353	667.520	ppb	4.3940	0.7	353.049
Sb 206.834	-0.9129	ppb	8.7914	963.0	8.7171
Se 196.026	3.6011	ppb	21.8786	607.6	0.0634
Si 288.158	18943.0	ppb	16.2628	0.1	89801.6
Sn 189.925	45.6593	ppb	1.4430	3.2	13.3699
Sr 216.596	551.826	ppb	1.4654	0.3	2147.52
Ti 334.941	709.888	ppb	0.1826	0.0	78050.7
Tl 190.794	-4.8255	ppb	3.7630	78.0	-11.0052
V 292.401	230.405	ppb	1.1911	0.5	3036.97
Zn 206.200	1128.04	ppb	10.2973	0.9	632.756

680-154549-A-21-A (Samp) **12/15/2018, 11:59:24 PM** **Rack 3, Tube 29**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	4.1963	4.7998	4.1698
Al 308.215	76414.5	76553.2	76477.3
As 188.980	88.4096	87.9865	89.3237
B 249.678	81.1366	81.9411	83.1127
Ba 389.178	224.967	224.981	224.277
Be 313.042	4.6454	4.6561	4.6567
Ca 370.602	94326	94368	94327
Cd 226.502	8.7089	8.8663	8.4886
Co 228.615	14.7603	14.3288	14.9104
Cr 267.716	264.407	265.111	264.370
Cu 324.754	202.164	205.121	202.266
Fe 271.441	110215	110306	110197
K 766.491	8187.24	8189.94	8162.66
Mg 279.078	31282.2	31317.9	31236.1
Mn 257.610	849.329	850.347	855.702
Mo 202.032	3.5874	3.4885	4.4481

Label	Replicates Concentration		
Na 330.237	446.588u	979.459	582.582
Ni 231.604	55.2125	50.1558	58.1119
Pb 220.353	402.014	399.360	388.929
Sb 206.834	-2.7184	-5.0328u	5.5773
Se 196.026	8.1801	-0.6873	2.1211
Si 288.158	15861.5	15873.5	15856.0
Sn 189.925	26.4348	24.4040	24.2268
Sr 216.596	396.682	397.352	400.534
Ti 334.941	576.293	576.297	575.707
Tl 190.794	0.7117u	-9.1299u	2.0406u
V 292.401	167.456	166.979	167.404
Zn 206.200	721.009	723.584	724.866

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	4.3886	ppb	0.3563	8.1	99.6506
Al 308.215	76481.7	ppb	69.4744	0.1	180528
As 188.980	88.5732	ppb	0.6835	0.8	23.5452
B 249.678	82.0635	ppb	0.9937	1.2	364.233
Ba 389.178	224.742	ppb	0.4025	0.2	2163.20
Be 313.042	4.6527	ppb	0.0064	0.1	3623.73
Ca 370.602	94340	ppb	24.27	0.0	196689
Cd 226.502	8.6879	ppb	0.1897	2.2	221.839
Co 228.615	14.6665	ppb	0.3019	2.1	69.0543
Cr 267.716	264.629	ppb	0.4175	0.2	5738.79
Cu 324.754	203.184	ppb	1.6782	0.8	7615.39
Fe 271.441	110239	ppb	58.4944	0.1	82741.9
K 766.491	8179.95	ppb	15.0312	0.2	202644
Mg 279.078	31278.8	ppb	41.0114	0.1	43104.0
Mn 257.610	851.793	ppb	3.4237	0.4	82630.9
Mo 202.032	3.8413	ppb	0.5278	13.7	9.0642
Na 330.237	669.543	ppb	276.874	41.4	49.9165
Ni 231.604	54.4934	ppb	4.0265	7.4	68.5147
Pb 220.353	396.768	ppb	6.9168	1.7	212.235
Sb 206.834	-0.7246	ppb	5.5790	769.9	7.3927
Se 196.026	3.2046	ppb	4.5319	141.4	-0.1585
Si 288.158	15863.6	ppb	8.9423	0.1	75255.8
Sn 189.925	25.0219	ppb	1.2268	4.9	7.2335
Sr 216.596	398.189	ppb	2.0577	0.5	1552.81
Ti 334.941	576.099	ppb	0.3395	0.1	63305.7
Tl 190.794	-2.1259	ppb	6.1019	287.0	-9.1013
V 292.401	167.280	ppb	0.2614	0.2	2209.53
Zn 206.200	723.153	ppb	1.9638	0.3	405.647

680-154549-A-22-A (Samp) **12/16/2018, 12:04:07 AM** **Rack 3, Tube 30**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	7.0259	6.6980	7.6782
Al 308.215	120562	120442	120215
As 188.980	61.9508	76.1904	67.0178
B 249.678	128.586	128.604	129.084
Ba 389.178	279.923	279.631	280.669
Be 313.042	7.2047	7.2083	7.2341
Ca 370.602	140518	140526	140311

Label	Replicates Concentration		
Cd 226.502	10.9088	10.5787	11.2099
Co 228.615	26.1097	25.2125	24.4220
Cr 267.716	414.292	415.297	413.768
Cu 324.754	283.434	285.017	281.806
Fe 271.441	166959	166958	166932
K 766.491	12109.0	12092.4	12087.6
Mg 279.078	63083.9	63086.5	63106.4
Mn 257.610	1437.35	1436.88	1435.00
Mo 202.032	6.3890	4.8287	6.5105
Na 330.237	780.247	888.724	1052.12
Ni 231.604	85.1527	88.8351	81.6574
Pb 220.353	558.500	546.946	547.466
Sb 206.834	5.5577	1.2964	3.7108
Se 196.026	9.0693	-7.4106u	20.5660
Si 288.158	19737.7	19769.9	19756.6
Sn 189.925	35.8835	36.3832	34.1478
Sr 216.596	585.874	587.880	589.948
Ti 334.941	788.647	793.135	793.714
Tl 190.794	-9.7197u	-4.2559u	7.8051u
V 292.401	255.702	254.765	254.687
Zn 206.200	931.131	943.639	938.479

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	7.1340	ppb	0.4990	7.0	183.483
Al 308.215	120406	ppb	176.101	0.1	284118
As 188.980	68.3863	ppb	7.2177	10.6	18.5313
B 249.678	128.758	ppb	0.2823	0.2	615.535
Ba 389.178	280.075	ppb	0.5350	0.2	2741.65
Be 313.042	7.2157	ppb	0.0160	0.2	5720.00
Ca 370.602	140452	ppb	122.0	0.1	292809
Cd 226.502	10.8991	ppb	0.3157	2.9	298.903
Co 228.615	25.2481	ppb	0.8444	3.3	121.831
Cr 267.716	414.452	ppb	0.7770	0.2	8976.23
Cu 324.754	283.419	ppb	1.6057	0.6	10536.7
Fe 271.441	166950	ppb	15.1314	0.0	125298
K 766.491	12096.4	ppb	11.1982	0.1	299549
Mg 279.078	63092.3	ppb	12.2679	0.0	86935.0
Mn 257.610	1436.41	ppb	1.2440	0.1	139346
Mo 202.032	5.9094	ppb	0.9379	15.9	12.5206
Na 330.237	907.029	ppb	136.856	15.1	50.0205
Ni 231.604	85.2151	ppb	3.5893	4.2	108.022
Pb 220.353	550.970	ppb	6.5258	1.2	292.262
Sb 206.834	3.5217	ppb	2.1370	60.7	10.2041
Se 196.026	7.4082	ppb	14.0621	189.8	0.8320
Si 288.158	19754.7	ppb	16.1883	0.1	93636.3
Sn 189.925	35.4715	ppb	1.1733	3.3	10.3406
Sr 216.596	587.901	ppb	2.0372	0.3	2290.88
Ti 334.941	791.832	ppb	2.7734	0.4	87091.9
Tl 190.794	-2.0568	ppb	8.9670	436.0	-11.1821
V 292.401	255.051	ppb	0.5649	0.2	3369.17
Zn 206.200	937.750	ppb	6.2857	0.7	525.503

Cont Calib Verif (CCV) **12/16/2018, 12:08:51 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	491.044	490.369	493.666
Al 308.215	9976.09	9978.43	9953.74
As 188.980	526.965	520.524	517.272
B 249.678	530.164	530.045	532.596
Ba 389.178	475.012	474.856	471.860
Be 313.042	541.143	541.131	540.690
Ca 370.602	10141	10146	10132
Cd 226.502	521.180	521.757	519.805
Co 228.615	509.689	507.670	508.125
Cr 267.716	504.141	504.411	503.293
Cu 324.754	506.931	505.631	509.554
Fe 271.441	10187.7	10194.2	10154.3
K 766.491	10115.7	10131.2	10121.1
Mg 279.078	10575.4	10582.2	10574.6
Mn 257.610	505.853	506.942	505.572
Mo 202.032	493.991	493.832	490.339
Na 330.237	10733.2	10873.9	11009.3
Ni 231.604	517.764	515.152	515.275
Pb 220.353	525.054	518.859	516.247
Sb 206.834	508.858	512.979	509.848
Se 196.026	535.098	549.755	524.156
Si 288.158	5016.98	5026.35	5006.88
Sn 189.925	501.914	500.934	507.101
Sr 216.596	502.756	504.807	503.033
Ti 334.941	496.716	496.604	495.723
Tl 190.794	494.587	496.561	508.539
V 292.401	499.232	500.730	499.542
Zn 206.200	1089.48	1087.43	1093.79

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.693	ppb	1.7417	0.4	17050.1	98.33864
Al 308.215	9969.42	ppb	13.6308	0.1	23687.6	99.69418
As 188.980	521.587	ppb	4.9331	0.9	132.752	104.31744
B 249.678	530.935	ppb	1.4399	0.3	3419.26	106.18697
Ba 389.178	473.909	ppb	1.7761	0.4	4498.56	94.78185
Be 313.042	540.988	ppb	0.2584	0.0	440253	108.19759
Ca 370.602	10140	ppb	6.828	0.1	21190	101.39688
Cd 226.502	520.914	ppb	1.0031	0.2	7942.07	104.18282
Co 228.615	508.494	ppb	1.0589	0.2	2355.30	101.69887
Cr 267.716	503.948	ppb	0.5834	0.1	10885.8	100.78960
Cu 324.754	507.372	ppb	1.9987	0.4	18632.3	101.47440
Fe 271.441	10178.7	ppb	21.4246	0.2	7687.20	101.73638
K 766.491	10122.7	ppb	7.8862	0.1	250714	101.22684
Mg 279.078	10577.4	ppb	4.1573	0.0	14589.8	105.77427
Mn 257.610	506.123	ppb	0.7236	0.1	49024.9	101.22451
Mo 202.032	492.721	ppb	2.0643	0.4	1026.18	98.54411
Na 330.237	10872.2	ppb	138.032	1.3	308.649	108.72151
Ni 231.604	516.064	ppb	1.4738	0.3	661.625	103.21272
Pb 220.353	520.053	ppb	4.5233	0.9	276.448	104.01064
Sb 206.834	510.562	ppb	2.1515	0.4	214.758	102.11235
Se 196.026	536.336	ppb	12.8445	2.4	96.2684	107.26727
Si 288.158	5016.74	ppb	9.7411	0.2	24154.4	100.33474

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	503.316	ppb	3.3140	0.7	149.453	100.66327
Sr 216.596	503.532	ppb	1.1128	0.2	1922.32	100.70647
Ti 334.941	496.348	ppb	0.5439	0.1	54481.9	99.26956
Tl 190.794	499.896	ppb	7.5504	1.5	133.619	99.97915
V 292.401	499.835	ppb	0.7904	0.2	6505.00	99.96690
Zn 206.200	1090.23	ppb	3.2493	0.3	613.329	109.02334

Cont Calib Blank (CCB) **12/16/2018, 12:13:34 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3697u	-0.0693u	-0.3302u
Al 308.215	4.5532	1.8674	3.9064
As 188.980	8.9056	3.0874	3.9127
B 249.678	3.0793	2.9273	3.5594
Ba 389.178	-0.6607u	-0.5461u	-0.3585u
Be 313.042	0.0396	0.0543	0.0687
Ca 370.602	0.6480	7.404	0.6939
Cd 226.502	0.2213	-0.0852u	0.3180
Co 228.615	-0.9380u	-0.3717u	-1.2823u
Cr 267.716	-0.3676u	-0.0832u	-0.1619u
Cu 324.754	1.0414	0.7451	0.8513
Fe 271.441	1.3067	4.2426	-5.0002u
K 766.491	1.6665	2.2641	3.1904
Mg 279.078	0.9743	2.7819	2.5078
Mn 257.610	0.1058	0.0579	0.1810
Mo 202.032	-1.2667u	0.2533	1.4195
Na 330.237	-65.5146u	304.283	92.8232
Ni 231.604	-1.7330u	2.4961	0.3596
Pb 220.353	-1.8184u	1.8779	8.8970
Sb 206.834	-7.7533u	3.7003	0.1854
Se 196.026	-11.2820u	-8.2103u	-7.8429u
Si 288.158	2.7209	4.8588	1.0558
Sn 189.925	1.2695	-3.1952u	-4.7018u
Sr 216.596	0.8794	1.1177	0.6231
Ti 334.941	0.2568	0.3380	0.0961
Tl 190.794	-7.0004u	-5.5228u	-5.4514u
V 292.401	0.2579	0.4445	0.1805
Zn 206.200	-2.8456u	0.4464	-0.0654u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2564	ppb	0.1632	63.7	-38.5339	-0.25640
Al 308.215	3.4423	ppb	1.4018	40.7	163.120	3.44234
As 188.980	5.3019	ppb	3.1481	59.4	2.3047	5.30190
B 249.678	3.1887	ppb	0.3299	10.3	-45.9414	3.18869
Ba 389.178	-0.5218	ppb	0.1526	29.2	-55.0447	-0.52175
Be 313.042	0.0542	ppb	0.0145	26.8	-139.786	0.05421
Ca 370.602	2.915	ppb	3.888	133.3	33.57	2.91544
Cd 226.502	0.1514	ppb	0.2105	139.0	8.1428	0.15139
Co 228.615	-0.8640	ppb	0.4598	53.2	-11.4803	-0.86399
Cr 267.716	-0.2043	ppb	0.1469	71.9	15.2947	-0.20426
Cu 324.754	0.8793	ppb	0.1501	17.1	256.251	0.87927
Fe 271.441	0.1830	ppb	4.7227	2580.2	17.7268	0.18303
K 766.491	2.3737	ppb	0.7678	32.3	305.123	2.37368

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	2.0880	ppb	0.9742	46.7	21.9935	2.08801
Mn 257.610	0.1149	ppb	0.0621	54.0	41.0151	0.11492
Mo 202.032	0.1354	ppb	1.3470	995.1	2.9972	0.13536
Na 330.237	110.531	ppb	185.534	167.9	48.2275	110.53051
Ni 231.604	0.3743	ppb	2.1146	565.0	-1.0848	0.37425
Pb 220.353	2.9855	ppb	5.4429	182.3	7.6727	2.98549
Sb 206.834	-1.2892	ppb	5.8675	455.1	5.1853	-1.28920
Se 196.026	-9.1117	ppb	1.8884	20.7	-2.8105	-9.11173
Si 288.158	2.8785	ppb	1.9064	66.2	350.919	2.87847
Sn 189.925	-2.2092	ppb	3.1054	140.6	-0.8635	-2.20919
Sr 216.596	0.8734	ppb	0.2474	28.3	8.8843	0.87342
Ti 334.941	0.2303	ppb	0.1231	53.4	-11.1916	0.23030
Tl 190.794	-5.9915	ppb	0.8745	14.6	-6.0032	-5.99152
V 292.401	0.2943	ppb	0.1357	46.1	1.5991	0.29432
Zn 206.200	-0.8215	ppb	1.7715	215.6	0.0664	-0.82153

680-154549-A-24-A (Samp) **12/16/2018, 12:18:16 AM** **Rack 3, Tube 31**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5529u	-0.9149u	0.0562u
Al 308.215	25205.1	25072.8	25082.6
As 188.980	957.179	946.472	950.657
B 249.678	32.5889	30.7541	31.0067
Ba 389.178	197.010	196.306	197.300
Be 313.042	2.0501	2.0420	2.0451
Ca 370.602	373460	372786	372831
Cd 226.502	2.3648	2.7835	2.7269
Co 228.615	12.1148	12.5424	12.0091
Cr 267.716	79.0614	78.7642	78.7579
Cu 324.754	230.188	229.348	226.052
Fe 271.441	48454.7	48401.4	48557.9
K 766.491	1379.10	1380.26	1375.15
Mg 279.078	5702.86	5705.43	5704.42
Mn 257.610	323.109	322.411	322.901
Mo 202.032	4.7071	5.1466	4.3537
Na 330.237	497.456	172.438u	419.280
Ni 231.604	55.5965	60.6659	57.7502
Pb 220.353	380.052	372.570	384.650
Sb 206.834	13.0717	26.8373	5.9186
Se 196.026	1.2171	9.1402	0.0868
Si 288.158	4580.89	4567.78	4579.66
Sn 189.925	28.6404	37.0953	34.0336
Sr 216.596	474.324	472.209	474.508
Ti 334.941	436.749	435.264	435.727
Tl 190.794	-5.2570u	-8.2037u	-5.7580u
V 292.401	127.128	126.471	128.598
Zn 206.200	986.890	979.368	990.032

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4705	ppb	0.4908	104.3	-57.7259
Al 308.215	25120.2	ppb	73.7389	0.3	59400.6
As 188.980	951.436	ppb	5.3956	0.6	241.662
B 249.678	31.4499	ppb	0.9945	3.2	92.1345

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	196.872	ppb	0.5112	0.3	1852.64
Be 313.042	2.0457	ppb	0.0041	0.2	1542.11
Ca 370.602	373026	ppb	376.9	0.1	778336
Cd 226.502	2.6251	ppb	0.2272	8.7	82.1381
Co 228.615	12.2221	ppb	0.2824	2.3	54.5436
Cr 267.716	78.8611	ppb	0.1735	0.2	1725.90
Cu 324.754	228.529	ppb	2.1858	1.0	8521.46
Fe 271.441	48471.3	ppb	79.6066	0.2	36391.4
K 766.491	1378.17	ppb	2.6812	0.2	34346.7
Mg 279.078	5704.24	ppb	1.2965	0.0	7872.44
Mn 257.610	322.807	ppb	0.3584	0.1	31319.3
Mo 202.032	4.7358	ppb	0.3972	8.4	11.8262
Na 330.237	363.058	ppb	169.646	46.7	47.3125
Ni 231.604	58.0042	ppb	2.5442	4.4	73.0237
Pb 220.353	379.091	ppb	6.0970	1.6	203.317
Sb 206.834	15.2759	ppb	10.6321	69.6	12.7526
Se 196.026	3.4814	ppb	4.9332	141.7	-0.3464
Si 288.158	4576.11	ppb	7.2403	0.2	21964.3
Sn 189.925	33.2564	ppb	4.2807	12.9	9.6820
Sr 216.596	473.680	ppb	1.2778	0.3	1827.29
Ti 334.941	435.913	ppb	0.7600	0.2	47832.6
Tl 190.794	-6.4062	ppb	1.5767	24.6	-7.9087
V 292.401	127.399	ppb	1.0891	0.9	1677.31
Zn 206.200	985.430	ppb	5.4797	0.6	554.105

680-154549-A-25-A (Samp) **12/16/2018, 12:22:58 AM** **Rack 3, Tube 32**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	2.3928	2.5064	2.1072
Al 308.215	39746.5	39812.6	39823.5
As 188.980	918.906	914.871	923.891
B 249.678	55.7245	57.4061	55.8278
Ba 389.178	274.736	273.909	273.863
Be 313.042	2.7565	2.7567	2.7673
Ca 370.602	151246	151500	151501
Cd 226.502	7.6794	7.4984	7.6177
Co 228.615	17.1078	18.9352	18.5150
Cr 267.716	227.915	228.401	228.140
Cu 324.754	283.496	285.970	283.605
Fe 271.441	95015.8	95101.5	95066.9
K 766.491	2604.42	2604.98	2602.68
Mg 279.078	9060.21	9071.30	9084.59
Mn 257.610	609.634	610.155	609.762
Mo 202.032	9.5426	10.3404	9.3954
Na 330.237	487.802	467.298	763.795
Ni 231.604	96.2078	94.9209	97.8488
Pb 220.353	435.249	436.804	436.829
Sb 206.834	6.3329	3.0700	15.0138
Se 196.026	-3.0399u	-9.1014u	0.1952
Si 288.158	6560.39	6558.69	6558.81
Sn 189.925	31.7837	36.5128	39.4406
Sr 216.596	393.773	390.787	392.953
Ti 334.941	527.935	528.755	529.735

Label	Replicates Concentration		
Tl 190.794	-9.2371u	-1.4131u	0.9760u
V 292.401	151.594	151.470	151.458
Zn 206.200	883.721	887.854	886.229

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.3355	ppb	0.2057	8.8	31.0490
Al 308.215	39794.2	ppb	41.6747	0.1	94008.3
As 188.980	919.223	ppb	4.5180	0.5	233.586
B 249.678	56.3195	ppb	0.9425	1.7	209.719
Ba 389.178	274.169	ppb	0.4914	0.2	2608.49
Be 313.042	2.7602	ppb	0.0061	0.2	2089.93
Ca 370.602	151416	ppb	147.1	0.1	315813
Cd 226.502	7.5985	ppb	0.0920	1.2	192.432
Co 228.615	18.1860	ppb	0.9571	5.3	84.4621
Cr 267.716	228.152	ppb	0.2435	0.1	4950.11
Cu 324.754	284.357	ppb	1.3979	0.5	10556.0
Fe 271.441	95061.4	ppb	43.1502	0.0	71352.6
K 766.491	2604.03	ppb	1.2011	0.0	64678.3
Mg 279.078	9072.03	ppb	12.2036	0.1	12508.1
Mn 257.610	609.851	ppb	0.2714	0.0	59129.4
Mo 202.032	9.7595	ppb	0.5084	5.2	21.5831
Na 330.237	572.965	ppb	165.581	28.9	48.5213
Ni 231.604	96.3258	ppb	1.4675	1.5	122.305
Pb 220.353	436.294	ppb	0.9050	0.2	233.150
Sb 206.834	8.1389	ppb	6.1733	75.8	10.7298
Se 196.026	-3.9820	ppb	4.7194	118.5	-1.5316
Si 288.158	6559.30	ppb	0.9472	0.0	31331.3
Sn 189.925	35.9123	ppb	3.8636	10.8	10.4717
Sr 216.596	392.504	ppb	1.5425	0.4	1527.15
Ti 334.941	528.809	ppb	0.9014	0.2	58041.0
Tl 190.794	-3.2247	ppb	5.3421	165.7	-8.8560
V 292.401	151.507	ppb	0.0753	0.0	1999.80
Zn 206.200	885.935	ppb	2.0823	0.2	497.431

680-154549-A-26-A (Samp) **12/16/2018, 12:27:41 AM** **Rack 3, Tube 33**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	4.1286	4.8314	3.9207
Al 308.215	77985.5	77948.8	77925.9
As 188.980	267.494	264.595	272.075
B 249.678	70.4682	69.3210	70.0882
Ba 389.178	212.014	210.251	211.877
Be 313.042	3.6539	3.6540	3.6451
Ca 370.602	148278	148061	148161
Cd 226.502	8.9622	9.5777	9.4190
Co 228.615	15.0730	15.4525	17.2544
Cr 267.716	293.820	292.280	293.027
Cu 324.754	265.576	266.401	264.068
Fe 271.441	108542	108463	108491
K 766.491	6778.51	6793.17	6780.64
Mg 279.078	24504.1	24517.3	24478.5
Mn 257.610	914.998	913.184	913.804
Mo 202.032	8.4133	6.1901	6.1277

Label	Replicates Concentration		
Na 330.237	466.499u	1129.29	670.947
Ni 231.604	64.5351	64.6822	66.5280
Pb 220.353	424.328	428.930	436.404
Sb 206.834	4.4690	10.2656	-3.0702
Se 196.026	11.7773	6.9033	2.2381
Si 288.158	15222.8	15208.4	15204.2
Sn 189.925	32.8648	29.8824	33.0598
Sr 216.596	514.615	512.227	517.045
Ti 334.941	566.571	566.564	566.982
Tl 190.794	-1.0817u	2.1565u	-7.0751u
V 292.401	195.895	196.099	196.237
Zn 206.200	750.001	758.784	766.506

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	4.2936	ppb	0.4773	11.1	96.4944
Al 308.215	77953.4	ppb	30.0726	0.0	183999
As 188.980	268.055	ppb	3.7711	1.4	68.9268
B 249.678	69.9591	ppb	0.5844	0.8	286.238
Ba 389.178	211.381	ppb	0.9808	0.5	2027.84
Be 313.042	3.6510	ppb	0.0051	0.1	2817.11
Ca 370.602	148166	ppb	108.5	0.1	309012
Cd 226.502	9.3196	ppb	0.3195	3.4	230.228
Co 228.615	15.9266	ppb	1.1655	7.3	74.7681
Cr 267.716	293.042	ppb	0.7704	0.3	6351.22
Cu 324.754	265.349	ppb	1.1829	0.4	9869.23
Fe 271.441	108499	ppb	39.9912	0.0	81435.8
K 766.491	6784.11	ppb	7.9172	0.1	168107
Mg 279.078	24500.0	ppb	19.7271	0.1	33760.4
Mn 257.610	913.995	ppb	0.9217	0.1	88613.4
Mo 202.032	6.9104	ppb	1.3020	18.8	15.4597
Na 330.237	755.579	ppb	339.405	44.9	52.1036
Ni 231.604	65.2485	ppb	1.1106	1.7	82.3456
Pb 220.353	429.887	ppb	6.0947	1.4	229.456
Sb 206.834	3.8882	ppb	6.6868	172.0	9.3518
Se 196.026	6.9729	ppb	4.7700	68.4	0.5257
Si 288.158	15211.8	ppb	9.7468	0.1	72179.0
Sn 189.925	31.9357	ppb	1.7808	5.6	9.2893
Sr 216.596	514.629	ppb	2.4091	0.5	1997.51
Ti 334.941	566.706	ppb	0.2394	0.0	62252.4
Tl 190.794	-2.0001	ppb	4.6838	234.2	-8.9583
V 292.401	196.077	ppb	0.1717	0.1	2585.56
Zn 206.200	758.430	ppb	8.2582	1.1	425.496

680-154549-A-27-A (Samp) **12/16/2018, 12:32:24 AM** **Rack 3, Tube 34**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	4.6107	5.3987	5.1748
Al 308.215	104835	104499	104507
As 188.980	45.8830	51.9880	53.5243
B 249.678	134.089	134.075	135.322
Ba 389.178	200.490	200.462	200.491
Be 313.042	6.2131	6.2094	6.1917
Ca 370.602	131199	131084	131057

Label	Replicates Concentration		
Cd 226.502	10.3692	10.2028	10.0756
Co 228.615	20.4764	19.6860	18.2453
Cr 267.716	348.909	349.506	349.546
Cu 324.754	238.399	236.817	236.170
Fe 271.441	121464	121600	121526
K 766.491	12356.2	12340.7	12359.2
Mg 279.078	60329.2	60322.1	60278.0
Mn 257.610	658.076	658.069	658.070
Mo 202.032	6.2758	4.4941	6.1486
Na 330.237	1330.05	1103.17	1328.46
Ni 231.604	72.0219	76.8882	74.3288
Pb 220.353	545.769	544.487	543.558
Sb 206.834	-5.1456	-3.1261	9.9839
Se 196.026	8.1543	7.4028	1.2323
Si 288.158	18156.7	18127.1	18136.4
Sn 189.925	34.3096	35.8525	31.2160
Sr 216.596	535.809	533.207	532.692
Ti 334.941	843.964	843.336	842.679
Tl 190.794	-4.8356u	0.1092u	-11.8557u
V 292.401	294.942	295.281	294.184
Zn 206.200	1116.03	1121.51	1109.68

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	5.0614	ppb	0.4061	8.0	119.445
Al 308.215	104614	ppb	191.428	0.2	246874
As 188.980	50.4651	ppb	4.0419	8.0	13.9174
B 249.678	134.496	ppb	0.7160	0.5	698.334
Ba 389.178	200.481	ppb	0.0168	0.0	1964.85
Be 313.042	6.2047	ppb	0.0114	0.2	4896.44
Ca 370.602	131114	ppb	75.72	0.1	273404
Cd 226.502	10.2158	ppb	0.1472	1.4	254.675
Co 228.615	19.4693	ppb	1.1313	5.8	94.1044
Cr 267.716	349.320	ppb	0.3570	0.1	7565.56
Cu 324.754	237.129	ppb	1.1468	0.5	8847.94
Fe 271.441	121530	ppb	67.9476	0.1	91215.2
K 766.491	12352.0	ppb	9.9164	0.1	305874
Mg 279.078	60309.8	ppb	27.7290	0.0	83111.4
Mn 257.610	658.072	ppb	0.0040	0.0	64045.1
Mo 202.032	5.6395	ppb	0.9939	17.6	12.6101
Na 330.237	1253.89	ppb	130.537	10.4	62.0618
Ni 231.604	74.4129	ppb	2.4342	3.3	94.1330
Pb 220.353	544.605	ppb	1.1102	0.2	288.853
Sb 206.834	0.5707	ppb	8.2144	1439.2	8.3123
Se 196.026	5.5965	ppb	3.7981	67.9	0.2928
Si 288.158	18140.1	ppb	15.1010	0.1	86016.3
Sn 189.925	33.7927	ppb	2.3611	7.0	9.8415
Sr 216.596	533.903	ppb	1.6707	0.3	2074.11
Ti 334.941	843.326	ppb	0.6426	0.1	92735.0
Tl 190.794	-5.5273	ppb	6.0124	108.8	-10.4385
V 292.401	294.802	ppb	0.5621	0.2	3882.22
Zn 206.200	1115.74	ppb	5.9196	0.5	626.264

680-161905-B-3-B (Samp) **12/16/2018, 12:37:07 AM** **Rack 3, Tube 35**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2530u	0.3553	-0.5425u
Al 308.215	1046.75	1041.02	1042.25
As 188.980	-3.3826u	-1.4501u	-3.9866u
B 249.678	4.3740	5.0656	3.9110
Ba 389.178	0.4434	1.2115	2.0658
Be 313.042	0.0411	0.0521	0.0337
Ca 370.602	1702	1690	1691
Cd 226.502	0.0626	0.5500	0.1550
Co 228.615	-0.5184u	-0.8476u	-0.9574u
Cr 267.716	3.6876	3.8659	3.8334
Cu 324.754	3.7760	2.9316	3.1911
Fe 271.441	1276.43	1283.78	1269.18
K 766.491	132.121	132.687	132.009
Mg 279.078	599.548	604.774	597.857
Mn 257.610	7.4438	7.4538	7.2329
Mo 202.032	-1.8557u	0.9410	-0.0364u
Na 330.237	210.835	380.509	257.917
Ni 231.604	1.2685	2.1547	0.0519
Pb 220.353	0.7469	6.8660	1.8952
Sb 206.834	4.0111	9.6374	8.7862
Se 196.026	-1.7596u	-2.7988u	-3.9834u
Si 288.158	201.910	197.034	199.690
Sn 189.925	17.1993	8.1721	17.4744
Sr 216.596	6.2279	7.0058	6.6273
Ti 334.941	12.9338	12.8481	12.7902
Tl 190.794	6.9472	-8.9668u	4.9649
V 292.401	3.1114	2.8765	3.1498
Zn 206.200	14.1926	12.5642	15.3044

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1468	ppb	0.4582	312.3	-35.0099
Al 308.215	1043.34	ppb	3.0173	0.3	2615.60
As 188.980	-2.9398	ppb	1.3249	45.1	0.2225
B 249.678	4.4502	ppb	0.5810	13.1	-38.9024
Ba 389.178	1.2402	ppb	0.8116	65.4	-37.2080
Be 313.042	0.0423	ppb	0.0093	21.9	-149.101
Ca 370.602	1694	ppb	6.576	0.4	3561
Cd 226.502	0.2559	ppb	0.2589	101.2	10.7119
Co 228.615	-0.7745	ppb	0.2285	29.5	-10.9127
Cr 267.716	3.7956	ppb	0.0950	2.5	101.690
Cu 324.754	3.2996	ppb	0.4325	13.1	344.269
Fe 271.441	1276.47	ppb	7.2972	0.6	975.439
K 766.491	132.272	ppb	0.3632	0.3	3519.23
Mg 279.078	600.726	ppb	3.6059	0.6	846.764
Mn 257.610	7.3768	ppb	0.1247	1.7	747.142
Mo 202.032	-0.3170	ppb	1.4193	447.7	2.0382
Na 330.237	283.087	ppb	87.5928	30.9	52.3060
Ni 231.604	1.1584	ppb	1.0557	91.1	-0.0759
Pb 220.353	3.1694	ppb	3.2525	102.6	7.7610
Sb 206.834	7.4782	ppb	3.0326	40.6	8.8413
Se 196.026	-2.8473	ppb	1.1127	39.1	-1.6689
Si 288.158	199.545	ppb	2.4414	1.2	1281.15

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	14.2819	ppb	5.2930	37.1	4.0400
Sr 216.596	6.6204	ppb	0.3890	5.9	31.1406
Ti 334.941	12.8574	ppb	0.0722	0.6	1376.85
Tl 190.794	0.9818	ppb	8.6725	883.4	-4.1307
V 292.401	3.0459	ppb	0.1480	4.9	37.9301
Zn 206.200	14.0204	ppb	1.3782	9.8	8.3951

680-161905-B-11-B (Samp) **12/16/2018, 12:41:50 AM** **Rack 3, Tube 36**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5225u	0.4861	-0.2750u
Al 308.215	54.1924	54.1659	57.3441
As 188.980	2.7084	4.8487	1.9550
B 249.678	1.7192	1.9090	2.4942
Ba 389.178	-2.6267u	-1.7618u	-0.0240u
Be 313.042	-0.0161u	-0.0147u	-0.0190u
Ca 370.602	254.9	254.7	253.9
Cd 226.502	0.1880	0.5520	0.1835
Co 228.615	-0.4891u	-1.5315u	-0.5978u
Cr 267.716	0.4681	0.5997	0.4871
Cu 324.754	2.9753	3.4625	2.9700
Fe 271.441	47.5133	53.4570	57.4432
K 766.491	23.3071	23.6342	23.8847
Mg 279.078	25.9415	34.9123	29.8327
Mn 257.610	1.0823	1.0791	1.0836
Mo 202.032	-0.6174u	0.9215	-1.6214u
Na 330.237	17.8228	81.0358	170.808
Ni 231.604	1.9698	1.8946	0.7709
Pb 220.353	11.5985	1.0865	2.1774
Sb 206.834	-10.9741u	-4.5093u	1.7299
Se 196.026	-1.2437u	0.0844	-8.7413u
Si 288.158	46.6251	45.8953	47.4524
Sn 189.925	15.5370	19.1331	15.4465
Sr 216.596	0.2718	1.4856	0.2184
Ti 334.941	4.3698	4.2981	4.2573
Tl 190.794	1.3547	-2.8914u	-7.3401u
V 292.401	0.3222	0.7462	0.3479
Zn 206.200	6.9652	4.5457	6.1922

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1038	ppb	0.5256	506.5	-33.2498
Al 308.215	55.2342	ppb	1.8273	3.3	285.260
As 188.980	3.1707	ppb	1.5012	47.3	1.7658
B 249.678	2.0408	ppb	0.4040	19.8	-53.5607
Ba 389.178	-1.4708	ppb	1.3256	90.1	-64.0786
Be 313.042	-0.0166	ppb	0.0022	13.3	-197.350
Ca 370.602	254.5	ppb	0.5545	0.2	558.5
Cd 226.502	0.3078	ppb	0.2115	68.7	10.5697
Co 228.615	-0.8728	ppb	0.5731	65.7	-11.4838
Cr 267.716	0.5183	ppb	0.0711	13.7	30.8844
Cu 324.754	3.1359	ppb	0.2829	9.0	338.091
Fe 271.441	52.8045	ppb	4.9970	9.5	57.2259
K 766.491	23.6087	ppb	0.2896	1.2	830.544

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	30.2289	ppb	4.4985	14.9	60.7574
Mn 257.610	1.0816	ppb	0.0023	0.2	134.729
Mo 202.032	-0.4391	ppb	1.2808	291.7	1.8027
Na 330.237	89.8887	ppb	76.8758	85.5	47.6954
Ni 231.604	1.5451	ppb	0.6715	43.5	0.4209
Pb 220.353	4.9541	ppb	5.7800	116.7	8.6965
Sb 206.834	-4.5845	ppb	6.3523	138.6	3.8304
Se 196.026	-3.3002	ppb	4.7587	144.2	-1.7554
Si 288.158	46.6576	ppb	0.7791	1.7	559.159
Sn 189.925	16.7055	ppb	2.1028	12.6	4.7606
Sr 216.596	0.6586	ppb	0.7167	108.8	8.0706
Ti 334.941	4.3084	ppb	0.0570	1.3	436.546
Tl 190.794	-2.9589	ppb	4.3478	146.9	-5.1691
V 292.401	0.4721	ppb	0.2377	50.3	3.9728
Zn 206.200	5.9010	ppb	1.2357	20.9	3.8464

680-161848-C-2-A (Samp) **12/16/2018, 12:46:33 AM** **Rack 3, Tube 37**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.2525u	-0.3439u	-1.8947u
Al 308.215	182531	182663	182783
As 188.980	39.5084	46.2928	30.5637
B 249.678	53.9881u	52.9596u	56.4969u
Ba 389.178	609.561	609.987	609.506
Be 313.042	24.7888	24.8111	24.8016
Ca 370.602	31852	31922	31964
Cd 226.502	1.0364	1.1976	1.8058
Co 228.615	90.0015	90.1026	89.6510
Cr 267.716	424.976	426.233	426.874
Cu 324.754	239.566	241.118	242.884
Fe 271.441	595019	596230	596340
K 766.491	25357.5	25361.6	25349.8
Mg 279.078	34380.9	34450.2	34456.9
Mn 257.610	1903.99	1909.18	1908.56
Mo 202.032	7.2970	4.6825	6.8245
Na 330.237	724.935u	494.029u	723.715u
Ni 231.604	126.111	125.959	125.679
Pb 220.353	85.3458	94.7324	87.5936
Sb 206.834	-7.1735	8.2463	5.2363
Se 196.026	6.9550	-11.7347u	-3.2587
Si 288.158	22377.4	22417.5	22439.6
Sn 189.925	13.7920	30.4975	14.7046
Sr 216.596	337.972	337.647	339.035
Ti 334.941	2071.04	2076.12	2074.12
Tl 190.794	7.0259u	12.9854u	13.6460u
V 292.401	1256.91	1256.86	1258.70
Zn 206.200	387.345	383.477	387.080

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.1637	ppb	0.7792	67.0	-192.123
Al 308.215	182659	ppb	125.889	0.1	430973
As 188.980	38.7883	ppb	7.8892	20.3	11.9088
B 249.678	54.4815	ppb	1.8196	3.3	-298.418

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	609.685	ppb	0.2628	0.0	5983.91
Be 313.042	24.8005	ppb	0.0112	0.0	20042.8
Ca 370.602	31913	ppb	56.41	0.2	65476
Cd 226.502	1.3466	ppb	0.4058	30.1	467.992
Co 228.615	89.9184	ppb	0.2370	0.3	445.624
Cr 267.716	426.028	ppb	0.9652	0.2	9271.96
Cu 324.754	241.190	ppb	1.6599	0.7	9090.92
Fe 271.441	595863	ppb	732.616	0.1	447158
K 766.491	25356.3	ppb	5.9929	0.0	627641
Mg 279.078	34429.4	ppb	42.0773	0.1	47414.1
Mn 257.610	1907.24	ppb	2.8328	0.1	185177
Mo 202.032	6.2680	ppb	1.3933	22.2	6.8423
Na 330.237	647.560	ppb	132.963	20.5	5.9861
Ni 231.604	125.917	ppb	0.2193	0.2	160.307
Pb 220.353	89.2239	ppb	4.9011	5.5	52.9765
Sb 206.834	2.1030	ppb	8.1735	388.7	13.9355
Se 196.026	-2.6794	ppb	9.3583	349.3	0.3623
Si 288.158	22411.5	ppb	31.5569	0.1	106237
Sn 189.925	19.6647	ppb	9.3926	47.8	5.6403
Sr 216.596	338.218	ppb	0.7262	0.2	1433.87
Ti 334.941	2073.76	ppb	2.5566	0.1	227715
Tl 190.794	11.2191	ppb	3.6464	32.5	-24.1053
V 292.401	1257.49	ppb	1.0433	0.1	16599.3
Zn 206.200	385.967	ppb	2.1611	0.6	209.368

680-161848-A-1-B (Samp) **12/16/2018, 12:51:16 AM** **Rack 3, Tube 38**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1018u	-0.9340u	0.2249u
Al 308.215	98091.1	98214.4	98178.1
As 188.980	35.7698	14.7347	28.1028
B 249.678	56.7861	56.4768	56.5430
Ba 389.178	988.736	990.519	988.951
Be 313.042	9.5082	9.5132	9.4821
Ca 370.602	12369	12405	12398
Cd 226.502	0.3037	0.5984	0.4467
Co 228.615	102.518	104.680	103.866
Cr 267.716	127.095	126.866	127.645
Cu 324.754	92.5075	93.2131	92.4985
Fe 271.441	94451.4	94540.0	94538.1
K 766.491	6192.55	6195.97	6202.91
Mg 279.078	12154.1	12160.3	12136.4
Mn 257.610	1022.90	1023.36	1023.72
Mo 202.032	3.7223	5.3900	5.2471
Na 330.237	1336.84	1375.70	1358.04
Ni 231.604	128.541	127.429	127.437
Pb 220.353	90.6098	97.8984	100.428
Sb 206.834	7.1717	-6.4652u	1.0130
Se 196.026	-2.9102u	5.6428	4.1607
Si 288.158	11314.7	11328.6	11317.8
Sn 189.925	18.3723	16.5708	10.2503
Sr 216.596	122.235	123.150	123.222
Ti 334.941	834.779	836.882	836.544

Label	Replicates Concentration		
Tl 190.794	10.1794u	-5.7816u	6.2482u
V 292.401	224.077	225.155	224.364
Zn 206.200	356.383	356.172	350.252

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2703	ppb	0.5975	221.1	-57.6239
Al 308.215	98161.2	ppb	63.3286	0.1	231655
As 188.980	26.2025	ppb	10.6455	40.6	7.7611
B 249.678	56.6020	ppb	0.1629	0.3	212.120
Ba 389.178	989.402	ppb	0.9734	0.1	9453.20
Be 313.042	9.5012	ppb	0.0167	0.2	7561.23
Ca 370.602	12391	ppb	19.13	0.2	25728
Cd 226.502	0.4496	ppb	0.1474	32.8	85.8348
Co 228.615	103.688	ppb	1.0921	1.1	484.466
Cr 267.716	127.202	ppb	0.4006	0.3	2774.86
Cu 324.754	92.7397	ppb	0.4100	0.4	3606.43
Fe 271.441	94509.8	ppb	50.6392	0.1	70943.8
K 766.491	6197.14	ppb	5.2779	0.1	153583
Mg 279.078	12150.3	ppb	12.4014	0.1	16734.8
Mn 257.610	1023.33	ppb	0.4087	0.0	99120.2
Mo 202.032	4.7864	ppb	0.9244	19.3	11.2434
Na 330.237	1356.86	ppb	19.4536	1.4	68.8507
Ni 231.604	127.803	ppb	0.6397	0.5	162.710
Pb 220.353	96.3119	ppb	5.0975	5.3	55.4531
Sb 206.834	0.5732	ppb	6.8290	1191.4	7.3006
Se 196.026	2.2978	ppb	4.5707	198.9	-0.3560
Si 288.158	11320.4	ppb	7.2998	0.1	53820.0
Sn 189.925	15.0645	ppb	4.2654	28.3	4.2728
Sr 216.596	122.869	ppb	0.5503	0.4	495.818
Ti 334.941	836.068	ppb	1.1291	0.1	91779.9
Tl 190.794	3.5487	ppb	8.3159	234.3	-6.6553
V 292.401	224.532	ppb	0.5580	0.2	2960.45
Zn 206.200	354.269	ppb	3.4805	1.0	198.450

680-161405-A-105-A (Samp) **12/16/2018, 12:55:59 AM** **Rack 3, Tube 39**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.4637	2.1363	1.6328
Al 308.215	97119.3	97057.9	97121.6
As 188.980	524.547	533.344	543.790
B 249.678	58.5671	59.3123	58.4255
Ba 389.178	1114.14	1115.22	1115.91
Be 313.042	5.2887	5.2781	5.2854
Ca 370.602	508604	508525	510535
Cd 226.502	6.4426	6.6516	6.8541
Co 228.615	91.3823	91.0298	90.8423
Cr 267.716	122.253	122.648	121.477
Cu 324.754	278.809	282.327	280.197
Fe 271.441	186351	186347	186079
K 766.491	11645.8	11643.8	11670.0
Mg 279.078	318095	318054	318558
Mn 257.610	13325.3	13357.7	13327.7
Mo 202.032	8.4743	9.4075	11.4282

Label	Replicates Concentration		
Na 330.237	1406.62	1573.25	1300.15
Ni 231.604	138.977	138.956	139.568
Pb 220.353	1950.29	1923.58	1927.25
Sb 206.834	-7.0225u	9.5321	12.0204
Se 196.026	20.7334	-5.6333	19.7601
Si 288.158	9963.63	9978.42	9977.49
Sn 189.925	71.6649	63.2417	70.5359
Sr 216.596	356.612	361.249	358.404
Ti 334.941	1144.73	1143.15	1142.58
Tl 190.794	-9.9285u	7.5629u	-3.3447u
V 292.401	244.880	244.627	243.100
Zn 206.200	1373.62	1370.13	1366.20

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.7443	ppb	0.3499	20.1	15.5996
Al 308.215	97099.6	ppb	36.1318	0.0	229155
As 188.980	533.894	ppb	9.6335	1.8	136.338
B 249.678	58.7683	ppb	0.4764	0.8	135.541
Ba 389.178	1115.09	ppb	0.8891	0.1	11002.1
Be 313.042	5.2841	ppb	0.0054	0.1	4196.37
Ca 370.602	509221	ppb	1138	0.2	1062508
Cd 226.502	6.6495	ppb	0.2058	3.1	248.375
Co 228.615	91.0848	ppb	0.2742	0.3	431.174
Cr 267.716	122.126	ppb	0.5956	0.5	2699.39
Cu 324.754	280.444	ppb	1.7720	0.6	10433.2
Fe 271.441	186259	ppb	155.839	0.1	139791
K 766.491	11653.2	ppb	14.5885	0.1	288584
Mg 279.078	318236	ppb	279.947	0.1	438458
Mn 257.610	13336.9	ppb	18.0776	0.1	1290966
Mo 202.032	9.7700	ppb	1.5099	15.5	20.2644
Na 330.237	1426.67	ppb	137.650	9.6	59.6846
Ni 231.604	139.167	ppb	0.3476	0.2	177.337
Pb 220.353	1933.71	ppb	14.4744	0.7	1013.05
Sb 206.834	4.8434	ppb	10.3511	213.7	9.9324
Se 196.026	11.6201	ppb	14.9498	128.7	2.7361
Si 288.158	9973.18	ppb	8.2821	0.1	47480.1
Sn 189.925	68.4808	ppb	4.5722	6.7	20.1558
Sr 216.596	358.755	ppb	2.3380	0.7	1418.58
Ti 334.941	1143.49	ppb	1.1123	0.1	126531
Tl 190.794	-1.9034	ppb	8.8343	464.1	-8.8846
V 292.401	244.202	ppb	0.9632	0.4	3240.46
Zn 206.200	1369.98	ppb	3.7089	0.3	768.525

680-161405-A-104-A (Samp) **12/16/2018, 1:00:43 AM** **Rack 3, Tube 40**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.8756	2.0600	2.5933
Al 308.215	88692.7	88721.8	88648.4
As 188.980	295.475	275.585	308.355
B 249.678	61.7875	62.9933	61.2777
Ba 389.178	803.438	803.320	805.173
Be 313.042	4.2009	4.1948	4.2079
Ca 370.602	265893	265699	265850

Label	Replicates Concentration		
Cd 226.502	5.7309	6.2302	5.9032
Co 228.615	48.8485	49.1121	49.6713
Cr 267.716	132.163	131.881	131.992
Cu 324.754	263.208	268.900	264.014
Fe 271.441	136482	136375	136280
K 766.491	11474.7	11487.7	11481.5
Mg 279.078	162669	162579	162496
Mn 257.610	6421.68	6421.47	6420.00
Mo 202.032	8.0294	7.0510	7.9360
Na 330.237	1814.00	1370.34	1204.56
Ni 231.604	130.970	132.675	127.385
Pb 220.353	1969.89	1973.82	1991.54
Sb 206.834	9.8838	4.0469	3.1188
Se 196.026	3.4689	23.4459	11.6245
Si 288.158	9571.46	9565.56	9565.39
Sn 189.925	45.9057	62.1920	52.7567
Sr 216.596	222.946	225.979	226.112
Ti 334.941	1050.29	1050.58	1048.76
Tl 190.794	6.9337u	2.4961u	2.5318u
V 292.401	178.361	177.610	178.200
Zn 206.200	1546.82	1546.12	1560.11

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.1763	ppb	0.3727	17.1	28.1214
Al 308.215	88687.6	ppb	36.9370	0.0	209314
As 188.980	293.139	ppb	16.5096	5.6	75.3508
B 249.678	62.0195	ppb	0.8810	1.4	206.372
Ba 389.178	803.977	ppb	1.0371	0.1	7848.94
Be 313.042	4.2012	ppb	0.0065	0.2	3279.55
Ca 370.602	265814	ppb	102.1	0.0	554564
Cd 226.502	5.9548	ppb	0.2536	4.3	200.346
Co 228.615	49.2106	ppb	0.4202	0.9	234.356
Cr 267.716	132.012	ppb	0.1420	0.1	2893.75
Cu 324.754	265.374	ppb	3.0797	1.2	9876.31
Fe 271.441	136379	ppb	101.175	0.1	102359
K 766.491	11481.3	ppb	6.5397	0.1	284330
Mg 279.078	162581	ppb	86.1611	0.1	224007
Mn 257.610	6421.05	ppb	0.9177	0.0	621645
Mo 202.032	7.6721	ppb	0.5399	7.0	16.6425
Na 330.237	1462.97	ppb	315.102	21.5	64.6124
Ni 231.604	130.343	ppb	2.6999	2.1	166.031
Pb 220.353	1978.41	ppb	11.5327	0.6	1035.75
Sb 206.834	5.6832	ppb	3.6673	64.5	9.8296
Se 196.026	12.8464	ppb	10.0444	78.2	2.1774
Si 288.158	9567.47	ppb	3.4604	0.0	45558.8
Sn 189.925	53.6181	ppb	8.1773	15.3	15.7364
Sr 216.596	225.012	ppb	1.7910	0.8	895.888
Ti 334.941	1049.88	ppb	0.9785	0.1	115744
Tl 190.794	3.9872	ppb	2.5518	64.0	-7.0469
V 292.401	178.057	ppb	0.3952	0.2	2361.95
Zn 206.200	1551.02	ppb	7.8826	0.5	871.017

Cont Calib Verif (CCV) **12/16/2018, 1:05:27 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	492.583	482.422	488.971
Al 308.215	9978.33	9977.96	9977.83
As 188.980	525.927	533.621	539.523
B 249.678	530.870	534.517	531.198
Ba 389.178	470.674	470.919	471.874
Be 313.042	542.900	543.066	542.729
Ca 370.602	10110	10120	10122
Cd 226.502	520.847	519.267	518.968
Co 228.615	509.900	508.388	508.802
Cr 267.716	503.174	502.800	501.542
Cu 324.754	510.050	502.588	505.898
Fe 271.441	10130.2	10159.2	10164.8
K 766.491	10137.3	10147.1	10128.2
Mg 279.078	10605.7	10612.6	10605.2
Mn 257.610	505.995	504.575	505.326
Mo 202.032	493.895	491.149	494.855
Na 330.237	11140.8	11380.0	10923.3
Ni 231.604	516.526	518.963	518.591
Pb 220.353	518.553	515.310	523.215
Sb 206.834	520.560	503.064	490.434
Se 196.026	545.527	537.075	544.034
Si 288.158	5017.00	5008.53	5014.38
Sn 189.925	504.635	504.657	506.875
Sr 216.596	501.742	502.960	502.688
Ti 334.941	494.518	494.598	494.868
Tl 190.794	488.908	495.659	489.659
V 292.401	499.367	498.539	498.219
Zn 206.200	1089.74	1080.51	1085.63

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	487.992	ppb	5.1507	1.1	16921.5	97.59839
Al 308.215	9978.04	ppb	0.2565	0.0	23707.9	99.78039
As 188.980	533.024	ppb	6.8178	1.3	135.644	106.60471
B 249.678	532.195	ppb	2.0175	0.4	3427.58	106.43898
Ba 389.178	471.156	ppb	0.6340	0.1	4472.25	94.23110
Be 313.042	542.898	ppb	0.1682	0.0	441809	108.57970
Ca 370.602	10118	ppb	6.443	0.1	21143	101.17556
Cd 226.502	519.694	ppb	1.0097	0.2	7923.48	103.93878
Co 228.615	509.030	ppb	0.7813	0.2	2357.76	101.80597
Cr 267.716	502.505	ppb	0.8547	0.2	10854.7	100.50105
Cu 324.754	506.179	ppb	3.7388	0.7	18589.0	101.23573
Fe 271.441	10151.4	ppb	18.5489	0.2	7666.74	101.46331
K 766.491	10137.5	ppb	9.4383	0.1	251081	101.37544
Mg 279.078	10607.8	ppb	4.0999	0.0	14631.7	106.07829
Mn 257.610	505.298	ppb	0.7102	0.1	48945.3	101.05968
Mo 202.032	493.300	ppb	1.9233	0.4	1027.38	98.65994
Na 330.237	11148.0	ppb	228.439	2.0	315.445	111.48026Q
Ni 231.604	518.027	ppb	1.3131	0.3	664.149	103.60532
Pb 220.353	519.026	ppb	3.9738	0.8	275.912	103.80518
Sb 206.834	504.686	ppb	15.1284	3.0	212.322	100.93718
Se 196.026	542.212	ppb	4.5113	0.8	97.3347	108.44237
Si 288.158	5013.30	ppb	4.3327	0.1	24138.6	100.26604

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	505.389	ppb	1.2873	0.3	150.069	101.07780
Sr 216.596	502.463	ppb	0.6393	0.1	1918.22	100.49262
Ti 334.941	494.662	ppb	0.1835	0.0	54296.9	98.93232
Tl 190.794	491.409	ppb	3.7000	0.8	131.282	98.28176
V 292.401	498.708	ppb	0.5920	0.1	6490.24	99.74165
Zn 206.200	1085.30	ppb	4.6220	0.4	610.553	108.52954

Cont Calib Blank (CCB) **12/16/2018, 1:10:09 AM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1999u	-0.1955u	0.6656
Al 308.215	7.2012	2.3850	8.3131
As 188.980	3.5180	-1.3412u	4.2197
B 249.678	2.7350	3.2030	2.6241
Ba 389.178	-0.1879u	1.4324	1.1603
Be 313.042	0.0667	0.0671	0.0522
Ca 370.602	9.437	10.25	3.557
Cd 226.502	-0.0292u	-0.0404u	0.0231
Co 228.615	-1.2269u	-0.8914u	-0.1071u
Cr 267.716	-0.4235u	-0.4400u	-0.2163u
Cu 324.754	1.4973	0.9506	0.8623
Fe 271.441	7.4675	9.9561	-1.7628u
K 766.491	4.1643	3.8885	2.1549
Mg 279.078	8.6939	0.4619	8.0899
Mn 257.610	0.1444	0.2303	0.1010
Mo 202.032	-0.5150u	1.3979	0.6896
Na 330.237	428.118	8.5235	147.218
Ni 231.604	1.9394	3.6446	-0.5259u
Pb 220.353	4.5028	2.9182	4.3371
Sb 206.834	9.3584	-6.3649u	-9.4438u
Se 196.026	-13.4036u	2.4293	-19.4174u
Si 288.158	5.5385	3.2123	4.1101
Sn 189.925	6.5288	6.5201	3.3876
Sr 216.596	1.2949	0.9398	-0.0314u
Ti 334.941	0.3347	0.1688	0.2721
Tl 190.794	8.4806	-12.2083u	-2.1843u
V 292.401	-0.2744u	0.2712	-0.2085u
Zn 206.200	0.8833	1.4298	4.4580

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0901	ppb	0.4984	553.5	-26.5016	0.09006
Al 308.215	5.9665	ppb	3.1510	52.8	169.063	5.96645
As 188.980	2.1322	ppb	3.0284	142.0	1.5031	2.13216
B 249.678	2.8540	ppb	0.3072	10.8	-48.1568	2.85403
Ba 389.178	0.8016	ppb	0.8677	108.2	-42.3786	0.80160
Be 313.042	0.0620	ppb	0.0085	13.7	-133.469	0.06199
Ca 370.602	7.748	ppb	3.652	47.1	43.63	7.74768
Cd 226.502	-0.0155	ppb	0.0339	218.5	5.6117	-0.01549
Co 228.615	-0.7418	ppb	0.5747	77.5	-10.9139	-0.74179
Cr 267.716	-0.3600	ppb	0.1247	34.6	11.9403	-0.35995
Cu 324.754	1.1034	ppb	0.3440	31.2	264.386	1.10337
Fe 271.441	5.2203	ppb	6.1742	118.3	21.5151	5.22026
K 766.491	3.4026	ppb	1.0892	32.0	330.581	3.40255

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	5.7485	ppb	4.5883	79.8	27.0371	5.74854
Mn 257.610	0.1586	ppb	0.0658	41.5	45.2640	0.15856
Mo 202.032	0.5242	ppb	0.9671	184.5	3.8049	0.52417
Na 330.237	194.620	ppb	213.776	109.8	50.2867	194.62016
Ni 231.604	1.6860	ppb	2.0967	124.4	0.6021	1.68604
Pb 220.353	3.9193	ppb	0.8709	22.2	8.1587	3.91935
Sb 206.834	-2.1501	ppb	10.0849	469.0	4.8283	-2.15006
Se 196.026	-10.1306	ppb	11.2851	111.4	-2.9954	-10.13060Z
Si 288.158	4.2869	ppb	1.1732	27.4	357.719	4.28693
Sn 189.925	5.4789	ppb	1.8110	33.1	1.4225	5.47886
Sr 216.596	0.7344	ppb	0.6866	93.5	8.3460	0.73444
Ti 334.941	0.2585	ppb	0.0838	32.4	-8.0768	0.25855
Tl 190.794	-1.9707	ppb	10.3461	525.0	-4.8964	-1.97066
V 292.401	-0.0706	ppb	0.2978	421.8	-3.1917	-0.07059
Zn 206.200	2.2570	ppb	1.9256	85.3	1.7979	2.25701

680-161405-A-127-A (Samp) **12/16/2018, 1:14:51 AM** **Rack 3, Tube 41**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.8589u	-1.5827u	-1.2638u
Al 308.215	174817	175078	174772
As 188.980	66.8936	56.2416	59.9919
B 249.678	52.1773	49.7571	51.5400
Ba 389.178	2314.72	2314.57	2313.00
Be 313.042	9.9858	9.9842	9.9489
Ca 370.602	44364	44361	44321
Cd 226.502	9.3529	9.6200	9.1044
Co 228.615	130.723	132.532	131.639
Cr 267.716	200.794	201.027	200.457
Cu 324.754	133.108	134.834	130.615
Fe 271.441	269554	269976	269242
K 766.491	11627.4	11649.0	11624.5
Mg 279.078	41125.1	41196.2	41070.6
Mn 257.610	29338.0x	29366.2x	29332.8x
Mo 202.032	11.8107	10.3693	11.5322
Na 330.237	132.034u	70.5916u	128.979u
Ni 231.604	199.549	200.767	194.192
Pb 220.353	151.089	160.793	148.093
Sb 206.834	5.0258	14.4955	2.4082
Se 196.026	-13.9834	9.4739	8.2972
Si 288.158	14777.1	14780.3	14736.6
Sn 189.925	14.2566	11.7160	15.4361
Sr 216.596	151.509	151.153	152.132
Ti 334.941	1398.85	1399.33	1396.62
Tl 190.794	20.8296	7.9672u	11.4189u
V 292.401	326.796	328.690	327.982
Zn 206.200	588.032	586.804	588.828

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.5685b	ppb	0.2978	19.0	-79.9496
Al 308.215	174889b	ppb	164.910	0.1	412608
As 188.980	61.0423b	ppb	5.4031	8.9	16.9120
B 249.678	51.1581b	ppb	1.2545	2.5	2.7760

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	2314.10b	ppb	0.9497	0.0	22203.4
Be 313.042	9.9730b	ppb	0.0209	0.2	7949.41
Ca 370.602	44349b	ppb	23.80	0.1	92591
Cd 226.502	9.3591b	ppb	0.2578	2.8	352.420
Co 228.615	131.632b	ppb	0.9044	0.7	624.168
Cr 267.716	200.759b	ppb	0.2864	0.1	4434.99
Cu 324.754	132.852b	ppb	2.1212	1.6	5098.38
Fe 271.441	269591b	ppb	368.488	0.1	202325
K 766.491	11633.7b	ppb	13.3982	0.1	288100
Mg 279.078	41130.7b	ppb	62.9580	0.2	56364.3
Mn 257.610	29345.7xb	ppb	18.0024	0.1	2837496
Mo 202.032	11.2374b	ppb	0.7646	6.8	22.0868
Na 330.237	110.535b	ppb	34.6256	31.3	21.6748
Ni 231.604	198.169b	ppb	3.4980	1.8	253.191
Pb 220.353	153.325b	ppb	6.6383	4.3	86.8685
Sb 206.834	7.3098b	ppb	6.3591	87.0	12.0380
Se 196.026	1.2626b	ppb	13.2165	1046.8	2.5634
Si 288.158	14764.7b	ppb	24.3457	0.2	70106.4
Sn 189.925	13.8029b	ppb	1.9011	13.8	3.8974
Sr 216.596	151.598b	ppb	0.4953	0.3	645.001
Ti 334.941	1398.27b	ppb	1.4492	0.1	153588
Tl 190.794	13.4052b	ppb	6.6573	49.7	-4.0024
V 292.401	327.823b	ppb	0.9573	0.3	4351.06
Zn 206.200	587.888b	ppb	1.0194	0.2	327.453

MB 680-550522/1-A (Samp) **12/16/2018, 1:19:34 AM** **Rack 3, Tube 42**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3916u	-1.1095u	0.3641
Al 308.215	11.6491	13.9517	15.4355
As 188.980	1.7737	2.1805	2.1036
B 249.678	1.5163	0.7876	0.8598
Ba 389.178	-0.2701u	0.0711	0.3590
Be 313.042	-0.0167u	-0.0098u	-0.0079u
Ca 370.602	48.63	58.03	57.44
Cd 226.502	-0.2023u	0.0678	-0.0155u
Co 228.615	-1.1798u	-1.3275u	-1.6310u
Cr 267.716	-0.1788u	-0.0324u	0.3346
Cu 324.754	1.8706	0.8066	1.1800
Fe 271.441	30.2915	18.8717	29.7278
K 766.491	15.5213	14.9922	14.5297
Mg 279.078	9.8792	7.2517	10.9078
Mn 257.610	0.6271	0.7127	0.6145
Mo 202.032	0.2360	1.1674	0.1102
Na 330.237	-117.007u	373.503	0.3779u
Ni 231.604	0.0675	0.2373	0.3233
Pb 220.353	6.4281	7.5596	3.3855
Sb 206.834	-8.5776u	-0.2487u	-4.9991u
Se 196.026	-11.4527u	-8.3953u	9.3943
Si 288.158	21.9344	19.7537	21.3895
Sn 189.925	9.9767	13.7093	12.9205
Sr 216.596	0.2171	1.1450	1.2170
Ti 334.941	0.7479	0.8741	0.7244

Label	Replicates Concentration		
Tl 190.794	-2.1926u	0.4480	-1.3432u
V 292.401	0.3743	-0.1339u	0.3041
Zn 206.200	2.1025	1.1845	2.9584

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3790	ppb	0.7369	194.4	-42.8008
Al 308.215	13.6788	ppb	1.9079	13.9	187.256
As 188.980	2.0193	ppb	0.2161	10.7	1.4746
B 249.678	1.0546	ppb	0.4015	38.1	-60.0248
Ba 389.178	0.0534	ppb	0.3149	590.3	-49.5297
Be 313.042	-0.0115	ppb	0.0047	40.7	-193.234
Ca 370.602	54.70	ppb	5.269	9.6	141.6
Cd 226.502	-0.0500	ppb	0.1383	276.7	5.1005
Co 228.615	-1.3795	ppb	0.2301	16.7	-13.8718
Cr 267.716	0.0412	ppb	0.2645	642.6	20.5901
Cu 324.754	1.2857	ppb	0.5398	42.0	270.996
Fe 271.441	26.2970	ppb	6.4367	24.5	37.2938
K 766.491	15.0144	ppb	0.4962	3.3	617.895
Mg 279.078	9.3462	ppb	1.8854	20.2	31.9886
Mn 257.610	0.6514	ppb	0.0534	8.2	92.9456
Mo 202.032	0.5046	ppb	0.5775	114.5	3.7638
Na 330.237	85.6247	ppb	256.126	299.1	47.6037
Ni 231.604	0.2094	ppb	0.1302	62.2	-1.2963
Pb 220.353	5.7910	ppb	2.1588	37.3	9.1332
Sb 206.834	-4.6084	ppb	4.1782	90.7	3.8168
Se 196.026	-3.4846	ppb	11.2577	323.1	-1.7890
Si 288.158	21.0259	ppb	1.1349	5.4	437.686
Sn 189.925	12.2021	ppb	1.9673	16.1	3.4216
Sr 216.596	0.8597	ppb	0.5577	64.9	8.8376
Ti 334.941	0.7821	ppb	0.0805	10.3	49.4016
Tl 190.794	-1.0293	ppb	1.3480	131.0	-4.6382
V 292.401	0.1815	ppb	0.2754	151.7	0.1308
Zn 206.200	2.0818	ppb	0.8871	42.6	1.6988

LCS 680-550522/2-A (Samp) **12/16/2018, 1:24:18 AM** **Rack 3, Tube 43**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	46.5408	45.1849	46.1400
Al 308.215	4696.46	4690.13	4700.63
As 188.980	92.5818	93.1179	95.3179
B 249.678	196.364	197.251	196.609
Ba 389.178	88.3146	88.0047	88.8060
Be 313.042	51.2321	51.1697	51.2152
Ca 370.602	4790	4792	4798
Cd 226.502	49.9326	49.6065	49.6319
Co 228.615	45.7685	46.7838	47.7531
Cr 267.716	96.9998	96.6520	97.1068
Cu 324.754	99.1222	97.3425	98.4453
Fe 271.441	4841.24	4832.48	4838.01
K 766.491	7589.35	7581.72	7590.39
Mg 279.078	4986.29	4963.72	4971.51
Mn 257.610	480.529	479.594	480.087
Mo 202.032	93.9283	95.2076	92.9591

Label	Replicates Concentration		
Na 330.237	5528.96	5294.46	5162.09
Ni 231.604	97.3309	100.371	101.181
Pb 220.353	496.366	494.280	488.423
Sb 206.834	43.2722	52.4496	45.6795
Se 196.026	98.5685	83.3052	91.7327
Si 288.158	13.9260	12.7577	8.6955
Sn 189.925	108.586	106.793	106.756
Sr 216.596	95.8927	95.0680	96.4913
Ti 334.941	93.8665	93.7236	93.7388
Tl 190.794	33.3309	31.4365	36.5429
V 292.401	93.8277	92.7606	92.9141
Zn 206.200	103.615	103.830	108.237

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	45.9552	ppb	0.6965	1.5	1566.62
Al 308.215	4695.74	ppb	5.2895	0.1	11233.1
As 188.980	93.6725	ppb	1.4499	1.5	24.6363
B 249.678	196.741	ppb	0.4578	0.2	1223.85
Ba 389.178	88.3751	ppb	0.4041	0.5	802.143
Be 313.042	51.2057	ppb	0.0323	0.1	41502.6
Ca 370.602	4793	ppb	4.335	0.1	10032
Cd 226.502	49.7237	ppb	0.1814	0.4	766.380
Co 228.615	46.7685	ppb	0.9924	2.1	209.894
Cr 267.716	96.9195	ppb	0.2378	0.2	2110.57
Cu 324.754	98.3033	ppb	0.8983	0.9	3791.51
Fe 271.441	4837.24	ppb	4.4282	0.1	3650.64
K 766.491	7587.15	ppb	4.7331	0.1	187977
Mg 279.078	4973.84	ppb	11.4667	0.2	6868.19
Mn 257.610	480.070	ppb	0.4676	0.1	46468.9
Mo 202.032	94.0317	ppb	1.1278	1.2	197.993
Na 330.237	5328.50	ppb	185.789	3.5	175.688
Ni 231.604	99.6276	ppb	2.0298	2.0	126.518
Pb 220.353	493.023	ppb	4.1180	0.8	262.694
Sb 206.834	47.1338	ppb	4.7584	10.1	24.8316
Se 196.026	91.2021	ppb	7.6455	8.4	15.4554
Si 288.158	11.7930	ppb	2.7454	23.3	419.244
Sn 189.925	107.378	ppb	1.0459	1.0	31.7222
Sr 216.596	95.8173	ppb	0.7146	0.7	370.936
Ti 334.941	93.7763	ppb	0.0785	0.1	10273.6
Tl 190.794	33.7701	ppb	2.5814	7.6	4.8940
V 292.401	93.1674	ppb	0.5769	0.6	1211.08
Zn 206.200	105.227	ppb	2.6089	2.5	59.5956

680-161405-A-29-A (Samp) **12/16/2018, 1:29:01 AM** **Rack 3, Tube 44**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0098u	-0.0852u	0.5201u
Al 308.215	124737	124796	125017
As 188.980	87.6855	88.6162	98.6050
B 249.678	55.7429	55.3590	54.2209
Ba 389.178	1146.51	1147.52	1152.03
Be 313.042	5.9976	6.0100	6.0229
Ca 370.602	30797	30786	30820

Label	Replicates Concentration		
Cd 226.502	3.9978	3.6145	3.6317
Co 228.615	69.7251	69.4639	71.2413
Cr 267.716	176.615	176.617	176.860
Cu 324.754	175.103	175.837	174.975
Fe 271.441	200366	200169	200129
K 766.491	15735.9	15706.6	15711.8
Mg 279.078	36503.9	36520.9	36566.8
Mn 257.610	6183.84	6177.88	6183.49
Mo 202.032	5.4544	4.4741	5.5012
Na 330.237	202.709u	467.735u	313.651u
Ni 231.604	171.429	169.945	172.142
Pb 220.353	645.747	647.128	657.449
Sb 206.834	-5.5239	-3.7613	12.7229
Se 196.026	19.6885	-13.0711u	6.4217
Si 288.158	17196.5	17168.4	17154.3
Sn 189.925	20.0243	28.5773	37.3539
Sr 216.596	125.481	127.055	124.610
Ti 334.941	1654.84	1652.64	1652.53
Tl 190.794	-4.0406u	-1.5042u	13.0079u
V 292.401	237.123	236.945	236.938
Zn 206.200	1664.52	1652.96	1667.56

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1482	ppb	0.3256	219.6	-55.3573
Al 308.215	124850	ppb	147.328	0.1	294599
As 188.980	91.6356	ppb	6.0536	6.6	24.5141
B 249.678	55.1076	ppb	0.7916	1.4	97.5244
Ba 389.178	1148.69	ppb	2.9397	0.3	11031.7
Be 313.042	6.0102	ppb	0.0127	0.2	4720.74
Ca 370.602	30801	ppb	17.24	0.1	64041
Cd 226.502	3.7480	ppb	0.2165	5.8	214.123
Co 228.615	70.1434	ppb	0.9597	1.4	338.775
Cr 267.716	176.697	ppb	0.1413	0.1	3864.06
Cu 324.754	175.305	ppb	0.4647	0.3	6623.41
Fe 271.441	200221	ppb	126.437	0.1	150267
K 766.491	15718.1	ppb	15.6049	0.1	389162
Mg 279.078	36530.5	ppb	32.5363	0.1	50276.7
Mn 257.610	6181.74	ppb	3.3439	0.1	598035
Mo 202.032	5.1432	ppb	0.5799	11.3	10.4495
Na 330.237	328.031	ppb	133.097	40.6	30.2458
Ni 231.604	171.172	ppb	1.1212	0.7	218.525
Pb 220.353	650.108	ppb	6.3947	1.0	344.104
Sb 206.834	1.1459	ppb	10.0646	878.3	8.7551
Se 196.026	4.3464	ppb	16.4781	379.1	0.8090
Si 288.158	17173.1	ppb	21.4947	0.1	81488.7
Sn 189.925	28.6518	ppb	8.6650	30.2	8.3127
Sr 216.596	125.715	ppb	1.2392	1.0	530.498
Ti 334.941	1653.34	ppb	1.2997	0.1	181571
Tl 190.794	2.4877	ppb	9.1986	369.8	-10.0620
V 292.401	237.002	ppb	0.1053	0.0	3149.09
Zn 206.200	1661.68	ppb	7.7060	0.5	932.378

680-161405-A-29-Asd (Samp) **12/16/2018, 1:33:45 AM** **Rack 3, Tube 45**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0427u	-0.6604u	-0.6536u
Al 308.215	24581.7	24518.1	24514.7
As 188.980	17.7244	25.5948	18.6048
B 249.678	12.7998	11.5603	12.6332
Ba 389.178	228.770	229.563	228.061
Be 313.042	1.1368	1.1416	1.1310
Ca 370.602	6143	6133	6129
Cd 226.502	0.9171	0.7131	0.6828
Co 228.615	14.0718	12.7559	14.3748
Cr 267.716	34.9748	34.6275	35.0587
Cu 324.754	35.3535	35.6272	35.1031
Fe 271.441	40339.5	40327.9	40396.7
K 766.491	2966.92	2962.47	2966.80
Mg 279.078	7302.28	7303.56	7297.08
Mn 257.610	1261.00	1260.09	1260.75
Mo 202.032	0.2461u	0.7985	1.0074
Na 330.237	357.983	-4.8492u	5.3393u
Ni 231.604	36.7864	36.0333	33.6837
Pb 220.353	128.730	137.499	129.305
Sb 206.834	10.6716	2.3439	-13.0724u
Se 196.026	-11.4151u	-4.9082u	-1.4989u
Si 288.158	3452.15	3437.23	3451.16
Sn 189.925	7.0231	0.5589	1.3415
Sr 216.596	26.2618	24.3195	27.3865
Ti 334.941	329.318	329.556	329.822
Tl 190.794	1.0028u	2.5417u	-0.3682u
V 292.401	47.3599	47.6666	47.1773
Zn 206.200	341.022	340.087	330.828

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4238	ppb	0.4040	95.3	-50.5382
Al 308.215	24538.2	ppb	37.7234	0.2	58025.3
As 188.980	20.6414	ppb	4.3124	20.9	6.2600
B 249.678	12.3311	ppb	0.6727	5.5	-25.7382
Ba 389.178	228.798	ppb	0.7510	0.3	2157.39
Be 313.042	1.1365	ppb	0.0053	0.5	743.649
Ca 370.602	6135	ppb	7.395	0.1	12777
Cd 226.502	0.7710	ppb	0.1274	16.5	48.0325
Co 228.615	13.7342	ppb	0.8606	6.3	60.4152
Cr 267.716	34.8870	ppb	0.2286	0.7	778.894
Cu 324.754	35.3612	ppb	0.2621	0.7	1515.13
Fe 271.441	40354.7	ppb	36.8449	0.1	30300.4
K 766.491	2965.40	ppb	2.5376	0.1	73619.8
Mg 279.078	7300.97	ppb	3.4306	0.0	10063.4
Mn 257.610	1260.61	ppb	0.4721	0.0	121977
Mo 202.032	0.6840	ppb	0.3934	57.5	3.5419
Na 330.237	119.491	ppb	206.603	172.9	43.7433
Ni 231.604	35.5011	ppb	1.6184	4.6	44.0807
Pb 220.353	131.845	ppb	4.9052	3.7	74.6734
Sb 206.834	-0.0190	ppb	12.0470	63473.8	6.2278
Se 196.026	-5.9407	ppb	5.0381	84.8	-1.9964
Si 288.158	3446.85	ppb	8.3418	0.2	16625.3

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	2.9745	ppb	3.5280	118.6	0.6778
Sr 216.596	25.9893	ppb	1.5516	6.0	113.836
Ti 334.941	329.565	ppb	0.2521	0.1	36164.1
Tl 190.794	1.0588	ppb	1.4558	137.5	-5.3462
V 292.401	47.4012	ppb	0.2473	0.5	628.122
Zn 206.200	337.312	ppb	5.6350	1.7	189.693

680-161405-A-29-Apds (Samp) **12/16/2018, 1:38:28 AM** **Rack 3, Tube 46**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.1684	52.7993	52.5088
Al 308.215	127547	127685	127794
As 188.980	199.515	189.745	188.962
B 249.678	266.051	266.922	267.185
Ba 389.178	1215.81	1219.51	1218.68
Be 313.042	61.0622	61.1466	61.1824
Ca 370.602	35127	35259	35267
Cd 226.502	56.1058	56.7401	56.3247
Co 228.615	120.011	120.087	122.210
Cr 267.716	276.087	276.693	276.992
Cu 324.754	279.564	279.494	277.261
Fe 271.441	200242	200574	200734
K 766.491	24155.9	24121.8	24146.6
Mg 279.078	41079.0	41137.1	41167.5
Mn 257.610	6526.62	6546.10	6539.15
Mo 202.032	106.844	108.333	107.400
Na 330.237	6349.36	6019.63	5940.53
Ni 231.604	270.219	272.131	269.951
Pb 220.353	1143.71	1134.87	1143.09
Sb 206.834	50.6084	51.2456	55.9953
Se 196.026	109.830	125.119	121.938
Si 288.158	16775.0	16813.4	16825.5
Sn 189.925	132.272	120.662	123.397
Sr 216.596	222.338	221.815	223.076
Ti 334.941	1713.45	1716.28	1717.66
Tl 190.794	30.0628	51.7555	25.5644
V 292.401	331.600	332.816	332.255
Zn 206.200	1742.31	1736.93	1747.36

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.4922	ppb	0.3158	0.6	1763.54
Al 308.215	127675	ppb	123.856	0.1	301265
As 188.980	192.740	ppb	5.8796	3.1	50.0556
B 249.678	266.719	ppb	0.5939	0.2	1490.67
Ba 389.178	1218.00	ppb	1.9437	0.2	11700.0
Be 313.042	61.1304	ppb	0.0617	0.1	49593.7
Ca 370.602	35218	ppb	78.67	0.2	73266
Cd 226.502	56.3902	ppb	0.3222	0.6	1015.74
Co 228.615	120.769	ppb	1.2483	1.0	573.585
Cr 267.716	276.591	ppb	0.4607	0.2	6018.29
Cu 324.754	278.773	ppb	1.3097	0.5	10377.0
Fe 271.441	200517	ppb	250.909	0.1	150492
K 766.491	24141.4	ppb	17.6504	0.1	597582

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	41127.9	ppb	44.9942	0.1	56608.6
Mn 257.610	6537.29	ppb	9.8720	0.2	632430
Mo 202.032	107.526	ppb	0.7528	0.7	223.141
Na 330.237	6103.17	ppb	216.842	3.6	171.887
Ni 231.604	270.767	ppb	1.1889	0.4	346.563
Pb 220.353	1140.56	ppb	4.9346	0.4	599.339
Sb 206.834	52.6164	ppb	2.9435	5.6	29.5614
Se 196.026	118.962	ppb	8.0675	6.8	21.6458
Si 288.158	16804.6	ppb	26.3448	0.2	79774.5
Sn 189.925	125.444	ppb	6.0697	4.8	37.0938
Sr 216.596	222.410	ppb	0.6334	0.3	898.124
Ti 334.941	1715.79	ppb	2.1455	0.1	188442
Tl 190.794	35.7942	ppb	14.0046	39.1	-0.7946
V 292.401	332.224	ppb	0.6085	0.2	4387.61
Zn 206.200	1742.20	ppb	5.2145	0.3	977.606

680-161405-A-29-B MS (Samp) **12/16/2018, 1:43:12 AM** **Rack 3, Tube 47**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	46.8539	46.7704	46.5995
Al 308.215	137397	137436	137672
As 188.980	267.288	281.685	267.350
B 249.678	412.186	411.915	411.784
Ba 389.178	1282.96	1279.05	1280.51
Be 313.042	107.632	107.539	107.625
Ca 370.602	37581	37619	37652
Cd 226.502	102.655	101.218	101.894
Co 228.615	212.204	213.778	214.719
Cr 267.716	363.442	362.856	363.465
Cu 324.754	341.648	342.449	341.894
Fe 271.441	217154	216532	217022
K 766.491	29695.6	29701.6	29789.3
Mg 279.078	46238.5	46253.1	46270.6
Mn 257.610	8698.03	8694.49	8692.31
Mo 202.032	187.933	190.336	187.529
Na 330.237	10264.2	10921.7	10641.5
Ni 231.604	372.701	374.690	378.031
Pb 220.353	1362.04	1358.65	1341.78
Sb 206.834	75.1597	62.9680	72.5136
Se 196.026	206.850	186.903	181.674
Si 288.158	17257.4	17236.2	17274.4
Sn 189.925	215.304	201.416	212.981
Sr 216.596	303.887	305.929	308.346
Ti 334.941	2030.53	2026.57	2028.39
Tl 190.794	79.5659	79.4414	77.4200
V 292.401	450.647	449.777	451.553
Zn 206.200	1507.66	1503.90	1506.44

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	46.7413	ppb	0.1297	0.3	1564.35
Al 308.215	137502	ppb	148.990	0.1	324444
As 188.980	272.108	ppb	8.2943	3.0	70.1367
B 249.678	411.962	ppb	0.2049	0.0	2430.93

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1280.84	ppb	1.9788	0.2	12311.2
Be 313.042	107.598	ppb	0.0520	0.0	87424.0
Ca 370.602	37617	ppb	35.14	0.1	78287
Cd 226.502	101.922	ppb	0.7191	0.7	1721.03
Co 228.615	213.567	ppb	1.2709	0.6	1007.23
Cr 267.716	363.254	ppb	0.3453	0.1	7892.69
Cu 324.754	341.997	ppb	0.4107	0.1	12674.1
Fe 271.441	216903	ppb	328.014	0.2	162794
K 766.491	29728.8	ppb	52.4468	0.2	735832
Mg 279.078	46254.1	ppb	16.0955	0.0	63649.0
Mn 257.610	8694.94	ppb	2.8860	0.0	841065
Mo 202.032	188.599	ppb	1.5174	0.8	391.324
Na 330.237	10609.1	ppb	329.911	3.1	281.469
Ni 231.604	375.141	ppb	2.6937	0.7	480.705
Pb 220.353	1354.16	ppb	10.8507	0.8	710.525
Sb 206.834	70.2137	ppb	6.4130	9.1	36.6470
Se 196.026	191.809	ppb	13.2857	6.9	35.1138
Si 288.158	17256.0	ppb	19.1377	0.1	81938.5
Sn 189.925	209.900	ppb	7.4388	3.5	62.2069
Sr 216.596	306.054	ppb	2.2319	0.7	1219.73
Ti 334.941	2028.50	ppb	1.9818	0.1	222784
Tl 190.794	78.8091	ppb	1.2046	1.5	11.0560
V 292.401	450.659	ppb	0.8878	0.2	5936.71
Zn 206.200	1506.00	ppb	1.9164	0.1	844.481

680-161405-A-29-C MS (Samp) **12/16/2018, 1:47:55 AM** **Rack 3, Tube 48**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	47.7479	48.2939	47.7938
Al 308.215	144335	144435	144137
As 188.980	358.929	350.859	360.278
B 249.678	417.232	419.824	418.114
Ba 389.178	1588.19	1587.11	1585.89
Be 313.042	109.635	109.851	109.754
Ca 370.602	44960	44934	44878
Cd 226.502	107.056	106.840	106.731
Co 228.615	172.649	172.826	173.033
Cr 267.716	380.026	380.355	380.785
Cu 324.754	422.688	424.283	423.226
Fe 271.441	210435	210637	210774
K 766.491	30390.5	30360.3	30352.3
Mg 279.078	46381.3	46509.8	46420.6
Mn 257.610	10041.6	10082.4	10064.3
Mo 202.032	190.228	190.101	188.189
Na 330.237	11094.6	11288.7	10991.9
Ni 231.604	366.465	371.119	368.791
Pb 220.353	2110.98	2114.84	2115.40
Sb 206.834	60.7591	78.2882	50.2677
Se 196.026	200.452	212.589	194.551
Si 288.158	19639.4	19690.2	19687.8
Sn 189.925	231.201	224.271	212.472
Sr 216.596	342.446	341.925	341.000
Ti 334.941	1789.64	1793.67	1793.48

Label	Replicates Concentration		
Tl 190.794	77.6464	77.6084	79.2395
V 292.401	435.429	432.673	436.182
Zn 206.200	3299.43	3321.33	3302.75

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	47.9452	ppb	0.3029	0.6	1610.55
Al 308.215	144302	ppb	151.470	0.1	340481
As 188.980	356.689	ppb	5.0933	1.4	91.5113
B 249.678	418.390	ppb	1.3180	0.3	2479.49
Ba 389.178	1587.07	ppb	1.1513	0.1	15238.8
Be 313.042	109.747	ppb	0.1083	0.1	89173.7
Ca 370.602	44924	ppb	41.96	0.1	93567
Cd 226.502	106.876	ppb	0.1653	0.2	1792.24
Co 228.615	172.836	ppb	0.1925	0.1	815.691
Cr 267.716	380.389	ppb	0.3809	0.1	8263.92
Cu 324.754	423.399	ppb	0.8117	0.2	15624.9
Fe 271.441	210616	ppb	170.742	0.1	158073
K 766.491	30367.7	ppb	20.1545	0.1	751640
Mg 279.078	46437.2	ppb	65.8820	0.1	63885.8
Mn 257.610	10062.8	ppb	20.4155	0.2	973292
Mo 202.032	189.506	ppb	1.1425	0.6	393.302
Na 330.237	11125.1	ppb	150.767	1.4	290.492
Ni 231.604	368.792	ppb	2.3269	0.6	472.584
Pb 220.353	2113.74	ppb	2.4054	0.1	1105.94
Sb 206.834	63.1050	ppb	14.1567	22.4	33.6959
Se 196.026	202.531	ppb	9.1969	4.5	37.1646
Si 288.158	19672.5	ppb	28.6538	0.1	93336.0
Sn 189.925	222.648	ppb	9.4691	4.3	65.9975
Sr 216.596	341.790	ppb	0.7323	0.2	1354.97
Ti 334.941	1792.26	ppb	2.2733	0.1	196854
Tl 190.794	78.1648	ppb	0.9309	1.2	11.3933
V 292.401	434.761	ppb	1.8469	0.4	5725.37
Zn 206.200	3307.83	ppb	11.8027	0.4	1858.03

680-161405-A-67-A (Samp) **12/16/2018, 1:52:38 AM** **Rack 3, Tube 49**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5400	0.4170u	0.3991u
Al 308.215	143685	143520	143523
As 188.980	391.841	384.318	375.720
B 249.678	65.4268	64.2790	63.7057
Ba 389.178	1621.93	1617.65	1619.04
Be 313.042	8.6577	8.7065	8.6853
Ca 370.602	37364	37283	37293
Cd 226.502	8.6993	8.9968	8.5800
Co 228.615	92.5469	93.6239	93.8032
Cr 267.716	184.445	184.358	183.842
Cu 324.754	354.841	354.137	355.216
Fe 271.441	224201	224092	223765
K 766.491	15025.0	15055.4	15056.2
Mg 279.078	38383.0	38313.5	38253.5
Mn 257.610	14656.9	14655.3	14637.6
Mo 202.032	13.3964	11.3658	13.0428

Label	Replicates Concentration		
Na 330.237	431.467u	597.475u	549.742u
Ni 231.604	190.074	194.755	198.879
Pb 220.353	1559.26	1554.10	1554.08
Sb 206.834	13.2297	6.5222	6.4375
Se 196.026	15.9862	-13.1647u	-8.4046
Si 288.158	18127.6	18112.8	18118.4
Sn 189.925	52.3741	43.9643	43.0550
Sr 216.596	162.968	163.479	163.145
Ti 334.941	1536.91	1535.50	1534.68
Tl 190.794	10.4983u	0.4013u	1.4734u
V 292.401	284.662	285.553	283.425
Zn 206.200	1811.86	1806.35	1793.45

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4521	ppb	0.0767	17.0	-31.7267
Al 308.215	143576	ppb	94.3482	0.1	338761
As 188.980	383.960	ppb	8.0666	2.1	98.4871
B 249.678	64.4705	ppb	0.8764	1.4	135.553
Ba 389.178	1619.54	ppb	2.1864	0.1	15544.1
Be 313.042	8.6832	ppb	0.0245	0.3	6898.05
Ca 370.602	37313	ppb	44.08	0.1	77735
Cd 226.502	8.7587	ppb	0.2147	2.5	308.662
Co 228.615	93.3247	ppb	0.6795	0.7	446.059
Cr 267.716	184.215	ppb	0.3258	0.2	4044.99
Cu 324.754	354.731	ppb	0.5478	0.2	13135.1
Fe 271.441	224019	ppb	226.729	0.1	168126
K 766.491	15045.5	ppb	17.7525	0.1	372521
Mg 279.078	38316.7	ppb	64.7923	0.2	52646.1
Mn 257.610	14649.9	ppb	10.7033	0.1	1416725
Mo 202.032	12.6017	ppb	1.0848	8.6	25.5901
Na 330.237	526.228	ppb	85.4658	16.2	32.7776
Ni 231.604	194.569	ppb	4.4051	2.3	248.596
Pb 220.353	1555.82	ppb	2.9864	0.2	816.016
Sb 206.834	8.7298	ppb	3.8973	44.6	12.1033
Se 196.026	-1.8610	ppb	15.6384	840.3	0.5236
Si 288.158	18119.6	ppb	7.4612	0.0	85953.9
Sn 189.925	46.4644	ppb	5.1381	11.1	13.6092
Sr 216.596	163.197	ppb	0.2598	0.2	678.970
Ti 334.941	1535.70	ppb	1.1237	0.1	168664
Tl 190.794	4.1244	ppb	5.5460	134.5	-8.4264
V 292.401	284.547	ppb	1.0689	0.4	3775.68
Zn 206.200	1803.88	ppb	9.4494	0.5	1012.04

680-161405-A-21-A (Samp) **12/16/2018, 1:57:22 AM** **Rack 3, Tube 50**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.0954	2.1340	1.7161
Al 308.215	108090	108080	108235
As 188.980	125.495	122.499	133.255
B 249.678	51.5964	52.1833	53.9784
Ba 389.178	961.338	955.867	959.380
Be 313.042	5.4567	5.4574	5.4728
Ca 370.602	34288	34299	34303

Label	Replicates Concentration		
Cd 226.502	4.8444	5.1262	4.8376
Co 228.615	53.7905	51.3680	52.2349
Cr 267.716	152.700	153.061	152.664
Cu 324.754	239.827	238.765	238.136
Fe 271.441	160963	160825	161013
K 766.491	12357.5	12370.8	12356.8
Mg 279.078	30646.1	30680.8	30634.1
Mn 257.610	3808.21	3802.93	3810.70
Mo 202.032	4.5751	6.4809	5.3626
Na 330.237	594.443u	644.587u	542.322u
Ni 231.604	136.346	132.854	140.720
Pb 220.353	2095.41	2104.15	2104.57
Sb 206.834	10.5471	6.6509	21.9796
Se 196.026	15.4158	21.4977	-4.2341
Si 288.158	15188.9	15177.3	15202.8
Sn 189.925	87.8664	94.0320	90.8366
Sr 216.596	134.904	133.628	134.487
Ti 334.941	1252.62	1252.06	1254.28
Tl 190.794	-4.5015u	16.6031u	4.2321u
V 292.401	198.908	199.043	200.857
Zn 206.200	2288.05	2289.90	2285.58

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.6485	ppb	0.5226	31.7	0.3541
Al 308.215	108135	ppb	86.8362	0.1	255177
As 188.980	127.083	ppb	5.5510	4.4	33.4031
B 249.678	52.5860	ppb	1.2410	2.4	119.843
Ba 389.178	958.862	ppb	2.7721	0.3	9198.85
Be 313.042	5.4623	ppb	0.0091	0.2	4274.39
Ca 370.602	34297	ppb	7.884	0.0	71363
Cd 226.502	4.9361	ppb	0.1647	3.3	202.945
Co 228.615	52.4645	ppb	1.2274	2.3	251.949
Cr 267.716	152.808	ppb	0.2194	0.1	3339.87
Cu 324.754	238.909	ppb	0.8548	0.4	8921.74
Fe 271.441	160934	ppb	97.3705	0.1	120785
K 766.491	12361.7	ppb	7.9117	0.1	306113
Mg 279.078	30653.7	ppb	24.2607	0.1	42205.2
Mn 257.610	3807.28	ppb	3.9647	0.1	368412
Mo 202.032	5.4729	ppb	0.9577	17.5	11.7116
Na 330.237	593.784	ppb	51.1354	8.6	39.0748
Ni 231.604	136.640	ppb	3.9412	2.9	174.130
Pb 220.353	2101.38	ppb	5.1748	0.2	1099.43
Sb 206.834	13.0592	ppb	7.9671	61.0	13.2091
Se 196.026	10.8932	ppb	13.4489	123.5	1.6611
Si 288.158	15189.7	ppb	12.7876	0.1	72111.9
Sn 189.925	90.9117	ppb	3.0835	3.4	26.8253
Sr 216.596	134.340	ppb	0.6509	0.5	554.777
Ti 334.941	1252.99	ppb	1.1546	0.1	137606
Tl 190.794	5.4446	ppb	10.6044	194.8	-8.2816
V 292.401	199.603	ppb	1.0882	0.5	2649.31
Zn 206.200	2287.84	ppb	2.1657	0.1	1285.12

Cont Calib Verif (CCV) **12/16/2018, 2:02:06 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	493.059	491.895	490.835
Al 308.215	9998.63	9988.25	9973.72
As 188.980	546.554	544.339	533.574
B 249.678	534.729	536.242	536.737
Ba 389.178	468.499	468.606	468.207
Be 313.042	547.820	548.284	547.776
Ca 370.602	10127	10129	10128
Cd 226.502	523.012	523.733	523.605
Co 228.615	510.020	508.187	509.486
Cr 267.716	505.233	504.872	504.278
Cu 324.754	510.339	508.908	504.813
Fe 271.441	10172.9	10179.4	10193.0
K 766.491	10171.4	10154.4	10144.9
Mg 279.078	10644.3	10660.6	10652.3
Mn 257.610	505.871	506.898	507.638
Mo 202.032	492.711	488.962	490.535
Na 330.237	10960.5	11085.0	10969.6
Ni 231.604	513.267	517.214	522.386
Pb 220.353	522.940	506.190	518.583
Sb 206.834	504.141	502.956	510.015
Se 196.026	536.165	549.063	532.474
Si 288.158	5048.41	5061.61	5060.07
Sn 189.925	514.088	510.641	515.673
Sr 216.596	505.161	501.088	503.995
Ti 334.941	495.589	496.522	496.348
Tl 190.794	501.620	507.461	510.778
V 292.401	496.592	497.964	498.214
Zn 206.200	1087.35	1099.37	1092.43

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.929	ppb	1.1123	0.2	17058.3	98.38588
Al 308.215	9986.87	ppb	12.5134	0.1	23728.6	99.86866
As 188.980	541.489	ppb	6.9433	1.3	137.785	108.29785
B 249.678	535.903	ppb	1.0459	0.2	3451.97	107.18056
Ba 389.178	468.438	ppb	0.2065	0.0	4446.29	93.68752
Be 313.042	547.960	ppb	0.2815	0.1	445930	109.59208
Ca 370.602	10128	ppb	0.7486	0.0	21165	101.27968
Cd 226.502	523.450	ppb	0.3848	0.1	7980.67	104.69006
Co 228.615	509.231	ppb	0.9431	0.2	2358.73	101.84618
Cr 267.716	504.795	ppb	0.4820	0.1	10904.1	100.95891
Cu 324.754	508.020	ppb	2.8678	0.6	18655.8	101.60402
Fe 271.441	10181.8	ppb	10.3017	0.1	7689.52	101.76672
K 766.491	10156.9	ppb	13.4301	0.1	251561	101.56911
Mg 279.078	10652.4	ppb	8.1132	0.1	14693.1	106.52403
Mn 257.610	506.802	ppb	0.8873	0.2	49090.9	101.36043
Mo 202.032	490.736	ppb	1.8824	0.4	1022.05	98.14720
Na 330.237	11005.0	ppb	69.3790	0.6	311.904	110.05013Q
Ni 231.604	517.622	ppb	4.5734	0.9	663.629	103.52444
Pb 220.353	515.904	ppb	8.6903	1.7	274.288	103.18089
Sb 206.834	505.704	ppb	3.7801	0.7	212.769	101.14081
Se 196.026	539.234	ppb	8.7098	1.6	96.7944	107.84680
Si 288.158	5056.70	ppb	7.2162	0.1	24343.3	101.13393

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	513.467	ppb	2.5727	0.5	152.471	102.69350
Sr 216.596	503.415	ppb	2.0978	0.4	1921.89	100.68300
Ti 334.941	496.153	ppb	0.4961	0.1	54460.8	99.23067
Tl 190.794	506.620	ppb	4.6365	0.9	135.473	101.32391
V 292.401	497.590	ppb	0.8732	0.2	6475.67	99.51800
Zn 206.200	1093.05	ppb	6.0367	0.6	614.912	109.30493

Cont Calib Blank (CCB) **12/16/2018, 2:06:48 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2363u	-0.0273u	-0.2120u
Al 308.215	3.9952	4.2898	7.1169
As 188.980	-2.1452u	5.3433	-1.9978u
B 249.678	3.4781	3.4925	4.2767
Ba 389.178	-2.3226u	-0.6230u	-1.2636u
Be 313.042	0.0843	0.0960	0.1135
Ca 370.602	10.17	13.04	6.219
Cd 226.502	0.1258	0.6635	0.2277
Co 228.615	-1.5542u	-1.0660u	-0.8499u
Cr 267.716	-0.2659u	-0.2189u	-0.1693u
Cu 324.754	0.6937	1.2314	0.5240
Fe 271.441	12.9556	9.6272	14.5817
K 766.491	5.7328	5.0665	5.1902
Mg 279.078	10.4119	9.2130	5.9125
Mn 257.610	0.3513	0.4010	0.4433
Mo 202.032	-0.4845u	1.6573	1.2176
Na 330.237	109.761	-37.4321u	136.294
Ni 231.604	3.5555	2.1582	1.8505
Pb 220.353	5.7852	-2.4851u	-4.6718u
Sb 206.834	3.6723	-4.7268u	4.3635
Se 196.026	3.3661	-13.5409u	-8.7964u
Si 288.158	5.1144	6.6652	6.2273
Sn 189.925	-2.2313u	-2.3949u	1.7638
Sr 216.596	-0.2936u	0.7302	2.0608
Ti 334.941	0.3800	0.3319	0.4130
Tl 190.794	0.5918	-1.5994u	-5.1248u
V 292.401	0.1180	1.1688	-0.0074u
Zn 206.200	-2.3181u	1.0611	3.0137

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1585	ppb	0.1143	72.1	-35.1348	-0.15854
Al 308.215	5.1340	ppb	1.7236	33.6	167.118	5.13398
As 188.980	0.4001	ppb	4.2816	1070.2	1.0650	0.40008
B 249.678	3.7491	ppb	0.4569	12.2	-42.2612	3.74911
Ba 389.178	-1.4031	ppb	0.8584	61.2	-63.4659	-1.40307
Be 313.042	0.0980	ppb	0.0147	15.0	-104.165	0.09797
Ca 370.602	9.809	ppb	3.425	34.9	47.94	9.80921
Cd 226.502	0.3390	ppb	0.2856	84.2	11.0061	0.33901
Co 228.615	-1.1567	ppb	0.3608	31.2	-12.8414	-1.15670
Cr 267.716	-0.2180	ppb	0.0483	22.2	14.9999	-0.21803
Cu 324.754	0.8164	ppb	0.3693	45.2	253.976	0.81639
Fe 271.441	12.3882	ppb	2.5255	20.4	26.8625	12.38815
K 766.491	5.3299	ppb	0.3544	6.7	378.268	5.32986

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	8.5125	ppb	2.3301	27.4	30.8439	8.51246
Mn 257.610	0.3985	ppb	0.0460	11.6	68.4678	0.39852
Mo 202.032	0.7968	ppb	1.1312	142.0	4.3712	0.79677
Na 330.237	69.5411	ppb	93.5865	134.6	47.2142	69.54115
Ni 231.604	2.5214	ppb	0.9087	36.0	1.6771	2.52138
Pb 220.353	-0.4572	ppb	5.5156	1206.3	5.8808	-0.45723
Sb 206.834	1.1030	ppb	5.0606	458.8	6.1729	1.10301
Se 196.026	-6.3237	ppb	8.7205	137.9	-2.3044	-6.32373
Si 288.158	6.0023	ppb	0.7995	13.3	365.781	6.00231
Sn 189.925	-0.9541	ppb	2.3552	246.8	-0.4903	-0.95414
Sr 216.596	0.8325	ppb	1.1806	141.8	8.7163	0.83247
Ti 334.941	0.3750	ppb	0.0408	10.9	4.7038	0.37496
Tl 190.794	-2.0441	ppb	2.8842	141.1	-4.9171	-2.04412
V 292.401	0.4265	ppb	0.6459	151.5	3.3161	0.42647
Zn 206.200	0.5856	ppb	2.6975	460.7	0.8577	0.58559

680-161405-A-22-A (Samp) **12/16/2018, 2:11:30 AM** **Rack 3, Tube 51**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.9347	1.2752	1.1409
Al 308.215	109162	109388	109242
As 188.980	231.602	245.485	246.107
B 249.678	50.8078	52.0436	50.3268
Ba 389.178	1256.48	1257.38	1256.56
Be 313.042	6.2840	6.2690	6.2587
Ca 370.602	41882	41893	41691
Cd 226.502	7.0366	7.1401	7.5029
Co 228.615	60.4265	61.5342	59.4823
Cr 267.716	151.098	151.583	151.512
Cu 324.754	263.748	260.752	260.645
Fe 271.441	187256	187467	187325
K 766.491	12336.5	12350.5	12347.4
Mg 279.078	30671.4	30713.3	30666.9
Mn 257.610	5408.51	5416.30	5408.82
Mo 202.032	7.6270	8.1150	8.1671
Na 330.237	865.613u	587.990u	242.689u
Ni 231.604	147.015	144.230	146.955
Pb 220.353	2868.43	2864.70	2843.16
Sb 206.834	-3.6472	12.6149	3.9897
Se 196.026	7.2540	-11.0998u	8.1043
Si 288.158	14956.9	14974.1	14959.2
Sn 189.925	449.767	452.712	446.886
Sr 216.596	184.619	182.870	181.782
Ti 334.941	1196.81	1198.10	1196.00
Tl 190.794	9.4203u	11.2540u	1.6534u
V 292.401	217.231	216.851	217.041
Zn 206.200	2393.17	2397.47	2387.49

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1169	ppb	0.1715	15.4	-20.2889
Al 308.215	109264	ppb	114.774	0.1	257842
As 188.980	241.065	ppb	8.2006	3.4	62.2815
B 249.678	51.0594	ppb	0.8856	1.7	83.6278

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1256.81	ppb	0.4968	0.0	12056.2
Be 313.042	6.2706	ppb	0.0127	0.2	4933.34
Ca 370.602	41822	ppb	113.7	0.3	87039
Cd 226.502	7.2265	ppb	0.2449	3.4	257.104
Co 228.615	60.4810	ppb	1.0271	1.7	289.321
Cr 267.716	151.398	ppb	0.2617	0.2	3315.32
Cu 324.754	261.715	ppb	1.7616	0.7	9754.41
Fe 271.441	187349	ppb	107.764	0.1	140607
K 766.491	12344.8	ppb	7.3584	0.1	305697
Mg 279.078	30683.8	ppb	25.6189	0.1	42229.8
Mn 257.610	5411.21	ppb	4.4095	0.1	523497
Mo 202.032	7.9697	ppb	0.2979	3.7	16.5129
Na 330.237	565.431	ppb	312.074	55.2	35.8510
Ni 231.604	146.067	ppb	1.5907	1.1	186.246
Pb 220.353	2858.76	ppb	13.6439	0.5	1493.88
Sb 206.834	4.3192	ppb	8.1361	188.4	9.8686
Se 196.026	1.4195	ppb	10.8504	764.4	0.1682
Si 288.158	14963.4	ppb	9.3575	0.1	71071.8
Sn 189.925	449.789	ppb	2.9131	0.6	133.535
Sr 216.596	183.090	ppb	1.4315	0.8	747.131
Ti 334.941	1196.97	ppb	1.0607	0.1	131456
Tl 190.794	7.4426	ppb	5.0967	68.5	-8.3955
V 292.401	217.041	ppb	0.1898	0.1	2882.89
Zn 206.200	2392.71	ppb	5.0062	0.2	1343.75

680-161405-A-23-A (Samp) **12/16/2018, 2:16:13 AM** **Rack 3, Tube 52**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.1313	0.9143	0.4984
Al 308.215	143283	142941	142965
As 188.980	417.135	414.150	417.221
B 249.678	60.2290	60.0622	59.0813
Ba 389.178	2130.15	2128.82	2123.06
Be 313.042	8.4147	8.4100	8.4374
Ca 370.602	39976	39970	39909
Cd 226.502	9.1002	8.9586	8.8400
Co 228.615	117.254	116.778	118.073
Cr 267.716	190.475	190.430	190.417
Cu 324.754	256.929	252.649	255.434
Fe 271.441	232192	232540	232599
K 766.491	15088.7	15056.5	15084.1
Mg 279.078	35954.5	35965.4	35935.3
Mn 257.610	17475.9	17468.6	17468.1
Mo 202.032	10.6013	11.0811	12.6261
Na 330.237	504.966u	594.212u	398.955u
Ni 231.604	182.442	184.496	183.839
Pb 220.353	2688.75	2679.80	2704.76
Sb 206.834	4.4032	-4.9579	-0.6942
Se 196.026	3.0572	6.0116	-14.6471u
Si 288.158	19425.9	19445.2	19424.9
Sn 189.925	74.6178	63.3086	63.5966
Sr 216.596	189.503	190.486	188.830
Ti 334.941	1464.33	1466.02	1462.66

Label	Replicates Concentration		
Tl 190.794	13.2700u	10.1300u	12.5944u
V 292.401	285.498	285.285	284.576
Zn 206.200	2104.29	2089.79	2098.56

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.8480	ppb	0.3216	37.9	-13.7129
Al 308.215	143063	ppb	190.504	0.1	337552
As 188.980	416.169	ppb	1.7487	0.4	106.648
B 249.678	59.7908	ppb	0.6201	1.0	96.4850
Ba 389.178	2127.34	ppb	3.7717	0.2	20401.3
Be 313.042	8.4207	ppb	0.0146	0.2	6684.18
Ca 370.602	39952	ppb	37.28	0.1	83274
Cd 226.502	8.9663	ppb	0.1302	1.5	317.896
Co 228.615	117.368	ppb	0.6552	0.6	557.402
Cr 267.716	190.441	ppb	0.0306	0.0	4185.51
Cu 324.754	255.004	ppb	2.1722	0.9	9520.38
Fe 271.441	232444	ppb	219.994	0.1	174449
K 766.491	15076.5	ppb	17.4176	0.1	373286
Mg 279.078	35951.7	ppb	15.2756	0.0	49357.1
Mn 257.610	17470.9	ppb	4.3276	0.0	1689439
Mo 202.032	11.4361	ppb	1.0581	9.3	23.0477
Na 330.237	499.377	ppb	97.7482	19.6	30.7234
Ni 231.604	183.592	ppb	1.0492	0.6	234.454
Pb 220.353	2691.10	ppb	12.6496	0.5	1407.18
Sb 206.834	-0.4163	ppb	4.6867	1125.8	8.4350
Se 196.026	-1.8594	ppb	11.1725	600.9	0.8054
Si 288.158	19432.0	ppb	11.4311	0.1	92147.1
Sn 189.925	67.1743	ppb	6.4479	9.6	19.7671
Sr 216.596	189.607	ppb	0.8329	0.4	781.952
Ti 334.941	1464.34	ppb	1.6773	0.1	160823
Tl 190.794	11.9981	ppb	1.6527	13.8	-5.8608
V 292.401	285.120	ppb	0.4826	0.2	3784.44
Zn 206.200	2097.55	ppb	7.3052	0.3	1177.10

680-161405-A-19-A (Samp) **12/16/2018, 2:20:57 AM** **Rack 3, Tube 53**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4447u	-0.2558u	-0.3389u
Al 308.215	131381	131432	131513
As 188.980	89.7746	85.4073	87.7271
B 249.678	47.6839	47.6438	47.3055
Ba 389.178	1014.80	1018.15	1017.11
Be 313.042	6.2898	6.3016	6.3108
Ca 370.602	28525	28598	28588
Cd 226.502	1.9560	2.0640	1.7816
Co 228.615	61.9894	62.9098	62.1128
Cr 267.716	160.911	160.482	160.647
Cu 324.754	120.843	120.378	120.688
Fe 271.441	209402	209273	209488
K 766.491	11000.2	10996.3	10997.5
Mg 279.078	34143.0	34195.9	34173.5
Mn 257.610	5859.26	5843.96	5861.55
Mo 202.032	7.2223	6.9676	6.3941

Label	Replicates Concentration		
Na 330.237	1064.55	633.175u	716.743u
Ni 231.604	144.808	141.283	138.920
Pb 220.353	244.071	240.458	249.460
Sb 206.834	-7.9060u	5.6132	4.4093
Se 196.026	1.6413	-2.3284	23.3843
Si 288.158	16826.6	16843.9	16858.0
Sn 189.925	17.4774	18.8812	16.7179
Sr 216.596	118.725	120.417	121.214
Ti 334.941	1364.79	1367.06	1365.95
Tl 190.794	-19.3452u	1.6902u	6.2406u
V 292.401	257.980	258.767	257.804
Zn 206.200	571.512	576.909	573.288

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0500	ppb	0.4304	861.3	-64.4034
Al 308.215	131442	ppb	66.4123	0.1	310146
As 188.980	87.6363	ppb	2.1850	2.5	23.5236
B 249.678	47.5444	ppb	0.2079	0.4	38.5697
Ba 389.178	1016.69	ppb	1.7154	0.2	9769.14
Be 313.042	6.3008	ppb	0.0105	0.2	4957.77
Ca 370.602	28570	ppb	39.78	0.1	59354
Cd 226.502	1.9339	ppb	0.1425	7.4	193.607
Co 228.615	62.3373	ppb	0.4996	0.8	300.194
Cr 267.716	160.680	ppb	0.2162	0.1	3518.85
Cu 324.754	120.636	ppb	0.2366	0.2	4642.78
Fe 271.441	209388	ppb	108.147	0.1	157145
K 766.491	10998.0	ppb	1.9818	0.0	272372
Mg 279.078	34170.8	ppb	26.5517	0.1	47026.6
Mn 257.610	5854.92	ppb	9.5611	0.2	566433
Mo 202.032	6.8613	ppb	0.4242	6.2	13.8810
Na 330.237	804.823	ppb	228.780	28.4	44.1032
Ni 231.604	141.670	ppb	2.9630	2.1	180.592
Pb 220.353	244.663	ppb	4.5302	1.9	133.063
Sb 206.834	0.7055	ppb	7.4821	1060.5	8.5966
Se 196.026	7.5657	ppb	13.8423	183.0	1.3920
Si 288.158	16842.8	ppb	15.7410	0.1	79915.1
Sn 189.925	17.6922	ppb	1.0976	6.2	5.0540
Sr 216.596	120.119	ppb	1.2706	1.1	511.446
Ti 334.941	1365.93	ppb	1.1344	0.1	150015
Tl 190.794	-3.8048	ppb	13.6493	358.7	-12.2541
V 292.401	258.184	ppb	0.5128	0.2	3427.27
Zn 206.200	573.903	ppb	2.7505	0.5	320.421

680-161405-A-20-A (Samp) **12/16/2018, 2:25:40 AM** **Rack 3, Tube 54**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.0945u	-1.5757u	0.0126u
Al 308.215	133976	133987	134238
As 188.980	93.4715	97.7030	95.3031
B 249.678	54.4282	54.8060	53.4839
Ba 389.178	1474.35	1475.93	1476.00
Be 313.042	8.0154	8.0379	8.0637
Ca 370.602	25945	25956	25962

Label	Replicates Concentration		
Cd 226.502	2.2879	2.4796	2.5739
Co 228.615	127.939	128.389	127.972
Cr 267.716	175.499	176.184	176.095
Cu 324.754	205.690	204.175	208.548
Fe 271.441	275803	275956	276431
K 766.491	12547.1	12550.9	12550.0
Mg 279.078	37382.3	37418.8	37409.1
Mn 257.610	8572.65	8594.04	8598.95
Mo 202.032	9.1110	10.8046	11.3049
Na 330.237	374.195u	624.314u	523.377u
Ni 231.604	194.109	193.068	195.761
Pb 220.353	111.335	106.662	108.209
Sb 206.834	-5.1069	3.3807	2.0947
Se 196.026	-0.2952	3.1781	2.6939
Si 288.158	16665.9	16689.6	16692.4
Sn 189.925	18.2222	26.7649	23.6394
Sr 216.596	113.693	115.631	113.883
Ti 334.941	1597.84	1598.90	1600.82
Tl 190.794	4.5736u	-5.4226u	2.1990u
V 292.401	330.264	330.321	330.132
Zn 206.200	500.585	492.417	493.793

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8859	ppb	0.8144	91.9	-101.740
Al 308.215	134067	ppb	147.770	0.1	316340
As 188.980	95.4925	ppb	2.1221	2.2	25.6420
B 249.678	54.2393	ppb	0.6810	1.3	16.5857
Ba 389.178	1475.43	ppb	0.9315	0.1	14179.1
Be 313.042	8.0390	ppb	0.0242	0.3	6373.06
Ca 370.602	25954	ppb	8.220	0.0	53814
Cd 226.502	2.4471	ppb	0.1457	6.0	250.034
Co 228.615	128.100	ppb	0.2510	0.2	609.700
Cr 267.716	175.926	ppb	0.3726	0.2	3860.05
Cu 324.754	206.137	ppb	2.2208	1.1	7757.38
Fe 271.441	276063	ppb	327.449	0.1	207181
K 766.491	12549.4	ppb	1.9727	0.0	310758
Mg 279.078	37403.4	ppb	18.9060	0.1	51452.6
Mn 257.610	8588.55	ppb	13.9836	0.2	830790
Mo 202.032	10.4068	ppb	1.1498	11.0	20.2658
Na 330.237	507.295	ppb	125.833	24.8	30.8849
Ni 231.604	194.313	ppb	1.3581	0.7	248.227
Pb 220.353	108.735	ppb	2.3808	2.2	62.7166
Sb 206.834	0.1228	ppb	4.5745	3724.6	9.0497
Se 196.026	1.8589	ppb	1.8812	101.2	0.8092
Si 288.158	16682.6	ppb	14.5671	0.1	79170.5
Sn 189.925	22.8755	ppb	4.3223	18.9	6.5952
Sr 216.596	114.402	ppb	1.0682	0.9	504.349
Ti 334.941	1599.19	ppb	1.5150	0.1	175630
Tl 190.794	0.4500	ppb	5.2226	1160.5	-12.9831
V 292.401	330.239	ppb	0.0968	0.0	4385.98
Zn 206.200	495.598	ppb	4.3730	0.9	275.471

680-161405-A-68-A (Samp) **12/16/2018, 2:30:23 AM** **Rack 3, Tube 55**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.2407	0.4637u	0.3696u
Al 308.215	141206	141254	141419
As 188.980	378.085	385.544	394.906
B 249.678	61.2045	62.1065	61.9982
Ba 389.178	1610.57	1614.36	1611.93
Be 313.042	7.8158	7.8272	7.8209
Ca 370.602	38100	38093	38095
Cd 226.502	5.7535	5.7752	6.2766
Co 228.615	78.0821	77.6304	76.6812
Cr 267.716	183.082	183.264	182.590
Cu 324.754	321.949	322.794	319.756
Fe 271.441	220056	220020	220005
K 766.491	14906.6	14910.0	14907.5
Mg 279.078	37391.3	37434.0	37400.8
Mn 257.610	8582.19	8564.17	8586.33
Mo 202.032	7.1909	7.2409	7.4452
Na 330.237	604.866u	811.799u	175.285u
Ni 231.604	182.049	178.990	179.623
Pb 220.353	1747.80	1756.50	1753.71
Sb 206.834	3.7824	4.3315	2.4546
Se 196.026	-18.7511u	-0.0074	27.7621
Si 288.158	17168.1	17168.1	17149.7
Sn 189.925	44.1849	45.2552	41.0919
Sr 216.596	167.012	170.139	167.643
Ti 334.941	1602.24	1601.00	1600.71
Tl 190.794	1.9878u	22.3179u	-1.4011u
V 292.401	281.371	282.559	281.609
Zn 206.200	1933.15	1928.32	1915.95

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6913	ppb	0.4781	69.2	-35.5352
Al 308.215	141293	ppb	112.038	0.1	333377
As 188.980	386.178	ppb	8.4281	2.2	99.0410
B 249.678	61.7697	ppb	0.4925	0.8	121.768
Ba 389.178	1612.29	ppb	1.9211	0.1	15472.7
Be 313.042	7.8213	ppb	0.0057	0.1	6197.43
Ca 370.602	38096	ppb	3.673	0.0	79266
Cd 226.502	5.9351	ppb	0.2960	5.0	262.631
Co 228.615	77.4645	ppb	0.7150	0.9	372.876
Cr 267.716	182.979	ppb	0.3486	0.2	4006.18
Cu 324.754	321.500	ppb	1.5678	0.5	11929.0
Fe 271.441	220027	ppb	26.4397	0.0	165129
K 766.491	14908.0	ppb	1.7516	0.0	369118
Mg 279.078	37408.7	ppb	22.4044	0.1	51458.6
Mn 257.610	8577.57	ppb	11.7854	0.1	829674
Mo 202.032	7.2923	ppb	0.1347	1.8	14.6181
Na 330.237	530.650	ppb	324.683	61.2	32.8757
Ni 231.604	180.221	ppb	1.6146	0.9	230.158
Pb 220.353	1752.67	ppb	4.4407	0.3	918.069
Sb 206.834	3.5228	ppb	0.9650	27.4	9.9478
Se 196.026	3.0012	ppb	23.4021	779.8	0.8430
Si 288.158	17162.0	ppb	10.6156	0.1	81435.0

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	43.5107	ppb	2.1620	5.0	12.7309
Sr 216.596	168.265	ppb	1.6534	1.0	697.627
Ti 334.941	1601.32	ppb	0.8141	0.1	175864
Tl 190.794	7.6348	ppb	12.8283	168.0	-8.8187
V 292.401	281.847	ppb	0.6283	0.2	3740.22
Zn 206.200	1925.81	ppb	8.8715	0.5	1080.67

680-161405-A-26-A (Samp) **12/16/2018, 2:35:07 AM** **Rack 3, Tube 56**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2099u	-0.0968u	0.3537u
Al 308.215	196366	196867	196427
As 188.980	61.6340	54.0432	55.0790
B 249.678	96.5023	96.3752	97.3256
Ba 389.178	1779.25	1784.48	1780.53
Be 313.042	9.5409	9.5250	9.5363
Ca 370.602	36890	36957	36913
Cd 226.502	1.1337	1.4784	1.1196
Co 228.615	110.610	110.800	109.841
Cr 267.716	261.076	261.333	261.509
Cu 324.754	176.359	177.320	175.792
Fe 271.441	313237	313959	313489
K 766.491	23754.5	23813.9	23771.7
Mg 279.078	70532.9	70584.9	70599.2
Mn 257.610	4656.63	4664.94	4661.65
Mo 202.032	3.9654	2.7785	3.9675
Na 330.237	809.117u	172.005u	706.052u
Ni 231.604	281.358	280.544	279.889
Pb 220.353	96.6403	79.8401	93.7151
Sb 206.834	-6.4917	-5.1016	-4.1990
Se 196.026	-19.9011u	-16.4595u	18.3393
Si 288.158	22014.6	22031.4	22020.2
Sn 189.925	19.6789	21.5391	24.3645
Sr 216.596	191.808	194.644	191.215
Ti 334.941	2313.03	2320.24	2319.61
Tl 190.794	-0.9262u	2.1460u	7.0650u
V 292.401	347.439	345.713	345.981
Zn 206.200	642.432	643.679	636.105

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0157	ppb	0.2982	1898.6	-87.8268
Al 308.215	196553	ppb	273.077	0.1	463701
As 188.980	56.9187	ppb	4.1162	7.2	15.9504
B 249.678	96.7344	ppb	0.5159	0.5	259.320
Ba 389.178	1781.42	ppb	2.7284	0.2	17151.3
Be 313.042	9.5341	ppb	0.0082	0.1	7594.62
Ca 370.602	36920	ppb	33.98	0.1	76563
Cd 226.502	1.2439	ppb	0.2032	16.3	261.822
Co 228.615	110.417	ppb	0.5081	0.5	535.059
Cr 267.716	261.306	ppb	0.2178	0.1	5698.02
Cu 324.754	176.490	ppb	0.7726	0.4	6690.13
Fe 271.441	313561	ppb	366.435	0.1	235319
K 766.491	23780.0	ppb	30.5268	0.1	588640

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	70572.4	ppb	34.8923	0.0	97195.4
Mn 257.610	4661.07	ppb	4.1891	0.1	451294
Mo 202.032	3.5705	ppb	0.6859	19.2	5.5157
Na 330.237	562.391	ppb	341.990	60.8	27.8878
Ni 231.604	280.597	ppb	0.7361	0.3	359.226
Pb 220.353	90.0652	ppb	8.9751	10.0	52.0641
Sb 206.834	-5.2641	ppb	1.1550	21.9	7.5352
Se 196.026	-6.0071	ppb	21.1547	352.2	-0.8593
Si 288.158	22022.1	ppb	8.5550	0.0	104410
Sn 189.925	21.8608	ppb	2.3593	10.8	6.2934
Sr 216.596	192.556	ppb	1.8328	1.0	811.076
Ti 334.941	2317.63	ppb	3.9935	0.2	254603
Tl 190.794	2.7616	ppb	4.0311	146.0	-14.8653
V 292.401	346.378	ppb	0.9288	0.3	4607.59
Zn 206.200	640.738	ppb	4.0608	0.6	356.556

680-161405-A-27-A (Samp) **12/16/2018, 2:39:50 AM** **Rack 3, Tube 57**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.8213	0.4542u	0.6260u
Al 308.215	109023	109051	109148
As 188.980	113.702	107.639	109.232
B 249.678	52.6339	54.5265	52.9618
Ba 389.178	1038.86	1043.12	1041.33
Be 313.042	5.3795	5.3471	5.3707
Ca 370.602	40433	40483	40395
Cd 226.502	4.6806	4.6805	4.9268
Co 228.615	53.9254	54.7648	54.4830
Cr 267.716	154.593	154.294	154.641
Cu 324.754	201.556	198.545	200.446
Fe 271.441	164179	164190	164390
K 766.491	14883.5	14859.8	14880.8
Mg 279.078	32489.3	32475.1	32493.0
Mn 257.610	5204.86	5208.02	5207.47
Mo 202.032	6.6712	7.2312	6.8580
Na 330.237	374.773u	379.047u	747.131u
Ni 231.604	138.499	140.093	140.220
Pb 220.353	1411.59	1396.23	1403.23
Sb 206.834	9.6908	-1.4191	-2.2974
Se 196.026	5.5319	-11.5826u	22.7717
Si 288.158	15855.9	15860.8	15887.4
Sn 189.925	47.0922	42.9284	40.9244
Sr 216.596	138.216	138.085	138.747
Ti 334.941	1323.46	1325.11	1324.76
Tl 190.794	-11.3222u	4.6762u	0.5165u
V 292.401	207.568	206.846	207.158
Zn 206.200	2108.80	2110.47	2106.98

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6338	ppb	0.1837	29.0	-32.7446
Al 308.215	109074	ppb	65.8650	0.1	257393
As 188.980	110.191	ppb	3.1433	2.9	29.1375
B 249.678	53.3741	ppb	1.0114	1.9	121.719

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1041.10	ppb	2.1384	0.2	9988.40
Be 313.042	5.3658	ppb	0.0168	0.3	4196.67
Ca 370.602	40437	ppb	43.94	0.1	84197
Cd 226.502	4.7626	ppb	0.1422	3.0	202.764
Co 228.615	54.3911	ppb	0.4272	0.8	261.632
Cr 267.716	154.510	ppb	0.1880	0.1	3379.67
Cu 324.754	200.182	ppb	1.5224	0.8	7518.02
Fe 271.441	164253	ppb	118.719	0.1	123275
K 766.491	14874.7	ppb	12.9526	0.1	368294
Mg 279.078	32485.8	ppb	9.4680	0.0	44715.5
Mn 257.610	5206.79	ppb	1.6865	0.0	503723
Mo 202.032	6.9201	ppb	0.2851	4.1	14.6684
Na 330.237	500.317	ppb	213.758	42.7	36.8663
Ni 231.604	139.604	ppb	0.9594	0.7	177.939
Pb 220.353	1403.68	ppb	7.6866	0.5	736.358
Sb 206.834	1.9914	ppb	6.6823	335.6	8.6624
Se 196.026	5.5737	ppb	17.1772	308.2	0.8328
Si 288.158	15868.0	ppb	16.9289	0.1	75313.6
Sn 189.925	43.6483	ppb	3.1463	7.2	12.7719
Sr 216.596	138.349	ppb	0.3502	0.3	570.843
Ti 334.941	1324.44	ppb	0.8704	0.1	145455
Tl 190.794	-2.0432	ppb	8.3007	406.3	-10.1267
V 292.401	207.191	ppb	0.3625	0.2	2749.69
Zn 206.200	2108.75	ppb	1.7495	0.1	1184.33

680-161405-A-28-A (Samp) **12/16/2018, 2:44:34 AM** **Rack 3, Tube 58**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3332u	0.2954u	-0.5604u
Al 308.215	139929	140107	140003
As 188.980	93.8678	76.7526	72.1176
B 249.678	56.8514	56.0482	55.3269
Ba 389.178	1443.13	1441.43	1446.90
Be 313.042	6.8372	6.8370	6.8515
Ca 370.602	42498	42454	42617
Cd 226.502	6.8440	6.7138	6.5333
Co 228.615	90.6744	91.5379	90.1346
Cr 267.716	181.898	181.651	181.562
Cu 324.754	160.400	162.460	160.982
Fe 271.441	221978	221714	221546
K 766.491	17427.5	17450.6	17412.3
Mg 279.078	39463.7	39464.5	39412.2
Mn 257.610	13936.9	13939.8	13905.7
Mo 202.032	10.0819	11.0863	8.0125
Na 330.237	1268.64	837.364u	803.027u
Ni 231.604	190.533	187.882	189.563
Pb 220.353	586.644	597.671	591.246
Sb 206.834	4.5748	-6.2197	-5.7178
Se 196.026	-1.2414	3.5435	2.9449
Si 288.158	17480.9	17488.8	17444.0
Sn 189.925	16.6627	25.4629	23.9630
Sr 216.596	138.464	139.875	139.366
Ti 334.941	1728.28	1725.72	1726.03

Label	Replicates Concentration		
Tl 190.794	1.7212u	0.3623u	6.0476u
V 292.401	268.984	269.136	269.382
Zn 206.200	1166.63	1164.58	1162.91

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1994	ppb	0.4433	222.3	-55.6062
Al 308.215	140013	ppb	89.4315	0.1	330359
As 188.980	80.9127	ppb	11.4563	14.2	21.8442
B 249.678	56.0755	ppb	0.7626	1.4	82.5918
Ba 389.178	1443.82	ppb	2.8039	0.2	13863.7
Be 313.042	6.8419	ppb	0.0083	0.1	5399.57
Ca 370.602	42523	ppb	84.37	0.2	88602
Cd 226.502	6.6970	ppb	0.1560	2.3	275.368
Co 228.615	90.7823	ppb	0.7078	0.8	435.896
Cr 267.716	181.704	ppb	0.1743	0.1	3989.39
Cu 324.754	161.281	ppb	1.0621	0.7	6119.34
Fe 271.441	221746	ppb	217.800	0.1	166420
K 766.491	17430.1	ppb	19.3026	0.1	431524
Mg 279.078	39446.8	ppb	29.9989	0.1	54211.8
Mn 257.610	13927.5	ppb	18.9068	0.1	1346889
Mo 202.032	9.7269	ppb	1.5673	16.1	19.6544
Na 330.237	969.675	ppb	259.476	26.8	45.2723
Ni 231.604	189.326	ppb	1.3411	0.7	241.854
Pb 220.353	591.854	ppb	5.5387	0.9	314.208
Sb 206.834	-2.4542	ppb	6.0925	248.2	7.4686
Se 196.026	1.7490	ppb	2.6070	149.1	1.1062
Si 288.158	17471.2	ppb	23.9462	0.1	82899.8
Sn 189.925	22.0295	ppb	4.7080	21.4	6.3437
Sr 216.596	139.235	ppb	0.7147	0.5	586.892
Ti 334.941	1726.67	ppb	1.3972	0.1	189631
Tl 190.794	2.7104	ppb	2.9689	109.5	-8.9109
V 292.401	269.167	ppb	0.2007	0.1	3574.94
Zn 206.200	1164.71	ppb	1.8643	0.2	652.551

680-161405-A-24-A (Samp) **12/16/2018, 2:49:17 AM** **Rack 3, Tube 59**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2742u	0.1591u	-0.0225u
Al 308.215	178257	178229	177926
As 188.980	173.671	169.977	158.033
B 249.678	61.4970	62.9038	63.8611
Ba 389.178	1816.70	1816.70	1813.80
Be 313.042	9.6952	9.6723	9.6939
Ca 370.602	41399	41420	41432
Cd 226.502	5.2272	5.9907	5.7132
Co 228.615	85.6304	85.7817	84.7098
Cr 267.716	210.804	210.783	211.823
Cu 324.754	172.226	174.799	173.689
Fe 271.441	250988	250966	251073
K 766.491	18293.3	18302.4	18307.6
Mg 279.078	43307.1	43235.2	43285.7
Mn 257.610	15195.1	15203.0	15172.3
Mo 202.032	9.1211	10.5274	9.7407

Label	Replicates Concentration		
Na 330.237	249.594u	510.003u	337.533u
Ni 231.604	192.525	192.212	192.812
Pb 220.353	1179.41	1175.93	1188.96
Sb 206.834	12.6077	-3.4176	-1.3786
Se 196.026	0.4681	-1.3441	0.8542
Si 288.158	21065.0	21072.1	21069.0
Sn 189.925	36.6878	28.9778	34.5699
Sr 216.596	200.060	198.362	198.522
Ti 334.941	1492.27	1494.21	1495.63
Tl 190.794	8.7552u	-2.4605u	14.0385u
V 292.401	303.184	302.835	302.348
Zn 206.200	1211.10	1222.25	1217.36

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1369	ppb	0.1496	109.2	-47.1403
Al 308.215	178137	ppb	183.933	0.1	420268
As 188.980	167.227	ppb	8.1735	4.9	43.7273
B 249.678	62.7540	ppb	1.1892	1.9	97.5592
Ba 389.178	1815.74	ppb	1.6742	0.1	17433.5
Be 313.042	9.6871	ppb	0.0128	0.1	7717.64
Ca 370.602	41417	ppb	16.90	0.0	86251
Cd 226.502	5.6437	ppb	0.3865	6.8	282.508
Co 228.615	85.3740	ppb	0.5801	0.7	409.553
Cr 267.716	211.137	ppb	0.5940	0.3	4629.42
Cu 324.754	173.571	ppb	1.2901	0.7	6571.14
Fe 271.441	251009	ppb	56.4112	0.0	188379
K 766.491	18301.1	ppb	7.2319	0.0	453073
Mg 279.078	43276.0	ppb	36.9616	0.1	59468.5
Mn 257.610	15190.1	ppb	15.9463	0.1	1468999
Mo 202.032	9.7964	ppb	0.7048	7.2	19.3675
Na 330.237	365.710	ppb	132.471	36.2	27.9409
Ni 231.604	192.516	ppb	0.2999	0.2	245.969
Pb 220.353	1181.43	ppb	6.7440	0.6	620.917
Sb 206.834	2.6038	ppb	8.7234	335.0	9.9530
Se 196.026	-0.0073	ppb	1.1737	16132.5	0.9920
Si 288.158	21068.7	ppb	3.5957	0.0	99872.4
Sn 189.925	33.4118	ppb	3.9833	11.9	9.7281
Sr 216.596	198.981	ppb	0.9377	0.5	822.023
Ti 334.941	1494.04	ppb	1.6846	0.1	164108
Tl 190.794	6.7777	ppb	8.4254	124.3	-8.6639
V 292.401	302.789	ppb	0.4200	0.1	4019.65
Zn 206.200	1216.91	ppb	5.5892	0.5	681.501

680-161405-A-25-A (Samp) **12/16/2018, 2:54:01 AM** **Rack 3, Tube 60**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1734u	1.3937	1.4156
Al 308.215	228637	228598	228954
As 188.980	50.6201	57.6976	49.5001
B 249.678	69.1182	68.4850	69.1628
Ba 389.178	1737.42	1738.04	1736.76
Be 313.042	13.2918	13.2791	13.3001
Ca 370.602	47440	47416	47407

Label	Replicates Concentration		
Cd 226.502	1.5533	1.8299	2.1172
Co 228.615	77.4608	76.0973	76.5682
Cr 267.716	246.442	247.379	248.629
Cu 324.754	114.823	113.166	112.709
Fe 271.441	270210	270260	270681
K 766.491	20056.8	20023.4	20070.6
Mg 279.078	50374.2	50414.9	50454.8
Mn 257.610	6969.54	6962.33	6985.31
Mo 202.032	6.2795	5.7395	6.5173
Na 330.237	661.768u	278.760u	362.262u
Ni 231.604	196.818	194.475	198.219
Pb 220.353	153.219	158.148	145.265
Sb 206.834	-3.2609	2.7389	-0.7153
Se 196.026	8.7129	1.5288	-5.9053
Si 288.158	25709.4	25750.7	25751.7
Sn 189.925	18.5782	21.0436	30.1456
Sr 216.596	227.589	229.266	227.486
Ti 334.941	1385.46	1383.62	1387.11
Tl 190.794	7.8135u	6.3288u	-1.9180u
V 292.401	313.660	312.500	313.378
Zn 206.200	736.026	739.693	743.493

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9942	ppb	0.7109	71.5	-38.6835
Al 308.215	228730	ppb	195.269	0.1	539579
As 188.980	52.6059	ppb	4.4449	8.4	14.7745
B 249.678	68.9220	ppb	0.3791	0.6	118.908
Ba 389.178	1737.41	ppb	0.6424	0.0	16697.2
Be 313.042	13.2903	ppb	0.0106	0.1	10655.5
Ca 370.602	47421	ppb	16.94	0.0	98585
Cd 226.502	1.8335	ppb	0.2820	15.4	241.045
Co 228.615	76.7088	ppb	0.6925	0.9	368.953
Cr 267.716	247.483	ppb	1.0974	0.4	5399.28
Cu 324.754	113.566	ppb	1.1121	1.0	4399.16
Fe 271.441	270384	ppb	258.841	0.1	202917
K 766.491	20050.3	ppb	24.3155	0.1	496354
Mg 279.078	50414.7	ppb	40.3032	0.1	69383.2
Mn 257.610	6972.39	ppb	11.7547	0.2	674595
Mo 202.032	6.1788	ppb	0.3986	6.5	11.5672
Na 330.237	434.263	ppb	201.400	46.4	29.1953
Ni 231.604	196.504	ppb	1.8913	1.0	251.116
Pb 220.353	152.211	ppb	6.5007	4.3	84.1771
Sb 206.834	-0.4124	ppb	3.0113	730.2	9.0500
Se 196.026	1.4455	ppb	7.3095	505.7	0.5702
Si 288.158	25737.2	ppb	24.1328	0.1	121904
Sn 189.925	23.2558	ppb	6.0928	26.2	6.7082
Sr 216.596	228.114	ppb	0.9991	0.4	937.895
Ti 334.941	1385.40	ppb	1.7462	0.1	152208
Tl 190.794	4.0748	ppb	5.2427	128.7	-12.2453
V 292.401	313.180	ppb	0.6050	0.2	4158.69
Zn 206.200	739.737	ppb	3.7334	0.5	412.828

Cont Calib Verif (CCV) **12/16/2018, 2:58:45 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	489.160	488.770	489.974
Al 308.215	9997.39	10003.9	10014.7
As 188.980	533.328	537.145	542.104
B 249.678	539.115	538.657	538.080
Ba 389.178	464.876	465.680	467.912
Be 313.042	550.774	549.319	549.891
Ca 370.602	10121	10131	10136
Cd 226.502	523.825	525.353	523.739
Co 228.615	510.531	509.647	510.007
Cr 267.716	506.005	503.859	504.107
Cu 324.754	506.945	509.317	509.167
Fe 271.441	10209.6	10201.7	10196.7
K 766.491	10186.6	10169.1	10177.4
Mg 279.078	10705.1	10705.4	10693.3
Mn 257.610	508.138	507.095	507.591
Mo 202.032	492.177	490.714	494.529
Na 330.237	11381.6	10930.5	11233.0
Ni 231.604	518.074	520.051	516.991
Pb 220.353	515.776	529.642	526.119
Sb 206.834	502.369	490.714	504.663
Se 196.026	538.338	552.156	556.536
Si 288.158	5085.61	5070.21	5077.39
Sn 189.925	492.398	515.927	499.927
Sr 216.596	504.203	502.569	503.103
Ti 334.941	495.547	494.707	494.640
Tl 190.794	486.291	501.495	490.638
V 292.401	497.758	496.673	498.787
Zn 206.200	1094.06	1093.91	1102.44

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	489.302	ppb	0.6145	0.1	16967.0	97.86031
Al 308.215	10005.3	ppb	8.7436	0.1	23772.2	100.05350
As 188.980	537.526	ppb	4.4002	0.8	136.783	107.50515
B 249.678	538.617	ppb	0.5188	0.1	3469.82	107.72343
Ba 389.178	466.156	ppb	1.5732	0.3	4424.53	93.23125
Be 313.042	549.995	ppb	0.7330	0.1	447586	109.99892
Ca 370.602	10129	ppb	7.457	0.1	21167	101.29087
Cd 226.502	524.305	ppb	0.9080	0.2	7993.71	104.86110
Co 228.615	510.062	ppb	0.4446	0.1	2362.57	102.01231
Cr 267.716	504.657	ppb	1.1742	0.2	10901.1	100.93143
Cu 324.754	508.476	ppb	1.3285	0.3	18672.3	101.69524
Fe 271.441	10202.6	ppb	6.5043	0.1	7705.23	101.97536
K 766.491	10177.7	ppb	8.7273	0.1	252075	101.77716
Mg 279.078	10701.3	ppb	6.8958	0.1	14760.5	107.01280
Mn 257.610	507.608	ppb	0.5218	0.1	49169.0	101.52157
Mo 202.032	492.474	ppb	1.9248	0.4	1025.66	98.49472
Na 330.237	11181.7	ppb	229.891	2.1	316.240	111.81683Q
Ni 231.604	518.372	ppb	1.5514	0.3	664.592	103.67436
Pb 220.353	523.845	ppb	7.2068	1.4	278.421	104.76909
Sb 206.834	499.249	ppb	7.4798	1.5	210.089	99.84971
Se 196.026	549.010	ppb	9.4978	1.7	98.5689	109.80198
Si 288.158	5077.74	ppb	7.7076	0.2	24441.9	101.55473

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	502.751	ppb	12.0156	2.4	149.284	100.55013
Sr 216.596	503.292	ppb	0.8335	0.2	1921.40	100.65835
Ti 334.941	494.964	ppb	0.5055	0.1	54330.4	98.99289
Tl 190.794	492.808	ppb	7.8309	1.6	131.667	98.56168
V 292.401	497.739	ppb	1.0571	0.2	6477.54	99.54784
Zn 206.200	1096.81	ppb	4.8824	0.4	617.025	109.68063

Cont Calib Blank (CCB) **12/16/2018, 3:03:28 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates		Concentration
Ag 328.068	-0.3571u	0.5113	-0.7687u
Al 308.215	2.9104	5.1038	4.0841
As 188.980	5.2760	-2.9273u	-2.5321u
B 249.678	2.8046	3.0124	2.9357
Ba 389.178	1.1264	0.0561	-2.7111u
Be 313.042	0.0572	0.0722	0.0762
Ca 370.602	2.043	6.605	3.237
Cd 226.502	0.1971	0.2043	0.1682
Co 228.615	-0.5260u	-1.3595u	-1.5556u
Cr 267.716	-0.2182u	-0.0559u	-0.1855u
Cu 324.754	1.6501	0.5994	1.3953
Fe 271.441	-2.7574u	13.4715	13.2016
K 766.491	4.6489	4.2142	3.6519
Mg 279.078	2.7867	4.6131	10.0499
Mn 257.610	0.1463	0.2274	0.2886
Mo 202.032	0.9411	-0.6031u	0.8717
Na 330.237	96.6770	189.560	185.660
Ni 231.604	2.6755	2.5005	-0.6957u
Pb 220.353	6.6019	-2.8844u	0.6785
Sb 206.834	-6.2117u	4.2348	1.3696
Se 196.026	-3.2156u	-6.7458u	-3.8786u
Si 288.158	4.5458	6.4095	7.3549
Sn 189.925	-1.4791u	4.4617	5.6442
Sr 216.596	-0.1344u	0.1930	0.1644
Ti 334.941	0.3658	0.3609	0.3638
Tl 190.794	-3.0462u	-10.3910u	0.4399
V 292.401	0.5429	0.1724	0.3194
Zn 206.200	0.7538	2.3542	0.4437

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2048	ppb	0.6535	319.0	-36.7424	-0.20484
Al 308.215	4.0328	ppb	1.0976	27.2	164.519	4.03277
As 188.980	-0.0611	ppb	4.6263	7568.9	0.9484	-0.06112
B 249.678	2.9176	ppb	0.1051	3.6	-47.7357	2.91757
Ba 389.178	-0.5095	ppb	1.9803	388.7	-54.9230	-0.50952
Be 313.042	0.0685	ppb	0.0101	14.7	-128.128	0.06852
Ca 370.602	3.962	ppb	2.366	59.7	35.74	3.96186
Cd 226.502	0.1899	ppb	0.0191	10.0	8.7351	0.18986
Co 228.615	-1.1470	ppb	0.5467	47.7	-12.7944	-1.14704
Cr 267.716	-0.1532	ppb	0.0858	56.0	16.3972	-0.15318
Cu 324.754	1.2149	ppb	0.5481	45.1	268.425	1.21494
Fe 271.441	7.9719	ppb	9.2928	116.6	23.5497	7.97190
K 766.491	4.1717	ppb	0.4999	12.0	349.611	4.17166

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	5.8166	ppb	3.7782	65.0	27.1303	5.81657
Mn 257.610	0.2208	ppb	0.0714	32.3	51.2708	0.22080
Mo 202.032	0.4032	ppb	0.8722	216.3	3.5535	0.40322
Na 330.237	157.299	ppb	52.5365	33.4	49.3701	157.29910
Ni 231.604	1.4934	ppb	1.8979	127.1	0.3550	1.49340
Pb 220.353	1.4653	ppb	4.7919	327.0	6.8815	1.46533
Sb 206.834	-0.2024	ppb	5.3977	2666.5	5.6343	-0.20243
Se 196.026	-4.6133	ppb	1.8763	40.7	-1.9940	-4.61333
Si 288.158	6.1034	ppb	1.4293	23.4	366.091	6.10340
Sn 189.925	2.8756	ppb	3.8173	132.7	0.6484	2.87563
Sr 216.596	0.0743	ppb	0.1813	244.0	5.8208	0.07433
Ti 334.941	0.3635	ppb	0.0025	0.7	3.4366	0.36351
Tl 190.794	-4.3324	ppb	5.5288	127.6	-5.5471	-4.33242
V 292.401	0.3449	ppb	0.1865	54.1	2.2615	0.34490
Zn 206.200	1.1839	ppb	1.0253	86.6	1.1943	1.18390

680-161405-A-44-A (Samp) **12/16/2018, 3:08:10 AM** **Rack 4, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2680u	0.0645u	-0.7948u
Al 308.215	130825	131061	130717
As 188.980	62.9600	77.3511	71.0223
B 249.678	58.6678	59.1109	59.5838
Ba 389.178	1223.90	1226.69	1223.59
Be 313.042	6.9044	6.8912	6.8915
Ca 370.602	24751	24834	24790
Cd 226.502	1.8486	1.2824	1.6269
Co 228.615	85.9364	86.0347	85.4627
Cr 267.716	175.916	175.769	176.056
Cu 324.754	157.734	156.285	156.199
Fe 271.441	230691	230743	230532
K 766.491	13463.7	13470.3	13456.6
Mg 279.078	38665.9	38704.4	38642.5
Mn 257.610	5964.92	5964.58	5965.08
Mo 202.032	6.5162	6.2579	5.1888
Na 330.237	-13.7819u	202.621u	478.794u
Ni 231.604	170.211	171.652	169.395
Pb 220.353	167.727	171.519	185.579
Sb 206.834	-3.0125	5.4548	-12.1424u
Se 196.026	7.3534	-17.1407u	0.7667
Si 288.158	18246.6	18266.3	18223.1
Sn 189.925	20.9819	21.4286	27.9850
Sr 216.596	124.141	121.769	123.373
Ti 334.941	1634.97	1636.08	1633.08
Tl 190.794	7.8572u	12.6035u	7.6140u
V 292.401	277.797	278.851	279.203
Zn 206.200	531.927	528.937	542.054

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3328	ppb	0.4333	130.2	-78.7884
Al 308.215	130868	ppb	175.886	0.1	308792
As 188.980	70.4445	ppb	7.2129	10.2	19.2165
B 249.678	59.1209	ppb	0.4581	0.8	93.7360

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1224.73	ppb	1.7062	0.1	11769.8
Be 313.042	6.8957	ppb	0.0076	0.1	5441.76
Ca 370.602	24792	ppb	41.58	0.2	51434
Cd 226.502	1.5860	ppb	0.2853	18.0	203.711
Co 228.615	85.8113	ppb	0.3059	0.4	412.270
Cr 267.716	175.913	ppb	0.1438	0.1	3849.94
Cu 324.754	156.739	ppb	0.8625	0.6	5956.46
Fe 271.441	230655	ppb	109.835	0.0	173105
K 766.491	13463.6	ppb	6.8512	0.1	333378
Mg 279.078	38670.9	ppb	31.2551	0.1	53227.7
Mn 257.610	5964.86	ppb	0.2585	0.0	577107
Mo 202.032	5.9876	ppb	0.7038	11.8	11.7532
Na 330.237	222.544	ppb	246.892	110.9	27.7588
Ni 231.604	170.419	ppb	1.1428	0.7	217.541
Pb 220.353	174.942	ppb	9.4054	5.4	96.8312
Sb 206.834	-3.2334	ppb	8.8007	272.2	7.2412
Se 196.026	-3.0069	ppb	12.6755	421.5	-0.4515
Si 288.158	18245.3	ppb	21.6554	0.1	86548.6
Sn 189.925	23.4651	ppb	3.9207	16.7	6.7705
Sr 216.596	123.094	ppb	1.2104	1.0	527.449
Ti 334.941	1634.71	ppb	1.5188	0.1	179534
Tl 190.794	9.3582	ppb	2.8131	30.1	-9.4181
V 292.401	278.617	ppb	0.7315	0.3	3700.61
Zn 206.200	534.306	ppb	6.8746	1.3	297.854

680-161405-A-30-A (Samp) **12/16/2018, 3:12:54 AM** **Rack 4, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.3163	2.0455	1.9274
Al 308.215	125620	125643	125829
As 188.980	326.165	322.214	319.426
B 249.678	66.7082	67.0724	66.4576
Ba 389.178	1627.77	1626.96	1626.50
Be 313.042	6.8142	6.8135	6.8157
Ca 370.602	44337	44368	44360
Cd 226.502	16.0389	15.8344	15.9289
Co 228.615	69.9333	67.4646	66.8814
Cr 267.716	201.682	201.098	201.906
Cu 324.754	394.262	391.035	389.949
Fe 271.441	186030	186092	186039
K 766.491	14760.9	14746.9	14728.1
Mg 279.078	33972.4	33989.5	34022.8
Mn 257.610	12955.5	12968.0	12994.3
Mo 202.032	7.0128	8.0652	9.3412
Na 330.237	569.294u	820.240u	306.993u
Ni 231.604	173.632	171.748	170.931
Pb 220.353	2660.31	2643.04	2637.39
Sb 206.834	3.3178	1.4040	9.0881
Se 196.026	17.6192	-11.9196u	5.1914
Si 288.158	17519.6	17512.0	17519.4
Sn 189.925	72.2812	80.0998	74.2308
Sr 216.596	196.904	198.753	199.246
Ti 334.941	1353.47	1354.50	1354.47

Label	Replicates Concentration		
Tl 190.794	6.7306u	6.7707u	4.1131u
V 292.401	237.715	236.169	235.467
Zn 206.200	6977.25	6988.07	6976.77

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.7630	ppb	0.3914	22.2	18.2123
Al 308.215	125697	ppb	114.493	0.1	296595
As 188.980	322.602	ppb	3.3862	1.0	82.8913
B 249.678	66.7460	ppb	0.3092	0.5	188.196
Ba 389.178	1627.08	ppb	0.6425	0.0	15601.1
Be 313.042	6.8145	ppb	0.0011	0.0	5376.77
Ca 370.602	44355	ppb	15.88	0.0	92472
Cd 226.502	15.9341	ppb	0.1024	0.6	389.428
Co 228.615	68.0931	ppb	1.6201	2.4	326.191
Cr 267.716	201.562	ppb	0.4170	0.2	4411.47
Cu 324.754	391.749	ppb	2.2430	0.6	14469.6
Fe 271.441	186054	ppb	33.8203	0.0	139636
K 766.491	14745.3	ppb	16.4794	0.1	365093
Mg 279.078	33994.9	ppb	25.6148	0.1	46710.7
Mn 257.610	12972.6	ppb	19.8060	0.2	1254515
Mo 202.032	8.1397	ppb	1.1659	14.3	16.8807
Na 330.237	565.509	ppb	256.645	45.4	24.5053
Ni 231.604	172.103	ppb	1.3848	0.8	219.728
Pb 220.353	2646.92	ppb	11.9404	0.5	1383.90
Sb 206.834	4.6033	ppb	4.0001	86.9	10.1099
Se 196.026	3.6303	ppb	14.8311	408.5	1.2513
Si 288.158	17517.0	ppb	4.3248	0.0	83102.4
Sn 189.925	75.5373	ppb	4.0698	5.4	22.2538
Sr 216.596	198.301	ppb	1.2343	0.6	804.751
Ti 334.941	1354.15	ppb	0.5833	0.0	148721
Tl 190.794	5.8715	ppb	1.5229	25.9	-6.8746
V 292.401	236.450	ppb	1.1502	0.5	3136.54
Zn 206.200	6980.70	ppb	6.3902	0.1	3924.33

680-161405-A-31-A (Samp) **12/16/2018, 3:17:39 AM** **Rack 4, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7631	0.2899	0.6428
Al 308.215	142590	142481	142564
As 188.980	208.824	207.126	198.791
B 249.678	67.6528	64.9927	67.5815
Ba 389.178	1818.95	1820.98	1821.02
Be 313.042	7.4101	7.4394	7.4236
Ca 370.602	46148	46192	46195
Cd 226.502	13.9874	14.9427	14.5377
Co 228.615	71.3880	70.1456	71.0199
Cr 267.716	216.863	218.412	218.027
Cu 324.754	387.453	387.136	387.805
Fe 271.441	205160	205574	205577
K 766.491	16351.9	16354.2	16346.2
Mg 279.078	38998.7	39039.5	39049.4
Mn 257.610	18475.0	18481.3	18466.9
Mo 202.032	9.1725	7.8998	7.2244

Label	Replicates Concentration		
Na 330.237	562.292u	858.721u	693.767u
Ni 231.604	189.740	195.104	188.199
Pb 220.353	2095.52	2101.14	2112.42
Sb 206.834	-10.7798u	-6.0715	0.3883
Se 196.026	10.7376	-16.6595u	10.0211
Si 288.158	19196.3	19238.1	19206.7
Sn 189.925	66.1985	56.4802	69.9092
Sr 216.596	221.564	220.544	219.044
Ti 334.941	1423.47	1424.54	1423.99
Tl 190.794	1.2926u	7.8055u	5.9436u
V 292.401	254.850	254.742	254.962
Zn 206.200	5612.76	5618.96	5620.75

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5653	ppb	0.2459	43.5	-15.9117
Al 308.215	142545	ppb	57.1100	0.0	336328
As 188.980	204.913	ppb	5.3700	2.6	53.1650
B 249.678	66.7423	ppb	1.5157	2.3	169.013
Ba 389.178	1820.32	ppb	1.1824	0.1	17460.1
Be 313.042	7.4244	ppb	0.0147	0.2	5873.86
Ca 370.602	46178	ppb	26.37	0.1	96341
Cd 226.502	14.4893	ppb	0.4795	3.3	382.304
Co 228.615	70.8512	ppb	0.6381	0.9	340.192
Cr 267.716	217.768	ppb	0.8064	0.4	4773.69
Cu 324.754	387.465	ppb	0.3349	0.1	14318.2
Fe 271.441	205437	ppb	239.993	0.1	154181
K 766.491	16350.8	ppb	4.1403	0.0	404817
Mg 279.078	39029.2	ppb	26.8641	0.1	53588.1
Mn 257.610	18474.4	ppb	7.2367	0.0	1786440
Mo 202.032	8.0989	ppb	0.9892	12.2	16.5117
Na 330.237	704.927	ppb	148.529	21.1	29.5264
Ni 231.604	191.015	ppb	3.6244	1.9	244.049
Pb 220.353	2103.03	ppb	8.6110	0.4	1101.05
Sb 206.834	-5.4877	ppb	5.6069	102.2	6.1979
Se 196.026	1.3664	ppb	15.6150	1142.8	1.3989
Si 288.158	19213.7	ppb	21.7441	0.1	91114.7
Sn 189.925	64.1960	ppb	6.9349	10.8	18.8815
Sr 216.596	220.384	ppb	1.2681	0.6	893.461
Ti 334.941	1424.00	ppb	0.5346	0.0	156406
Tl 190.794	5.0139	ppb	3.3545	66.9	-6.5212
V 292.401	254.852	ppb	0.1097	0.0	3381.73
Zn 206.200	5617.49	ppb	4.1935	0.1	3157.30

680-161405-A-32-A (Samp) **12/16/2018, 3:22:23 AM** **Rack 4, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5282	-1.7513	-0.5349
Al 308.215	145486	145521	145486
As 188.980	269.013	264.020	260.585
B 249.678	69.8735	69.2752	69.4383
Ba 389.178	2353.54	2360.47	2359.47
Be 313.042	8.0358	8.0476	8.0593
Ca 370.602	47126	47207	47112

Label	Replicates Concentration		
Cd 226.502	27.6328	27.4068	27.3586
Co 228.615	110.843	111.194	109.950
Cr 267.716	212.277	211.786	211.605
Cu 324.754	435.954	435.002	437.324
Fe 271.441	221012	221131	220896
K 766.491	16893.0	16915.5	16936.9
Mg 279.078	37831.9	37860.1	37872.8
Mn 257.610	52411.8x	52416.0x	52339.2x
Mo 202.032	16.7373	16.1120	19.2333
Na 330.237	878.213u	568.654u	521.375u
Ni 231.604	288.991	291.321	288.849
Pb 220.353	2460.42	2453.31	2479.33
Sb 206.834	-2.0995	7.2242	7.0690
Se 196.026	6.1271	-6.2191	-9.3829
Si 288.158	19834.1	19881.5	19872.2
Sn 189.925	937.537	926.691	949.567
Sr 216.596	255.381	255.441	256.030
Ti 334.941	1450.20	1452.31	1452.10
Tl 190.794	40.8502	36.4473	33.7275
V 292.401	287.934	286.945	288.462
Zn 206.200	7501.51	7527.35	7501.46

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9381b	ppb	0.7042	75.1	0.3346
Al 308.215	145498b	ppb	19.9703	0.0	343293
As 188.980	264.540b	ppb	4.2379	1.6	68.2743
B 249.678	69.5290b	ppb	0.3093	0.4	171.895
Ba 389.178	2357.82b	ppb	3.7465	0.2	22604.5
Be 313.042	8.0476b	ppb	0.0117	0.1	6377.36
Ca 370.602	47148b	ppb	51.30	0.1	98962
Cd 226.502	27.4661b	ppb	0.1464	0.5	591.293
Co 228.615	110.662b	ppb	0.6412	0.6	525.528
Cr 267.716	211.890b	ppb	0.3478	0.2	4714.36
Cu 324.754	436.094b	ppb	1.1677	0.3	16085.1
Fe 271.441	221013b	ppb	117.659	0.1	165871
K 766.491	16915.1b	ppb	21.9737	0.1	418781
Mg 279.078	37854.9b	ppb	20.9383	0.1	51614.2
Mn 257.610	52389.0xb	ppb	43.1785	0.1	5065159
Mo 202.032	17.3609b	ppb	1.6515	9.5	35.5219
Na 330.237	656.081b	ppb	193.819	29.5	22.2632
Ni 231.604	289.720b	ppb	1.3877	0.5	370.956
Pb 220.353	2464.35b	ppb	13.4486	0.5	1291.44
Sb 206.834	4.0646b	ppb	5.3388	131.4	10.2919
Se 196.026	-3.1583b	ppb	8.1955	259.5	3.7015
Si 288.158	19862.6b	ppb	25.1043	0.1	94255.0
Sn 189.925	937.932b	ppb	11.4429	1.2	278.681
Sr 216.596	255.617b	ppb	0.3585	0.1	1030.74
Ti 334.941	1451.53b	ppb	1.1606	0.1	159423
Tl 190.794	37.0083b	ppb	3.5943	9.7	10.1303
V 292.401	287.780b	ppb	0.7700	0.3	3815.82
Zn 206.200	7510.11b	ppb	14.9342	0.2	4221.63

680-161405-A-33-A (Samp) **12/16/2018, 3:27:07 AM** **Rack 4, Tube 5**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0394u	-0.4394u	-0.5186u
Al 308.215	167889	168052	168051
As 188.980	58.1581	58.5526	53.0340
B 249.678	89.3714	85.1361	88.0845
Ba 389.178	1612.03	1614.34	1610.44
Be 313.042	8.8503	8.8491	8.8529
Ca 370.602	38907	38964	38935
Cd 226.502	1.9050	1.9710	1.4693
Co 228.615	97.4335	96.8723	97.8722
Cr 267.716	233.684	232.973	234.362
Cu 324.754	191.558	188.687	189.751
Fe 271.441	281572	281682	281765
K 766.491	20255.1	20238.8	20256.5
Mg 279.078	66258.8	66244.1	66249.7
Mn 257.610	4106.12	4106.67	4106.19
Mo 202.032	5.2227	3.2133	4.4497
Na 330.237	523.974u	107.380u	626.419u
Ni 231.604	245.925	249.079	247.004
Pb 220.353	158.215	141.484	145.628
Sb 206.834	-6.2408	-23.4164u	5.9146
Se 196.026	-25.6521u	-12.1837u	8.1524
Si 288.158	21727.6	21741.7	21750.6
Sn 189.925	15.6631	24.1095	19.6730
Sr 216.596	174.583	174.121	174.009
Ti 334.941	1893.83	1895.22	1896.07
Tl 190.794	2.7616u	-1.6917u	1.2111u
V 292.401	327.566	327.979	328.601
Zn 206.200	770.239	768.459	753.356

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3062	ppb	0.3019	98.6	-92.9842
Al 308.215	167997	ppb	93.6079	0.1	396356
As 188.980	56.5816	ppb	3.0786	5.4	15.8048
B 249.678	87.5307	ppb	2.1713	2.5	230.343
Ba 389.178	1612.27	ppb	1.9603	0.1	15519.9
Be 313.042	8.8508	ppb	0.0020	0.0	7037.55
Ca 370.602	38935	ppb	28.72	0.1	80814
Cd 226.502	1.7818	ppb	0.2726	15.3	245.564
Co 228.615	97.3926	ppb	0.5012	0.5	469.881
Cr 267.716	233.673	ppb	0.6949	0.3	5097.33
Cu 324.754	189.999	ppb	1.4512	0.8	7173.23
Fe 271.441	281673	ppb	96.9375	0.0	211389
K 766.491	20250.1	ppb	9.8257	0.0	501299
Mg 279.078	66250.9	ppb	7.4077	0.0	91250.9
Mn 257.610	4106.33	ppb	0.2961	0.0	397606
Mo 202.032	4.2952	ppb	1.0136	23.6	7.4881
Na 330.237	419.258	ppb	274.908	65.6	27.2879
Ni 231.604	247.336	ppb	1.6026	0.6	316.458
Pb 220.353	148.442	ppb	8.7134	5.9	82.6713
Sb 206.834	-7.9142	ppb	14.7369	186.2	6.0219
Se 196.026	-9.8945	ppb	17.0181	172.0	-1.7134
Si 288.158	21740.0	ppb	11.5752	0.1	103058

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	19.8152	ppb	4.2250	21.3	5.6852
Sr 216.596	174.238	ppb	0.3043	0.2	734.003
Ti 334.941	1895.04	ppb	1.1287	0.1	208202
Tl 190.794	0.7603	ppb	2.2606	297.3	-14.2793
V 292.401	328.049	ppb	0.5208	0.2	4359.19
Zn 206.200	764.018	ppb	9.2764	1.2	426.342

680-161405-A-34-A (Samp) **12/16/2018, 3:31:51 AM** **Rack 4, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7448	-0.0887u	0.7433
Al 308.215	100627	100663	101034
As 188.980	204.322	199.493	221.123
B 249.678	51.5099	51.8934	53.5597
Ba 389.178	1080.98	1080.26	1082.83
Be 313.042	5.4394	5.4022	5.4012
Ca 370.602	41731	41703	41839
Cd 226.502	3.8015	3.4534	3.3797
Co 228.615	49.1765	48.6061	47.7323
Cr 267.716	148.157	147.542	148.667
Cu 324.754	173.821	175.167	177.316
Fe 271.441	156116	155820	156090
K 766.491	10583.1	10571.5	10595.7
Mg 279.078	31774.0	31779.0	31796.6
Mn 257.610	4554.40	4548.35	4553.56
Mo 202.032	3.2396	5.1269	2.4203
Na 330.237	198.677u	452.501u	379.457u
Ni 231.604	130.109	129.919	132.519
Pb 220.353	2331.06	2339.77	2346.15
Sb 206.834	4.5348	4.1566	5.9168
Se 196.026	-6.0409u	-5.3656u	8.0400
Si 288.158	15804.0	15781.2	15798.8
Sn 189.925	51.3882	40.9118	49.5090
Sr 216.596	138.918	137.088	136.747
Ti 334.941	1232.15	1231.47	1233.86
Tl 190.794	-8.0181u	4.4627u	2.0909u
V 292.401	198.257	196.361	196.694
Zn 206.200	1360.66	1367.76	1367.91

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4665	ppb	0.4808	103.1	-38.1119
Al 308.215	100775	ppb	225.488	0.2	237819
As 188.980	208.313	ppb	11.3538	5.5	53.9364
B 249.678	52.3210	ppb	1.0898	2.1	123.037
Ba 389.178	1081.36	ppb	1.3245	0.1	10370.3
Be 313.042	5.4143	ppb	0.0218	0.4	4236.09
Ca 370.602	41758	ppb	71.79	0.2	86955
Cd 226.502	3.5449	ppb	0.2253	6.4	177.821
Co 228.615	48.5050	ppb	0.7274	1.5	233.255
Cr 267.716	148.122	ppb	0.5630	0.4	3239.72
Cu 324.754	175.434	ppb	1.7631	1.0	6618.77
Fe 271.441	156009	ppb	163.783	0.1	117089
K 766.491	10583.4	ppb	12.0912	0.1	262114

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	31783.2	ppb	11.8752	0.0	43755.6
Mn 257.610	4552.10	ppb	3.2789	0.1	440418
Mo 202.032	3.5956	ppb	1.3880	38.6	7.8841
Na 330.237	343.545	ppb	130.667	38.0	35.6582
Ni 231.604	130.849	ppb	1.4493	1.1	166.684
Pb 220.353	2338.99	ppb	7.5733	0.3	1223.23
Sb 206.834	4.8694	ppb	0.9266	19.0	9.7723
Se 196.026	-1.1222	ppb	7.9418	707.7	-0.4676
Si 288.158	15794.7	ppb	11.9455	0.1	74962.9
Sn 189.925	47.2697	ppb	5.5856	11.8	13.8487
Sr 216.596	137.584	ppb	1.1676	0.8	566.123
Ti 334.941	1232.49	ppb	1.2288	0.1	135360
Tl 190.794	-0.4882	ppb	6.6281	1357.7	-9.5320
V 292.401	197.104	ppb	1.0120	0.5	2615.68
Zn 206.200	1365.44	ppb	4.1425	0.3	766.364

680-161405-A-39-A (Samp) **12/16/2018, 3:36:35 AM** **Rack 4, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.8967u	-0.1453u	-0.4487u
Al 308.215	156301	156149	155918
As 188.980	56.7381	60.6983	49.1123
B 249.678	91.6517	91.9401	91.2126
Ba 389.178	1319.70	1317.46	1311.28
Be 313.042	7.8089	7.8176	7.8214
Ca 370.602	118848	118773	118761
Cd 226.502	1.0385	0.7370	0.7293
Co 228.615	105.283	107.887	106.736
Cr 267.716	222.780	222.838	223.187
Cu 324.754	221.194	225.541	223.916
Fe 271.441	278712	278677	278707
K 766.491	21209.0	21185.3	21167.5
Mg 279.078	78074.9	78134.4	78039.8
Mn 257.610	6495.19	6494.49	6504.91
Mo 202.032	5.6537	3.6873	4.9496
Na 330.237	626.443u	733.772u	782.251u
Ni 231.604	266.944	261.442	265.625
Pb 220.353	93.2534	86.1192	84.4342
Sb 206.834	2.0114	-4.3125	-3.6195
Se 196.026	1.2675	22.0628	9.1427
Si 288.158	18812.8	18849.1	18842.8
Sn 189.925	15.5511	10.9846	21.9517
Sr 216.596	304.586	303.526	303.468
Ti 334.941	2707.15	2711.67	2709.17
Tl 190.794	-2.0834u	13.6163u	2.1248u
V 292.401	306.209	305.770	305.587
Zn 206.200	585.138	582.395	573.583

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4969	ppb	0.3780	76.1	-95.6398
Al 308.215	156122	ppb	192.914	0.1	368352
As 188.980	55.5162	ppb	5.8888	10.6	15.5308
B 249.678	91.6015	ppb	0.3663	0.4	260.147

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1316.15	ppb	4.3647	0.3	12698.9
Be 313.042	7.8160	ppb	0.0064	0.1	6205.86
Ca 370.602	118794	ppb	46.96	0.0	247525
Cd 226.502	0.8350	ppb	0.1763	21.1	228.222
Co 228.615	106.635	ppb	1.3050	1.2	519.913
Cr 267.716	222.935	ppb	0.2200	0.1	4870.84
Cu 324.754	223.550	ppb	2.1962	1.0	8389.46
Fe 271.441	278699	ppb	18.6436	0.0	209158
K 766.491	21187.3	ppb	20.8576	0.1	524487
Mg 279.078	78083.0	ppb	47.8371	0.1	107535
Mn 257.610	6498.20	ppb	5.8232	0.1	628906
Mo 202.032	4.7635	ppb	0.9963	20.9	8.5095
Na 330.237	714.155	ppb	79.7346	11.2	34.4726
Ni 231.604	264.671	ppb	2.8726	1.1	338.739
Pb 220.353	87.9356	ppb	4.6818	5.3	51.3067
Sb 206.834	-1.9735	ppb	3.4684	175.7	8.4089
Se 196.026	10.8243	ppb	10.4992	97.0	2.2548
Si 288.158	18834.9	ppb	19.3843	0.1	89382.4
Sn 189.925	16.1625	ppb	5.5091	34.1	4.5991
Sr 216.596	303.860	ppb	0.6296	0.2	1228.80
Ti 334.941	2709.33	ppb	2.2667	0.1	297624
Tl 190.794	4.5525	ppb	8.1265	178.5	-12.5182
V 292.401	305.855	ppb	0.3198	0.1	4072.28
Zn 206.200	580.372	ppb	6.0372	1.0	323.093

MB 680-551411/1-A (Samp) **12/16/2018, 3:41:20 AM** **Rack 4, Tube 8**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2162	0.2615	-0.7247u
Al 308.215	10.3250	6.2466	7.8639
As 188.980	-2.7350u	1.6248	-2.5779u
B 249.678	2.2890	1.4206	1.1576
Ba 389.178	0.1618	-0.9566u	0.8864
Be 313.042	-0.0167u	-0.0264u	-0.0140u
Ca 370.602	26.73	23.08	29.59
Cd 226.502	-0.0220u	-0.0068u	-0.1361u
Co 228.615	-0.4701u	-1.1201u	-1.3690u
Cr 267.716	0.6941	0.0265	-0.1179u
Cu 324.754	11.7942	11.9471	11.6018
Fe 271.441	23.0922	24.5315	17.2660
K 766.491	13.2231	14.0744	14.6229
Mg 279.078	7.0605	4.9069	2.3474
Mn 257.610	0.3425	0.3262	0.3685
Mo 202.032	1.6320	-0.2697u	0.5144
Na 330.237	320.207	19.8117	538.967
Ni 231.604	0.4052	2.4769	1.2278
Pb 220.353	6.0140	4.5671	5.5245
Sb 206.834	10.2164	1.7579	-4.4520u
Se 196.026	1.3724	-6.3877u	-10.7800u
Si 288.158	25.5313	22.7535	21.3706
Sn 189.925	10.7324	17.8403	7.0413
Sr 216.596	0.7690	0.2980	-0.0156u
Ti 334.941	0.9037	0.9239	0.8478

Label	Replicates Concentration		
Tl 190.794	-13.9284u	-2.5454u	-12.6017u
V 292.401	0.5691	0.0156	0.3589
Zn 206.200	12.7603	12.3458	12.4135

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0823	ppb	0.5568	676.2	-32.4922
Al 308.215	8.1452	ppb	2.0537	25.2	174.217
As 188.980	-1.2293	ppb	2.4730	201.2	0.6530
B 249.678	1.6224	ppb	0.5921	36.5	-56.2845
Ba 389.178	0.0305	ppb	0.9285	3041.8	-49.7480
Be 313.042	-0.0190	ppb	0.0065	34.1	-199.444
Ca 370.602	26.46	ppb	3.263	12.3	82.67
Cd 226.502	-0.0549	ppb	0.0707	128.6	5.0234
Co 228.615	-0.9864	ppb	0.4641	47.1	-12.0490
Cr 267.716	0.2009	ppb	0.4332	215.6	24.0356
Cu 324.754	11.7810	ppb	0.1731	1.5	651.608
Fe 271.441	21.6299	ppb	3.8472	17.8	33.8074
K 766.491	13.9734	ppb	0.7053	5.0	592.138
Mg 279.078	4.7716	ppb	2.3595	49.4	25.6881
Mn 257.610	0.3457	ppb	0.0214	6.2	63.3878
Mo 202.032	0.6256	ppb	0.9558	152.8	4.0152
Na 330.237	292.995	ppb	260.645	89.0	52.6749
Ni 231.604	1.3700	ppb	1.0432	76.1	0.1961
Pb 220.353	5.3685	ppb	0.7359	13.7	8.9130
Sb 206.834	2.5074	ppb	7.3629	293.6	6.7537
Se 196.026	-5.2651	ppb	6.1535	116.9	-2.1122
Si 288.158	23.2185	ppb	2.1190	9.1	447.806
Sn 189.925	11.8713	ppb	5.4888	46.2	3.3233
Sr 216.596	0.3505	ppb	0.3950	112.7	6.8809
Ti 334.941	0.8918	ppb	0.0395	4.4	61.4295
Tl 190.794	-9.6918	ppb	6.2244	64.2	-7.0245
V 292.401	0.3145	ppb	0.2794	88.8	1.8376
Zn 206.200	12.5066	ppb	0.2224	1.8	7.5625

LCS 680-551411/2-A (Samp) **12/16/2018, 3:46:04 AM** **Rack 4, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	47.6360	47.0165	46.5010
Al 308.215	4771.68	4767.17	4772.30
As 188.980	101.159	106.547	106.126
B 249.678	200.804	202.859	201.379
Ba 389.178	87.1840	87.8429	88.5588
Be 313.042	52.6355	52.5238	52.6912
Ca 370.602	4837	4821	4828
Cd 226.502	51.7312	51.1852	51.0133
Co 228.615	48.1195	48.3143	48.0523
Cr 267.716	98.1861	98.2362	97.8194
Cu 324.754	99.7781	99.1914	99.8089
Fe 271.441	4921.55	4917.62	4923.38
K 766.491	7759.69	7756.69	7775.52
Mg 279.078	5087.40	5079.99	5096.33
Mn 257.610	488.018	487.117	487.478
Mo 202.032	96.1051	93.8972	96.2821

Label	Replicates Concentration		
Na 330.237	5785.27	5567.37	5556.18
Ni 231.604	100.670	98.5277	99.6676
Pb 220.353	507.218	509.215	488.144
Sb 206.834	53.0262	41.9831	33.7192
Se 196.026	95.4388	87.3931	98.2121
Si 288.158	10.7413	8.9701	10.8880
Sn 189.925	109.159	105.726	105.532
Sr 216.596	97.7491	96.7737	95.9293
Ti 334.941	94.9881	95.0245	95.1203
Tl 190.794	29.9649	40.5505	27.9047
V 292.401	94.4620	94.6571	93.9114
Zn 206.200	108.092	108.870	105.438

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	47.0512	ppb	0.5683	1.2	1604.68
Al 308.215	4770.38	ppb	2.7986	0.1	11409.2
As 188.980	104.611	ppb	2.9965	2.9	27.4023
B 249.678	201.681	ppb	1.0604	0.5	1256.29
Ba 389.178	87.8619	ppb	0.6876	0.8	797.379
Be 313.042	52.6169	ppb	0.0852	0.2	42651.4
Ca 370.602	4829	ppb	8.117	0.2	10105
Cd 226.502	51.3099	ppb	0.3748	0.7	790.588
Co 228.615	48.1620	ppb	0.1361	0.3	216.362
Cr 267.716	98.0806	ppb	0.2276	0.2	2135.63
Cu 324.754	99.5928	ppb	0.3479	0.3	3838.33
Fe 271.441	4920.85	ppb	2.9434	0.1	3713.47
K 766.491	7763.97	ppb	10.1177	0.1	192352
Mg 279.078	5087.91	ppb	8.1844	0.2	7025.30
Mn 257.610	487.538	ppb	0.4536	0.1	47191.4
Mo 202.032	95.4281	ppb	1.3288	1.4	200.893
Na 330.237	5636.27	ppb	129.156	2.3	183.240
Ni 231.604	99.6216	ppb	1.0717	1.1	126.508
Pb 220.353	501.526	ppb	11.6318	2.3	267.118
Sb 206.834	42.9095	ppb	9.6867	22.6	23.0731
Se 196.026	93.6813	ppb	5.6195	6.0	15.9064
Si 288.158	10.1998	ppb	1.0675	10.5	412.223
Sn 189.925	106.806	ppb	2.0400	1.9	31.5520
Sr 216.596	96.8173	ppb	0.9107	0.9	374.758
Ti 334.941	95.0443	ppb	0.0683	0.1	10413.1
Tl 190.794	32.8067	ppb	6.7850	20.7	4.6277
V 292.401	94.3435	ppb	0.3867	0.4	1226.34
Zn 206.200	107.467	ppb	1.7998	1.7	60.8535

680-161864-A-1-A (Samp) **12/16/2018, 3:50:48 AM** **Rack 4, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.8018u	-0.4990u	-0.5270u
Al 308.215	46916.8	46857.5	46905.0
As 188.980	5.4718	13.4875	3.1450
B 249.678	7.0111	5.7828	4.2485
Ba 389.178	43.4930	43.3411	41.9081
Be 313.042	0.2352	0.2302	0.2268
Ca 370.602	67975	67982	68026

Label	Replicates Concentration		
Cd 226.502	-0.0842	0.0510	0.1105
Co 228.615	0.5428	-0.2284	-0.0691
Cr 267.716	54.3012	53.9555	54.1811
Cu 324.754	12.4510	12.2504	12.2537
Fe 271.441	11973.7	11999.1	12034.3
K 766.491	546.834	547.416	546.299
Mg 279.078	8636.61	8653.14	8668.98
Mn 257.610	83.6771	83.8840	83.8244
Mo 202.032	7.7091	6.4773	4.9350
Na 330.237	721.577	319.943	306.240
Ni 231.604	10.1169	11.2431	10.3739
Pb 220.353	38.4770	32.8700	32.6373
Sb 206.834	-4.8830u	-4.9485u	-2.1793u
Se 196.026	-3.9458u	0.0067	1.8665
Si 288.158	3417.43	3451.66	3415.96
Sn 189.925	13.4038	14.5034	12.9199
Sr 216.596	89.0241	90.2572	88.3160
Ti 334.941	451.193	452.748	451.075
Tl 190.794	-13.9814u	4.1135	-7.9712u
V 292.401	60.1979	60.0361	60.4049
Zn 206.200	22.1366	23.8732	22.3485

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6093	ppb	0.1673	27.5	-53.9465
Al 308.215	46893.1	ppb	31.3777	0.1	110743
As 188.980	7.3681	ppb	5.4258	73.6	2.8424
B 249.678	5.6808	ppb	1.3841	24.4	-41.4325
Ba 389.178	42.9140	ppb	0.8745	2.0	372.906
Be 313.042	0.2307	ppb	0.0042	1.8	17.1570
Ca 370.602	67994	ppb	27.56	0.0	141899
Cd 226.502	0.0257	ppb	0.0998	387.8	17.0485
Co 228.615	0.0818	ppb	0.4071	497.9	-2.7898
Cr 267.716	54.1459	ppb	0.1755	0.3	1188.95
Cu 324.754	12.3183	ppb	0.1149	0.9	673.371
Fe 271.441	12002.4	ppb	30.4459	0.3	9024.46
K 766.491	546.850	ppb	0.5585	0.1	13777.2
Mg 279.078	8652.91	ppb	16.1848	0.2	11934.5
Mn 257.610	83.7951	ppb	0.1065	0.1	8189.02
Mo 202.032	6.3738	ppb	1.3900	21.8	15.7720
Na 330.237	449.253	ppb	235.939	52.5	55.0032
Ni 231.604	10.5779	ppb	0.5902	5.6	12.0449
Pb 220.353	34.6614	ppb	3.3065	9.5	23.5967
Sb 206.834	-4.0036	ppb	1.5802	39.5	4.3157
Se 196.026	-0.6909	ppb	2.9683	429.6	-1.2375
Si 288.158	3428.35	ppb	20.2030	0.6	16545.1
Sn 189.925	13.6090	ppb	0.8115	6.0	3.8399
Sr 216.596	89.1991	ppb	0.9824	1.1	349.194
Ti 334.941	451.672	ppb	0.9339	0.2	49572.5
Tl 190.794	-5.9464	ppb	9.2158	155.0	-6.4199
V 292.401	60.2130	ppb	0.1848	0.3	789.790
Zn 206.200	22.7861	ppb	0.9474	4.2	13.1528

Cont Calib Verif (CCV) **12/16/2018, 3:55:33 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	493.257	488.182	488.260
Al 308.215	10021.2	10015.1	10039.0
As 188.980	541.978	544.673	544.003
B 249.678	541.297	539.599	542.425
Ba 389.178	465.356	464.745	461.649
Be 313.042	551.232	551.346	552.055
Ca 370.602	10112	10091	10114
Cd 226.502	522.809	521.705	523.112
Co 228.615	509.795	510.263	508.723
Cr 267.716	502.905	502.895	504.428
Cu 324.754	512.029	505.067	510.560
Fe 271.441	10193.8	10178.7	10166.0
K 766.491	10219.8	10219.9	10230.5
Mg 279.078	10706.7	10705.6	10712.5
Mn 257.610	505.929	505.560	506.150
Mo 202.032	485.856	487.691	493.364
Na 330.237	11034.1	10827.8	11209.9
Ni 231.604	518.576	514.612	524.742
Pb 220.353	509.485	524.197	518.061
Sb 206.834	509.345	507.352	503.961
Se 196.026	525.081	521.479	538.817
Si 288.158	5065.69	5061.50	5078.82
Sn 189.925	501.037	507.790	490.158
Sr 216.596	503.508	499.132	501.696
Ti 334.941	494.098	493.973	495.151
Tl 190.794	500.682	499.518	488.664
V 292.401	496.246	497.136	498.265
Zn 206.200	1090.43	1100.19	1094.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	489.900	ppb	2.9079	0.6	16987.8	97.97996
Al 308.215	10025.1	ppb	12.3992	0.1	23818.8	100.25113
As 188.980	543.551	ppb	1.4034	0.3	138.307	108.71022
B 249.678	541.107	ppb	1.4228	0.3	3486.24	108.22140
Ba 389.178	463.917	ppb	1.9876	0.4	4403.10	92.78330
Be 313.042	551.544	ppb	0.4456	0.1	448848	110.30888Q
Ca 370.602	10106	ppb	12.55	0.1	21118	101.05502
Cd 226.502	522.542	ppb	0.7409	0.1	7966.85	104.50838
Co 228.615	509.594	ppb	0.7896	0.2	2360.43	101.91876
Cr 267.716	503.410	ppb	0.8822	0.2	10874.2	100.68192
Cu 324.754	509.219	ppb	3.6698	0.7	18699.2	101.84373
Fe 271.441	10179.5	ppb	13.9086	0.1	7687.83	101.74394
K 766.491	10223.4	ppb	6.1710	0.1	253206	102.23413
Mg 279.078	10708.3	ppb	3.6798	0.0	14770.1	107.08253
Mn 257.610	505.880	ppb	0.2985	0.1	49001.9	101.17594
Mo 202.032	488.971	ppb	3.9142	0.8	1018.38	97.79411
Na 330.237	11024.0	ppb	191.237	1.7	312.370	110.23960Q
Ni 231.604	519.310	ppb	5.1047	1.0	665.799	103.86198
Pb 220.353	517.248	ppb	7.3897	1.4	274.987	103.44956
Sb 206.834	506.886	ppb	2.7221	0.5	213.271	101.37725
Se 196.026	528.459	ppb	9.1492	1.7	94.8386	105.69179
Si 288.158	5068.67	ppb	9.0377	0.2	24398.8	101.37332

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	499.662	ppb	8.8960	1.8	148.366	99.93233
Sr 216.596	501.445	ppb	2.1988	0.4	1914.38	100.28905
Ti 334.941	494.407	ppb	0.6466	0.1	54269.3	98.88149
Tl 190.794	496.288	ppb	6.6283	1.3	132.630	99.25755
V 292.401	497.216	ppb	1.0121	0.2	6470.95	99.44313
Zn 206.200	1095.08	ppb	4.8946	0.4	616.052	109.50751

Cont Calib Blank (CCB) **12/16/2018, 4:00:15 AM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0618u	-0.3125u	-0.2425u
Al 308.215	6.1227	7.3149	4.6248
As 188.980	2.2535	6.5322	4.6343
B 249.678	2.7841	2.4845	2.8807
Ba 389.178	-0.3764u	-0.8116u	-0.6457u
Be 313.042	0.0547	0.0686	0.0475
Ca 370.602	7.999	5.699	9.730
Cd 226.502	-0.0259u	-0.2147u	0.1344
Co 228.615	-1.0977u	-0.7735u	-1.3330u
Cr 267.716	-0.0467u	-0.8888u	-0.0561u
Cu 324.754	1.3360	0.7127	1.2035
Fe 271.441	0.4749	-3.2889u	5.5805
K 766.491	4.6152	3.9675	4.2807
Mg 279.078	4.6939	7.3402	5.3500
Mn 257.610	0.2082	0.2728	0.0728
Mo 202.032	-0.8441u	0.3658	0.4592
Na 330.237	143.572	-26.6310u	109.196
Ni 231.604	2.2842	-0.8026u	-0.1682u
Pb 220.353	5.8472	1.4558	-5.6676u
Sb 206.834	-1.5213u	-2.4862u	-2.9249u
Se 196.026	-3.6136u	1.3516	6.6181
Si 288.158	3.2553	6.0475	5.3349
Sn 189.925	0.3194	-4.9054u	-3.5716u
Sr 216.596	-0.5261u	0.6881	1.3904
Ti 334.941	0.3832	0.4158	0.2066
Tl 190.794	1.5665	-2.5600u	2.2655
V 292.401	0.1165	-0.2409u	0.2371
Zn 206.200	-0.4514u	-0.7405u	1.3752

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2056	ppb	0.1294	62.9	-36.7683	-0.20560
Al 308.215	6.0208	ppb	1.3479	22.4	169.191	6.02081
As 188.980	4.4733	ppb	2.1439	47.9	2.0952	4.47332
B 249.678	2.7164	ppb	0.2066	7.6	-49.0486	2.71643
Ba 389.178	-0.6112	ppb	0.2196	35.9	-55.8999	-0.61122
Be 313.042	0.0569	ppb	0.0107	18.8	-137.551	0.05693
Ca 370.602	7.810	ppb	2.022	25.9	43.79	7.80954
Cd 226.502	-0.0354	ppb	0.1747	493.8	5.2987	-0.03539
Co 228.615	-1.0681	ppb	0.2809	26.3	-12.4246	-1.06807
Cr 267.716	-0.3305	ppb	0.4835	146.3	12.5719	-0.33052
Cu 324.754	1.0840	ppb	0.3284	30.3	263.672	1.08404
Fe 271.441	0.9222	ppb	4.4515	482.7	18.2700	0.92217
K 766.491	4.2878	ppb	0.3239	7.6	352.485	4.28780

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	5.7947	ppb	1.3781	23.8	27.1004	5.79469
Mn 257.610	0.1846	ppb	0.1021	55.3	47.7570	0.18458
Mo 202.032	-0.0064	ppb	0.7270	11384.3	2.7027	-0.00639
Na 330.237	75.3790	ppb	89.9998	119.4	47.3586	75.37897
Ni 231.604	0.4378	ppb	1.6302	372.3	-1.0028	0.43783
Pb 220.353	0.5451	ppb	5.8112	1066.0	6.4025	0.54513
Sb 206.834	-2.3108	ppb	0.7181	31.1	4.7648	-2.31083
Se 196.026	1.4520	ppb	5.1166	352.4	-0.8931	1.45203
Si 288.158	4.8792	ppb	1.4508	29.7	360.177	4.87923
Sn 189.925	-2.7192	ppb	2.7147	99.8	-1.0152	-2.71923
Sr 216.596	0.5175	ppb	0.9696	187.4	7.5210	0.51746
Ti 334.941	0.3352	ppb	0.1126	33.6	0.3312	0.33518
Tl 190.794	0.4240	ppb	2.6077	615.0	-4.2360	0.42400
V 292.401	0.0376	ppb	0.2486	661.4	-1.7456	0.03759
Zn 206.200	0.0611	ppb	1.1472	1878.2	0.5629	0.06108

680-161864-A-1-Asd (Samp) **12/16/2018, 4:04:58 AM** **Rack 4, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1501u	-0.5733u	-0.5656u
Al 308.215	9683.42	9676.12	9697.43
As 188.980	11.2809	-3.0000u	0.7109
B 249.678	3.0520	2.3778	0.9203
Ba 389.178	7.6126	5.9371	9.0083
Be 313.042	0.0463	0.0289	0.0347
Ca 370.602	13946	13934	13941
Cd 226.502	0.1361	-0.4642u	-0.4458u
Co 228.615	-2.0267u	-0.8584u	-0.4227u
Cr 267.716	10.7952	10.8246	10.9054
Cu 324.754	3.0340	2.3282	2.9234
Fe 271.441	2481.28	2491.43	2489.54
K 766.491	108.855	108.877	108.587
Mg 279.078	1792.50	1782.95	1789.63
Mn 257.610	17.2079	17.2989	17.2601
Mo 202.032	1.3319	1.3516	1.1978
Na 330.237	54.9091	325.586	119.503
Ni 231.604	1.4841	2.8234	3.5948
Pb 220.353	5.6016	6.5163	0.8390
Sb 206.834	-1.7428u	-8.5354u	-1.6220u
Se 196.026	2.8934	-15.7515u	-7.6979u
Si 288.158	845.019	846.753	842.210
Sn 189.925	7.1618	-1.2019u	4.1370
Sr 216.596	18.6040	20.4008	18.5328
Ti 334.941	97.4244	97.2534	97.6953
Tl 190.794	2.2929	-7.5362u	-1.8155u
V 292.401	12.2838	12.2646	13.0892
Zn 206.200	3.4596	4.9169	2.9697

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4297	ppb	0.2421	56.4	-45.2142
Al 308.215	9685.66	ppb	10.8311	0.1	22996.8
As 188.980	2.9973	ppb	7.4099	247.2	1.7251
B 249.678	2.1167	ppb	1.0896	51.5	-55.4690

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	7.5193	ppb	1.5377	20.5	24.4453
Be 313.042	0.0367	ppb	0.0088	24.1	-151.348
Ca 370.602	13940	ppb	6.349	0.0	29114
Cd 226.502	-0.2580	ppb	0.3414	132.3	4.1525
Co 228.615	-1.1026	ppb	0.8294	75.2	-11.6660
Cr 267.716	10.8417	ppb	0.0571	0.5	253.837
Cu 324.754	2.7618	ppb	0.3796	13.7	324.994
Fe 271.441	2487.42	ppb	5.3938	0.2	1884.19
K 766.491	108.773	ppb	0.1611	0.1	2937.78
Mg 279.078	1788.36	ppb	4.8969	0.3	2481.76
Mn 257.610	17.2557	ppb	0.0457	0.3	1710.19
Mo 202.032	1.2938	ppb	0.0837	6.5	5.3653
Na 330.237	166.666	ppb	141.367	84.8	49.2829
Ni 231.604	2.6341	ppb	1.0680	40.5	1.8233
Pb 220.353	4.3190	ppb	3.0483	70.6	8.2498
Sb 206.834	-3.9667	ppb	3.9571	99.8	4.1312
Se 196.026	-6.8520	ppb	9.3512	136.5	-2.3911
Si 288.158	844.661	ppb	2.2928	0.3	4329.97
Sn 189.925	3.3656	ppb	4.2348	125.8	0.7941
Sr 216.596	19.1792	ppb	1.0585	5.5	79.4237
Ti 334.941	97.4577	ppb	0.2228	0.2	10667.4
Tl 190.794	-2.3529	ppb	4.9365	209.8	-5.0904
V 292.401	12.5459	ppb	0.4707	3.8	162.806
Zn 206.200	3.7820	ppb	1.0129	26.8	2.6161

680-161864-A-1-Apds (Samp) **12/16/2018, 4:09:42 AM** **Rack 4, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.0283	51.7009	51.6150
Al 308.215	51107.7	51207.4	51131.3
As 188.980	121.373	116.652	112.952
B 249.678	222.070	222.813	222.533
Ba 389.178	137.359	137.973	136.848
Be 313.042	55.7689	55.8164	55.9132
Ca 370.602	71619	71639	71679
Cd 226.502	52.7991	53.5821	53.2895
Co 228.615	52.6087	51.2108	52.4718
Cr 267.716	155.092	155.347	155.359
Cu 324.754	116.968	117.695	117.203
Fe 271.441	16840.4	16897.1	16884.1
K 766.491	9094.32	9087.75	9080.57
Mg 279.078	13837.1	13843.9	13856.2
Mn 257.610	591.688	592.441	592.516
Mo 202.032	104.785	104.531	107.729
Na 330.237	6555.09	5744.06	6106.17
Ni 231.604	113.960	112.932	113.755
Pb 220.353	553.935	558.484	549.991
Sb 206.834	51.3003	49.6336	54.3855
Se 196.026	100.001	97.9915	122.691
Si 288.158	3388.17	3378.10	3359.36
Sn 189.925	114.629	110.752	110.605
Sr 216.596	187.463	188.334	189.077
Ti 334.941	542.340	542.781	542.799

Label	Replicates Concentration		
Tl 190.794	47.5837	30.9942	39.5572
V 292.401	158.110	157.400	158.005
Zn 206.200	133.444	135.321	134.472

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.4481	ppb	0.3660	0.7	1754.35
Al 308.215	51148.8	ppb	52.1310	0.1	120784
As 188.980	116.992	ppb	4.2209	3.6	30.5476
B 249.678	222.472	ppb	0.3750	0.2	1381.36
Ba 389.178	137.393	ppb	0.5630	0.4	1283.75
Be 313.042	55.8328	ppb	0.0735	0.1	45282.5
Ca 370.602	71646	ppb	30.42	0.0	149521
Cd 226.502	53.2235	ppb	0.3956	0.7	830.463
Co 228.615	52.0971	ppb	0.7706	1.5	238.875
Cr 267.716	155.266	ppb	0.1509	0.1	3370.43
Cu 324.754	117.289	ppb	0.3711	0.3	4482.38
Fe 271.441	16873.9	ppb	29.7253	0.2	12683.5
K 766.491	9087.54	ppb	6.8778	0.1	225101
Mg 279.078	13845.7	ppb	9.7145	0.1	19085.2
Mn 257.610	592.215	ppb	0.4577	0.1	57369.7
Mo 202.032	105.681	ppb	1.7777	1.7	222.010
Na 330.237	6135.11	ppb	406.287	6.6	193.949
Ni 231.604	113.549	ppb	0.5441	0.5	144.424
Pb 220.353	554.137	ppb	4.2501	0.8	293.946
Sb 206.834	51.7731	ppb	2.4110	4.7	26.9706
Se 196.026	106.895	ppb	13.7172	12.8	18.3509
Si 288.158	3375.21	ppb	14.6227	0.4	16320.8
Sn 189.925	111.996	ppb	2.2821	2.0	33.0952
Sr 216.596	188.291	ppb	0.8080	0.4	727.016
Ti 334.941	542.640	ppb	0.2602	0.0	59575.0
Tl 190.794	39.3784	ppb	8.2962	21.1	6.0190
V 292.401	157.838	ppb	0.3830	0.2	2061.04
Zn 206.200	134.412	ppb	0.9399	0.7	75.8163

680-161864-A-1-B MS (Samp) **12/16/2018, 4:14:27 AM** **Rack 4, Tube 13**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	47.1433	46.8386	46.2962
Al 308.215	54374.2	54316.0	54278.2
As 188.980	95.2939	100.535	98.0586
B 249.678	184.666	184.628	186.249
Ba 389.178	128.016	125.485	128.093
Be 313.042	53.2691	53.2631	53.2967
Ca 370.602	52541	52462	52477
Cd 226.502	50.8499	50.6275	50.2876
Co 228.615	49.0430	50.0727	49.9531
Cr 267.716	152.289	151.406	151.472
Cu 324.754	111.617	112.245	110.055
Fe 271.441	16367.4	16339.5	16360.1
K 766.491	8633.47	8640.82	8636.40
Mg 279.078	12303.2	12291.9	12302.1
Mn 257.610	527.839	526.866	526.663
Mo 202.032	93.3043	94.2713	90.1503

Label	Replicates Concentration		
Na 330.237	5949.15	5069.80	5526.33
Ni 231.604	111.073	113.207	112.647
Pb 220.353	530.949	514.378	529.504
Sb 206.834	29.1576	24.5217	28.3221
Se 196.026	114.261	95.9193	104.106
Si 288.158	3998.04	4023.12	4007.56
Sn 189.925	106.493	115.167	106.898
Sr 216.596	143.062	143.433	140.812
Ti 334.941	459.944	461.088	460.096
Tl 190.794	17.7368	31.9995	33.2131
V 292.401	153.803	152.673	153.562
Zn 206.200	126.310	127.222	125.277

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	46.7594	ppb	0.4291	0.9	1591.71
Al 308.215	54322.8	ppb	48.3550	0.1	128269
As 188.980	97.9626	ppb	2.6219	2.7	25.7363
B 249.678	185.181	ppb	0.9249	0.5	1136.31
Ba 389.178	127.198	ppb	1.4839	1.2	1184.43
Be 313.042	53.2763	ppb	0.0179	0.0	43199.1
Ca 370.602	52493	ppb	41.85	0.1	109553
Cd 226.502	50.5883	ppb	0.2832	0.6	790.140
Co 228.615	49.6896	ppb	0.5631	1.1	227.090
Cr 267.716	151.722	ppb	0.4917	0.3	3293.79
Cu 324.754	111.306	ppb	1.1275	1.0	4265.06
Fe 271.441	16355.7	ppb	14.4932	0.1	12294.5
K 766.491	8636.90	ppb	3.6985	0.0	213951
Mg 279.078	12299.1	ppb	6.2359	0.1	16953.6
Mn 257.610	527.123	ppb	0.6288	0.1	51068.0
Mo 202.032	92.5753	ppb	2.1550	2.3	194.788
Na 330.237	5515.09	ppb	439.780	8.0	178.856
Ni 231.604	112.309	ppb	1.1063	1.0	142.833
Pb 220.353	524.944	ppb	9.1788	1.7	278.727
Sb 206.834	27.3338	ppb	2.4709	9.0	16.9598
Se 196.026	104.762	ppb	9.1883	8.8	17.9564
Si 288.158	4009.57	ppb	12.6643	0.3	19309.0
Sn 189.925	109.519	ppb	4.8951	4.5	32.3588
Sr 216.596	142.436	ppb	1.4183	1.0	551.745
Ti 334.941	460.376	ppb	0.6210	0.1	50539.9
Tl 190.794	27.6498	ppb	8.6063	31.1	2.8043
V 292.401	153.346	ppb	0.5952	0.4	2002.68
Zn 206.200	126.270	ppb	0.9728	0.8	71.2456

680-161864-A-1-C MSD (Samp) **12/16/2018, 4:19:11 AM** **Rack 4, Tube 14**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	48.8034	48.5454	47.8954
Al 308.215	59914.6	60053.8	59996.9
As 188.980	101.890	102.026	108.955
B 249.678	184.975	184.895	184.942
Ba 389.178	133.534	136.061	134.210
Be 313.042	53.2772	53.3329	53.2799
Ca 370.602	159238	159564	159223

Label	Replicates Concentration		
Cd 226.502	50.7838	50.2849	49.9357
Co 228.615	50.4390	49.2126	49.5107
Cr 267.716	155.977	156.340	156.459
Cu 324.754	114.556	114.671	112.919
Fe 271.441	18383.3	18401.5	18403.7
K 766.491	9062.21	9071.47	9064.10
Mg 279.078	45749.1	45836.9	45792.7
Mn 257.610	565.560	566.447	566.081
Mo 202.032	92.5229	90.8778	93.8711
Na 330.237	6042.30	6267.78	5783.53
Ni 231.604	108.651	109.508	112.382
Pb 220.353	525.144	518.278	534.994
Sb 206.834	14.9563	21.7918	28.6118
Se 196.026	101.787	93.2034	95.8626
Si 288.158	3522.62	3546.69	3557.95
Sn 189.925	99.1959	107.032	99.6274
Sr 216.596	222.361	222.882	223.485
Ti 334.941	443.835	444.423	444.100
Tl 190.794	24.5696	34.9771	32.4319
V 292.401	158.231	159.440	159.449
Zn 206.200	134.222	131.597	128.365

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.4148	ppb	0.4679	1.0	1648.32
Al 308.215	59988.4	ppb	69.9701	0.1	141630
As 188.980	104.290	ppb	4.0398	3.9	27.3400
B 249.678	184.937	ppb	0.0402	0.0	1132.68
Ba 389.178	134.602	ppb	1.3080	1.0	1290.99
Be 313.042	53.2967	ppb	0.0314	0.1	43232.0
Ca 370.602	159342	ppb	192.7	0.1	332510
Cd 226.502	50.3348	ppb	0.4263	0.8	788.210
Co 228.615	49.7207	ppb	0.6396	1.3	227.158
Cr 267.716	156.258	ppb	0.2509	0.2	3391.89
Cu 324.754	114.048	ppb	0.9799	0.9	4364.93
Fe 271.441	18396.2	ppb	11.2046	0.1	13825.7
K 766.491	9065.93	ppb	4.8931	0.1	224566
Mg 279.078	45792.9	ppb	43.9010	0.1	63113.8
Mn 257.610	566.029	ppb	0.4457	0.1	54977.0
Mo 202.032	92.4239	ppb	1.4991	1.6	194.443
Na 330.237	6031.20	ppb	242.313	4.0	191.364
Ni 231.604	110.181	ppb	1.9544	1.8	140.096
Pb 220.353	526.138	ppb	8.4020	1.6	279.297
Sb 206.834	21.7867	ppb	6.8278	31.3	14.7002
Se 196.026	96.9511	ppb	4.3943	4.5	16.5486
Si 288.158	3542.42	ppb	18.0476	0.5	17103.0
Sn 189.925	101.952	ppb	4.4048	4.3	30.1087
Sr 216.596	222.909	ppb	0.5623	0.3	859.938
Ti 334.941	444.120	ppb	0.2944	0.1	48865.7
Tl 190.794	30.6595	ppb	5.4254	17.7	3.5637
V 292.401	159.040	ppb	0.7004	0.4	2077.68
Zn 206.200	131.395	ppb	2.9339	2.2	74.0982

680-161864-A-2-A (Samp) **12/16/2018, 4:23:55 AM** **Rack 4, Tube 15**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3930	-0.1997u	-0.0556u
Al 308.215	35701.3	35676.9	35660.3
As 188.980	8.5352	22.1409	20.0003
B 249.678	14.4652	13.7474	13.7707
Ba 389.178	160.721	159.392	161.424
Be 313.042	0.7006	0.7227	0.7106
Ca 370.602	107924	107983	107998
Cd 226.502	0.2125	0.5389	0.4598
Co 228.615	7.7781	8.8955	8.2883
Cr 267.716	29.1820	29.3450	30.0241
Cu 324.754	47.9951	48.3801	48.3045
Fe 271.441	26074.0	26058.5	26117.6
K 766.491	4647.51	4647.75	4646.79
Mg 279.078	45217.2	45311.3	45343.3
Mn 257.610	393.831	393.854	394.768
Mo 202.032	5.9056	4.4491	3.3478
Na 330.237	739.648	625.920	953.458
Ni 231.604	22.2052	20.2803	19.7799
Pb 220.353	21.4327	19.8726	15.5286
Sb 206.834	0.3900	5.3252	-2.4798u
Se 196.026	-5.0351u	2.7743	5.6699
Si 288.158	2204.75	2208.20	2215.22
Sn 189.925	9.3109	15.2771	9.5505
Sr 216.596	155.766	156.635	156.845
Ti 334.941	1371.72	1370.81	1371.45
Tl 190.794	-12.7461u	-17.7366u	-3.0934u
V 292.401	73.8842	73.7335	74.1895
Zn 206.200	156.341	150.526	152.548

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0459	ppb	0.3091	673.6	-35.2056
Al 308.215	35679.5	ppb	20.6105	0.1	84299.8
As 188.980	16.8921	ppb	7.3161	43.3	5.2833
B 249.678	13.9944	ppb	0.4078	2.9	-0.6252
Ba 389.178	160.512	ppb	1.0316	0.6	1540.17
Be 313.042	0.7113	ppb	0.0110	1.6	413.706
Ca 370.602	107968	ppb	39.21	0.0	225313
Cd 226.502	0.4037	ppb	0.1702	42.2	32.4360
Co 228.615	8.3206	ppb	0.5594	6.7	44.0043
Cr 267.716	29.5170	ppb	0.4466	1.5	660.808
Cu 324.754	48.2266	ppb	0.2040	0.4	1978.46
Fe 271.441	26083.4	ppb	30.6587	0.1	19591.3
K 766.491	4647.35	ppb	0.4998	0.0	115237
Mg 279.078	45290.6	ppb	65.5524	0.1	62428.1
Mn 257.610	394.151	ppb	0.5348	0.1	38383.4
Mo 202.032	4.5675	ppb	1.2830	28.1	11.8121
Na 330.237	773.008	ppb	166.298	21.5	60.5191
Ni 231.604	20.7551	ppb	1.2805	6.2	25.1215
Pb 220.353	18.9446	ppb	3.0595	16.1	15.4590
Sb 206.834	1.0784	ppb	3.9478	366.1	6.4928
Se 196.026	1.1364	ppb	5.5373	487.3	-0.8342
Si 288.158	2209.39	ppb	5.3380	0.2	10834.1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	11.3795	ppb	3.3775	29.7	3.1770
Sr 216.596	156.415	ppb	0.5724	0.4	609.368
Ti 334.941	1371.33	ppb	0.4678	0.0	150642
Tl 190.794	-11.1921	ppb	7.4442	66.5	-8.3354
V 292.401	73.9357	ppb	0.2323	0.3	978.215
Zn 206.200	153.138	ppb	2.9518	1.9	86.2961

680-162002-C-1-A (Samp) **12/16/2018, 4:28:39 AM** **Rack 4, Tube 16**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0225u	-0.0328u	-0.0844u
Al 308.215	470.604	475.361	470.446
As 188.980	5.7524	1.4772	9.7545
B 249.678	810.074	810.709	809.067
Ba 389.178	60.8043	62.3311	63.1547
Be 313.042	-0.0099u	0.0034u	0.0157u
Ca 370.602	6588	6608	6594
Cd 226.502	0.6908	0.7123	0.8840
Co 228.615	1.5624	0.7067u	1.6151
Cr 267.716	49.6194	49.2660	49.5201
Cu 324.754	317.367	309.203	313.544
Fe 271.441	12489.7	12538.8	12520.3
K 766.491	933.192	932.052	931.852
Mg 279.078	1350.91	1348.07	1350.95
Mn 257.610	94.6449	94.7170	94.5580
Mo 202.032	517.837	511.017	514.230
Na 330.237	1218.88	1271.12	930.572
Ni 231.604	42.5779	42.4717	40.5606
Pb 220.353	275.544	276.234	276.340
Sb 206.834	10.3073	6.7042u	4.1416u
Se 196.026	-5.9857u	-10.7938u	4.2037
Si 288.158	11188.6	11212.7	11215.8
Sn 189.925	34.6299	36.7979	41.2354
Sr 216.596	4.4559	4.7897	5.1987
Ti 334.941	13.0917	13.0572	12.9880
Tl 190.794	-4.1281u	-7.6726u	-1.9761u
V 292.401	2.1372u	2.1919u	2.3540u
Zn 206.200	4349.09	4359.93	4374.45

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0466	ppb	0.0332	71.3	-33.6920
Al 308.215	472.137	ppb	2.7934	0.6	1276.90
As 188.980	5.6614	ppb	4.1394	73.1	2.3480
B 249.678	809.950	ppb	0.8279	0.1	5254.36
Ba 389.178	62.0967	ppb	1.1926	1.9	549.886
Be 313.042	0.0031	ppb	0.0128	416.1	-215.006
Ca 370.602	6596	ppb	10.47	0.2	13768
Cd 226.502	0.7623	ppb	0.1059	13.9	26.5783
Co 228.615	1.2948	ppb	0.5099	39.4	-6.4731
Cr 267.716	49.4685	ppb	0.1823	0.4	1087.70
Cu 324.754	313.372	ppb	4.0847	1.3	11601.6
Fe 271.441	12516.3	ppb	24.8075	0.2	9410.04
K 766.491	932.365	ppb	0.7226	0.1	23316.1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1349.97	ppb	1.6510	0.1	1878.59
Mn 257.610	94.6400	ppb	0.0796	0.1	9197.44
Mo 202.032	514.361	ppb	3.4122	0.7	1071.21
Na 330.237	1140.19	ppb	183.403	16.1	61.6729
Ni 231.604	41.8701	ppb	1.1353	2.7	52.2841
Pb 220.353	276.039	ppb	0.4320	0.2	149.715
Sb 206.834	7.0510	ppb	3.0974	43.9	4.6583
Se 196.026	-4.1920	ppb	7.6580	182.7	-1.8705
Si 288.158	11205.7	ppb	14.8696	0.1	53311.8
Sn 189.925	37.5544	ppb	3.3671	9.0	10.9600
Sr 216.596	4.8148	ppb	0.3720	7.7	19.7395
Ti 334.941	13.0456	ppb	0.0528	0.4	1399.96
Tl 190.794	-4.5923	ppb	2.8764	62.6	-6.8195
V 292.401	2.2277	ppb	0.1127	5.1	-8.6737
Zn 206.200	4361.16	ppb	12.7221	0.3	2453.35

680-162002-C-2-A (Samp) **12/16/2018, 4:33:23 AM** **Rack 4, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4499u	0.3651	-0.3022u
Al 308.215	110.480	107.150	113.592
As 188.980	-1.9652u	-2.7426u	-0.9902u
B 249.678	676.750	678.804	680.136
Ba 389.178	11.5724	13.3973	12.0395
Be 313.042	-0.0156u	-0.0142u	-0.0287u
Ca 370.602	6099	6122	6119
Cd 226.502	0.5825	0.2431	0.3636
Co 228.615	-1.4997u	-0.2111u	-0.2514u
Cr 267.716	6.3331	6.4902	6.2873
Cu 324.754	183.339	181.421	182.090
Fe 271.441	1540.39	1529.37	1535.42
K 766.491	1089.93	1098.31	1090.10
Mg 279.078	573.211	575.179	578.579
Mn 257.610	14.4371	14.4160	14.3975
Mo 202.032	183.229	185.677	182.771
Na 330.237	1210.58	1346.87	1517.68
Ni 231.604	2.7836	5.7020	6.5754
Pb 220.353	16.6252	17.2221	12.1420
Sb 206.834	-2.6232u	9.5985	5.6718
Se 196.026	-6.4199u	0.7503	4.2392
Si 288.158	345.125	335.020	330.817
Sn 189.925	41.0638	37.4456	39.1164
Sr 216.596	3.0538	4.6215	3.3710
Ti 334.941	12.8128	12.9639	12.8929
Tl 190.794	-5.0871u	-0.4513u	7.2313
V 292.401	0.4626u	0.5183u	0.6741u
Zn 206.200	3388.77	3367.27	3370.34

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1290	ppb	0.4342	336.6	-34.4326
Al 308.215	110.407	ppb	3.2215	2.9	418.279
As 188.980	-1.8993	ppb	0.8781	46.2	0.4623
B 249.678	678.563	ppb	1.7060	0.3	4400.02

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	12.3364	ppb	0.9480	7.7	69.3616
Be 313.042	-0.0195	ppb	0.0080	41.2	-211.181
Ca 370.602	6113	ppb	12.59	0.2	12781
Cd 226.502	0.3964	ppb	0.1720	43.4	12.9965
Co 228.615	-0.6540	ppb	0.7326	112.0	-12.3300
Cr 267.716	6.3702	ppb	0.1064	1.7	157.219
Cu 324.754	182.284	ppb	0.9735	0.5	6838.76
Fe 271.441	1535.06	ppb	5.5208	0.4	1169.59
K 766.491	1092.78	ppb	4.7872	0.4	27285.2
Mg 279.078	575.656	ppb	2.7155	0.5	812.322
Mn 257.610	14.4169	ppb	0.0198	0.1	1427.91
Mo 202.032	183.892	ppb	1.5621	0.8	384.761
Na 330.237	1358.37	ppb	153.873	11.3	70.4219
Ni 231.604	5.0203	ppb	1.9857	39.6	4.8922
Pb 220.353	15.3297	ppb	2.7768	18.1	14.0511
Sb 206.834	4.2157	ppb	6.2396	148.0	5.9753
Se 196.026	-0.4768	ppb	5.4345	1139.8	-1.2372
Si 288.158	336.987	ppb	7.3542	2.2	1957.73
Sn 189.925	39.2086	ppb	1.8109	4.6	11.4519
Sr 216.596	3.6821	ppb	0.8288	22.5	17.5346
Ti 334.941	12.8899	ppb	0.0756	0.6	1380.30
Tl 190.794	0.5643	ppb	6.2216	1102.5	-4.5123
V 292.401	0.5517	ppb	0.1096	19.9	-8.0977
Zn 206.200	3375.46	ppb	11.6262	0.3	1899.09

680-162002-C-3-A (Samp) **12/16/2018, 4:38:07 AM** **Rack 4, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5663	-0.0925u	0.0558
Al 308.215	202.178	206.891	202.408
As 188.980	7.4995	1.9724	1.5513
B 249.678	193.228	191.788	193.212
Ba 389.178	483.190	480.653	481.826
Be 313.042	-0.0194u	-0.0085u	0.0039u
Ca 370.602	3566	3570	3572
Cd 226.502	1.0720	0.8802	0.8657
Co 228.615	0.5762	-0.0146u	0.5647
Cr 267.716	13.6064	13.6151	13.1263
Cu 324.754	120.337	120.382	120.817
Fe 271.441	3065.66	3056.32	3055.75
K 766.491	688.803	687.398	687.416
Mg 279.078	272.547	278.559	271.939
Mn 257.610	30.9131	30.8545	30.9871
Mo 202.032	75.7389	75.0724	76.0256
Na 330.237	1017.49	1362.88	879.821
Ni 231.604	17.3377	16.8046	15.4737
Pb 220.353	36.8266	30.8060	35.5934
Sb 206.834	1.1684u	2.5172	-5.2780u
Se 196.026	12.4719	-19.2586u	-8.0957u
Si 288.158	180.934	179.379	174.531
Sn 189.925	27.0486	16.3367	12.2602
Sr 216.596	12.2534	11.8980	12.2566
Ti 334.941	3.3728	3.3041	3.3332

Label	Replicates Concentration		
Tl 190.794	-7.2024u	4.7245	-9.3843u
V 292.401	0.8651	0.3465u	0.4858
Zn 206.200	4320.68	4310.10	4315.58

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1765	ppb	0.3456	195.8	-24.1138
Al 308.215	203.826	ppb	2.6573	1.3	636.975
As 188.980	3.6744	ppb	3.3193	90.3	1.8876
B 249.678	192.743	ppb	0.8270	0.4	1199.28
Ba 389.178	481.890	ppb	1.2695	0.3	4560.77
Be 313.042	-0.0080	ppb	0.0117	146.1	-195.018
Ca 370.602	3569	ppb	2.782	0.1	7470
Cd 226.502	0.9393	ppb	0.1151	12.3	22.3751
Co 228.615	0.3754	ppb	0.3378	90.0	-6.4180
Cr 267.716	13.4493	ppb	0.2797	2.1	310.013
Cu 324.754	120.512	ppb	0.2650	0.2	4596.82
Fe 271.441	3059.24	ppb	5.5693	0.2	2313.33
K 766.491	687.872	ppb	0.8060	0.1	17266.5
Mg 279.078	274.348	ppb	3.6595	1.3	396.864
Mn 257.610	30.9182	ppb	0.0665	0.2	3023.13
Mo 202.032	75.6123	ppb	0.4891	0.6	159.769
Na 330.237	1086.73	ppb	248.863	22.9	61.2959
Ni 231.604	16.5387	ppb	0.9601	5.8	19.7053
Pb 220.353	34.4087	ppb	3.1803	9.2	24.0214
Sb 206.834	-0.5308	ppb	4.1662	784.9	4.9454
Se 196.026	-4.9608	ppb	16.0959	324.5	-2.0449
Si 288.158	178.281	ppb	3.3398	1.9	1191.48
Sn 189.925	18.5485	ppb	7.6383	41.2	5.3087
Sr 216.596	12.1360	ppb	0.2061	1.7	51.5172
Ti 334.941	3.3367	ppb	0.0345	1.0	330.668
Tl 190.794	-3.9541	ppb	7.5946	192.1	-5.6640
V 292.401	0.5658	ppb	0.2684	47.4	0.0106
Zn 206.200	4315.45	ppb	5.2954	0.1	2427.79

680-162002-C-4-A (Samp) **12/16/2018, 4:42:52 AM** **Rack 4, Tube 19**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2920u	-0.4351u	0.3920
Al 308.215	38.0387	40.7056	40.5577
As 188.980	4.5053	3.0186	-0.8789u
B 249.678	2169.31	2172.13	2175.51
Ba 389.178	2.2284	2.3846	1.8900
Be 313.042	-0.0083u	-0.0135u	-0.0099u
Ca 370.602	7957	7949	7945
Cd 226.502	0.1277	-0.0810u	-0.0849u
Co 228.615	-0.6297u	-1.8503u	-1.8145u
Cr 267.716	1.1361	1.6910	1.9231
Cu 324.754	13.9449	13.7501	13.0111
Fe 271.441	235.321	242.288	237.465
K 766.491	4205.16	4196.01	4199.93
Mg 279.078	875.825	869.823	871.545
Mn 257.610	32.6028	32.6932	32.6872
Mo 202.032	264.758	263.523	262.923

Label	Replicates Concentration		
Na 330.237	2493.11	2389.72	2116.29
Ni 231.604	3.2974	2.5239	0.3264
Pb 220.353	12.9925	5.3649	9.0444
Sb 206.834	3.6408u	4.0308u	-1.1488u
Se 196.026	-14.6954u	1.6379	-6.4434u
Si 288.158	170.894	169.027	166.898
Sn 189.925	7.4807	12.4780	15.2496
Sr 216.596	2.8249	2.6509	4.4104
Ti 334.941	1.4278	1.3636	1.2915
Tl 190.794	-5.4415u	-13.4427u	-4.5847u
V 292.401	0.5466u	0.1339u	-0.0354u
Zn 206.200	2938.72	2942.95	2920.34

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1117	ppb	0.4420	395.8	-33.5136
Al 308.215	39.7673	ppb	1.4988	3.8	252.874
As 188.980	2.2150	ppb	2.7806	125.5	1.4908
B 249.678	2172.32	ppb	3.1034	0.1	14238.0
Ba 389.178	2.1677	ppb	0.2528	11.7	-27.7902
Be 313.042	-0.0106	ppb	0.0027	25.3	-209.160
Ca 370.602	7950	ppb	6.407	0.1	16618
Cd 226.502	-0.0127	ppb	0.1217	954.6	5.8256
Co 228.615	-1.4315	ppb	0.6946	48.5	-16.9340
Cr 267.716	1.5834	ppb	0.4044	25.5	53.9204
Cu 324.754	13.5687	ppb	0.4926	3.6	721.773
Fe 271.441	238.358	ppb	3.5688	1.5	196.529
K 766.491	4200.37	ppb	4.5908	0.1	104177
Mg 279.078	872.398	ppb	3.0908	0.4	1221.12
Mn 257.610	32.6610	ppb	0.0506	0.2	3191.48
Mo 202.032	263.735	ppb	0.9356	0.4	550.666
Na 330.237	2333.04	ppb	194.697	8.3	95.5872
Ni 231.604	2.0493	ppb	1.5413	75.2	1.0720
Pb 220.353	9.1339	ppb	3.8145	41.8	10.8016
Sb 206.834	2.1743	ppb	2.8844	132.7	4.4343
Se 196.026	-6.5003	ppb	8.1668	125.6	-2.3328
Si 288.158	168.940	ppb	1.9995	1.2	1172.16
Sn 189.925	11.7361	ppb	3.9372	33.5	3.2833
Sr 216.596	3.2954	ppb	0.9695	29.4	14.7393
Ti 334.941	1.3610	ppb	0.0682	5.0	115.717
Tl 190.794	-7.8230	ppb	4.8857	62.5	-6.8779
V 292.401	0.2151	ppb	0.2993	139.2	-18.5188
Zn 206.200	2934.01	ppb	12.0231	0.4	1650.81

680-162002-C-5-A (Samp) **12/16/2018, 4:47:36 AM** **Rack 4, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2278u	-0.3110u	0.0657
Al 308.215	325.892	323.165	323.799
As 188.980	-2.7662u	7.9633	4.6352
B 249.678	1281.22	1280.88	1285.76
Ba 389.178	787.130	785.459	787.409
Be 313.042	-0.0124u	-0.0292u	-0.0243u
Ca 370.602	7606	7624	7607

Label	Replicates Concentration		
Cd 226.502	0.6398	0.3150	0.2294
Co 228.615	5.9823	6.6819	5.4371
Cr 267.716	17.8189	17.6686	17.4079
Cu 324.754	38.6780	38.7907	38.7877
Fe 271.441	2285.28	2307.31	2287.45
K 766.491	1372.31	1372.83	1370.28
Mg 279.078	1206.52	1225.58	1224.33
Mn 257.610	30.1518	30.0700	30.0791
Mo 202.032	167.772	164.558	164.696
Na 330.237	3059.79	3111.86	3030.66
Ni 231.604	4.6059	4.3137	5.4323
Pb 220.353	77.0739	75.5303	79.9066
Sb 206.834	-8.9138u	5.0710	-2.9603u
Se 196.026	-7.6068u	-19.1040u	-7.7974u
Si 288.158	239.403	239.631	236.439
Sn 189.925	16.5232	23.6241	15.2480
Sr 216.596	20.1911	20.0085	19.1840
Ti 334.941	3.3150	3.3924	3.1714
Tl 190.794	-1.1017u	14.0954	-1.7427u
V 292.401	0.8686u	0.8381u	0.6547u
Zn 206.200	3772.05	3773.75	3770.51

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1577	ppb	0.1979	125.5	-35.6083
Al 308.215	324.286	ppb	1.4271	0.4	922.397
As 188.980	3.2774	ppb	5.4921	167.6	1.7736
B 249.678	1282.62	ppb	2.7253	0.2	8377.14
Ba 389.178	786.666	ppb	1.0547	0.1	7477.09
Be 313.042	-0.0220	ppb	0.0086	39.2	-211.979
Ca 370.602	7612	ppb	10.20	0.1	15908
Cd 226.502	0.3947	ppb	0.2165	54.8	13.5356
Co 228.615	6.0338	ppb	0.6240	10.3	18.8999
Cr 267.716	17.6318	ppb	0.2080	1.2	400.122
Cu 324.754	38.7521	ppb	0.0642	0.2	1633.50
Fe 271.441	2293.35	ppb	12.1409	0.5	1738.97
K 766.491	1371.81	ppb	1.3486	0.1	34189.3
Mg 279.078	1218.81	ppb	10.6606	0.9	1698.52
Mn 257.610	30.1003	ppb	0.0449	0.1	2947.44
Mo 202.032	165.675	ppb	1.8172	1.1	346.902
Na 330.237	3067.44	ppb	41.1347	1.3	111.391
Ni 231.604	4.7839	ppb	0.5802	12.1	4.5815
Pb 220.353	77.5036	ppb	2.2196	2.9	46.4213
Sb 206.834	-2.2677	ppb	7.0181	309.5	3.4915
Se 196.026	-11.5027	ppb	6.5836	57.2	-3.2347
Si 288.158	238.491	ppb	1.7810	0.7	1487.75
Sn 189.925	18.4651	ppb	4.5131	24.4	5.2842
Sr 216.596	19.7945	ppb	0.5366	2.7	79.5622
Ti 334.941	3.2929	ppb	0.1121	3.4	328.911
Tl 190.794	3.7503	ppb	8.9648	239.0	-3.6254
V 292.401	0.7871	ppb	0.1157	14.7	-3.8299
Zn 206.200	3772.10	ppb	1.6233	0.0	2122.18

Cont Calib Verif (CCV) **12/16/2018, 4:52:21 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	488.193	490.007	487.799
Al 308.215	10000.8	10021.1	9997.91
As 188.980	536.330	533.852	542.138
B 249.678	552.903	554.841	552.761
Ba 389.178	459.736	462.301	460.322
Be 313.042	553.361	553.732	552.250
Ca 370.602	10113	10109	10090
Cd 226.502	523.701	523.393	522.313
Co 228.615	511.744	510.204	503.963
Cr 267.716	503.229	505.232	502.157
Cu 324.754	509.469	512.037	510.458
Fe 271.441	10197.3	10201.0	10163.8
K 766.491	10230.4	10236.7	10225.7
Mg 279.078	10743.0	10752.3	10741.5
Mn 257.610	504.465	504.822	504.041
Mo 202.032	487.699	491.140	489.963
Na 330.237	11261.7	11436.6	11398.9
Ni 231.604	521.023	519.316	520.572
Pb 220.353	523.311	519.590	513.356
Sb 206.834	511.889	516.536	507.497
Se 196.026	537.893	559.962	551.523
Si 288.158	5230.66	5229.25	5217.46
Sn 189.925	488.545	505.549	499.782
Sr 216.596	497.687	498.467	500.686
Ti 334.941	492.741	492.587	491.329
Tl 190.794	486.311	494.573	492.166
V 292.401	493.787	495.314	493.313
Zn 206.200	1095.24	1107.40	1097.42

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	488.666	ppb	1.1775	0.2	16944.9	97.73325
Al 308.215	10006.6	ppb	12.6444	0.1	23775.0	100.06613
As 188.980	537.440	ppb	4.2532	0.8	136.761	107.48795
B 249.678	553.502	ppb	1.1623	0.2	3567.85	110.70034Q
Ba 389.178	460.786	ppb	1.3441	0.3	4373.19	92.15726
Be 313.042	553.114	ppb	0.7713	0.1	450126	110.62286Q
Ca 370.602	10104	ppb	12.22	0.1	21115	101.03916
Cd 226.502	523.136	ppb	0.7289	0.1	7975.89	104.62714
Co 228.615	508.637	ppb	4.1204	0.8	2355.95	101.72735
Cr 267.716	503.539	ppb	1.5605	0.3	10877.0	100.70786
Cu 324.754	510.655	ppb	1.2956	0.3	18751.3	102.13095
Fe 271.441	10187.3	ppb	20.5069	0.2	7693.68	101.82258
K 766.491	10230.9	ppb	5.5154	0.1	253392	102.30913
Mg 279.078	10745.6	ppb	5.8704	0.1	14821.6	107.45615
Mn 257.610	504.443	ppb	0.3910	0.1	48863.1	100.88856
Mo 202.032	489.601	ppb	1.7492	0.4	1019.69	97.92011
Na 330.237	11365.7	ppb	92.0747	0.8	320.757	113.65743Q
Ni 231.604	520.304	ppb	0.8850	0.2	667.078	104.06075
Pb 220.353	518.752	ppb	5.0300	1.0	275.771	103.75047
Sb 206.834	511.974	ppb	4.5201	0.9	215.366	102.39482
Se 196.026	549.793	ppb	11.1362	2.0	98.7107	109.95854
Si 288.158	5225.79	ppb	7.2475	0.1	25140.3	104.51586

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	497.959	ppb	8.6474	1.7	147.860	99.59179
Sr 216.596	498.947	ppb	1.5558	0.3	1904.80	99.78934
Ti 334.941	492.219	ppb	0.7745	0.2	54029.2	98.44374
Tl 190.794	491.017	ppb	4.2495	0.9	131.172	98.20332
V 292.401	494.138	ppb	1.0457	0.2	6430.52	98.82759
Zn 206.200	1100.02	ppb	6.4838	0.6	618.834	110.00205Q

Cont Calib Blank (CCB) **12/16/2018, 4:57:03 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0141	-0.3149u	0.1502
Al 308.215	10.5418	7.6390	6.2152
As 188.980	3.2921	8.5939	0.1572
B 249.678	8.5420	7.9027	8.6876
Ba 389.178	-1.2739u	-0.2072u	-1.6459u
Be 313.042	0.0858	0.0617	0.0681
Ca 370.602	2.476	2.483	5.254
Cd 226.502	-0.0441u	-0.0529u	-0.0252u
Co 228.615	-1.0715u	-0.9355u	0.0796
Cr 267.716	-0.3944u	0.1158	-0.4183u
Cu 324.754	1.2719	1.1465	1.1669
Fe 271.441	1.8287	14.4568	9.5504
K 766.491	4.5985	4.2098	3.1740
Mg 279.078	5.5162	5.9796	7.2644
Mn 257.610	0.1982	0.1932	0.0828
Mo 202.032	-0.0386u	0.5690	0.2563
Na 330.237	25.2174	214.431	53.9163
Ni 231.604	3.0470	0.8532	3.1161
Pb 220.353	8.3449	2.9321	3.5084
Sb 206.834	0.5666	-5.6061u	7.7996
Se 196.026	5.7577	-13.6074u	-14.8699u
Si 288.158	48.4914	48.0041	44.8646
Sn 189.925	6.1075	1.7414	3.9925
Sr 216.596	-0.3007u	0.2697	0.7440
Ti 334.941	0.3276	0.2526	0.0972
Tl 190.794	-12.1624u	2.2283	-5.5027u
V 292.401	0.4338	0.2851	-0.0467u
Zn 206.200	1.4039	-0.5248u	0.1607

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0502	ppb	0.2391	476.3	-31.3684	-0.05020
Al 308.215	8.1320	ppb	2.2050	27.1	174.178	8.13201
As 188.980	4.0144	ppb	4.2645	106.2	1.9791	4.01439
B 249.678	8.3775	ppb	0.4175	5.0	-11.7795	8.37745
Ba 389.178	-1.0423	ppb	0.7467	71.6	-60.0192	-1.04232
Be 313.042	0.0719	ppb	0.0125	17.4	-125.390	0.07189
Ca 370.602	3.405	ppb	1.602	47.1	34.58	3.40456
Cd 226.502	-0.0408	ppb	0.0142	34.8	5.2240	-0.04076
Co 228.615	-0.6425	ppb	0.6290	97.9	-10.4510	-0.64246
Cr 267.716	-0.2323	ppb	0.3017	129.9	14.6914	-0.23229
Cu 324.754	1.1951	ppb	0.0673	5.6	267.708	1.19510
Fe 271.441	8.6120	ppb	6.3662	73.9	24.0529	8.61197
K 766.491	3.9941	ppb	0.7363	18.4	345.217	3.99410

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	6.2534	ppb	0.9057	14.5	27.7328	6.25343
Mn 257.610	0.1581	ppb	0.0652	41.3	45.2061	0.15808
Mo 202.032	0.2622	ppb	0.3038	115.9	3.2607	0.26224
Na 330.237	97.8547	ppb	101.972	104.2	47.9117	97.85473
Ni 231.604	2.3388	ppb	1.2870	55.0	1.4417	2.33875
Pb 220.353	4.9285	ppb	2.9727	60.3	8.6840	4.92849
Sb 206.834	0.9200	ppb	6.7098	729.3	6.0989	0.92002
Se 196.026	-7.5732	ppb	11.5622	152.7	-2.5312	-7.57323
Si 288.158	47.1200	ppb	1.9684	4.2	559.750	47.12003
Sn 189.925	3.9471	ppb	2.1834	55.3	0.9670	3.94711
Sr 216.596	0.2377	ppb	0.5231	220.1	6.4350	0.23768
Ti 334.941	0.2258	ppb	0.1175	52.0	-11.6759	0.22580
Tl 190.794	-5.1456	ppb	7.2020	140.0	-5.7706	-5.14562
V 292.401	0.2241	ppb	0.2460	109.8	0.6706	0.22407
Zn 206.200	0.3466	ppb	0.9777	282.1	0.7232	0.34658

680-162002-C-6-A (Samp) **12/16/2018, 5:01:45 AM** **Rack 4, Tube 21**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.9055u	-0.8173u	0.3857
Al 308.215	12.2162	6.2706	11.1589
As 188.980	9.2431	1.6328	-0.7295u
B 249.678	86.7626	88.9029	85.0933
Ba 389.178	3.4304	3.3191	3.5293
Be 313.042	-0.0133u	-0.0178u	-0.0018u
Ca 370.602	1275	1277	1272
Cd 226.502	0.1405	0.1544	-0.0835u
Co 228.615	-1.6850u	-0.9205u	-1.5546u
Cr 267.716	0.4078	0.4204	0.3660
Cu 324.754	2.1474	1.1688	1.5035
Fe 271.441	213.773	201.959	204.474
K 766.491	91.1829	90.2555	91.7008
Mg 279.078	50.5832	43.1743	48.1346
Mn 257.610	10.2420	10.1502	10.1452
Mo 202.032	62.2781	58.9578	59.5267
Na 330.237	-118.186u	179.000	317.881
Ni 231.604	2.4081	0.3370	1.0557
Pb 220.353	4.2994	-0.6784u	14.1174
Sb 206.834	0.8206u	1.7404	0.7096u
Se 196.026	4.1121	-14.4465u	-5.4670u
Si 288.158	43.2860	41.1305	37.4863
Sn 189.925	11.8876	11.3154	15.4460
Sr 216.596	0.6813	1.4081	0.3114
Ti 334.941	0.9196	0.8593	0.8770
Tl 190.794	-5.3986u	-2.4956u	-12.9610u
V 292.401	0.4251	0.1196u	-0.2292u
Zn 206.200	918.226	922.566	926.434

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4457	ppb	0.7214	161.9	-45.1346
Al 308.215	9.8819	ppb	3.1718	32.1	179.238
As 188.980	3.3821	ppb	5.2114	154.1	1.8119
B 249.678	86.9196	ppb	1.9097	2.2	505.233

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	3.4263	ppb	0.1051	3.1	-17.0512
Be 313.042	-0.0110	ppb	0.0083	75.1	-196.689
Ca 370.602	1275	ppb	2.352	0.2	2687
Cd 226.502	0.0705	ppb	0.1335	189.5	7.0670
Co 228.615	-1.3867	ppb	0.4090	29.5	-14.5453
Cr 267.716	0.3981	ppb	0.0285	7.2	28.3174
Cu 324.754	1.6066	ppb	0.4973	31.0	283.880
Fe 271.441	206.735	ppb	6.2232	3.0	172.715
K 766.491	91.0464	ppb	0.7323	0.8	2499.17
Mg 279.078	47.2974	ppb	3.7747	8.0	84.1938
Mn 257.610	10.1791	ppb	0.0545	0.5	1014.38
Mo 202.032	60.2542	ppb	1.7757	2.9	127.901
Na 330.237	126.231	ppb	222.771	176.5	46.3176
Ni 231.604	1.2669	ppb	1.0516	83.0	0.0644
Pb 220.353	5.9128	ppb	7.5287	127.3	9.1811
Sb 206.834	1.0902	ppb	0.5658	51.9	5.6754
Se 196.026	-5.2671	ppb	9.2809	176.2	-2.1111
Si 288.158	40.6343	ppb	2.9315	7.2	538.479
Sn 189.925	12.8830	ppb	2.2380	17.4	3.6241
Sr 216.596	0.8002	ppb	0.5579	69.7	7.8493
Ti 334.941	0.8853	ppb	0.0310	3.5	60.8418
Tl 190.794	-6.9517	ppb	5.4028	77.7	-6.3586
V 292.401	0.1052	ppb	0.3274	311.3	-5.1940
Zn 206.200	922.409	ppb	4.1060	0.4	519.351

680-162002-C-7-A (Samp) **12/16/2018, 5:06:30 AM** **Rack 4, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.8067u	-0.2563u	-0.1353u
Al 308.215	58.0224	52.0133	58.2941
As 188.980	1.8021	4.8820	-1.8914u
B 249.678	208.225	210.560	209.995
Ba 389.178	4.3952	5.4545	4.7205
Be 313.042	-0.0355u	-0.0116u	-0.0193u
Ca 370.602	2795	2788	2794
Cd 226.502	1.0140	1.7475	1.5403
Co 228.615	-1.1647u	-0.5683u	-0.4971u
Cr 267.716	8.7289	9.0378	8.4525
Cu 324.754	24.6846	24.4596	24.2054
Fe 271.441	2212.87	2226.99	2204.02
K 766.491	376.738	376.032	376.921
Mg 279.078	517.050	521.941	519.271
Mn 257.610	25.5518	25.5548	25.5115
Mo 202.032	15.4428	13.8794	13.3187
Na 330.237	571.806	527.473	612.658
Ni 231.604	6.2229	5.9921	7.3746
Pb 220.353	-0.1501u	13.0652	12.2424
Sb 206.834	-11.2938u	-4.5137u	-2.8814u
Se 196.026	-16.5529u	-21.3251u	10.8608
Si 288.158	138.806	139.283	138.115
Sn 189.925	11.6853	16.2979	13.5578
Sr 216.596	1.9843	3.3654	1.0604
Ti 334.941	0.5480	0.5177	0.6215

Label	Replicates Concentration		
Tl 190.794	-4.0979u	-3.8690u	-0.6423u
V 292.401	1.0307	0.8171	0.3701
Zn 206.200	2456.91	2444.19	2463.17

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3995	ppb	0.3579	89.6	-43.9262
Al 308.215	56.1099	ppb	3.5504	6.3	287.637
As 188.980	1.5976	ppb	3.3913	212.3	1.3692
B 249.678	209.593	ppb	1.2180	0.6	1311.08
Ba 389.178	4.8567	ppb	0.5426	11.2	-2.4121
Be 313.042	-0.0221	ppb	0.0122	55.0	-202.424
Ca 370.602	2792	ppb	4.015	0.1	5850
Cd 226.502	1.4339	ppb	0.3782	26.4	29.2825
Co 228.615	-0.7434	ppb	0.3666	49.3	-11.0003
Cr 267.716	8.7397	ppb	0.2928	3.4	208.387
Cu 324.754	24.4498	ppb	0.2398	1.0	1111.78
Fe 271.441	2214.63	ppb	11.5865	0.5	1679.44
K 766.491	376.564	ppb	0.4695	0.1	9563.78
Mg 279.078	519.421	ppb	2.4487	0.5	734.712
Mn 257.610	25.5394	ppb	0.0242	0.1	2503.33
Mo 202.032	14.2137	ppb	1.1008	7.7	32.2150
Na 330.237	570.646	ppb	42.6045	7.5	53.2867
Ni 231.604	6.5298	ppb	0.7406	11.3	6.8330
Pb 220.353	8.3858	ppb	7.4038	88.3	10.4916
Sb 206.834	-6.2296	ppb	4.4610	71.6	3.0810
Se 196.026	-9.0057	ppb	17.3696	192.9	-2.7821
Si 288.158	138.735	ppb	0.5871	0.4	995.473
Sn 189.925	13.8470	ppb	2.3199	16.8	3.9107
Sr 216.596	2.1367	ppb	1.1600	54.3	13.9898
Ti 334.941	0.5624	ppb	0.0534	9.5	26.9550
Tl 190.794	-2.8698	ppb	1.9324	67.3	-5.2470
V 292.401	0.7393	ppb	0.3371	45.6	6.6910
Zn 206.200	2454.76	ppb	9.6706	0.4	1381.22

680-161932-D-1-A (Samp) **12/16/2018, 5:11:14 AM** **Rack 4, Tube 23**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.8917u	-0.3161u	-1.2647u
Al 308.215	68778.1	68691.4	68722.8
As 188.980	26.1008	33.6720	30.4024
B 249.678	20.3034	20.5564	20.4718
Ba 389.178	519.446	514.838	517.550
Be 313.042	5.1591	5.1735	5.1745
Ca 370.602	5718	5727	5718
Cd 226.502	0.2214	0.1910	0.1089
Co 228.615	72.2268	70.6850	70.8163
Cr 267.716	90.5061	90.4745	90.5135
Cu 324.754	71.3862	71.7502	70.9997
Fe 271.441	103310	103300	103164
K 766.491	5185.27	5175.31	5180.66
Mg 279.078	7201.44	7190.12	7199.40
Mn 257.610	1839.82	1839.89	1837.31
Mo 202.032	7.7638	6.2187	6.1115

Label	Replicates Concentration		
Na 330.237	306.047u	123.776u	492.947
Ni 231.604	67.8787	69.4333	67.4048
Pb 220.353	87.4743	87.6099	90.9318
Sb 206.834	-4.1310u	-0.0835	-6.8227u
Se 196.026	-31.8599u	-10.0483u	-5.0400u
Si 288.158	2951.46	2937.49	2940.95
Sn 189.925	13.8410	18.3900	22.2056
Sr 216.596	55.1655	55.5100	54.9399
Ti 334.941	783.916	782.830	780.111
Tl 190.794	-6.0091u	-5.9948u	-4.3840u
V 292.401	174.060	172.910	173.269
Zn 206.200	250.022	241.784	252.760

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8242	ppb	0.4779	58.0	-76.7405
Al 308.215	68730.8	ppb	43.8673	0.1	162249
As 188.980	30.0584	ppb	3.7973	12.6	8.7590
B 249.678	20.4438	ppb	0.1288	0.6	-34.5950
Ba 389.178	517.278	ppb	2.3161	0.4	4934.23
Be 313.042	5.1690	ppb	0.0086	0.2	4030.50
Ca 370.602	5721	ppb	5.104	0.1	11806
Cd 226.502	0.1738	ppb	0.0582	33.5	86.6186
Co 228.615	71.2427	ppb	0.8548	1.2	333.393
Cr 267.716	90.4980	ppb	0.0207	0.0	1986.00
Cu 324.754	71.3787	ppb	0.3753	0.5	2834.08
Fe 271.441	103258	ppb	81.1704	0.1	77506.3
K 766.491	5180.41	ppb	4.9840	0.1	128426
Mg 279.078	7196.99	ppb	6.0362	0.1	9905.21
Mn 257.610	1839.01	ppb	1.4711	0.1	177962
Mo 202.032	6.6980	ppb	0.9246	13.8	15.0998
Na 330.237	307.590	ppb	184.590	60.0	42.6086
Ni 231.604	68.2389	ppb	1.0612	1.6	86.1327
Pb 220.353	88.6720	ppb	1.9582	2.2	51.9220
Sb 206.834	-3.6791	ppb	3.3922	92.2	5.4843
Se 196.026	-15.6494	ppb	14.2603	91.1	-3.5128
Si 288.158	2943.30	ppb	7.2781	0.2	14271.0
Sn 189.925	18.1455	ppb	4.1876	23.1	5.1888
Sr 216.596	55.2051	ppb	0.2871	0.5	239.576
Ti 334.941	782.286	ppb	1.9604	0.3	85859.3
Tl 190.794	-5.4626	ppb	0.9342	17.1	-9.3922
V 292.401	173.413	ppb	0.5881	0.3	2292.90
Zn 206.200	248.189	ppb	5.7131	2.3	138.687

680-161932-D-2-A (Samp) **12/16/2018, 5:15:58 AM** **Rack 4, Tube 24**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.5286u	-1.3490u	-0.6670u
Al 308.215	70486.0	70620.9	70550.3
As 188.980	17.7560	17.6831	27.5968
B 249.678	25.2181	26.8605	23.5904
Ba 389.178	708.644	708.167	708.557
Be 313.042	8.0956	8.1087	8.0939
Ca 370.602	6933	6969	6945

Label	Replicates Concentration		
Cd 226.502	0.2825	0.3276	0.1757
Co 228.615	74.8176	73.6379	72.7924
Cr 267.716	81.2091	81.5332	81.9273
Cu 324.754	57.0291	56.9005	56.8719
Fe 271.441	65656.4	65756.3	65737.1
K 766.491	4772.09	4778.68	4768.71
Mg 279.078	7383.41	7406.54	7396.79
Mn 257.610	1048.85	1050.71	1048.79
Mo 202.032	2.2535	2.3221	4.3678
Na 330.237	446.361	757.981	360.372
Ni 231.604	89.5032	89.5904	90.8372
Pb 220.353	87.0809	80.7432	83.2667
Sb 206.834	-4.1673u	2.8982	1.4391
Se 196.026	6.4017	-4.8611u	7.3072
Si 288.158	2644.97	2652.37	2650.65
Sn 189.925	18.6086	16.2886	9.1187
Sr 216.596	76.9049	78.8337	77.6406
Ti 334.941	673.045	675.573	675.459
Tl 190.794	-0.7202u	0.0585u	1.3293u
V 292.401	159.388	160.163	159.864
Zn 206.200	248.789	246.376	243.120

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.1816	ppb	0.4546	38.5	-82.9733
Al 308.215	70552.4	ppb	67.4657	0.1	166543
As 188.980	21.0120	ppb	5.7027	27.1	6.3974
B 249.678	25.2230	ppb	1.6350	6.5	34.0464
Ba 389.178	708.456	ppb	0.2542	0.0	6752.77
Be 313.042	8.0994	ppb	0.0081	0.1	6417.00
Ca 370.602	6949	ppb	18.24	0.3	14428
Cd 226.502	0.2619	ppb	0.0780	29.8	60.7643
Co 228.615	73.7493	ppb	1.0172	1.4	343.085
Cr 267.716	81.5565	ppb	0.3597	0.4	1787.62
Cu 324.754	56.9338	ppb	0.0837	0.1	2302.15
Fe 271.441	65716.6	ppb	53.0036	0.1	49335.6
K 766.491	4773.16	ppb	5.0724	0.1	118350
Mg 279.078	7395.58	ppb	11.6141	0.2	10186.8
Mn 257.610	1049.45	ppb	1.0896	0.1	101594
Mo 202.032	2.9812	ppb	1.2014	40.3	7.9240
Na 330.237	521.571	ppb	209.202	40.1	51.2839
Ni 231.604	89.9769	ppb	0.7463	0.8	114.088
Pb 220.353	83.6969	ppb	3.1907	3.8	49.1038
Sb 206.834	0.0567	ppb	3.7301	6581.7	6.6599
Se 196.026	2.9492	ppb	6.7791	229.9	-0.3240
Si 288.158	2649.33	ppb	3.8717	0.1	12877.6
Sn 189.925	14.6719	ppb	4.9472	33.7	4.1560
Sr 216.596	77.7930	ppb	0.9734	1.3	317.217
Ti 334.941	674.692	ppb	1.4279	0.2	74049.6
Tl 190.794	0.2225	ppb	1.0346	464.9	-6.4806
V 292.401	159.805	ppb	0.3907	0.2	2106.67
Zn 206.200	246.095	ppb	2.8454	1.2	138.019

680-161405-A-136-A (Samp) **12/16/2018, 5:20:43 AM** **Rack 4, Tube 25**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5937u	-0.2170u	-0.3782u
Al 308.215	61135.8	61175.7	61276.4
As 188.980	137.493	131.218	126.112
B 249.678	76.6676	78.0132	75.4032
Ba 389.178	855.456	854.941	856.938
Be 313.042	2.9193	2.9216	2.9505
Ca 370.602	1026816x	1025807x	1032214x
Cd 226.502	3.1916	2.9391	3.5694
Co 228.615	37.5708	37.8310	36.7020
Cr 267.716	85.1886	85.4073	85.2635
Cu 324.754	98.5811	97.1015	97.5107
Fe 271.441	115108	115154	115237
K 766.491	9278.80	9277.02	9285.57
Mg 279.078	645810	647630	649223
Mn 257.610	7299.90	7280.95	7297.42
Mo 202.032	3.2016	5.1380	4.6909
Na 330.237	2529.53	2217.02	1644.57
Ni 231.604	69.9553	70.4001	71.9900
Pb 220.353	317.838	316.557	326.506
Sb 206.834	-7.7501u	-3.5734u	8.2816
Se 196.026	5.0638	2.6662	-1.0660
Si 288.158	2399.14	2399.78	2406.25
Sn 189.925	13.6980	14.5010	16.4250
Sr 216.596	509.749	511.193	512.465
Ti 334.941	633.966	634.729	636.498
Tl 190.794	-5.3026u	0.7413u	4.7264u
V 292.401	128.315	129.058	127.665
Zn 206.200	613.064	605.918	612.807

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3963b	ppb	0.1890	47.7	-59.5946
Al 308.215	61196.0b	ppb	72.4475	0.1	144479
As 188.980	131.608b	ppb	5.7004	4.3	34.4651
B 249.678	76.6947b	ppb	1.3052	1.7	324.082
Ba 389.178	855.778b	ppb	1.0367	0.1	8847.38
Be 313.042	2.9305b	ppb	0.0174	0.6	2352.68
Ca 370.602	1028279xb	ppb	3445	0.3	2145646
Cd 226.502	3.2334b	ppb	0.3172	9.8	144.755
Co 228.615	37.3679b	ppb	0.5912	1.6	175.198
Cr 267.716	85.2864b	ppb	0.1112	0.1	1885.50
Cu 324.754	97.7311b	ppb	0.7640	0.8	3792.57
Fe 271.441	115166b	ppb	65.3637	0.1	86439.9
K 766.491	9280.46b	ppb	4.5088	0.0	229875
Mg 279.078	647554b	ppb	1707.69	0.3	892400
Mn 257.610	7292.75b	ppb	10.2982	0.1	707998
Mo 202.032	4.3435b	ppb	1.0139	23.3	10.0451
Na 330.237	2130.37b	ppb	448.794	21.1	85.5950
Ni 231.604	70.7818b	ppb	1.0697	1.5	89.4365
Pb 220.353	320.300b	ppb	5.4123	1.7	173.035
Sb 206.834	-1.0140b	ppb	8.3167	820.2	6.7084
Se 196.026	2.2214b	ppb	3.0890	139.1	0.2645
Si 288.158	2401.73b	ppb	3.9345	0.2	11707.9

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	14.8747b	ppb	1.4014	9.4	4.2164
Sr 216.596	511.136b	ppb	1.3588	0.3	1985.64
Ti 334.941	635.064b	ppb	1.2986	0.2	71801.9
Tl 190.794	0.0550b	ppb	5.0496	9179.3	-7.0911
V 292.401	128.346b	ppb	0.6970	0.5	1708.16
Zn 206.200	610.596b	ppb	4.0538	0.7	342.372

680-161405-A-91-A (Samp) **12/16/2018, 5:25:27 AM** **Rack 4, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	2.9332	2.4383	2.9128
Al 308.215	91267.8	91501.4	91412.7
As 188.980	577.657	570.217	585.029
B 249.678	71.6187	71.2094	71.2007
Ba 389.178	3492.03	3503.00	3499.39
Be 313.042	5.3492	5.3488	5.3167
Ca 370.602	77363	77471	77442
Cd 226.502	14.6005	14.8680	14.5524
Co 228.615	69.8902	69.2237	67.3363
Cr 267.716	168.078	168.910	168.187
Cu 324.754	1132.23	1131.30	1127.37
Fe 271.441	145288	145513	145310
K 766.491	13189.9	13193.4	13194.8
Mg 279.078	28087.5	28110.1	28102.1
Mn 257.610	7523.55	7524.67	7514.19
Mo 202.032	7.9061	10.5211	6.9959
Na 330.237	1708.52	1751.01	1987.56
Ni 231.604	180.091	178.659	181.486
Pb 220.353	8674.80	8666.27	8666.44
Sb 206.834	6.9746	20.8380	25.6569
Se 196.026	12.0681	38.8382	19.5492
Si 288.158	2026.46	2025.85	2024.41
Sn 189.925	151.216	148.228	149.902
Sr 216.596	324.605	325.978	325.215
Ti 334.941	1102.00	1102.09	1102.57
Tl 190.794	1.0279u	1.3112u	2.0952u
V 292.401	190.378	190.084	190.171
Zn 206.200	5509.72	5509.63	5534.16

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.7614	ppb	0.2800	10.1	49.6013
Al 308.215	91394.0	ppb	117.970	0.1	215697
As 188.980	577.634	ppb	7.4059	1.3	147.310
B 249.678	71.3429	ppb	0.2389	0.3	258.898
Ba 389.178	3498.14	ppb	5.5900	0.2	33481.3
Be 313.042	5.3383	ppb	0.0186	0.3	4177.55
Ca 370.602	77425	ppb	55.63	0.1	161457
Cd 226.502	14.6736	ppb	0.1700	1.2	339.059
Co 228.615	68.8167	ppb	1.3247	1.9	326.131
Cr 267.716	168.392	ppb	0.4518	0.3	3681.15
Cu 324.754	1130.30	ppb	2.5771	0.2	41244.0
Fe 271.441	145371	ppb	123.908	0.1	109107
K 766.491	13192.7	ppb	2.5017	0.0	326676

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	28099.9	ppb	11.4871	0.0	38649.9
Mn 257.610	7520.81	ppb	5.7531	0.1	727390
Mo 202.032	8.4744	ppb	1.8300	21.6	18.1771
Na 330.237	1815.70	ppb	150.350	8.3	62.6627
Ni 231.604	180.079	ppb	1.4133	0.8	229.978
Pb 220.353	8669.17	ppb	4.8784	0.1	4518.43
Sb 206.834	17.8231	ppb	9.6992	54.4	15.0549
Se 196.026	23.4852	ppb	13.8123	58.8	4.2350
Si 288.158	2025.58	ppb	1.0500	0.1	9965.36
Sn 189.925	149.782	ppb	1.4975	1.0	44.3302
Sr 216.596	325.266	ppb	0.6879	0.2	1280.83
Ti 334.941	1102.22	ppb	0.3072	0.0	121047
Tl 190.794	1.4781	ppb	0.5529	37.4	-7.7951
V 292.401	190.211	ppb	0.1511	0.1	2521.63
Zn 206.200	5517.84	ppb	14.1382	0.3	3102.09

680-161405-A-135-A (Samp) **12/16/2018, 5:30:12 AM** **Rack 4, Tube 27**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1421u	0.4758u	0.7951
Al 308.215	90429.5	90322.2	90212.3
As 188.980	140.682	144.913	146.551
B 249.678	51.2605	51.6783	50.2690
Ba 389.178	783.050	780.212	783.785
Be 313.042	4.3840	4.3680	4.3688
Ca 370.602	130762	130811	130694
Cd 226.502	3.3143	3.6779	2.6578
Co 228.615	47.7321	47.0177	46.8535
Cr 267.716	139.564	139.988	139.067
Cu 324.754	148.415	146.826	149.835
Fe 271.441	140079	140323	140119
K 766.491	9182.41	9178.77	9168.52
Mg 279.078	83200.3	83262.1	83195.9
Mn 257.610	4091.14	4095.35	4092.93
Mo 202.032	3.5858	4.1445	5.4058
Na 330.237	755.121	576.341u	619.697
Ni 231.604	115.276	109.122	111.414
Pb 220.353	439.287	430.321	433.298
Sb 206.834	5.7183	-2.3406	-4.9250u
Se 196.026	12.7084	20.7986	-13.5430u
Si 288.158	2215.35	2215.61	2214.04
Sn 189.925	22.0646	16.1008	29.6535
Sr 216.596	150.821	149.737	148.658
Ti 334.941	935.799	936.745	935.109
Tl 190.794	-7.1118u	-2.4716u	-7.2689u
V 292.401	177.375	176.717	176.451
Zn 206.200	754.388	753.086	742.150

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4710	ppb	0.3265	69.3	-35.7522
Al 308.215	90321.3	ppb	108.592	0.1	213167
As 188.980	144.049	ppb	3.0282	2.1	37.6536
B 249.678	51.0692	ppb	0.7239	1.4	130.556

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	782.349	ppb	1.8869	0.2	7559.73
Be 313.042	4.3736	ppb	0.0090	0.2	3401.23
Ca 370.602	130756	ppb	58.72	0.0	272684
Cd 226.502	3.2167	ppb	0.5170	16.1	161.114
Co 228.615	47.2011	ppb	0.4671	1.0	224.137
Cr 267.716	139.540	ppb	0.4608	0.3	3051.84
Cu 324.754	148.359	ppb	1.5054	1.0	5633.62
Fe 271.441	140174	ppb	130.669	0.1	105206
K 766.491	9176.57	ppb	7.2020	0.1	227304
Mg 279.078	83219.5	ppb	36.9955	0.0	114653
Mn 257.610	4093.14	ppb	2.1137	0.1	396250
Mo 202.032	4.3787	ppb	0.9323	21.3	9.7459
Na 330.237	650.386	ppb	93.2576	14.3	46.4028
Ni 231.604	111.937	ppb	3.1104	2.8	142.361
Pb 220.353	434.302	ppb	4.5661	1.1	231.881
Sb 206.834	-0.5158	ppb	5.5513	1076.4	7.3464
Se 196.026	6.6547	ppb	17.9533	269.8	0.8536
Si 288.158	2215.00	ppb	0.8434	0.0	10840.3
Sn 189.925	22.6063	ppb	6.7926	30.0	6.5152
Sr 216.596	149.738	ppb	1.0816	0.7	609.123
Ti 334.941	935.884	ppb	0.8210	0.1	102970
Tl 190.794	-5.6174	ppb	2.7255	48.5	-10.4244
V 292.401	176.848	ppb	0.4756	0.3	2345.87
Zn 206.200	749.875	ppb	6.7218	0.9	420.345

680-161405-A-137-A (Samp) **12/16/2018, 5:34:56 AM** **Rack 4, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1931u	-0.2630u	0.3078u
Al 308.215	101719	101990	101296
As 188.980	401.610	414.535	391.269
B 249.678	50.3990	50.0875	49.7940
Ba 389.178	708.056	707.230	704.314
Be 313.042	5.3993	5.4028	5.3566
Ca 370.602	194711	194960	193818
Cd 226.502	3.7742	3.7171	3.2459
Co 228.615	65.8191	64.4455	63.9106
Cr 267.716	126.516	126.068	125.864
Cu 324.754	173.270	175.196	172.462
Fe 271.441	182249	182664	181622
K 766.491	9242.30	9236.68	9240.47
Mg 279.078	130765	130820	130124
Mn 257.610	5253.49	5263.54	5228.76
Mo 202.032	8.5731	5.5605	5.8190
Na 330.237	1262.50	626.959u	1060.47
Ni 231.604	135.959	134.068	130.055
Pb 220.353	834.043	813.527	817.157
Sb 206.834	-9.3614u	9.2806	9.9017
Se 196.026	20.2360	1.2433	11.7375
Si 288.158	2228.60	2241.80	2228.84
Sn 189.925	31.1850	29.9918	24.7539
Sr 216.596	242.216	244.294	241.229
Ti 334.941	919.887	921.710	917.754

Label	Replicates Concentration		
Tl 190.794	3.6098u	-11.4270u	8.7225u
V 292.401	209.128	209.696	207.980
Zn 206.200	834.574	830.849	817.417

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0793	ppb	0.3019	380.6	-56.2859
Al 308.215	101668	ppb	349.687	0.3	239929
As 188.980	402.472	ppb	11.6570	2.9	103.094
B 249.678	50.0935	ppb	0.3026	0.6	82.4841
Ba 389.178	706.534	ppb	1.9659	0.3	6895.89
Be 313.042	5.3862	ppb	0.0257	0.5	4235.09
Ca 370.602	194496	ppb	600.7	0.3	405625
Cd 226.502	3.5791	ppb	0.2899	8.1	197.990
Co 228.615	64.7250	ppb	0.9845	1.5	306.581
Cr 267.716	126.149	ppb	0.3338	0.3	2769.88
Cu 324.754	173.643	ppb	1.4042	0.8	6559.44
Fe 271.441	182178	ppb	524.446	0.3	136727
K 766.491	9239.82	ppb	2.8700	0.0	228869
Mg 279.078	130570	ppb	387.109	0.3	179897
Mn 257.610	5248.59	ppb	17.8997	0.3	508200
Mo 202.032	6.6509	ppb	1.6697	25.1	13.8508
Na 330.237	983.307	ppb	324.718	33.0	50.7024
Ni 231.604	133.360	ppb	3.0150	2.3	169.898
Pb 220.353	821.576	ppb	10.9483	1.3	433.603
Sb 206.834	3.2736	ppb	10.9467	334.4	9.2695
Se 196.026	11.0722	ppb	9.5138	85.9	1.8897
Si 288.158	2233.08	ppb	7.5550	0.3	10925.7
Sn 189.925	28.6436	ppb	3.4210	11.9	8.3104
Sr 216.596	242.580	ppb	1.5649	0.6	973.518
Ti 334.941	919.784	ppb	1.9797	0.2	101358
Tl 190.794	0.3018	ppb	10.4741	3470.9	-10.1841
V 292.401	208.935	ppb	0.8739	0.4	2775.37
Zn 206.200	827.613	ppb	9.0243	1.1	463.513

680-161405-A-72-A (Samp) **12/16/2018, 5:39:41 AM** **Rack 4, Tube 29**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.9865	1.2429	0.7612
Al 308.215	82245.0	82277.8	82281.7
As 188.980	87.4410	81.2682	78.9095
B 249.678	61.1385	61.0047	60.8294
Ba 389.178	794.828	792.382	796.273
Be 313.042	3.8977	3.8870	3.9073
Ca 370.602	101113	101073	101092
Cd 226.502	4.1101	4.1403	3.9975
Co 228.615	45.0986	46.3698	45.4896
Cr 267.716	137.256	136.531	136.323
Cu 324.754	291.174	293.485	290.789
Fe 271.441	118215	118135	117998
K 766.491	10236.2	10242.5	10223.5
Mg 279.078	35832.1	35794.8	35839.9
Mn 257.610	3554.27	3552.31	3549.91
Mo 202.032	6.9458	8.1301	7.1615

Label	Replicates Concentration		
Na 330.237	1013.78	689.812	1239.00
Ni 231.604	178.102	176.111	172.097
Pb 220.353	1098.53	1100.23	1099.60
Sb 206.834	-0.2193	2.4169	-14.0714u
Se 196.026	22.0644	-6.0324u	26.4760
Si 288.158	2278.58	2273.59	2275.79
Sn 189.925	20.9009	26.2791	22.2541
Sr 216.596	168.991	167.605	168.366
Ti 334.941	790.999	789.714	790.033
Tl 190.794	-8.2651u	10.0236u	-2.6465u
V 292.401	147.621	148.121	147.612
Zn 206.200	1987.98	1978.00	1975.49

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9969	ppb	0.2410	24.2	-13.6233
Al 308.215	82268.2	ppb	20.1682	0.0	194173
As 188.980	82.5396	ppb	4.4055	5.3	22.0540
B 249.678	60.9908	ppb	0.1550	0.3	217.692
Ba 389.178	794.494	ppb	1.9667	0.2	7620.09
Be 313.042	3.8973	ppb	0.0102	0.3	3008.65
Ca 370.602	101093	ppb	20.06	0.0	210818
Cd 226.502	4.0826	ppb	0.0753	1.8	157.703
Co 228.615	45.6526	ppb	0.6511	1.4	215.001
Cr 267.716	136.703	ppb	0.4894	0.4	2987.17
Cu 324.754	291.816	ppb	1.4582	0.5	10831.5
Fe 271.441	118116	ppb	109.518	0.1	88654.0
K 766.491	10234.1	ppb	9.7043	0.1	253470
Mg 279.078	35822.3	ppb	24.1082	0.1	49336.5
Mn 257.610	3552.16	ppb	2.1834	0.1	343721
Mo 202.032	7.4125	ppb	0.6308	8.5	16.3741
Na 330.237	980.863	ppb	276.068	28.1	53.5659
Ni 231.604	175.437	ppb	3.0590	1.7	224.030
Pb 220.353	1099.46	ppb	0.8573	0.1	578.084
Sb 206.834	-3.9579	ppb	8.8572	223.8	5.6710
Se 196.026	14.1693	ppb	17.6337	124.4	2.1006
Si 288.158	2275.99	ppb	2.5000	0.1	11122.2
Sn 189.925	23.1447	ppb	2.7976	12.1	6.6753
Sr 216.596	168.321	ppb	0.6943	0.4	674.547
Ti 334.941	790.249	ppb	0.6691	0.1	86827.7
Tl 190.794	-0.2960	ppb	9.3682	3164.9	-8.2200
V 292.401	147.785	ppb	0.2910	0.2	1959.34
Zn 206.200	1980.49	ppb	6.6094	0.3	1112.83

680-161405-A-124-A (Samp) **12/16/2018, 5:44:25 AM** **Rack 4, Tube 30**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5498u	0.5250u	-0.2545u
Al 308.215	124318	124425	124678
As 188.980	206.501	204.306	204.058
B 249.678	42.0934	41.5011	42.3042
Ba 389.178	955.473	954.526	955.700
Be 313.042	5.5680	5.5577	5.5643
Ca 370.602	28797	28822	28867

Label	Replicates Concentration		
Cd 226.502	4.7412	4.0632	4.5436
Co 228.615	70.6190	70.4123	69.5742
Cr 267.716	141.194	141.557	141.157
Cu 324.754	183.121	181.960	184.771
Fe 271.441	163362	163208	163271
K 766.491	7720.37	7720.63	7710.49
Mg 279.078	30655.4	30662.6	30687.4
Mn 257.610	5992.69	5997.24	5999.73
Mo 202.032	4.1652	4.2676	4.3164
Na 330.237	670.427u	452.661u	748.920
Ni 231.604	130.505	129.282	129.851
Pb 220.353	1023.65	1047.97	1031.86
Sb 206.834	0.0401	9.0094	2.1335
Se 196.026	0.3670	17.6840	2.6950
Si 288.158	2684.25	2684.56	2691.34
Sn 189.925	27.6306	26.3206	19.7372
Sr 216.596	92.5607	92.4211	93.7304
Ti 334.941	1106.06	1104.25	1105.78
Tl 190.794	3.6312u	-5.8953u	3.8912u
V 292.401	221.125	220.484	222.281
Zn 206.200	891.662	895.628	893.130

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2734	ppb	0.4574	167.3	-42.8222
Al 308.215	124474	ppb	184.974	0.1	293709
As 188.980	204.955	ppb	1.3448	0.7	53.1027
B 249.678	41.9662	ppb	0.4164	1.0	47.7387
Ba 389.178	955.233	ppb	0.6223	0.1	9164.72
Be 313.042	5.5634	ppb	0.0052	0.1	4357.04
Ca 370.602	28829	ppb	35.62	0.1	59986
Cd 226.502	4.4493	ppb	0.3487	7.8	197.940
Co 228.615	70.2018	ppb	0.5533	0.8	333.150
Cr 267.716	141.303	ppb	0.2210	0.2	3096.22
Cu 324.754	183.284	ppb	1.4125	0.8	6904.82
Fe 271.441	163280	ppb	77.3336	0.0	122546
K 766.491	7717.16	ppb	5.7789	0.1	191193
Mg 279.078	30668.5	ppb	16.8065	0.1	42199.4
Mn 257.610	5996.55	ppb	3.5714	0.1	580060
Mo 202.032	4.2497	ppb	0.0771	1.8	9.1342
Na 330.237	624.003	ppb	153.489	24.6	43.2027
Ni 231.604	129.879	ppb	0.6118	0.5	165.419
Pb 220.353	1034.49	ppb	12.3688	1.2	544.090
Sb 206.834	3.7277	ppb	4.6924	125.9	9.3413
Se 196.026	6.9153	ppb	9.3983	135.9	1.1443
Si 288.158	2686.72	ppb	4.0042	0.1	13075.7
Sn 189.925	24.5628	ppb	4.2301	17.2	7.0969
Sr 216.596	92.9041	ppb	0.7190	0.8	396.923
Ti 334.941	1105.36	ppb	0.9731	0.1	121401
Tl 190.794	0.5424	ppb	5.5767	1028.2	-9.1312
V 292.401	221.297	ppb	0.9108	0.4	2933.51
Zn 206.200	893.473	ppb	2.0050	0.2	500.803

Cont Calib Verif (CCV) **12/16/2018, 5:49:10 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	496.193	493.749	488.869
Al 308.215	10038.1	10016.7	9960.76
As 188.980	533.588	553.086	563.038
B 249.678	548.310	549.021	546.324
Ba 389.178	457.224	456.184	455.888
Be 313.042	557.870	557.761	555.202
Ca 370.602	10097	10119	10076
Cd 226.502	524.083	522.986	523.100
Co 228.615	506.840	508.731	506.808
Cr 267.716	504.673	504.675	503.791
Cu 324.754	513.480	514.538	506.995
Fe 271.441	10220.9	10229.0	10178.1
K 766.491	10296.6	10261.3	10260.4
Mg 279.078	10819.1	10797.5	10785.2
Mn 257.610	505.416	505.707	503.924
Mo 202.032	486.926	488.219	485.719
Na 330.237	11670.3	11000.2	11329.9
Ni 231.604	519.837	516.327	518.585
Pb 220.353	512.947	513.771	514.860
Sb 206.834	509.762	508.758	503.735
Se 196.026	535.060	526.868	555.727
Si 288.158	5104.37	5105.49	5096.02
Sn 189.925	492.376	513.187	511.859
Sr 216.596	496.799	497.017	499.537
Ti 334.941	492.779	493.276	491.740
Tl 190.794	489.893	501.045	499.743
V 292.401	494.660	493.076	493.227
Zn 206.200	1116.36	1097.79	1110.34

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	492.937	ppb	3.7293	0.8	17093.3	98.58740
Al 308.215	10005.2	ppb	39.9328	0.4	23771.6	100.05178
As 188.980	549.904	ppb	14.9805	2.7	139.914	109.98082
B 249.678	547.885	ppb	1.3981	0.3	3530.86	109.57703
Ba 389.178	456.432	ppb	0.7017	0.2	4331.59	91.28633
Be 313.042	556.944	ppb	1.5095	0.3	453244	111.38885Q
Ca 370.602	10097	ppb	21.58	0.2	21101	100.97266
Cd 226.502	523.390	ppb	0.6034	0.1	7979.77	104.67793
Co 228.615	507.460	ppb	1.1010	0.2	2350.50	101.49191
Cr 267.716	504.379	ppb	0.5099	0.1	10895.1	100.87586
Cu 324.754	511.671	ppb	4.0837	0.8	18788.1	102.33421
Fe 271.441	10209.3	ppb	27.3652	0.3	7710.08	102.04225
K 766.491	10272.8	ppb	20.6608	0.2	254428	102.72792
Mg 279.078	10800.6	ppb	17.1498	0.2	14897.4	108.00610
Mn 257.610	505.016	ppb	0.9563	0.2	48918.7	101.00310
Mo 202.032	486.954	ppb	1.2502	0.3	1014.20	97.39090
Na 330.237	11333.5	ppb	335.036	3.0	319.941	113.33475Q
Ni 231.604	518.249	ppb	1.7789	0.3	664.437	103.64986
Pb 220.353	513.859	ppb	0.9598	0.2	273.224	102.77187
Sb 206.834	507.418	ppb	3.2292	0.6	213.507	101.48366
Se 196.026	539.218	ppb	14.8719	2.8	96.7914	107.84364
Si 288.158	5101.96	ppb	5.1722	0.1	24556.3	102.03914

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	505.807	ppb	11.6506	2.3	150.193	101.16142
Sr 216.596	497.784	ppb	1.5220	0.3	1900.41	99.55690
Ti 334.941	492.598	ppb	0.7837	0.2	54071.0	98.51970
Tl 190.794	496.894	ppb	6.0972	1.2	132.790	99.37872
V 292.401	493.654	ppb	0.8742	0.2	6424.33	98.73085
Zn 206.200	1108.16	ppb	9.4773	0.9	623.414	110.81638Q

Cont Calib Blank (CCB) **12/16/2018, 5:53:53 AM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4041u	-0.4266u	-0.5856u
Al 308.215	5.7662	5.5363	8.0414
As 188.980	3.4460	-2.4009u	2.4846
B 249.678	2.8729	4.6845	2.6026
Ba 389.178	-1.0893u	1.0169	1.1576
Be 313.042	0.0285	0.0432	0.0616
Ca 370.602	-1.019u	4.030	2.272
Cd 226.502	0.2532	0.0231	0.1966
Co 228.615	-0.9418u	-1.0424u	-0.3886u
Cr 267.716	-0.2790u	-0.5594u	-0.7216u
Cu 324.754	1.1831	1.6968	1.3343
Fe 271.441	-0.6717u	9.1280	7.2595
K 766.491	3.1324	2.1604	3.5630
Mg 279.078	6.2312	5.4911	13.6008
Mn 257.610	0.0354	0.1486	0.1164
Mo 202.032	-0.2482u	0.9306	1.0112
Na 330.237	531.846	147.753	-10.9915u
Ni 231.604	-0.4338u	1.0079	1.6295
Pb 220.353	8.4798	0.9668	3.6026
Sb 206.834	-3.6489u	-15.1170u	-7.7039u
Se 196.026	6.3293	4.3826	16.2791
Si 288.158	6.1454	5.8529	7.4773
Sn 189.925	6.2174	3.2442	2.2975
Sr 216.596	0.4286	0.8821	-1.0034u
Ti 334.941	0.3187	0.3824	0.1977
Tl 190.794	2.3435	-2.1781u	4.5740
V 292.401	-0.2295u	-0.1820u	-0.5927u
Zn 206.200	-1.4561u	1.9067	0.7271

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.4721	ppb	0.0989	21.0	-46.0302	-0.47209
Al 308.215	6.4480	ppb	1.3847	21.5	170.192	6.44796
As 188.980	1.1766	ppb	3.1352	266.5	1.2615	1.17657
B 249.678	3.3866	ppb	1.1321	33.4	-44.6483	3.38665
Ba 389.178	0.3617	ppb	1.2586	347.9	-46.5842	0.36174
Be 313.042	0.0444	ppb	0.0166	37.3	-147.777	0.04444
Ca 370.602	1.761	ppb	2.563	145.5	31.14	1.76095
Cd 226.502	0.1576	ppb	0.1199	76.1	8.2456	0.15763
Co 228.615	-0.7909	ppb	0.3521	44.5	-11.1434	-0.79094
Cr 267.716	-0.5200	ppb	0.2239	43.1	8.4914	-0.52001
Cu 324.754	1.4047	ppb	0.2640	18.8	275.317	1.40471
Fe 271.441	5.2386	ppb	5.2031	99.3	21.5310	5.23862
K 766.491	2.9519	ppb	0.7185	24.3	319.431	2.95194

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	8.4410	ppb	4.4838	53.1	30.7484	8.44102
Mn 257.610	0.1001	ppb	0.0583	58.2	39.6243	0.10014
Mo 202.032	0.5645	ppb	0.7050	124.9	3.8888	0.56452
Na 330.237	222.869	ppb	279.105	125.2	50.9849	222.86909
Ni 231.604	0.7345	ppb	1.0584	144.1	-0.6217	0.73453
Pb 220.353	4.3497	ppb	3.8118	87.6	8.3826	4.34971
Sb 206.834	-8.8233	ppb	5.8154	65.9	2.0680	-8.82328
Se 196.026	8.9970	ppb	6.3812	70.9	0.4764	8.99701
Si 288.158	6.4918	ppb	0.8659	13.3	368.176	6.49184
Sn 189.925	3.9197	ppb	2.0454	52.2	0.9589	3.91972
Sr 216.596	0.1024	ppb	0.9842	960.7	5.9269	0.10244
Ti 334.941	0.2996	ppb	0.0938	31.3	-3.5672	0.29962
Tl 190.794	1.5798	ppb	3.4402	217.8	-3.9186	1.57979
V 292.401	-0.3348	ppb	0.2247	67.1	-6.6553	-0.33475
Zn 206.200	0.3926	ppb	1.7062	434.6	0.7493	0.39256

680-161405-A-118-A (Samp) **12/16/2018, 5:58:35 AM** **Rack 4, Tube 31**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2001u	-0.0520u	0.1404u
Al 308.215	129800	129952	130057
As 188.980	292.530	289.004	293.208
B 249.678	44.6321	47.3500	43.5564
Ba 389.178	975.554	976.949	977.437
Be 313.042	6.0245	5.9994	6.0180
Ca 370.602	71612	71660	71678
Cd 226.502	4.3942	4.5242	4.5386
Co 228.615	73.5657	72.3115	73.2912
Cr 267.716	124.410	124.947	124.898
Cu 324.754	274.386	276.305	276.251
Fe 271.441	170361	170167	170336
K 766.491	7478.62	7483.54	7482.00
Mg 279.078	36947.7	36990.6	36990.7
Mn 257.610	4233.43	4232.22	4236.46
Mo 202.032	7.8022	7.2053	6.4214
Na 330.237	1581.25	1401.82	1327.34
Ni 231.604	147.530	147.445	148.142
Pb 220.353	1451.00	1434.47	1428.92
Sb 206.834	-4.4620	0.9797	4.3523
Se 196.026	10.3450	14.7044	20.6934
Si 288.158	2362.23	2361.63	2364.53
Sn 189.925	66.8846	59.8204	69.9141
Sr 216.596	285.433	283.436	284.383
Ti 334.941	1682.59	1681.74	1684.19
Tl 190.794	-0.4184u	-2.1037u	-4.8473u
V 292.401	210.484	210.515	209.961
Zn 206.200	1050.59	1052.58	1056.78

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0962	ppb	0.1317	137.0	-55.6851
Al 308.215	129937	ppb	129.109	0.1	306592
As 188.980	291.581	ppb	2.2567	0.8	75.0261
B 249.678	45.1795	ppb	1.9551	4.3	61.9604

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	976.646	ppb	0.9775	0.1	9378.11
Be 313.042	6.0140	ppb	0.0130	0.2	4730.26
Ca 370.602	71650	ppb	34.38	0.0	149307
Cd 226.502	4.4856	ppb	0.0795	1.8	203.705
Co 228.615	73.0561	ppb	0.6593	0.9	351.641
Cr 267.716	124.752	ppb	0.2969	0.2	2737.29
Cu 324.754	275.648	ppb	1.0926	0.4	10256.0
Fe 271.441	170288	ppb	105.655	0.1	127805
K 766.491	7481.38	ppb	2.5180	0.0	185360
Mg 279.078	36976.3	ppb	24.7956	0.1	50910.3
Mn 257.610	4234.04	ppb	2.1867	0.1	409714
Mo 202.032	7.1430	ppb	0.6925	9.7	15.0461
Na 330.237	1436.80	ppb	130.519	9.1	61.6156
Ni 231.604	147.706	ppb	0.3804	0.3	188.343
Pb 220.353	1438.13	ppb	11.4862	0.8	753.929
Sb 206.834	0.2900	ppb	4.4474	1533.6	7.9114
Se 196.026	15.2476	ppb	5.1955	34.1	2.5184
Si 288.158	2362.80	ppb	1.5320	0.1	11577.4
Sn 189.925	65.5397	ppb	5.1795	7.9	19.2813
Sr 216.596	284.418	ppb	0.9989	0.4	1130.63
Ti 334.941	1682.84	ppb	1.2410	0.1	184811
Tl 190.794	-2.4565	ppb	2.2354	91.0	-10.6886
V 292.401	210.320	ppb	0.3112	0.1	2794.31
Zn 206.200	1053.32	ppb	3.1595	0.3	590.627

680-161405-A-116-A (Samp) **12/16/2018, 6:03:19 AM** **Rack 4, Tube 32**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0533u	-0.1265u	0.2180u
Al 308.215	80718.0	80587.8	80549.8
As 188.980	208.414	211.993	220.944
B 249.678	75.1816	73.1912	73.3185
Ba 389.178	650.487	649.806	651.131
Be 313.042	4.1709	4.1598	4.1492
Ca 370.602	171187	171037	170896
Cd 226.502	3.8805	3.8865	4.2369
Co 228.615	40.8605	41.7185	40.8335
Cr 267.716	104.802	104.942	104.607
Cu 324.754	186.892	185.123	183.587
Fe 271.441	108411	108456	108261
K 766.491	8636.37	8620.11	8630.43
Mg 279.078	98785.5	98799.9	98707.5
Mn 257.610	3080.43	3080.28	3072.95
Mo 202.032	5.6300	5.8675	5.3936
Na 330.237	920.048	1242.75	1093.13
Ni 231.604	105.138	109.620	104.715
Pb 220.353	1162.32	1168.05	1147.60
Sb 206.834	2.5129	-4.1501u	6.7453
Se 196.026	1.5378	-0.8159	10.9949
Si 288.158	2415.97	2425.35	2416.78
Sn 189.925	33.9120	31.9161	25.8122
Sr 216.596	247.657	247.459	248.038
Ti 334.941	833.899	833.273	833.454

Label	Replicates Concentration		
Tl 190.794	-0.1525u	-6.7606u	0.9120u
V 292.401	151.275	151.885	151.144
Zn 206.200	1015.60	1009.25	1005.29

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0127	ppb	0.1815	1425.6	-47.6117
Al 308.215	80618.5	ppb	88.1930	0.1	190283
As 188.980	213.784	ppb	6.4540	3.0	55.2303
B 249.678	73.8971	ppb	1.1142	1.5	312.402
Ba 389.178	650.474	ppb	0.6626	0.1	6305.76
Be 313.042	4.1600	ppb	0.0109	0.3	3232.61
Ca 370.602	171040	ppb	145.7	0.1	356790
Cd 226.502	4.0013	ppb	0.2041	5.1	149.567
Co 228.615	41.1375	ppb	0.5033	1.2	194.130
Cr 267.716	104.784	ppb	0.1681	0.2	2297.09
Cu 324.754	185.201	ppb	1.6538	0.9	6962.97
Fe 271.441	108376	ppb	101.845	0.1	81345.0
K 766.491	8628.97	ppb	8.2259	0.1	213755
Mg 279.078	98764.3	ppb	49.7322	0.1	136089
Mn 257.610	3077.89	ppb	4.2755	0.1	298136
Mo 202.032	5.6304	ppb	0.2369	4.2	12.8129
Na 330.237	1085.31	ppb	161.491	14.9	59.3503
Ni 231.604	106.491	ppb	2.7177	2.6	135.362
Pb 220.353	1159.33	ppb	10.5523	0.9	609.176
Sb 206.834	1.7027	ppb	5.4927	322.6	7.8218
Se 196.026	3.9056	ppb	6.2513	160.1	0.1648
Si 288.158	2419.37	ppb	5.1992	0.2	11801.1
Sn 189.925	30.5467	ppb	4.2200	13.8	8.8763
Sr 216.596	247.718	ppb	0.2939	0.1	976.528
Ti 334.941	833.542	ppb	0.3223	0.0	91786.6
Tl 190.794	-2.0003	ppb	4.1567	207.8	-8.4042
V 292.401	151.434	ppb	0.3958	0.3	2006.53
Zn 206.200	1010.05	ppb	5.1994	0.5	567.131

680-161405-A-117-A (Samp) **12/16/2018, 6:08:04 AM** **Rack 4, Tube 33**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2211u	0.3008u	-0.1641u
Al 308.215	97334.3	97334.0	97291.8
As 188.980	318.243	335.771	341.068
B 249.678	51.8922	50.9331	50.1127
Ba 389.178	843.964	843.744	844.134
Be 313.042	5.0180	5.0320	5.0187
Ca 370.602	94084	94077	94136
Cd 226.502	5.5019	4.8652	5.3639
Co 228.615	60.9117	59.8461	60.2677
Cr 267.716	119.858	119.554	120.089
Cu 324.754	213.027	213.488	211.149
Fe 271.441	128867	128811	129104
K 766.491	6799.84	6812.58	6807.53
Mg 279.078	61681.7	61702.0	61734.2
Mn 257.610	5152.30	5151.36	5157.05
Mo 202.032	4.8630	5.3298	6.5667

Label	Replicates Concentration		
Na 330.237	773.083	1119.35	1116.72
Ni 231.604	125.603	129.988	128.827
Pb 220.353	1517.96	1499.08	1491.82
Sb 206.834	0.9282	-5.6566u	5.1012
Se 196.026	6.8535	8.9834	-0.7158
Si 288.158	2539.93	2549.79	2551.61
Sn 189.925	34.8232	31.5955	18.2760
Sr 216.596	158.963	157.996	157.663
Ti 334.941	959.687	959.923	962.360
Tl 190.794	0.0734u	8.1122u	-11.2159u
V 292.401	188.680	187.200	188.457
Zn 206.200	1116.65	1107.18	1105.49

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1192	ppb	0.2486	208.5	-43.2388
Al 308.215	97320.0	ppb	24.4724	0.0	229671
As 188.980	331.694	ppb	11.9462	3.6	85.0880
B 249.678	50.9793	ppb	0.8907	1.7	141.107
Ba 389.178	843.947	ppb	0.1951	0.0	8123.27
Be 313.042	5.0229	ppb	0.0079	0.2	3924.92
Ca 370.602	94099	ppb	32.32	0.0	196237
Cd 226.502	5.2436	ppb	0.3350	6.4	183.988
Co 228.615	60.3418	ppb	0.5367	0.9	285.067
Cr 267.716	119.833	ppb	0.2682	0.2	2627.87
Cu 324.754	212.555	ppb	1.2388	0.6	7959.14
Fe 271.441	128927	ppb	155.508	0.1	96767.7
K 766.491	6806.65	ppb	6.4147	0.1	168665
Mg 279.078	61706.0	ppb	26.4992	0.0	84990.0
Mn 257.610	5153.57	ppb	3.0511	0.1	498664
Mo 202.032	5.5865	ppb	0.8804	15.8	12.4161
Na 330.237	1003.05	ppb	199.162	19.9	55.1478
Ni 231.604	128.140	ppb	2.2719	1.8	163.188
Pb 220.353	1502.95	ppb	13.4895	0.9	788.055
Sb 206.834	0.1242	ppb	5.4238	4365.4	7.4228
Se 196.026	5.0404	ppb	5.0975	101.1	0.6221
Si 288.158	2547.11	ppb	6.2866	0.2	12410.1
Sn 189.925	28.2316	ppb	8.7715	31.1	8.1879
Sr 216.596	158.208	ppb	0.6753	0.4	638.773
Ti 334.941	960.656	ppb	1.4798	0.2	105618
Tl 190.794	-1.0101	ppb	9.7095	961.2	-8.4014
V 292.401	188.112	ppb	0.7982	0.4	2491.40
Zn 206.200	1109.77	ppb	6.0128	0.5	622.939

x (Samp) **12/16/2018, 6:12:48 AM** **Rack 4, Tube 34**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.8236	11.3164	11.1785
Al 308.215	233.093	239.864	237.516
As 188.980	31.1764	30.6385	25.4690
B 249.678	125.151	126.289	125.518
Ba 389.178	11.1521	10.0792	9.5730
Be 313.042	5.0138	5.0099	5.0358
Ca 370.602	588.3	580.0	584.4

Label	Replicates Concentration		
Cd 226.502	6.4879	6.3176	6.0851
Co 228.615	10.5137	10.6444	10.4319
Cr 267.716	11.6442	11.3189	11.7155
Cu 324.754	24.6034	24.3631	25.3421
Fe 271.441	71.9573	64.9198	82.8763
K 766.491	1156.65	1157.06	1156.93
Mg 279.078	626.963	626.769	627.409
Mn 257.610	12.1609	12.1912	12.2884
Mo 202.032	11.7755	10.6684	11.8170
Na 330.237	1499.70	1515.37	1686.61
Ni 231.604	47.9385	49.1124	47.3674
Pb 220.353	10.6101	16.3576	16.5645
Sb 206.834	16.2924	25.2536	20.9964
Se 196.026	4.0831	30.0333	23.1571
Si 288.158	130.175	127.914	127.524
Sn 189.925	58.6733	48.3673	65.8507
Sr 216.596	12.0866	11.0290	11.2955
Ti 334.941	11.6656	11.6258	11.6531
Tl 190.794	27.2942	26.7912	22.8140
V 292.401	11.2883	10.8862	11.1720
Zn 206.200	23.7276	26.2247	23.9197

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.4395	ppb	0.3397	3.0	367.776
Al 308.215	236.824	ppb	3.4377	1.5	713.977
As 188.980	29.0946	ppb	3.1513	10.8	8.3187
B 249.678	125.653	ppb	0.5809	0.5	760.438
Ba 389.178	10.2681	ppb	0.8063	7.9	48.8757
Be 313.042	5.0198	ppb	0.0140	0.3	3902.60
Ca 370.602	584.2	ppb	4.142	0.7	1247
Cd 226.502	6.2969	ppb	0.2022	3.2	101.741
Co 228.615	10.5300	ppb	0.1072	1.0	41.4470
Cr 267.716	11.5595	ppb	0.2114	1.8	268.939
Cu 324.754	24.7696	ppb	0.5102	2.1	1122.78
Fe 271.441	73.2511	ppb	9.0479	12.4	73.2807
K 766.491	1156.88	ppb	0.2113	0.0	28871.3
Mg 279.078	627.047	ppb	0.3283	0.1	883.147
Mn 257.610	12.2135	ppb	0.0666	0.5	1213.65
Mo 202.032	11.4203	ppb	0.6515	5.7	26.4402
Na 330.237	1567.23	ppb	103.685	6.6	83.9467
Ni 231.604	48.1394	ppb	0.8897	1.8	60.3343
Pb 220.353	14.5107	ppb	3.3796	23.3	13.6625
Sb 206.834	20.8474	ppb	4.4825	21.5	14.2906
Se 196.026	19.0912	ppb	13.4444	70.4	2.3098
Si 288.158	128.538	ppb	1.4313	1.1	951.126
Sn 189.925	57.6305	ppb	8.7882	15.2	16.9296
Sr 216.596	11.4704	ppb	0.5501	4.8	48.8515
Ti 334.941	11.6482	ppb	0.0204	0.2	1244.15
Tl 190.794	25.6331	ppb	2.4544	9.6	2.7206
V 292.401	11.1155	ppb	0.2069	1.9	142.394
Zn 206.200	24.6240	ppb	1.3896	5.6	14.3712

x (Samp) **12/16/2018, 6:17:32 AM** **Rack 4, Tube 35**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	10.8202	10.8950	10.4072
Al 308.215	231.077	234.165	231.266
As 188.980	24.2827	24.3326	35.2751
B 249.678	124.646	126.349	125.182
Ba 389.178	9.4581	9.6704	10.5854
Be 313.042	5.0002	4.9893	5.0089
Ca 370.602	584.1	584.3	582.5
Cd 226.502	5.8608	6.0719	5.8609
Co 228.615	9.6288	11.0189	11.4579
Cr 267.716	11.2685	11.5255	11.0136
Cu 324.754	25.3420	25.2553	24.5431
Fe 271.441	59.7178	60.2758	74.2333
K 766.491	1152.26	1153.48	1150.17
Mg 279.078	618.944	623.361	626.674
Mn 257.610	12.1287	12.0941	12.0722
Mo 202.032	11.8314	11.0768	11.4089
Na 330.237	1006.38	1271.77	1408.89
Ni 231.604	48.6600	49.1583	48.9645
Pb 220.353	24.6995	12.1355	12.6901
Sb 206.834	32.2246	16.9695	17.4918
Se 196.026	31.6562	14.9485	0.3303
Si 288.158	124.229	125.095	126.857
Sn 189.925	58.0904	61.8406	60.8484
Sr 216.596	11.5605	12.7354	12.3950
Ti 334.941	11.3528	11.4549	11.2942
Tl 190.794	30.0514	28.5474	30.6898
V 292.401	11.3003	11.0760	10.8838
Zn 206.200	24.6795	27.5961	27.2442

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.7075	ppb	0.2627	2.5	342.343
Al 308.215	232.169	ppb	1.7311	0.7	702.998
As 188.980	27.9635	ppb	6.3321	22.6	8.0326
B 249.678	125.393	ppb	0.8709	0.7	758.731
Ba 389.178	9.9046	ppb	0.5991	6.0	45.3926
Be 313.042	4.9995	ppb	0.0098	0.2	3886.00
Ca 370.602	583.7	ppb	0.9910	0.2	1246
Cd 226.502	5.9312	ppb	0.1219	2.1	96.1710
Co 228.615	10.7019	ppb	0.9549	8.9	42.2408
Cr 267.716	11.2692	ppb	0.2559	2.3	262.677
Cu 324.754	25.0468	ppb	0.4384	1.8	1132.83
Fe 271.441	64.7423	ppb	8.2242	12.7	66.8969
K 766.491	1151.97	ppb	1.6717	0.1	28749.8
Mg 279.078	622.993	ppb	3.8779	0.6	877.562
Mn 257.610	12.0984	ppb	0.0285	0.2	1202.49
Mo 202.032	11.4390	ppb	0.3782	3.3	26.4792
Na 330.237	1229.02	ppb	204.633	16.7	75.6330
Ni 231.604	48.9276	ppb	0.2512	0.5	61.3479
Pb 220.353	16.5084	ppb	7.0991	43.0	14.7024
Sb 206.834	22.2287	ppb	8.6607	39.0	14.8607
Se 196.026	15.6450	ppb	15.6746	100.2	1.6843
Si 288.158	125.394	ppb	1.3392	1.1	936.390

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	60.2598	ppb	1.9431	3.2	17.7114
Sr 216.596	12.2303	ppb	0.6045	4.9	51.7519
Ti 334.941	11.3673	ppb	0.0814	0.7	1213.32
Tl 190.794	29.7628	ppb	1.0999	3.7	3.8580
V 292.401	11.0867	ppb	0.2084	1.9	141.996
Zn 206.200	26.5066	ppb	1.5920	6.0	15.4301

Cont Calib Verif (CCV) **12/16/2018, 6:22:17 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	494.067	491.408	491.861
Al 308.215	10009.1	10008.5	10012.4
As 188.980	539.305	538.685	549.097
B 249.678	548.282	550.255	552.823
Ba 389.178	455.084	453.564	452.790
Be 313.042	559.888	560.704	559.636
Ca 370.602	10103	10116	10111
Cd 226.502	525.144	526.479	525.167
Co 228.615	509.878	510.422	508.734
Cr 267.716	504.655	504.653	503.930
Cu 324.754	512.996	513.425	511.847
Fe 271.441	10234.3	10236.1	10185.9
K 766.491	10297.1	10307.6	10283.3
Mg 279.078	10833.8	10854.1	10856.2
Mn 257.610	505.107	505.360	504.834
Mo 202.032	488.269	488.452	488.494
Na 330.237	11383.5	11181.6	11507.0
Ni 231.604	522.967	518.715	518.600
Pb 220.353	511.343	515.280	526.513
Sb 206.834	507.084	500.331	501.115
Se 196.026	559.726	532.615	570.763
Si 288.158	5095.67	5101.40	5095.89
Sn 189.925	502.545	497.780	488.463
Sr 216.596	496.414	498.574	498.162
Ti 334.941	492.292	492.600	491.504
Tl 190.794	498.316	502.613	499.632
V 292.401	492.808	493.960	493.706
Zn 206.200	1104.96	1106.26	1109.55

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	492.445	ppb	1.4226	0.3	17076.2	98.48907
Al 308.215	10010.0	ppb	2.1219	0.0	23783.0	100.10007
As 188.980	542.362	ppb	5.8407	1.1	138.006	108.47247
B 249.678	550.453	ppb	2.2766	0.4	3547.77	110.09066Q
Ba 389.178	453.812	ppb	1.1672	0.3	4306.58	90.76247
Be 313.042	560.076	ppb	0.5582	0.1	455794	112.01514Q
Ca 370.602	10110	ppb	6.580	0.1	21127	101.09790
Cd 226.502	525.597	ppb	0.7642	0.1	8013.36	105.11932
Co 228.615	509.678	ppb	0.8616	0.2	2360.79	101.93562
Cr 267.716	504.413	ppb	0.4180	0.1	10895.9	100.88257
Cu 324.754	512.756	ppb	0.8160	0.2	18827.5	102.55116
Fe 271.441	10218.8	ppb	28.4954	0.3	7717.28	102.13648
K 766.491	10296.0	ppb	12.1860	0.1	255002	102.95978

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10848.0	ppb	12.3929	0.1	14962.7	108.48013
Mn 257.610	505.100	ppb	0.2631	0.1	48927.1	101.02003
Mo 202.032	488.405	ppb	0.1195	0.0	1017.21	97.68106
Na 330.237	11357.4	ppb	164.241	1.4	320.531	113.57373Q
Ni 231.604	520.094	ppb	2.4891	0.5	666.807	104.01881
Pb 220.353	517.712	ppb	7.8721	1.5	275.229	103.54244
Sb 206.834	502.843	ppb	3.6936	0.7	211.600	100.56864
Se 196.026	554.368	ppb	19.6301	3.5	99.5411	110.87354Q
Si 288.158	5097.65	ppb	3.2459	0.1	24535.5	101.95309
Sn 189.925	496.263	ppb	7.1624	1.4	147.355	99.25259
Sr 216.596	497.716	ppb	1.1469	0.2	1900.10	99.54329
Ti 334.941	492.132	ppb	0.5653	0.1	54019.9	98.42640
Tl 190.794	500.187	ppb	2.2016	0.4	133.698	100.03747
V 292.401	493.492	ppb	0.6053	0.1	6422.04	98.69834
Zn 206.200	1106.92	ppb	2.3670	0.2	622.716	110.69234Q

Cont Calib Blank (CCB) **12/16/2018, 6:27:00 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0874u	-0.3045u	-0.6791u
Al 308.215	8.9950	6.6025	6.2470
As 188.980	4.1596	4.2454	1.5098
B 249.678	4.1971	2.8884	3.6074
Ba 389.178	-1.3435u	-0.9328u	-0.2246u
Be 313.042	0.0498	0.0751	0.0550
Ca 370.602	-0.2401u	0.9684	3.094
Cd 226.502	0.3330	0.0652	0.2364
Co 228.615	-1.2645u	-0.1246u	-1.3318u
Cr 267.716	-0.0397u	0.0552	-0.6519u
Cu 324.754	1.8615	1.6494	1.2023
Fe 271.441	-14.5421u	7.1133	-4.3999u
K 766.491	4.4163	4.3970	2.8491
Mg 279.078	8.4983	6.0575	8.0181
Mn 257.610	0.1335	0.2569	0.1511
Mo 202.032	-0.9412u	-0.7385u	-0.1974u
Na 330.237	331.737	299.934	260.688
Ni 231.604	0.8510	0.9694	0.8753
Pb 220.353	-3.5431u	6.2602	1.7322
Sb 206.834	-1.8419u	0.5728	-1.0139u
Se 196.026	-8.1507u	9.9251	-2.0881u
Si 288.158	7.4322	8.3875	7.4693
Sn 189.925	0.3591	8.9182	-6.9172u
Sr 216.596	-0.6178u	0.0748	0.9795
Ti 334.941	0.3203	0.2116	0.1647
Tl 190.794	-5.2107u	6.0273	-1.3595u
V 292.401	-0.0546u	-0.8634u	-0.5055u
Zn 206.200	0.3727	3.0881	-1.0642u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.3570	ppb	0.2993	83.8	-42.0285	-0.35699
Al 308.215	7.2815	ppb	1.4945	20.5	172.136	7.28152
As 188.980	3.3049	ppb	1.5552	47.1	1.7999	3.30494
B 249.678	3.5643	ppb	0.6554	18.4	-43.4695	3.56433

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	-0.8336	ppb	0.5660	67.9	-58.0276	-0.83363
Be 313.042	0.0600	ppb	0.0134	22.3	-135.041	0.05998
Ca 370.602	1.274	ppb	1.688	132.5	30.14	1.27423
Cd 226.502	0.2115	ppb	0.1356	64.1	9.0596	0.21153
Co 228.615	-0.9070	ppb	0.6784	74.8	-11.6694	-0.90695
Cr 267.716	-0.2121	ppb	0.3838	180.9	15.1286	-0.21211
Cu 324.754	1.5710	ppb	0.3365	21.4	281.323	1.57105
Fe 271.441	-3.9429	ppb	10.8349	274.8	14.6291	-3.94288
K 766.491	3.8875	ppb	0.8993	23.1	342.580	3.88751
Mg 279.078	7.5246	ppb	1.2931	17.2	29.4841	7.52461
Mn 257.610	0.1805	ppb	0.0667	37.0	47.3668	0.18050
Mo 202.032	-0.6257	ppb	0.3845	61.5	1.4160	-0.62574
Na 330.237	297.453	ppb	35.5894	12.0	52.8164	297.45273
Ni 231.604	0.8986	ppb	0.0625	7.0	-0.4105	0.89859
Pb 220.353	1.4831	ppb	4.9064	330.8	6.8909	1.48313
Sb 206.834	-0.7610	ppb	1.2271	161.2	5.4114	-0.76099
Se 196.026	-0.1046	ppb	9.1997	8797.4	-1.1756	-0.10457
Si 288.158	7.7630	ppb	0.5412	7.0	373.895	7.76303
Sn 189.925	0.7867	ppb	7.9264	1007.5	0.0273	0.78671
Sr 216.596	0.1455	ppb	0.8010	550.6	6.1085	0.14549
Ti 334.941	0.2322	ppb	0.0798	34.4	-10.9804	0.23219
Tl 190.794	-0.1810	ppb	5.7110	3155.9	-4.4018	-0.18096
V 292.401	-0.4745	ppb	0.4053	85.4	-8.3980	-0.47449
Zn 206.200	0.7989	ppb	2.1087	264.0	0.9779	0.79889

Cont Calib Verif (CCV) **12/16/2018, 12:53:57 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	495.699	492.211	494.721
Al 308.215	9881.42	9897.97	9892.48
As 188.980	473.558	464.525	460.627
B 249.678	462.784	464.078	462.731
Ba 389.178	539.964	539.498	542.013
Be 313.042	480.064	480.100	479.264
Ca 370.602	10108	10098	10106
Cd 226.502	486.835	487.046	486.263
Co 228.615	501.723	498.685	498.868
Cr 267.716	499.603	499.471	498.964
Cu 324.754	489.147	490.804	491.044
Fe 271.441	10057.0	10055.6	10047.2
K 766.491	9395.49	9410.07	9413.80
Mg 279.078	9477.22	9474.24	9467.78
Mn 257.610	507.721	507.971	507.801
Mo 202.032	502.345	502.208	503.197
Na 330.237	9038.17	9543.83	9408.07
Ni 231.604	485.729	495.958	491.514
Pb 220.353	499.606	498.693	497.495
Sb 206.834	502.178	514.346	499.887
Se 196.026	458.277	453.905	453.842
Si 288.158	4756.48	4753.67	4761.04
Sn 189.925	488.050	498.296	493.304
Sr 216.596	508.937	510.760	510.720
Ti 334.941	519.625	519.593	519.394

Label	Replicates Concentration		
Tl 190.794	503.838	513.822	500.748
V 292.401	514.618	515.910	515.080
Zn 206.200	937.862	943.584	951.657

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	494.210	ppb	1.7995	0.4	17137.6	98.84207
Al 308.215	9890.62	ppb	8.4282	0.1	23502.3	98.90624
As 188.980	466.236	ppb	6.6330	1.4	118.753	93.24729
B 249.678	463.198	ppb	0.7633	0.2	2973.33	92.63953
Ba 389.178	540.492	ppb	1.3381	0.2	5134.29	108.09833
Be 313.042	479.809	ppb	0.4723	0.1	390443	95.96188
Ca 370.602	10104	ppb	4.996	0.0	21116	101.03888
Cd 226.502	486.715	ppb	0.4054	0.1	7421.42	97.34296
Co 228.615	499.759	ppb	1.7034	0.3	2314.78	99.95171
Cr 267.716	499.346	ppb	0.3378	0.1	10786.6	99.86922
Cu 324.754	490.332	ppb	1.0332	0.2	18014.4	98.06630
Fe 271.441	10053.3	ppb	5.2957	0.1	7592.67	100.48272
K 766.491	9406.45	ppb	9.6778	0.1	232992	94.06452
Mg 279.078	9473.08	ppb	4.8277	0.1	13067.8	94.73082
Mn 257.610	507.831	ppb	0.1277	0.0	49185.5	101.56618
Mo 202.032	502.583	ppb	0.5358	0.1	1046.67	100.51668
Na 330.237	9330.02	ppb	261.707	2.8	271.107	93.30025
Ni 231.604	491.067	ppb	5.1290	1.0	629.485	98.21340
Pb 220.353	498.598	ppb	1.0587	0.2	265.276	99.71952
Sb 206.834	505.470	ppb	7.7714	1.5	212.524	101.09401
Se 196.026	455.341	ppb	2.5425	0.6	81.5671	91.06827
Si 288.158	4757.06	ppb	3.7159	0.1	22930.0	95.14128
Sn 189.925	493.217	ppb	5.1236	1.0	146.449	98.64330
Sr 216.596	510.139	ppb	1.0414	0.2	1947.64	102.02776
Ti 334.941	519.538	ppb	0.1249	0.0	57023.8	103.90751
Tl 190.794	506.136	ppb	6.8331	1.4	135.327	101.22716
V 292.401	515.203	ppb	0.6547	0.1	6705.78	103.04051
Zn 206.200	944.368	ppb	6.9308	0.7	531.289	94.43676

Cont Calib Blank (CCB) **12/16/2018, 12:58:39 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4211	-0.4664u	0.3229
Al 308.215	-5.6718u	-6.7493u	-5.1608u
As 188.980	-1.0897u	-1.2978u	-3.2222u
B 249.678	1.4264	0.4344	0.9108
Ba 389.178	0.8453	-0.2541u	0.9769
Be 313.042	0.0481	0.0488	0.0577
Ca 370.602	-0.7714u	1.969	1.029
Cd 226.502	0.0248	0.2218	0.3557
Co 228.615	-0.1787u	-0.6661u	-0.3259u
Cr 267.716	0.0356	-0.1488u	0.1743
Cu 324.754	-1.0321u	-1.0759u	-1.3678u
Fe 271.441	4.9906	1.2109	9.4336
K 766.491	-0.2682u	-0.5111u	-0.5058u
Mg 279.078	4.4614	2.8710	1.7999
Mn 257.610	0.0534	0.0518	0.1544
Mo 202.032	-0.3103u	-0.0348u	-1.0344u

Label	Replicates Concentration		
Na 330.237	-110.448u	-93.1067u	189.814
Ni 231.604	0.6542	0.5825	-0.3573u
Pb 220.353	6.3215	-2.1531u	-3.0209u
Sb 206.834	-0.3724u	-4.0978u	-0.1662u
Se 196.026	-4.7053u	-18.7199u	-5.2163u
Si 288.158	-16.1214u	-16.6598u	-16.0186u
Sn 189.925	2.1837	1.4499	0.1222
Sr 216.596	1.4161	0.7284	0.5695
Ti 334.941	0.2396	0.1845	0.0265
Tl 190.794	-7.9406u	2.5557	1.8040
V 292.401	0.0854	0.1206	0.3442
Zn 206.200	-1.9361u	-2.6752u	0.0019

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0925	ppb	0.4866	525.8	-26.4139	0.09253
Al 308.215	-5.8606	ppb	0.8109	13.8	141.173	-5.86063
As 188.980	-1.8699	ppb	1.1758	62.9	0.4910	-1.86987
B 249.678	0.9239	ppb	0.4961	53.7	-60.8655	0.92386
Ba 389.178	0.5227	ppb	0.6759	129.3	-45.0567	0.52267
Be 313.042	0.0515	ppb	0.0054	10.5	-141.945	0.05152
Ca 370.602	0.7420	ppb	1.392	187.6	29.01	0.74204
Cd 226.502	0.2008	ppb	0.1664	82.9	8.9007	0.20077
Co 228.615	-0.3902	ppb	0.2500	64.1	-9.2753	-0.39024
Cr 267.716	0.0204	ppb	0.1621	795.7	20.1377	0.02037
Cu 324.754	-1.1586	ppb	0.1825	15.8	182.345	-1.15861
Fe 271.441	5.2117	ppb	4.1158	79.0	21.5292	5.21170
K 766.491	-0.4284	ppb	0.1387	32.4	235.792	-0.42836
Mg 279.078	3.0441	ppb	1.3391	44.0	23.3165	3.04411
Mn 257.610	0.0865	ppb	0.0588	67.9	38.2611	0.08654
Mo 202.032	-0.4598	ppb	0.5163	112.3	1.7604	-0.45984
Na 330.237	-4.5804	ppb	168.574	3680.3	45.3967	-4.58040
Ni 231.604	0.2932	ppb	0.5644	192.5	-1.1896	0.29316
Pb 220.353	0.3825	ppb	5.1616	1349.4	6.3182	0.38251
Sb 206.834	-1.5455	ppb	2.2128	143.2	5.0832	-1.54545
Se 196.026	-9.5472	ppb	7.9479	83.2	-2.8895	-9.54715
Si 288.158	-16.2666uv	ppb	0.3444	2.1	260.518	-16.26660
Sn 189.925	1.2519	ppb	1.0449	83.5	0.1656	1.25192
Sr 216.596	0.9046	ppb	0.4500	49.7	9.0002	0.90465
Ti 334.941	0.1502	ppb	0.1107	73.7	-19.9952	0.15020
Tl 190.794	-1.1936	ppb	5.8551	490.5	-4.6807	-1.19362
V 292.401	0.1834	ppb	0.1404	76.5	0.1682	0.18343
Zn 206.200	-1.5364	ppb	1.3826	90.0	-0.3359	-1.53644

MB 680-551778/1-A (Samp) **12/16/2018, 1:03:19 PM** **Rack 1, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3790u	-0.1512u	0.2932
Al 308.215	0.6625	-0.6693u	3.3049
As 188.980	-3.5121u	2.7656	4.3569
B 249.678	-0.4831u	-1.5437u	-0.7794u
Ba 389.178	-0.7458u	-0.9084u	-0.4876u
Be 313.042	0.0462	0.0417	0.0309
Ca 370.602	11.57	11.03	10.36

Label	Replicates Concentration		
Cd 226.502	-0.4704u	-0.2441u	-0.0413u
Co 228.615	-0.2012u	-0.8646u	-0.7398u
Cr 267.716	-0.1030u	0.3332	0.2558
Cu 324.754	-1.4003u	-1.1409u	-1.2168u
Fe 271.441	20.8524	10.2646	15.6515
K 766.491	3.2626	2.3164	3.0713
Mg 279.078	4.3947	1.3783	9.4874
Mn 257.610	0.4487	0.4090	0.4821
Mo 202.032	0.0006	-1.5367u	-0.1176u
Na 330.237	122.782	-83.5620u	-43.3867u
Ni 231.604	1.5651	0.9240	0.4358
Pb 220.353	4.5957	1.8369	2.9154
Sb 206.834	-4.8605u	-4.0414u	2.0728
Se 196.026	-12.6117u	-0.7060u	-4.8653u
Si 288.158	-14.9080u	-15.9707u	-13.9014u
Sn 189.925	0.2225	2.2446	-0.2887u
Sr 216.596	1.2869	1.0466	0.5667
Ti 334.941	0.0769	0.3822	0.1295
Tl 190.794	-0.2600u	-4.9295u	-6.4335u
V 292.401	0.2950	0.1055	-0.2847u
Zn 206.200	-0.0101u	2.1293	1.5169

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0790	ppb	0.3418	432.6	-32.3757
Al 308.215	1.0994	ppb	2.0228	184.0	157.580
As 188.980	1.2035	ppb	4.1606	345.7	1.2683
B 249.678	-0.9354	ppb	0.5473	58.5	-73.1175
Ba 389.178	-0.7139	ppb	0.2122	29.7	-56.8770
Be 313.042	0.0396	ppb	0.0079	19.9	-151.672
Ca 370.602	10.98	ppb	0.6036	5.5	50.38
Cd 226.502	-0.2519	ppb	0.2147	85.2	2.0173
Co 228.615	-0.6019	ppb	0.3525	58.6	-10.2565
Cr 267.716	0.1620	ppb	0.2327	143.7	23.1927
Cu 324.754	-1.2526	ppb	0.1334	10.6	178.934
Fe 271.441	15.5895	ppb	5.2942	34.0	29.3013
K 766.491	2.8834	ppb	0.5003	17.4	317.736
Mg 279.078	5.0868	ppb	4.0986	80.6	26.1266
Mn 257.610	0.4466	ppb	0.0366	8.2	73.1068
Mo 202.032	-0.5512	ppb	0.8555	155.2	1.5704
Na 330.237	-1.3888	ppb	109.395	7877.0	45.4711
Ni 231.604	0.9750	ppb	0.5664	58.1	-0.3124
Pb 220.353	3.1160	ppb	1.3903	44.6	7.7411
Sb 206.834	-2.2764	ppb	3.7887	166.4	4.7832
Se 196.026	-6.0610	ppb	6.0422	99.7	-2.2567
Si 288.158	-14.9267uv	ppb	1.0348	6.9	266.919
Sn 189.925	0.7261	ppb	1.3396	184.5	0.0093
Sr 216.596	0.9667	ppb	0.3667	37.9	9.2469
Ti 334.941	0.1962	ppb	0.1632	83.2	-14.9269
Tl 190.794	-3.8744	ppb	3.2192	83.1	-5.4197
V 292.401	0.0386	ppb	0.2956	766.4	-1.7179
Zn 206.200	1.2120	ppb	1.1018	90.9	1.2098

LCS 680-551778/2-A (Samp) **12/16/2018, 1:08:00 PM** **Rack 1, Tube 2**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	98.9466	99.0662	99.2818
Al 308.215	9653.15	9643.47	9664.88
As 188.980	177.906	177.232	176.823
B 249.678	352.731	355.294	355.118
Ba 389.178	206.790	208.471	207.394
Be 313.042	91.5317	91.4664	91.4152
Ca 370.602	9567	9586	9569
Cd 226.502	95.0677	95.6106	94.9418
Co 228.615	94.4528	95.2919	95.9807
Cr 267.716	193.741	193.224	193.888
Cu 324.754	190.520	188.137	189.124
Fe 271.441	9597.58	9581.18	9581.74
K 766.491	16889.5	16873.8	16863.1
Mg 279.078	8845.47	8845.18	8843.40
Mn 257.610	964.616	965.882	964.801
Mo 202.032	194.244	194.441	195.627
Na 330.237	191184x	191172x	191072x
Ni 231.604	188.453	187.550	186.982
Pb 220.353	948.807	964.685	951.942
Sb 206.834	97.3843	105.433	101.927
Se 196.026	175.759	179.914	178.348
Si 288.158	-25.2740u	-23.5960u	-25.0364u
Sn 189.925	197.107	187.120	185.176
Sr 216.596	194.890	195.587	194.266
Ti 334.941	199.854	199.966	199.462
Tl 190.794	73.5489	66.7544	77.1885
V 292.401	199.723	198.909	198.987
Zn 206.200	180.540	180.163	185.452

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	99.0982b	ppb	0.1699	0.2	3412.61
Al 308.215	9653.83b	ppb	10.7195	0.1	22930.4
As 188.980	177.320b	ppb	0.5470	0.3	45.7723
B 249.678	354.381b	ppb	1.4313	0.4	2257.25
Ba 389.178	207.552b	ppb	0.8511	0.4	1947.81
Be 313.042	91.4711b	ppb	0.0584	0.1	74273.0
Ca 370.602	9574b	ppb	10.60	0.1	20010
Cd 226.502	95.2067b	ppb	0.3554	0.4	1461.91
Co 228.615	95.2418b	ppb	0.7652	0.8	435.206
Cr 267.716	193.618b	ppb	0.3484	0.2	4198.02
Cu 324.754	189.260b	ppb	1.1976	0.6	7092.29
Fe 271.441	9586.83b	ppb	9.3101	0.1	7218.02
K 766.491	16875.5b	ppb	13.2822	0.1	417800
Mg 279.078	8844.68b	ppb	1.1225	0.0	12197.0
Mn 257.610	965.100b	ppb	0.6839	0.1	93382.4
Mo 202.032	194.771b	ppb	0.7480	0.4	407.205
Na 330.237	191143xb	ppb	61.5187	0.0	4741.64
Ni 231.604	187.662b	ppb	0.7418	0.4	239.689
Pb 220.353	955.145b	ppb	8.4092	0.9	503.177
Sb 206.834	101.581b	ppb	4.0355	4.0	46.8974
Se 196.026	178.007b	ppb	2.0985	1.2	31.2696
Si 288.158	-24.6355uvb	ppb	0.9080	3.7	273.259

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	189.801b	ppb	6.4012	3.4	56.2525
Sr 216.596	194.914b	ppb	0.6608	0.3	748.850
Ti 334.941	199.761b	ppb	0.2649	0.1	21914.8
Tl 190.794	72.4973b	ppb	5.2959	7.3	15.5134
V 292.401	199.206b	ppb	0.4493	0.2	2591.91
Zn 206.200	182.052b	ppb	2.9510	1.6	102.689

LB 680-551722/1-B (Samp) **12/16/2018, 1:12:40 PM** **Rack 1, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.2367	0.1372	-0.4631u
Al 308.215	-3.9565u	-2.7161u	-3.6344u
As 188.980	2.0396	-1.7423u	-2.3854u
B 249.678	0.0203	0.1196	-1.2343u
Ba 389.178	-0.2786u	-1.1685u	-1.2657u
Be 313.042	0.0389	0.0226	0.0232
Ca 370.602	1.750	-2.846u	2.810
Cd 226.502	-0.1759u	0.4356	0.0021u
Co 228.615	-0.1516u	-0.7162u	-0.9291u
Cr 267.716	-0.2538u	0.0608	0.0454
Cu 324.754	-0.8811u	-1.1969u	-1.2030u
Fe 271.441	6.1157	1.3915	4.9179
K 766.491	10.5339	10.1366	9.0571
Mg 279.078	-2.6045u	0.2506	3.6145
Mn 257.610	0.0438	0.0827	0.1024
Mo 202.032	-0.4757u	-0.4687u	0.6466
Na 330.237	174063x	169782x	171462x
Ni 231.604	2.1375	-0.3059u	0.7633
Pb 220.353	5.3799	0.9392	-3.0220u
Sb 206.834	3.0642	-0.4671u	-12.7136u
Se 196.026	-18.0908u	-2.5100u	-0.8673u
Si 288.158	-16.7251u	-15.5800u	-15.7973u
Sn 189.925	2.7285	0.6216	1.7585
Sr 216.596	0.4857	0.1337	-0.1060u
Ti 334.941	0.2609	0.1032	0.1003
Tl 190.794	-3.6601u	-2.7163u	-10.9415u
V 292.401	-0.3006u	0.2532	-0.2755u
Zn 206.200	0.1058	-2.3472u	0.0212

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3036b	ppb	0.8620	284.0	-19.0800
Al 308.215	-3.4357b	ppb	0.6436	18.7	146.887
As 188.980	-0.6960b	ppb	2.3908	343.5	0.7879
B 249.678	-0.3648b	ppb	0.7547	206.9	-69.3542
Ba 389.178	-0.9043b	ppb	0.5440	60.2	-58.7022
Be 313.042	0.0282b	ppb	0.0092	32.6	-169.080
Ca 370.602	0.5713b	ppb	3.007	526.3	28.65
Cd 226.502	0.0873b	ppb	0.3145	360.5	6.8045
Co 228.615	-0.5990b	ppb	0.4018	67.1	-10.2491
Cr 267.716	-0.0492b	ppb	0.1774	360.3	19.9377
Cu 324.754	-1.0937b	ppb	0.1841	16.8	184.709
Fe 271.441	4.1417b	ppb	2.4559	59.3	20.7084
K 766.491	9.9092b	ppb	0.7642	7.7	491.575

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	0.4202b	ppb	3.1130	740.8	19.6996
Mn 257.610	0.0763b	ppb	0.0298	39.1	36.9151
Mo 202.032	-0.0992b	ppb	0.6460	650.9	2.5097
Na 330.237	171769xb	ppb	2156.61	1.3	4266.99
Ni 231.604	0.8650b	ppb	1.2248	141.6	-0.4539
Pb 220.353	1.0990b	ppb	4.2032	382.4	6.6911
Sb 206.834	-3.3722b	ppb	8.2803	245.5	4.3244
Se 196.026	-7.1560b	ppb	9.5053	132.8	-2.4555
Si 288.158	-16.0341uvb	ppb	0.6082	3.8	261.422
Sn 189.925	1.7029b	ppb	1.0545	61.9	0.3203
Sr 216.596	0.1711b	ppb	0.2977	173.9	6.1887
Ti 334.941	0.1548b	ppb	0.0919	59.3	-24.4435
Tl 190.794	-5.7726b	ppb	4.5012	78.0	-5.9435
V 292.401	-0.1076b	ppb	0.3128	290.6	-4.2869
Zn 206.200	-0.7401b	ppb	1.3924	188.1	0.1120

660-91088-A-1-F (Samp) **12/16/2018, 1:17:21 PM** **Rack 1, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2492	-0.1184u	0.1609
Al 308.215	44.1248	45.8528	47.0297
As 188.980	1.0694	-1.0622u	2.7685
B 249.678	6.6042	6.1282	6.2944
Ba 389.178	11.7103	12.6703	12.6678
Be 313.042	0.0358	0.0266	0.0238
Ca 370.602	4755	4742	4731
Cd 226.502	0.7750	1.0428	1.3696
Co 228.615	0.0775	-1.3532u	0.2544
Cr 267.716	0.2897	0.3000	-0.2357u
Cu 324.754	-0.8974u	-0.9807u	-0.9274u
Fe 271.441	12.1700	8.7533	5.4675
K 766.491	206.425	206.379	206.117
Mg 279.078	246.794	240.819	243.908
Mn 257.610	24.3118	24.3410	24.2677
Mo 202.032	0.1751	-1.5165u	-0.2423u
Na 330.237	190956x	190490x	189906x
Ni 231.604	1.9665	1.8288	2.0434
Pb 220.353	2.9149	-3.8824u	1.5949
Sb 206.834	0.6540	-1.6311u	-5.8152u
Se 196.026	-13.9676u	10.2138	-5.7013u
Si 288.158	26.0253	22.8025	23.7513
Sn 189.925	6.1571	5.0181	3.3829
Sr 216.596	4.7043	5.4377	4.6132
Ti 334.941	0.0222u	0.1815	0.0889
Tl 190.794	-9.9922u	-10.7010u	-7.1483u
V 292.401	0.4728	0.1374	0.3887
Zn 206.200	496.993	496.425	494.297

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0972b	ppb	0.1919	197.3	-26.2181
Al 308.215	45.6691b	ppb	1.4612	3.2	262.698
As 188.980	0.9252b	ppb	1.9194	207.5	1.1979
B 249.678	6.3423b	ppb	0.2416	3.8	-25.1863

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	12.3495b	ppb	0.5535	4.5	68.3296
Be 313.042	0.0288b	ppb	0.0063	21.9	-168.744
Ca 370.602	4743b	ppb	11.65	0.2	9925
Cd 226.502	1.0625b	ppb	0.2978	28.0	21.6114
Co 228.615	-0.3404b	ppb	0.8815	259.0	-9.0455
Cr 267.716	0.1180b	ppb	0.3063	259.6	23.7228
Cu 324.754	-0.9352b	ppb	0.0422	4.5	190.448
Fe 271.441	8.7969b	ppb	3.3515	38.1	24.2196
K 766.491	206.307b	ppb	0.1657	0.1	5351.08
Mg 279.078	243.840b	ppb	2.9880	1.2	354.922
Mn 257.610	24.3068b	ppb	0.0369	0.2	2380.44
Mo 202.032	-0.5279b	ppb	0.8813	166.9	1.6190
Na 330.237	190450xb	ppb	526.127	0.3	4724.90
Ni 231.604	1.9462b	ppb	0.1087	5.6	0.9367
Pb 220.353	0.2091b	ppb	3.6043	1723.5	6.2290
Sb 206.834	-2.2641b	ppb	3.2807	144.9	4.7849
Se 196.026	-3.1517b	ppb	12.2907	390.0	-1.7265
Si 288.158	24.1930b	ppb	1.6562	6.8	451.518
Sn 189.925	4.8527b	ppb	1.3945	28.7	1.2591
Sr 216.596	4.9184b	ppb	0.4521	9.2	24.3374
Ti 334.941	0.0975b	ppb	0.0800	82.0	-30.4686
Tl 190.794	-9.2805b	ppb	1.8802	20.3	-6.9024
V 292.401	0.3330b	ppb	0.1745	52.4	1.4471
Zn 206.200	495.905b	ppb	1.4214	0.3	279.459

660-91088-A-1-F (Samp) **12/16/2018, 1:22:01 PM** **Rack 1, Tube 5**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4659u	0.4194	0.7737
Al 308.215	0.9373	-1.8201u	2.2551
As 188.980	3.0529	0.4146	-1.8421u
B 249.678	0.3267	0.6059	-0.1219u
Ba 389.178	2.1943	2.4477	1.4695
Be 313.042	0.0301	0.0203	0.0151
Ca 370.602	917.5	908.8	904.8
Cd 226.502	0.1207	0.3075	-0.0595u
Co 228.615	-1.3049u	-0.6019u	-0.7341u
Cr 267.716	-0.1330u	-0.1845u	-0.3037u
Cu 324.754	-1.5085u	-1.0577u	-1.3998u
Fe 271.441	0.8887	-1.4258u	7.3209
K 766.491	33.5658	32.7875	33.5794
Mg 279.078	47.3078	45.7198	53.0522
Mn 257.610	4.6337	4.6357	4.5674
Mo 202.032	-0.8976u	-0.3644u	-0.2727u
Na 330.237	33725.4	33662.9	33159.6
Ni 231.604	0.5073	0.3795	1.0985
Pb 220.353	-6.0258u	0.8706	6.2256
Sb 206.834	-6.2124u	-3.7189u	2.5359
Se 196.026	-4.3188u	-2.7880u	-1.0113u
Si 288.158	-11.3625u	-11.0320u	-8.5817u
Sn 189.925	5.1608	3.1658	2.7483
Sr 216.596	0.6519	1.6919	0.8898
Ti 334.941	-0.0892u	0.0050u	-0.0177u

Label	Replicates Concentration		
Tl 190.794	-3.7103u	-2.5550u	-4.9197u
V 292.401	0.3024	-0.1508u	-0.4902u
Zn 206.200	91.1099	94.3119	93.0074

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2424	ppb	0.6385	263.4	-21.2010
Al 308.215	0.4574	ppb	2.0796	454.6	156.063
As 188.980	0.5418	ppb	2.4500	452.2	1.1010
B 249.678	0.2702	ppb	0.3672	135.9	-65.1659
Ba 389.178	2.0371	ppb	0.5077	24.9	-30.5210
Be 313.042	0.0218	ppb	0.0076	35.0	-167.587
Ca 370.602	910.4	ppb	6.493	0.7	1927
Cd 226.502	0.1229	ppb	0.1835	149.3	7.6414
Co 228.615	-0.8803	ppb	0.3736	42.4	-11.5536
Cr 267.716	-0.2071	ppb	0.0876	42.3	15.4944
Cu 324.754	-1.3220	ppb	0.2352	17.8	176.418
Fe 271.441	2.2612	ppb	4.5320	200.4	19.2775
K 766.491	33.3109	ppb	0.4533	1.4	1070.61
Mg 279.078	48.6933	ppb	3.8576	7.9	86.1819
Mn 257.610	4.6123	ppb	0.0389	0.8	475.922
Mo 202.032	-0.5116	ppb	0.3374	66.0	1.6530
Na 330.237	33516.0	ppb	310.212	0.9	868.986
Ni 231.604	0.6618	ppb	0.3836	58.0	-0.7149
Pb 220.353	0.3568	ppb	6.1418	1721.5	6.3052
Sb 206.834	-2.4651	ppb	4.5069	182.8	4.7032
Se 196.026	-2.7060	ppb	1.6553	61.2	-1.6474
Si 288.158	-10.3254uv	ppb	1.5191	14.7	288.556
Sn 189.925	3.6916	ppb	1.2893	34.9	0.8950
Sr 216.596	1.0779	ppb	0.5449	50.6	9.6701
Ti 334.941	-0.0339	ppb	0.0492	144.9	-41.0109
Tl 190.794	-3.7284	ppb	1.1825	31.7	-5.3788
V 292.401	-0.1129	ppb	0.3977	352.4	-3.8213
Zn 206.200	92.8097	ppb	1.6101	1.7	52.7310

660-91088-A-1-F (Samp) **12/16/2018, 1:26:43 PM** **Rack 1, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.4076	50.0804	50.9264
Al 308.215	5014.12	5007.00	5013.92
As 188.980	84.9141	94.2609	91.3566
B 249.678	188.346	189.723	188.449
Ba 389.178	119.870	118.181	118.847
Be 313.042	47.4064	47.3442	47.4080
Ca 370.602	9645	9628	9640
Cd 226.502	50.3153	50.2378	49.9716
Co 228.615	49.0890	48.6182	49.2592
Cr 267.716	100.127	99.9763	100.092
Cu 324.754	98.6226	98.3863	98.3573
Fe 271.441	4970.43	4964.95	4966.31
K 766.491	8988.28	8993.69	9002.86
Mg 279.078	4816.11	4816.64	4836.70
Mn 257.610	530.989	530.064	530.305
Mo 202.032	100.575	100.556	102.824

Label	Replicates Concentration		
Na 330.237	193585x	192758x	193871x
Ni 231.604	99.9885	98.4160	96.8598
Pb 220.353	491.165	489.279	489.262
Sb 206.834	50.8601	52.6854	54.7145
Se 196.026	93.1580	85.3611	74.0677
Si 288.158	19.4762	18.9011	18.4331
Sn 189.925	100.657	97.4844	106.278
Sr 216.596	106.730	105.853	104.414
Ti 334.941	102.587	102.702	102.748
Tl 190.794	33.6799	33.7278	34.6071
V 292.401	103.515	102.709	103.043
Zn 206.200	583.752	586.494	583.935

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.4715b	ppb	0.4266	0.8	1723.57
Al 308.215	5011.68b	ppb	4.0540	0.1	11978.6
As 188.980	90.1772b	ppb	4.7837	5.3	23.7511
B 249.678	188.839b	ppb	0.7669	0.4	1171.69
Ba 389.178	118.966b	ppb	0.8512	0.7	1094.66
Be 313.042	47.3862b	ppb	0.0364	0.1	38384.4
Ca 370.602	9638b	ppb	8.549	0.1	20141
Cd 226.502	50.1749b	ppb	0.1803	0.4	772.938
Co 228.615	48.9888b	ppb	0.3320	0.7	220.216
Cr 267.716	100.065b	ppb	0.0789	0.1	2179.91
Cu 324.754	98.4554b	ppb	0.1456	0.1	3797.14
Fe 271.441	4967.23b	ppb	2.8519	0.1	3748.36
K 766.491	8994.95b	ppb	7.3709	0.1	222810
Mg 279.078	4823.15b	ppb	11.7363	0.2	6659.93
Mn 257.610	530.453b	ppb	0.4798	0.1	51338.9
Mo 202.032	101.318b	ppb	1.3038	1.3	213.129
Na 330.237	193404xb	ppb	578.196	0.3	4796.74
Ni 231.604	98.4215b	ppb	1.5643	1.6	124.964
Pb 220.353	489.902b	ppb	1.0936	0.2	261.066
Sb 206.834	52.7533b	ppb	1.9281	3.7	27.1011
Se 196.026	84.1956b	ppb	9.5984	11.4	14.1887
Si 288.158	18.9368b	ppb	0.5225	2.8	453.929
Sn 189.925	101.473b	ppb	4.4533	4.4	29.9890
Sr 216.596	105.666b	ppb	1.1697	1.1	408.535
Ti 334.941	102.679b	ppb	0.0827	0.1	11244.9
Tl 190.794	34.0049b	ppb	0.5220	1.5	4.9672
V 292.401	103.089b	ppb	0.4050	0.4	1339.85
Zn 206.200	584.727b	ppb	1.5329	0.3	329.296

660-91088-A-1-G MS (Samp) **12/16/2018, 1:31:24 PM** **Rack 1, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	99.3614	99.0749	98.8966
Al 308.215	35.4618	31.4786	36.2754
As 188.980	304.382	305.019	297.074
B 249.678	299.872	299.446	300.713
Ba 389.178	358.769	356.616	358.399
Be 313.042	155.518	155.228	155.438
Ca 370.602	3713	3700	3707

Label	Replicates Concentration		
Cd 226.502	161.329	161.167	162.212
Co 228.615	158.407	159.883	160.878
Cr 267.716	161.901	161.777	162.072
Cu 324.754	158.507	158.282	158.713
Fe 271.441	330.628	329.967	321.506
K 766.491	156.917	156.992	157.739
Mg 279.078	197.984	190.883	194.030
Mn 257.610	182.993	182.843	183.015
Mo 202.032	165.292	165.630	165.027
Na 330.237	145139x	145075x	146495x
Ni 231.604	162.354	162.266	160.558
Pb 220.353	168.743	162.801	164.957
Sb 206.834	176.231	172.668	177.332
Se 196.026	288.567	282.630	292.704
Si 288.158	326.951	327.152	326.848
Sn 189.925	326.249	324.962	321.318
Sr 216.596	169.883	168.405	168.224
Ti 334.941	168.872	168.756	168.954
Tl 190.794	325.174	320.416	326.561
V 292.401	167.459	167.517	168.122
Zn 206.200	546.048	547.149	539.660

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	99.1110b	ppb	0.2345	0.2	3413.46
Al 308.215	34.4052b	ppb	2.5670	7.5	243.445
As 188.980	302.158b	ppb	4.4147	1.5	77.3332
B 249.678	300.010b	ppb	0.6449	0.2	1908.35
Ba 389.178	357.928b	ppb	1.1510	0.3	3374.51
Be 313.042	155.394b	ppb	0.1499	0.1	126320
Ca 370.602	3707b	ppb	6.675	0.2	7770
Cd 226.502	161.569b	ppb	0.5622	0.3	2464.85
Co 228.615	159.723b	ppb	1.2434	0.8	734.576
Cr 267.716	161.917b	ppb	0.1477	0.1	3511.72
Cu 324.754	158.501b	ppb	0.2153	0.1	5974.44
Fe 271.441	327.367b	ppb	5.0867	1.6	273.257
K 766.491	157.216b	ppb	0.4548	0.3	4136.41
Mg 279.078	194.299b	ppb	3.5581	1.8	284.983
Mn 257.610	182.950b	ppb	0.0936	0.1	17720.8
Mo 202.032	165.316b	ppb	0.3025	0.2	346.149
Na 330.237	145570xb	ppb	801.846	0.6	3621.58
Ni 231.604	161.726b	ppb	1.0122	0.6	206.266
Pb 220.353	165.500b	ppb	3.0077	1.8	92.1679
Sb 206.834	175.410b	ppb	2.4382	1.4	77.5022
Se 196.026	287.967b	ppb	5.0636	1.8	51.1284
Si 288.158	326.984b	ppb	0.1546	0.0	1939.24
Sn 189.925	324.177b	ppb	2.5580	0.8	96.2027
Sr 216.596	168.837b	ppb	0.9105	0.5	647.649
Ti 334.941	168.861b	ppb	0.0995	0.1	18495.6
Tl 190.794	324.051b	ppb	3.2228	1.0	85.1121
V 292.401	167.699b	ppb	0.3675	0.2	2180.00
Zn 206.200	544.286b	ppb	4.0433	0.7	306.576

660-91088-A-1-H MSD (Samp) **12/16/2018, 1:36:06 PM** **Rack 1, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	81.9155	82.6971	82.4872
Al 308.215	29.5528	28.7578	32.8781
As 188.980	256.442	244.275	253.459
B 249.678	250.073	250.343	250.604
Ba 389.178	301.138	301.322	301.150
Be 313.042	129.961	130.056	129.943
Ca 370.602	3113	3121	3109
Cd 226.502	134.272	134.507	134.116
Co 228.615	134.166	134.735	134.141
Cr 267.716	136.031	135.296	135.142
Cu 324.754	131.348	132.005	132.564
Fe 271.441	276.870	274.308	269.843
K 766.491	128.763	128.335	128.449
Mg 279.078	165.002	165.929	165.272
Mn 257.610	152.817	153.286	153.109
Mo 202.032	137.471	138.184	138.527
Na 330.237	120151x	120243x	120060x
Ni 231.604	133.035	133.959	135.687
Pb 220.353	138.674	134.325	131.553
Sb 206.834	142.229	146.365	147.191
Se 196.026	243.902	243.040	231.543
Si 288.158	271.106	269.356	272.318
Sn 189.925	261.963	273.538	268.369
Sr 216.596	141.076	141.128	140.686
Ti 334.941	141.582	141.447	141.229
Tl 190.794	284.238	264.356	278.448
V 292.401	140.423	141.169	141.472
Zn 206.200	449.622	448.545	449.739

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	82.3666b	ppb	0.4045	0.5	2831.76
Al 308.215	30.3962b	ppb	2.1858	7.2	232.809
As 188.980	251.392b	ppb	6.3412	2.5	64.5020
B 249.678	250.340b	ppb	0.2654	0.1	1581.31
Ba 389.178	301.204b	ppb	0.1030	0.0	2831.79
Be 313.042	129.987b	ppb	0.0606	0.0	105636
Ca 370.602	3114b	ppb	5.954	0.2	6533
Cd 226.502	134.299b	ppb	0.1968	0.1	2049.81
Co 228.615	134.347b	ppb	0.3358	0.2	616.691
Cr 267.716	135.490b	ppb	0.4751	0.4	2941.76
Cu 324.754	131.972b	ppb	0.6088	0.5	5012.04
Fe 271.441	273.673b	ppb	3.5561	1.3	231.396
K 766.491	128.516b	ppb	0.2214	0.2	3426.28
Mg 279.078	165.401b	ppb	0.4765	0.3	245.469
Mn 257.610	153.071b	ppb	0.2365	0.2	14831.5
Mo 202.032	138.061b	ppb	0.5388	0.4	289.527
Na 330.237	120151xb	ppb	91.2742	0.1	2997.15
Ni 231.604	134.227b	ppb	1.3461	1.0	170.925
Pb 220.353	134.851b	ppb	3.5896	2.7	76.2299
Sb 206.834	145.262b	ppb	2.6583	1.8	65.1595
Se 196.026	239.495b	ppb	6.9000	2.9	42.3276
Si 288.158	270.927b	ppb	1.4887	0.5	1664.62

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	267.957b	ppb	5.7989	2.2	79.4830
Sr 216.596	140.964b	ppb	0.2416	0.2	541.649
Ti 334.941	141.419b	ppb	0.1784	0.1	15484.1
Tl 190.794	275.681b	ppb	10.2260	3.7	71.7575
V 292.401	141.022b	ppb	0.5398	0.4	1832.92
Zn 206.200	449.302b	ppb	0.6586	0.1	253.167

660-91088-A-2-D (Samp) **12/16/2018, 1:40:48 PM** **Rack 1, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1639	0.4190	0.5179
Al 308.215	3.6800	0.1541	2.0767
As 188.980	5.6652	-2.4715u	4.6827
B 249.678	16.9274	17.3531	15.6924
Ba 389.178	14.4062	14.2198	14.8129
Be 313.042	0.0367	0.0430	0.0317
Ca 370.602	3175	3175	3175
Cd 226.502	0.1613	0.3028	-0.0264u
Co 228.615	-0.0053u	0.1048	-0.3709u
Cr 267.716	-0.0636	0.0224	0.1494
Cu 324.754	1.5850	1.7099	1.1643
Fe 271.441	51.3820	40.6414	44.3728
K 766.491	169.693	169.129	170.679
Mg 279.078	253.437	253.187	257.308
Mn 257.610	4.1986	4.1592	4.2456
Mo 202.032	-1.0776u	-0.1721u	-1.4210u
Na 330.237	180888x	180410x	181584x
Ni 231.604	51.8605	55.0092	55.2938
Pb 220.353	5.0045	7.0729	11.4294
Sb 206.834	2.9173	-1.4558u	3.7924
Se 196.026	-1.8511u	4.1811	-15.3120u
Si 288.158	32.6677	30.4174	30.5942
Sn 189.925	-0.6753u	-0.6895u	-1.4266u
Sr 216.596	7.9957	7.7049	6.3484
Ti 334.941	0.1330	0.1589	0.1267
Tl 190.794	-8.0514u	1.6349	-11.6675u
V 292.401	0.4693	0.2603	0.2234
Zn 206.200	178.515	176.164	177.129

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3669b	ppb	0.1827	49.8	-16.9067
Al 308.215	1.9703b	ppb	1.7654	89.6	159.638
As 188.980	2.6254b	ppb	4.4414	169.2	1.6280
B 249.678	16.6576b	ppb	0.8626	5.2	42.7046
Ba 389.178	14.4796b	ppb	0.3033	2.1	88.7279
Be 313.042	0.0371b	ppb	0.0056	15.1	-161.730
Ca 370.602	3175b	ppb	0.1252	0.0	6653
Cd 226.502	0.1459b	ppb	0.1652	113.2	7.7064
Co 228.615	-0.0905b	ppb	0.2490	275.2	-7.8785
Cr 267.716	0.0361b	ppb	0.1071	297.0	21.8570
Cu 324.754	1.4864b	ppb	0.2859	19.2	278.267
Fe 271.441	45.4654b	ppb	5.4531	12.0	51.7425
K 766.491	169.834b	ppb	0.7846	0.5	4448.62

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	254.644b	ppb	2.3105	0.9	370.030
Mn 257.610	4.2011b	ppb	0.0433	1.0	436.816
Mo 202.032	-0.8902b	ppb	0.6452	72.5	0.8656
Na 330.237	180960xb	ppb	590.433	0.3	4492.45
Ni 231.604	54.0545b	ppb	1.9054	3.5	67.9531
Pb 220.353	7.8356b	ppb	3.2797	41.9	10.1980
Sb 206.834	1.7513b	ppb	2.8117	160.6	6.4489
Se 196.026	-4.3273b	ppb	9.9797	230.6	-1.9416
Si 288.158	31.2264b	ppb	1.2513	4.0	484.637
Sn 189.925	-0.9305b	ppb	0.4297	46.2	-0.4616
Sr 216.596	7.3497b	ppb	0.8792	12.0	33.1993
Ti 334.941	0.1395b	ppb	0.0171	12.2	-25.5582
Tl 190.794	-6.0280b	ppb	6.8782	114.1	-6.0124
V 292.401	0.3177b	ppb	0.1326	41.8	1.3077
Zn 206.200	177.269b	ppb	1.1817	0.7	100.236

660-91088-A-3-D (Samp) **12/16/2018, 1:45:30 PM** **Rack 1, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.8151	0.2834	0.2486
Al 308.215	41.1333	48.2702	43.4854
As 188.980	6.6206	6.4085	-1.8095u
B 249.678	73.5921	74.5172	74.5212
Ba 389.178	16.8224	15.6579	15.1658
Be 313.042	0.0294	0.0291	0.0290
Ca 370.602	8056	8077	8073
Cd 226.502	2.3912	2.6758	2.7898
Co 228.615	0.1815	-0.0527u	-0.2078u
Cr 267.716	0.2241	0.4366	0.6323
Cu 324.754	2.3734	2.0199	2.2579
Fe 271.441	17.7765	13.9243	11.2882
K 766.491	321.647	322.150	322.353
Mg 279.078	429.778	435.816	429.547
Mn 257.610	10.2411	10.2204	10.2014
Mo 202.032	-0.9890u	-1.4013u	-1.2220u
Na 330.237	194023x	194248x	194037x
Ni 231.604	6.4945	5.8300	4.5946
Pb 220.353	25.0262	22.4113	24.5224
Sb 206.834	1.3280	3.1887	-0.5590u
Se 196.026	2.0175	-10.7097u	-3.5438u
Si 288.158	84.7258	82.1197	82.7057
Sn 189.925	-0.7841u	4.9675	-4.8257u
Sr 216.596	9.2501	9.6072	7.9288
Ti 334.941	0.1173	-0.0401u	0.0712
Tl 190.794	-4.6457u	-2.4611u	-9.4702u
V 292.401	0.6749	-0.2417u	0.2841
Zn 206.200	533.937	537.132	532.812

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4491b	ppb	0.3175	70.7	-14.0433
Al 308.215	44.2963b	ppb	3.6369	8.2	259.442
As 188.980	3.7398b	ppb	4.8071	128.5	1.9098
B 249.678	74.2102b	ppb	0.5352	0.7	421.730

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	15.8820b	ppb	0.8507	5.4	102.320
Be 313.042	0.0292b	ppb	0.0002	0.6	-168.046
Ca 370.602	8069b	ppb	11.16	0.1	16865
Cd 226.502	2.6189b	ppb	0.2053	7.8	45.3009
Co 228.615	-0.0264b	ppb	0.1960	743.4	-7.5759
Cr 267.716	0.4310b	ppb	0.2042	47.4	30.4722
Cu 324.754	2.2171b	ppb	0.1802	8.1	304.749
Fe 271.441	14.3297b	ppb	3.2631	22.8	28.3934
K 766.491	322.050b	ppb	0.3637	0.1	8214.93
Mg 279.078	431.714b	ppb	3.5545	0.8	613.999
Mn 257.610	10.2210b	ppb	0.0199	0.2	1019.53
Mo 202.032	-1.2041b	ppb	0.2067	17.2	0.2139
Na 330.237	194103xb	ppb	126.325	0.1	4814.56
Ni 231.604	5.6397b	ppb	0.9641	17.1	5.6865
Pb 220.353	23.9866b	ppb	1.3873	5.8	18.6047
Sb 206.834	1.3192b	ppb	1.8739	142.0	6.2755
Se 196.026	-4.0787b	ppb	6.3804	156.4	-1.8960
Si 288.158	83.1837b	ppb	1.3672	1.6	729.713
Sn 189.925	-0.2141b	ppb	4.9214	2298.5	-0.2470
Sr 216.596	8.9287b	ppb	0.8841	9.9	39.6506
Ti 334.941	0.0495b	ppb	0.0809	163.5	-35.2240
Tl 190.794	-5.5257b	ppb	3.5865	64.9	-5.8703
V 292.401	0.2391b	ppb	0.4599	192.4	0.2532
Zn 206.200	534.627b	ppb	2.2409	0.4	301.239

Cont Calib Verif (CCV) **12/16/2018, 1:50:14 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	498.293	501.276	492.579
Al 308.215	9941.37	9913.54	9924.28
As 188.980	473.268	468.245	460.372
B 249.678	468.257	465.318	466.261
Ba 389.178	541.531	538.210	540.156
Be 313.042	481.303	479.971	480.462
Ca 370.602	10127	10097	10108
Cd 226.502	489.617	488.744	488.459
Co 228.615	500.165	498.129	498.645
Cr 267.716	500.239	499.801	498.174
Cu 324.754	494.696	497.287	488.322
Fe 271.441	10038.2	10067.5	10048.2
K 766.491	9526.72	9517.54	9528.74
Mg 279.078	9507.97	9480.65	9499.95
Mn 257.610	508.985	508.190	508.430
Mo 202.032	506.708	505.243	505.859
Na 330.237	9214.41	9484.93	9449.88
Ni 231.604	498.827	493.158	493.801
Pb 220.353	497.680	496.617	497.857
Sb 206.834	508.535	505.147	493.755
Se 196.026	461.151	447.353	459.051
Si 288.158	4777.19	4769.14	4768.26
Sn 189.925	494.487	489.338	500.341
Sr 216.596	514.429	511.168	512.233
Ti 334.941	519.145	517.979	517.508

Label	Replicates Concentration		
Tl 190.794	518.928	519.113	490.944
V 292.401	516.792	513.602	516.955
Zn 206.200	943.334	956.002	953.937

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	497.383	ppb	4.4190	0.9	17247.8	99.47654
Al 308.215	9926.40	ppb	14.0317	0.1	23586.8	99.26395
As 188.980	467.295	ppb	6.5003	1.4	119.021	93.45901
B 249.678	466.612	ppb	1.5011	0.3	2995.81	93.32237
Ba 389.178	539.966	ppb	1.6691	0.3	5129.30	107.99313
Be 313.042	480.579	ppb	0.6740	0.1	391069	96.11574
Ca 370.602	10111	ppb	15.26	0.2	21130	101.10798
Cd 226.502	488.940	ppb	0.6033	0.1	7455.29	97.78798
Co 228.615	498.980	ppb	1.0582	0.2	2311.13	99.79593
Cr 267.716	499.405	ppb	1.0877	0.2	10787.8	99.88096
Cu 324.754	493.435	ppb	4.6140	0.9	18127.0	98.68700
Fe 271.441	10051.3	ppb	14.9043	0.1	7591.15	100.46296
K 766.491	9524.33	ppb	5.9711	0.1	235909	95.24331
Mg 279.078	9496.19	ppb	14.0440	0.1	13099.7	94.96189
Mn 257.610	508.535	ppb	0.4076	0.1	49253.7	101.70704
Mo 202.032	505.937	ppb	0.7357	0.1	1053.63	101.18732
Na 330.237	9383.07	ppb	147.117	1.6	272.391	93.83073
Ni 231.604	495.261	ppb	3.1041	0.6	634.881	99.05229
Pb 220.353	497.385	ppb	0.6704	0.1	264.644	99.47694
Sb 206.834	502.479	ppb	7.7430	1.5	211.267	100.49583
Se 196.026	455.852	ppb	7.4346	1.6	81.6598	91.17033
Si 288.158	4771.53	ppb	4.9205	0.1	22998.5	95.43063
Sn 189.925	494.722	ppb	5.5049	1.1	146.897	98.94439
Sr 216.596	512.610	ppb	1.6624	0.3	1957.02	102.52201
Ti 334.941	518.211	ppb	0.8430	0.2	56878.3	103.64215
Tl 190.794	509.662	ppb	16.2103	3.2	136.294	101.93235
V 292.401	515.783	ppb	1.8908	0.4	6713.19	103.15656
Zn 206.200	951.091	ppb	6.7965	0.7	535.070	95.10912

Cont Calib Blank (CCB) **12/16/2018, 1:54:56 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.6918	0.6413	-0.2071u
Al 308.215	-5.0255u	-4.0132u	-2.2536u
As 188.980	4.4665	5.5887	1.5060
B 249.678	1.0614	0.6051	0.7462
Ba 389.178	0.9238	0.0774	-0.2303u
Be 313.042	0.0433	0.0593	0.0484
Ca 370.602	3.723	1.406	-3.453u
Cd 226.502	0.0308	-0.0508u	0.1414
Co 228.615	-0.4575u	0.4031	0.6637
Cr 267.716	0.0246	0.1050	0.1938
Cu 324.754	-1.0770u	-1.1673u	-0.8055u
Fe 271.441	1.9015	1.3907	4.0420
K 766.491	-0.3005u	-0.5695u	-1.3248u
Mg 279.078	2.2891	3.9401	0.5470
Mn 257.610	0.0604	0.0614	0.0707
Mo 202.032	-0.3444u	0.4629	-0.8711u

Label	Replicates Concentration		
Na 330.237	-104.071u	50.2594	88.6061
Ni 231.604	-0.0330u	1.1789	1.2527
Pb 220.353	1.2414	1.5545	1.6557
Sb 206.834	-4.9549u	-5.7808u	-3.0540u
Se 196.026	-16.5670u	-6.2185u	3.1788
Si 288.158	-13.9337u	-15.5218u	-15.2251u
Sn 189.925	-3.1912u	1.7759	-4.9090u
Sr 216.596	0.8018	0.7164	0.8901
Ti 334.941	0.1604	0.1710	0.1874
Tl 190.794	3.6871	0.5693	-6.1963u
V 292.401	-0.0782u	-0.0425u	0.5801
Zn 206.200	-0.6304u	-2.2894u	0.8702

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3753	ppb	0.5050	134.6	-16.5877	0.37532
Al 308.215	-3.7641	ppb	1.4027	37.3	146.117	-3.76412
As 188.980	3.8538	ppb	2.1092	54.7	1.9385	3.85376
B 249.678	0.8043	ppb	0.2336	29.0	-61.6474	0.80427
Ba 389.178	0.2569	ppb	0.5976	232.6	-47.5966	0.25693
Be 313.042	0.0503	ppb	0.0082	16.2	-142.944	0.05033
Ca 370.602	0.5590	ppb	3.662	655.2	28.64	0.55897
Cd 226.502	0.0405	ppb	0.0965	238.6	6.4565	0.04046
Co 228.615	0.2031	ppb	0.5868	288.9	-6.5201	0.20310
Cr 267.716	0.1078	ppb	0.0847	78.5	22.0230	0.10780
Cu 324.754	-1.0166	ppb	0.1883	18.5	187.499	-1.01661
Fe 271.441	2.4447	ppb	1.4066	57.5	19.4841	2.44475
K 766.491	-0.7316	ppb	0.5311	72.6	228.289	-0.73157
Mg 279.078	2.2587	ppb	1.6967	75.1	22.2335	2.25875
Mn 257.610	0.0642	ppb	0.0057	8.8	36.1068	0.06417
Mo 202.032	-0.2509	ppb	0.6719	267.8	2.1947	-0.25086
Na 330.237	11.5981	ppb	101.991	879.4	45.7957	11.59808
Ni 231.604	0.7995	ppb	0.7219	90.3	-0.5389	0.79955
Pb 220.353	1.4839	ppb	0.2160	14.6	6.8912	1.48391
Sb 206.834	-4.5966	ppb	1.3983	30.4	3.8194	-4.59658
Se 196.026	-6.5355	ppb	9.8767	151.1	-2.3429	-6.53554
Si 288.158	-14.8936uv	ppb	0.8444	5.7	266.827	-14.89357
Sn 189.925	-2.1081	ppb	3.4716	164.7	-0.8335	-2.10811
Sr 216.596	0.8028	ppb	0.0869	10.8	8.6118	0.80276
Ti 334.941	0.1730	ppb	0.0136	7.9	-17.4909	0.17295
Tl 190.794	-0.6467	ppb	5.0526	781.3	-4.5294	-0.64666
V 292.401	0.1531	ppb	0.3702	241.8	-0.2498	0.15311
Zn 206.200	-0.6832	ppb	1.5804	231.3	0.1441	-0.68322

660-91088-A-4-D (Samp) **12/16/2018, 1:59:38 PM** **Rack 1, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0301u	-0.1757u	0.3080
Al 308.215	5.5278	8.6343	5.2000
As 188.980	-2.1857u	-3.2505u	-3.6357u
B 249.678	25.0610	25.6537	24.0891
Ba 389.178	13.1357	11.8302	12.5181
Be 313.042	0.0268	0.0239	0.0276
Ca 370.602	3674	3672	3675

Label	Replicates Concentration		
Cd 226.502	2.8372	3.3430	3.4712
Co 228.615	0.1152	-1.3021u	-0.7133u
Cr 267.716	0.6142	0.4047	0.4277
Cu 324.754	18.0550	18.3883	17.9979
Fe 271.441	33.6417	42.6867	21.3531
K 766.491	183.483	183.376	182.383
Mg 279.078	213.875	213.606	209.842
Mn 257.610	2.8601	2.8771	2.7247
Mo 202.032	-0.3908u	-0.2383u	-0.3553u
Na 330.237	149767x	150433x	150335x
Ni 231.604	0.6109	2.0282	1.3864
Pb 220.353	7.1388	0.4935	-1.7825u
Sb 206.834	-8.3386u	1.4529	0.3384
Se 196.026	-15.0675u	-6.0983u	-13.4185u
Si 288.158	41.7131	40.6398	42.4007
Sn 189.925	-0.4001u	3.7007	-1.6179u
Sr 216.596	14.6347	14.1973	15.6798
Ti 334.941	0.1362	0.0324u	0.0511
Tl 190.794	-4.0897u	-2.6293u	-8.5636u
V 292.401	0.0791	0.6495	0.0048u
Zn 206.200	65.9825	66.1729	64.0613

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0341b	ppb	0.2482	728.2	-28.4970
Al 308.215	6.4540b	ppb	1.8953	29.4	170.216
As 188.980	-3.0240b	ppb	0.7511	24.8	0.1992
B 249.678	24.9346b	ppb	0.7899	3.2	97.2299
Ba 389.178	12.4947b	ppb	0.6530	5.2	69.6921
Be 313.042	0.0261b	ppb	0.0019	7.5	-169.218
Ca 370.602	3674b	ppb	1.932	0.1	7694
Cd 226.502	3.2171b	ppb	0.3352	10.4	54.5032
Co 228.615	-0.6334b	ppb	0.7120	112.4	-10.4050
Cr 267.716	0.4822b	ppb	0.1149	23.8	31.2366
Cu 324.754	18.1471b	ppb	0.2109	1.2	882.453
Fe 271.441	32.5605b	ppb	10.7079	32.9	42.0330
K 766.491	183.081b	ppb	0.6068	0.3	4776.39
Mg 279.078	212.441b	ppb	2.2552	1.1	311.879
Mn 257.610	2.8206b	ppb	0.0835	3.0	303.222
Mo 202.032	-0.3281b	ppb	0.0798	24.3	2.0338
Na 330.237	150178xb	ppb	359.742	0.2	3736.20
Ni 231.604	1.3418b	ppb	0.7097	52.9	0.1595
Pb 220.353	1.9499b	ppb	4.6355	237.7	7.1343
Sb 206.834	-2.1824b	ppb	5.3604	245.6	4.8215
Se 196.026	-11.5281b	ppb	4.7741	41.4	-3.2487
Si 288.158	41.5845b	ppb	0.8875	2.1	533.591
Sn 189.925	0.5609b	ppb	2.7865	496.8	-0.0218
Sr 216.596	14.8373b	ppb	0.7617	5.1	62.2799
Ti 334.941	0.0732b	ppb	0.0554	75.6	-32.0816
Tl 190.794	-5.0942b	ppb	3.0921	60.7	-5.7558
V 292.401	0.2445b	ppb	0.3527	144.3	0.4300
Zn 206.200	65.4056b	ppb	1.1680	1.8	37.3164

660-91088-A-5-D (Samp) **12/16/2018, 2:04:21 PM** **Rack 1, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2813	0.0830	-0.2338u
Al 308.215	13.4246	12.5957	12.9852
As 188.980	6.1899	-1.6252u	-2.7513u
B 249.678	23.1535	23.8199	21.9061
Ba 389.178	20.1833	20.2134	20.4784
Be 313.042	0.0359	0.0399	0.0255
Ca 370.602	2585	2577	2578
Cd 226.502	0.1777	0.0256	0.4314
Co 228.615	0.5917	-0.3947u	-0.4630u
Cr 267.716	-0.2020u	-0.1695u	0.0394
Cu 324.754	0.3315	0.8484	0.7516
Fe 271.441	21.7585	15.1658	22.1499
K 766.491	419.733	417.412	418.368
Mg 279.078	417.659	419.629	424.398
Mn 257.610	6.6389	6.5914	6.5419
Mo 202.032	0.0784	-0.0377u	0.0605
Na 330.237	173365x	177537x	174376x
Ni 231.604	3.4627	4.0398	6.3451
Pb 220.353	333.339	328.630	335.726
Sb 206.834	-2.5872u	-4.6950u	-7.4362u
Se 196.026	2.4062	-13.5259u	-9.7409u
Si 288.158	32.3025	32.9834	30.2047
Sn 189.925	1.1548	2.1322	-3.6122u
Sr 216.596	5.1286	5.7434	5.2602
Ti 334.941	0.0267u	-0.0098u	0.0913
Tl 190.794	-5.6971u	0.5549	1.3980
V 292.401	0.1572	0.0720	-0.0814u
Zn 206.200	517.609	518.928	519.765

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0435b	ppb	0.2598	597.6	-28.1266
Al 308.215	13.0018b	ppb	0.4147	3.2	185.655
As 188.980	0.6044b	ppb	4.8698	805.7	1.1168
B 249.678	22.9598b	ppb	0.9715	4.2	84.2375
Ba 389.178	20.2917b	ppb	0.1624	0.8	144.493
Be 313.042	0.0338b	ppb	0.0074	22.0	-164.337
Ca 370.602	2580b	ppb	4.310	0.2	5412
Cd 226.502	0.2116b	ppb	0.2050	96.9	8.7012
Co 228.615	-0.0887b	ppb	0.5902	665.5	-7.8790
Cr 267.716	-0.1107b	ppb	0.1310	118.3	18.6420
Cu 324.754	0.6438b	ppb	0.2748	42.7	247.721
Fe 271.441	19.6914b	ppb	3.9242	19.9	32.4103
K 766.491	418.504b	ppb	1.1667	0.3	10601.5
Mg 279.078	420.562b	ppb	3.4653	0.8	598.674
Mn 257.610	6.5907b	ppb	0.0485	0.7	668.539
Mo 202.032	0.0337b	ppb	0.0625	185.3	2.7858
Na 330.237	175093xb	ppb	2176.32	1.2	4347.40
Ni 231.604	4.6159b	ppb	1.5251	33.0	4.3698
Pb 220.353	332.565b	ppb	3.6109	1.1	179.223
Sb 206.834	-4.9061b	ppb	2.4314	49.6	3.6901
Se 196.026	-6.9535b	ppb	8.3237	119.7	-2.4181
Si 288.158	31.8302b	ppb	1.4483	4.6	487.507

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.1084b	ppb	3.0735	2835.8	-0.2179
Sr 216.596	5.3774b	ppb	0.3237	6.0	26.0659
Ti 334.941	0.0360b	ppb	0.0512	142.0	-36.1726
Tl 190.794	-1.2481b	ppb	3.8760	310.6	-4.6948
V 292.401	0.0493b	ppb	0.1209	245.4	-2.2377
Zn 206.200	518.768b	ppb	1.0869	0.2	292.319

660-91088-A-6-D (Samp) **12/16/2018, 2:09:02 PM** **Rack 1, Tube 13**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0490	-0.0913u	-0.0610u
Al 308.215	36.3821	34.1336	35.8472
As 188.980	-3.3641u	-2.8605u	1.5966
B 249.678	22.5292	21.6830	21.5685
Ba 389.178	18.8997	17.4888	18.2210
Be 313.042	0.0217	0.0248	0.0382
Ca 370.602	5446	5457	5452
Cd 226.502	26.6774	27.0938	26.7988
Co 228.615	0.4312	0.1383	-0.6129u
Cr 267.716	3.2890	3.7049	3.3330
Cu 324.754	5.4586	5.2065	5.2618
Fe 271.441	33.3668	26.9290	25.7326
K 766.491	923.516	923.006	924.948
Mg 279.078	199.924	207.180	208.345
Mn 257.610	4.3951	4.4276	4.4358
Mo 202.032	-1.4493u	-0.4650u	-0.0383u
Na 330.237	167529x	168524x	168381x
Ni 231.604	6.7806	7.2995	7.1125
Pb 220.353	12.6837	6.8948	6.9136
Sb 206.834	-3.8482u	-1.0056u	-5.5835u
Se 196.026	-4.7443u	-7.3239u	0.1469
Si 288.158	36.6182	35.7506	37.9492
Sn 189.925	8.1974	5.5662	3.5990
Sr 216.596	10.8682	11.8109	11.7716
Ti 334.941	0.2426	0.1795	0.1849
Tl 190.794	2.7537	-8.3962u	-8.7024u
V 292.401	-0.0111u	0.1935	0.5043
Zn 206.200	59.6053	54.4145	58.5584

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0345b	ppb	0.0738	214.3	-30.8626
Al 308.215	35.4543b	ppb	1.1746	3.3	238.597
As 188.980	-1.5427b	ppb	2.7303	177.0	0.5734
B 249.678	21.9269b	ppb	0.5248	2.4	77.4254
Ba 389.178	18.2032b	ppb	0.7056	3.9	124.287
Be 313.042	0.0282b	ppb	0.0088	31.0	-168.046
Ca 370.602	5452b	ppb	5.428	0.1	11404
Cd 226.502	26.8566b	ppb	0.2142	0.8	414.264
Co 228.615	-0.0145b	ppb	0.5386	3713.1	-7.5213
Cr 267.716	3.4423b	ppb	0.2284	6.6	95.1934
Cu 324.754	5.3090b	ppb	0.1325	2.5	416.884
Fe 271.441	28.6761b	ppb	4.1060	14.3	39.1591
K 766.491	923.823b	ppb	1.0071	0.1	23104.7

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	205.150b	ppb	4.5626	2.2	301.807
Mn 257.610	4.4195b	ppb	0.0215	0.5	457.728
Mo 202.032	-0.6509b	ppb	0.7236	111.2	1.3633
Na 330.237	168145xb	ppb	537.607	0.3	4177.77
Ni 231.604	7.0642b	ppb	0.2628	3.7	7.5183
Pb 220.353	8.8307b	ppb	3.3368	37.8	10.7156
Sb 206.834	-3.4791b	ppb	2.3112	66.4	4.2981
Se 196.026	-3.9738b	ppb	3.7946	95.5	-1.8774
Si 288.158	36.7727b	ppb	1.1074	3.0	510.837
Sn 189.925	5.7876b	ppb	2.3072	39.9	1.5345
Sr 216.596	11.4835b	ppb	0.5333	4.6	49.4092
Ti 334.941	0.2024b	ppb	0.0350	17.3	-18.4542
Tl 190.794	-4.7816b	ppb	6.5276	136.5	-5.6677
V 292.401	0.2289b	ppb	0.2595	113.4	0.1246
Zn 206.200	57.5261b	ppb	2.7451	4.8	32.8828

660-91088-A-7-D (Samp) **12/16/2018, 2:13:42 PM** **Rack 1, Tube 14**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0915	-0.0568u	0.0852
Al 308.215	2.9292	3.3509	1.3129
As 188.980	-1.6023u	-0.6145u	-1.2753u
B 249.678	4.4028	3.7132	3.6424
Ba 389.178	10.8811	13.0524	13.7321
Be 313.042	0.0593	0.0535	0.0479
Ca 370.602	8953	8959	8937
Cd 226.502	0.0850	-0.0877u	0.1202
Co 228.615	-0.6384u	-0.5893u	-0.1789u
Cr 267.716	0.0957	0.1313	-0.0303
Cu 324.754	9.2409	9.3837	9.5846
Fe 271.441	13.9686	6.8262	-1.3852u
K 766.491	83.0542	82.0311	82.2186
Mg 279.078	266.759	265.831	270.704
Mn 257.610	3.4851	3.4213	3.4534
Mo 202.032	-0.9243u	-0.7261u	-0.2489u
Na 330.237	152494x	152313x	152464x
Ni 231.604	1.9088	3.6594	1.5345
Pb 220.353	4.5751	5.8778	4.2229
Sb 206.834	-4.0119u	2.7909	-2.7865u
Se 196.026	-6.0780u	-6.5674u	-8.0840u
Si 288.158	18.2486	19.4124	17.5942
Sn 189.925	3.3608	-1.2465u	1.9971
Sr 216.596	6.4131	4.6999	6.1256
Ti 334.941	-0.0309u	0.0607	0.0068u
Tl 190.794	-6.9849u	-0.9375u	-1.4852u
V 292.401	0.0875	0.0451	0.1205
Zn 206.200	47.7049	46.7350	49.3219

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0400b	ppb	0.0838	209.7	-28.2581
Al 308.215	2.5310b	ppb	1.0758	42.5	160.956
As 188.980	-1.1640b	ppb	0.5032	43.2	0.6696
B 249.678	3.9194b	ppb	0.4201	10.7	-41.1390

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	12.5552b	ppb	1.4891	11.9	70.3233
Be 313.042	0.0536b	ppb	0.0057	10.6	-146.136
Ca 370.602	8950b	ppb	10.89	0.1	18703
Cd 226.502	0.0392b	ppb	0.1113	284.1	6.1142
Co 228.615	-0.4688b	ppb	0.2523	53.8	-9.6409
Cr 267.716	0.0656b	ppb	0.0849	129.4	22.2718
Cu 324.754	9.4031b	ppb	0.1726	1.8	565.355
Fe 271.441	6.4699b	ppb	7.6831	118.8	22.4656
K 766.491	82.4347b	ppb	0.5447	0.7	2286.09
Mg 279.078	267.765b	ppb	2.5875	1.0	388.121
Mn 257.610	3.4533b	ppb	0.0319	0.9	364.626
Mo 202.032	-0.6331b	ppb	0.3472	54.8	1.4004
Na 330.237	152424xb	ppb	97.0458	0.1	3791.44
Ni 231.604	2.3676b	ppb	1.1343	47.9	1.4784
Pb 220.353	4.8919b	ppb	0.8717	17.8	8.6656
Sb 206.834	-1.3358b	ppb	3.6260	271.4	5.1703
Se 196.026	-6.9098b	ppb	1.0459	15.1	-2.4105
Si 288.158	18.4184b	ppb	0.9209	5.0	424.186
Sn 189.925	1.3705b	ppb	2.3667	172.7	0.2192
Sr 216.596	5.7462b	ppb	0.9174	16.0	27.5016
Ti 334.941	0.0122b	ppb	0.0461	377.4	-38.6628
Tl 190.794	-3.1359b	ppb	3.3446	106.7	-5.2151
V 292.401	0.0844b	ppb	0.0378	44.8	-1.6644
Zn 206.200	47.9206b	ppb	1.3069	2.7	27.4822

660-91088-A-8-D (Samp) **12/16/2018, 2:18:22 PM** **Rack 1, Tube 15**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2807	0.5849	0.1692
Al 308.215	-1.5820u	-0.9924u	2.1974
As 188.980	-2.1094u	-0.6532u	4.6922
B 249.678	30.0084	29.6176	29.4455
Ba 389.178	14.1971	14.1324	14.1797
Be 313.042	0.0350	0.0308	0.0295
Ca 370.602	1806	1812	1813
Cd 226.502	31.9745	32.0713	31.9141
Co 228.615	-0.7560u	-0.6526u	-0.4035u
Cr 267.716	0.5971	0.7561	0.4201
Cu 324.754	2.1297	2.4074	2.0243
Fe 271.441	16.3136	16.3480	18.5702
K 766.491	495.849	495.589	495.358
Mg 279.078	281.186	276.520	279.574
Mn 257.610	2.5291	2.5658	2.5547
Mo 202.032	-0.0833u	0.2285	-0.2115u
Na 330.237	139472x	141738x	140306x
Ni 231.604	3.6517	4.0485	5.2950
Pb 220.353	117.449	114.193	121.298
Sb 206.834	0.2254	1.9960	3.6503
Se 196.026	-5.3446u	-3.3821u	-15.5571u
Si 288.158	33.3336	35.4612	37.2221
Sn 189.925	4.9682	6.0244	4.3101
Sr 216.596	5.0266	4.9392	3.8975
Ti 334.941	0.0133u	0.0811	0.0938

Label	Replicates Concentration		
Tl 190.794	-7.5067u	-6.8052u	-9.9952u
V 292.401	0.2613	-0.2100u	0.6286
Zn 206.200	152.595	149.121	148.441

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3449b	ppb	0.2152	62.4	-17.6601
Al 308.215	-0.1257b	ppb	2.0333	1617.8	154.703
As 188.980	0.6432b	ppb	3.5814	556.8	1.1265
B 249.678	29.6905b	ppb	0.2884	1.0	128.557
Ba 389.178	14.1697b	ppb	0.0335	0.2	85.7839
Be 313.042	0.0318b	ppb	0.0029	9.0	-164.458
Ca 370.602	1810b	ppb	3.542	0.2	3805
Cd 226.502	31.9866b	ppb	0.0793	0.2	492.398
Co 228.615	-0.6040b	ppb	0.1812	30.0	-10.2735
Cr 267.716	0.5911b	ppb	0.1680	28.4	33.5099
Cu 324.754	2.1872b	ppb	0.1979	9.0	303.686
Fe 271.441	17.0773b	ppb	1.2930	7.6	30.4212
K 766.491	495.599b	ppb	0.2453	0.0	12509.1
Mg 279.078	279.094b	ppb	2.3702	0.8	403.744
Mn 257.610	2.5499b	ppb	0.0188	0.7	277.341
Mo 202.032	-0.0221b	ppb	0.2263	1025.4	2.6698
Na 330.237	140505xb	ppb	1146.12	0.8	3498.26
Ni 231.604	4.3318b	ppb	0.8575	19.8	4.0047
Pb 220.353	117.647b	ppb	3.5566	3.0	67.3556
Sb 206.834	1.9572b	ppb	1.7128	87.5	6.5304
Se 196.026	-8.0946b	ppb	6.5368	80.8	-2.6256
Si 288.158	35.3390b	ppb	1.9471	5.5	504.438
Sn 189.925	5.1009b	ppb	0.8648	17.0	1.3270
Sr 216.596	4.6211b	ppb	0.6282	13.6	23.1799
Ti 334.941	0.0627b	ppb	0.0433	69.0	-32.7351
Tl 190.794	-8.1023b	ppb	1.6763	20.7	-6.5845
V 292.401	0.2266b	ppb	0.4204	185.5	0.1992
Zn 206.200	150.052b	ppb	2.2283	1.5	84.9275

660-91088-A-9-D (Samp) **12/16/2018, 2:23:03 PM** **Rack 1, Tube 16**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3918	-0.2735u	0.4020
Al 308.215	7.6909	8.6428	8.9022
As 188.980	-1.8876u	-2.4319u	5.3617
B 249.678	1.0098	0.8457	1.0788
Ba 389.178	5.0452	4.8370	5.3449
Be 313.042	0.0196	0.0299	0.0325
Ca 370.602	335.8	338.2	334.4
Cd 226.502	0.2690	0.0923	-0.1053u
Co 228.615	-0.7023u	-0.2439u	-0.2156u
Cr 267.716	0.5499	0.9393	0.6456
Cu 324.754	-1.1005u	-1.6819u	-1.3094u
Fe 271.441	7.6809	9.3029	11.3221
K 766.491	32.1959	33.5120	32.8201
Mg 279.078	68.9277	66.2837	70.9309
Mn 257.610	1.9168	1.9706	1.9904
Mo 202.032	-0.2750u	-0.2148u	-0.1552u

Label	Replicates Concentration		
Na 330.237	32050.8	32517.7	32651.4
Ni 231.604	0.6030	0.0543	0.9159
Pb 220.353	2.5021	1.6608	7.7549
Sb 206.834	3.1165	-2.6088u	-3.0749u
Se 196.026	0.6277	-19.9081u	-4.9775u
Si 288.158	23.8376	20.9947	21.0208
Sn 189.925	5.5838	-0.3372u	1.5695
Sr 216.596	5.9097	5.3787	5.8882
Ti 334.941	-0.0180u	0.1820	0.0111
Tl 190.794	-3.6336u	5.9771	-7.0455u
V 292.401	0.3362	0.0556	0.3865
Zn 206.200	65.6359	67.5062	63.2538

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1734	ppb	0.3871	223.2	-23.6167
Al 308.215	8.4120	ppb	0.6378	7.6	174.833
As 188.980	0.3474	ppb	4.3511	1252.4	1.0517
B 249.678	0.9781	ppb	0.1197	12.2	-60.5088
Ba 389.178	5.0757	ppb	0.2553	5.0	-1.4320
Be 313.042	0.0273	ppb	0.0068	25.0	-163.117
Ca 370.602	336.1	ppb	1.910	0.6	728.9
Cd 226.502	0.0854	ppb	0.1873	219.4	7.0756
Co 228.615	-0.3873	ppb	0.2732	70.5	-9.2615
Cr 267.716	0.7116	ppb	0.2029	28.5	35.2886
Cu 324.754	-1.3639	ppb	0.2945	21.6	174.896
Fe 271.441	9.4353	ppb	1.8242	19.3	24.6907
K 766.491	32.8427	ppb	0.6583	2.0	1059.02
Mg 279.078	68.7141	ppb	2.3309	3.4	113.801
Mn 257.610	1.9592	ppb	0.0381	1.9	219.537
Mo 202.032	-0.2150	ppb	0.0599	27.9	2.2691
Na 330.237	32406.6	ppb	315.315	1.0	841.791
Ni 231.604	0.5244	ppb	0.4362	83.2	-0.8920
Pb 220.353	3.9726	ppb	3.3024	83.1	8.1869
Sb 206.834	-0.8557	ppb	3.4479	402.9	5.3714
Se 196.026	-8.0860	ppb	10.6149	131.3	-2.6241
Si 288.158	21.9510	ppb	1.6338	7.4	441.059
Sn 189.925	2.2720	ppb	3.0224	133.0	0.4728
Sr 216.596	5.7255	ppb	0.3005	5.2	27.4397
Ti 334.941	0.0583	ppb	0.1081	185.2	-30.7888
Tl 190.794	-1.5673	ppb	6.7527	430.8	-4.7833
V 292.401	0.2594	ppb	0.1783	68.7	1.0386
Zn 206.200	65.4653	ppb	2.1314	3.3	37.3501

660-91088-A-10-D (Samp) **12/16/2018, 2:27:44 PM** **Rack 1, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0989	0.1447	0.2780
Al 308.215	6.8398	10.2264	6.4179
As 188.980	-0.4742u	3.0697	-0.3261u
B 249.678	5.9012	5.7921	4.9600
Ba 389.178	10.0853	8.9728	8.2078
Be 313.042	0.0207	0.0226	0.0159
Ca 370.602	18372	18419	18373

Label	Replicates Concentration		
Cd 226.502	0.9812	0.7303	1.2671
Co 228.615	-0.4292u	-0.6201u	-0.1258u
Cr 267.716	0.7138	0.9070	0.6625
Cu 324.754	0.6646	-0.2080u	0.5560
Fe 271.441	16.6118	10.4492	11.7391
K 766.491	360.410	360.764	360.917
Mg 279.078	307.881	308.230	305.740
Mn 257.610	3.7990	3.8415	3.8081
Mo 202.032	-0.1562u	0.2488	-0.5704u
Na 330.237	179522x	180142x	180649x
Ni 231.604	3.2771	3.0893	0.6434
Pb 220.353	13.4760	4.8972	8.4661
Sb 206.834	-8.4169u	-2.3847u	2.5261
Se 196.026	-23.5748u	-1.8319u	-3.6886u
Si 288.158	57.4133	58.4040	58.4419
Sn 189.925	-1.0967u	7.1353	-0.2705u
Sr 216.596	25.3076	25.5637	26.3795
Ti 334.941	0.0510	0.1439	0.1232
Tl 190.794	-7.0201u	-2.2522u	9.4320
V 292.401	0.2790	0.3390	0.3788
Zn 206.200	372.698	378.908	378.206

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1739b	ppb	0.0931	53.5	-23.6818
Al 308.215	7.8280b	ppb	2.0878	26.7	173.461
As 188.980	0.7564b	ppb	2.0047	265.0	1.1551
B 249.678	5.5511b	ppb	0.5148	9.3	-30.3995
Ba 389.178	9.0886b	ppb	0.9441	10.4	37.2056
Be 313.042	0.0198b	ppb	0.0034	17.4	-173.548
Ca 370.602	18388b	ppb	26.69	0.1	38397
Cd 226.502	0.9929b	ppb	0.2686	27.0	20.5744
Co 228.615	-0.3917b	ppb	0.2493	63.6	-9.2848
Cr 267.716	0.7611b	ppb	0.1290	16.9	37.4742
Cu 324.754	0.3376b	ppb	0.4756	140.9	236.608
Fe 271.441	12.9334b	ppb	3.2503	25.1	27.3270
K 766.491	360.697b	ppb	0.2599	0.1	9171.19
Mg 279.078	307.283b	ppb	1.3482	0.4	442.582
Mn 257.610	3.8162b	ppb	0.0224	0.6	399.879
Mo 202.032	-0.1593b	ppb	0.4096	257.2	2.3848
Na 330.237	180104xb	ppb	564.576	0.3	4470.91
Ni 231.604	2.3366b	ppb	1.4694	62.9	1.4386
Pb 220.353	8.9465b	ppb	4.3096	48.2	10.7758
Sb 206.834	-2.7585b	ppb	5.4811	198.7	4.5815
Se 196.026	-9.6985b	ppb	12.0531	124.3	-2.9166
Si 288.158	58.0864b	ppb	0.5833	1.0	611.524
Sn 189.925	1.9227b	ppb	4.5331	235.8	0.3867
Sr 216.596	25.7503b	ppb	0.5598	2.2	103.984
Ti 334.941	0.1060b	ppb	0.0488	46.0	-29.0422
Tl 190.794	0.0532b	ppb	8.4649	15904.8	-4.3368
V 292.401	0.3323b	ppb	0.0502	15.1	1.4443
Zn 206.200	376.604b	ppb	3.4012	0.9	212.356

660-91088-A-11-D (Samp) **12/16/2018, 2:32:25 PM** **Rack 1, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5648u	0.2768	0.0668
Al 308.215	12.6858	9.0008	10.2788
As 188.980	1.2553	2.9925	3.4045
B 249.678	5.9428	5.0270	6.0271
Ba 389.178	15.2408	14.4262	13.5364
Be 313.042	0.0295	0.0269	0.0139
Ca 370.602	3411	3409	3417
Cd 226.502	0.0546	0.2622	0.2000
Co 228.615	-1.0411u	-0.5995u	0.7324
Cr 267.716	473.771	474.890	474.432
Cu 324.754	-0.0335u	-0.3194u	0.0870
Fe 271.441	3.8992	4.2198	2.4641
K 766.491	391.406	392.187	391.553
Mg 279.078	297.203	307.365	307.813
Mn 257.610	5.9778	5.9931	5.9806
Mo 202.032	-0.2448u	0.1651	-0.9944u
Na 330.237	183622x	182299x	185126x
Ni 231.604	2.1358	3.5015	3.8897
Pb 220.353	4.9799	4.1211	6.6936
Sb 206.834	4.7410	-7.6371u	0.3516
Se 196.026	-0.4178u	-14.4450u	-12.0989u
Si 288.158	20.3025	20.7879	21.3271
Sn 189.925	0.2283	0.2807	2.8782
Sr 216.596	4.2334	4.7878	4.9977
Ti 334.941	0.1322	0.1660	0.1453
Tl 190.794	1.5692	-3.6037u	-7.5395u
V 292.401	0.0077u	-0.1204u	0.2087u
Zn 206.200	388.395	399.649	394.345

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0737b	ppb	0.4381	594.3	-32.1985
Al 308.215	10.6551b	ppb	1.8711	17.6	180.088
As 188.980	2.5508b	ppb	1.1406	44.7	1.5370
B 249.678	5.6656b	ppb	0.5547	9.8	-29.6434
Ba 389.178	14.4011b	ppb	0.8525	5.9	88.0195
Be 313.042	0.0234b	ppb	0.0084	35.7	-172.984
Ca 370.602	3412b	ppb	3.909	0.1	7148
Cd 226.502	0.1723b	ppb	0.1065	61.8	8.0765
Co 228.615	-0.3027b	ppb	0.9232	305.0	-8.4261
Cr 267.716	474.364b	ppb	0.5628	0.1	10247.9
Cu 324.754	-0.0886b	ppb	0.2088	235.5	221.153
Fe 271.441	3.5277b	ppb	0.9349	26.5	20.6841
K 766.491	391.715b	ppb	0.4150	0.1	9938.66
Mg 279.078	304.127b	ppb	6.0007	2.0	438.208
Mn 257.610	5.9838b	ppb	0.0081	0.1	609.336
Mo 202.032	-0.3580b	ppb	0.5880	164.2	1.9721
Na 330.237	183683xb	ppb	1414.39	0.8	4558.82
Ni 231.604	3.1757b	ppb	0.9212	29.0	2.5178
Pb 220.353	5.2649b	ppb	1.3097	24.9	8.8893
Sb 206.834	-0.8481b	ppb	6.2757	739.9	6.9813
Se 196.026	-8.9872b	ppb	7.5135	83.6	-2.7873
Si 288.158	20.8058b	ppb	0.5125	2.5	435.344

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.1290b	ppb	1.5150	134.2	0.1511
Sr 216.596	4.6730b	ppb	0.3949	8.5	23.3926
Ti 334.941	0.1479b	ppb	0.0170	11.5	-24.5448
Tl 190.794	-3.1913b	ppb	4.5683	143.1	-5.2301
V 292.401	0.0320b	ppb	0.1659	518.5	-12.6622
Zn 206.200	394.130b	ppb	5.6300	1.4	221.947

660-91088-A-12-D (Samp) **12/16/2018, 2:37:06 PM** **Rack 1, Tube 19**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3410u	0.2730	0.5319
Al 308.215	10.1380	8.4793	9.8123
As 188.980	1.1986	0.5155	-1.1005u
B 249.678	6.9040	7.0362	7.3355
Ba 389.178	23.6868	22.6645	23.6529
Be 313.042	0.0192	0.0273	0.0140
Ca 370.602	19539	19557	19523
Cd 226.502	0.9376	0.6313	0.5405
Co 228.615	-0.6215u	-0.9067u	-0.8666u
Cr 267.716	0.1964	0.3256	0.0618
Cu 324.754	1.1583	0.9731	1.0459
Fe 271.441	151.624	147.550	141.892
K 766.491	403.135	404.019	404.755
Mg 279.078	357.464	349.433	349.998
Mn 257.610	3.3236	3.2196	3.3117
Mo 202.032	-0.6946u	-0.8969u	-0.9911u
Na 330.237	177165x	176993x	177763x
Ni 231.604	3.0129	2.6427	2.9178
Pb 220.353	4.9427	6.3815	5.6649
Sb 206.834	0.2401	-10.4162u	1.6040
Se 196.026	0.7866	-3.1000u	0.2607
Si 288.158	69.3974	70.4540	70.5168
Sn 189.925	-0.4885u	-4.1669u	-2.3636u
Sr 216.596	12.6304	12.2773	13.1227
Ti 334.941	0.0919	0.0351u	-0.0243u
Tl 190.794	-17.4649u	0.6161	-3.3363u
V 292.401	0.6048	0.3898	0.0293u
Zn 206.200	486.495	489.489	485.921

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1546b	ppb	0.4483	289.9	-24.3355
Al 308.215	9.4765b	ppb	0.8789	9.3	177.347
As 188.980	0.2045b	ppb	1.1807	577.3	1.0160
B 249.678	7.0919b	ppb	0.2211	3.1	-20.3883
Ba 389.178	23.3347b	ppb	0.5807	2.5	173.563
Be 313.042	0.0201b	ppb	0.0067	33.3	-172.887
Ca 370.602	19540b	ppb	17.20	0.1	40800
Cd 226.502	0.7031b	ppb	0.2081	29.6	16.2707
Co 228.615	-0.7983b	ppb	0.1544	19.3	-11.1640
Cr 267.716	0.1946b	ppb	0.1320	67.8	25.2522
Cu 324.754	1.0591b	ppb	0.0933	8.8	262.790
Fe 271.441	147.022b	ppb	4.8878	3.3	127.916
K 766.491	403.969b	ppb	0.8111	0.2	10241.9

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	352.298b	ppb	4.4828	1.3	504.627
Mn 257.610	3.2850b	ppb	0.0569	1.7	348.866
Mo 202.032	-0.8609b	ppb	0.1515	17.6	0.9251
Na 330.237	177307xb	ppb	404.018	0.2	4401.88
Ni 231.604	2.8578b	ppb	0.1922	6.7	2.1095
Pb 220.353	5.6630b	ppb	0.7194	12.7	9.0677
Sb 206.834	-2.8574b	ppb	6.5816	230.3	4.5447
Se 196.026	-0.6842b	ppb	2.1086	308.2	-1.2801
Si 288.158	70.1227b	ppb	0.6290	0.9	668.027
Sn 189.925	-2.3397b	ppb	1.8393	78.6	-0.8810
Sr 216.596	12.6768b	ppb	0.4246	3.3	54.0368
Ti 334.941	0.0342b	ppb	0.0581	169.6	-36.6834
Tl 190.794	-6.7284b	ppb	9.5057	141.3	-6.2105
V 292.401	0.3413b	ppb	0.2908	85.2	1.6627
Zn 206.200	487.302b	ppb	1.9156	0.4	274.618

660-91088-A-13-D (Samp) **12/16/2018, 2:41:48 PM** **Rack 1, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7510	-0.0602u	0.0966
Al 308.215	-1.1069u	-1.7402u	-0.2419u
As 188.980	2.1514	9.8729	4.3447
B 249.678	17.1548	16.7133	16.9125
Ba 389.178	18.3704	16.9492	18.7449
Be 313.042	0.0299	0.0232	0.0183
Ca 370.602	2868	2873	2862
Cd 226.502	6.0412	5.7691	5.9674
Co 228.615	0.2858	-0.3815u	-0.8816u
Cr 267.716	0.1788	0.2409	0.3372
Cu 324.754	-0.3060u	-0.6658u	-0.3232u
Fe 271.441	15.7216	8.5157	8.6673
K 766.491	603.422	603.983	603.738
Mg 279.078	327.766	325.542	320.810
Mn 257.610	8.8786	8.7599	8.7455
Mo 202.032	0.1565	-1.8153u	0.2095
Na 330.237	183998x	183840x	183423x
Ni 231.604	3.7171	1.0094	3.4787
Pb 220.353	184.249	183.728	185.268
Sb 206.834	2.3966	-1.4184u	-3.2077u
Se 196.026	-6.5764u	1.3363	8.3064
Si 288.158	37.1140	40.1815	37.9688
Sn 189.925	4.9944	10.0882	1.5332
Sr 216.596	6.6686	6.3738	6.8564
Ti 334.941	0.0204u	-0.0724u	0.0105u
Tl 190.794	-1.2608u	-7.9698u	-12.4446u
V 292.401	0.1315	0.2203	0.1608
Zn 206.200	383.186	389.546	390.762

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2625b	ppb	0.4303	163.9	-20.5158
Al 308.215	-1.0297b	ppb	0.7521	73.0	152.562
As 188.980	5.4564b	ppb	3.9790	72.9	2.3438
B 249.678	16.9269b	ppb	0.2211	1.3	44.5141

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	18.0215b	ppb	0.9473	5.3	122.669
Be 313.042	0.0238b	ppb	0.0058	24.4	-172.811
Ca 370.602	2868b	ppb	5.721	0.2	6012
Cd 226.502	5.9259b	ppb	0.1407	2.4	95.6485
Co 228.615	-0.3258b	ppb	0.5857	179.8	-8.9758
Cr 267.716	0.2523b	ppb	0.0798	31.6	26.5403
Cu 324.754	-0.4316b	ppb	0.2029	47.0	208.705
Fe 271.441	10.9682b	ppb	4.1172	37.5	25.8522
K 766.491	603.715b	ppb	0.2813	0.0	15184.2
Mg 279.078	324.706b	ppb	3.5525	1.1	466.543
Mn 257.610	8.7946b	ppb	0.0730	0.8	881.143
Mo 202.032	-0.4831b	ppb	1.1540	238.9	1.7120
Na 330.237	183753xb	ppb	297.085	0.2	4560.57
Ni 231.604	2.7351b	ppb	1.4992	54.8	1.9510
Pb 220.353	184.415b	ppb	0.7829	0.4	102.110
Sb 206.834	-0.7432b	ppb	2.8625	385.2	5.4172
Se 196.026	1.0221b	ppb	7.4464	728.5	-0.9703
Si 288.158	38.4214b	ppb	1.5830	4.1	518.816
Sn 189.925	5.5386b	ppb	4.3034	77.7	1.4623
Sr 216.596	6.6329b	ppb	0.2433	3.7	30.8881
Ti 334.941	-0.0139b	ppb	0.0509	367.7	-42.2446
Tl 190.794	-7.2251b	ppb	5.6290	77.9	-6.3398
V 292.401	0.1709b	ppb	0.0452	26.5	-0.6424
Zn 206.200	387.831b	ppb	4.0683	1.0	218.671

Cont Calib Verif (CCV) **12/16/2018, 2:46:32 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	495.257	495.378	497.024
Al 308.215	9959.29	9952.04	9949.47
As 188.980	464.719	470.738	468.971
B 249.678	468.322	470.441	469.980
Ba 389.178	539.564	540.165	539.150
Be 313.042	483.837	484.224	484.142
Ca 370.602	10139	10148	10139
Cd 226.502	489.658	491.123	491.521
Co 228.615	502.107	502.897	503.698
Cr 267.716	502.094	500.992	501.249
Cu 324.754	495.045	494.792	496.027
Fe 271.441	10114.8	10082.6	10066.1
K 766.491	9629.88	9596.86	9619.53
Mg 279.078	9559.60	9555.18	9558.68
Mn 257.610	509.690	510.013	510.380
Mo 202.032	507.742	507.403	507.726
Na 330.237	9461.46	8892.07	9347.78
Ni 231.604	494.541	499.090	497.390
Pb 220.353	495.889	502.761	501.572
Sb 206.834	502.245	509.742	505.208
Se 196.026	484.254	457.338	450.717
Si 288.158	4786.99	4785.85	4785.42
Sn 189.925	498.719	490.196	485.079
Sr 216.596	512.577	514.690	513.406
Ti 334.941	519.147	519.810	519.407

Label	Replicates Concentration		
Tl 190.794	500.494	504.016	501.686
V 292.401	515.972	516.529	517.261
Zn 206.200	951.300	951.197	950.597

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	495.886	ppb	0.9868	0.2	17195.8	99.17724
Al 308.215	9953.60	ppb	5.0933	0.1	23651.0	99.53600
As 188.980	468.143	ppb	3.0937	0.7	119.234	93.62851
B 249.678	469.581	ppb	1.1148	0.2	3015.33	93.91621
Ba 389.178	539.626	ppb	0.5103	0.1	5126.13	107.92525
Be 313.042	484.067	ppb	0.2040	0.0	393910	96.81348
Ca 370.602	10142	ppb	5.160	0.1	21196	101.42411
Cd 226.502	490.767	ppb	0.9807	0.2	7483.13	98.15343
Co 228.615	502.901	ppb	0.7959	0.2	2329.35	100.58015
Cr 267.716	501.445	ppb	0.5767	0.1	10831.8	100.28896
Cu 324.754	495.288	ppb	0.6519	0.1	18194.2	99.05761
Fe 271.441	10087.8	ppb	24.7473	0.2	7618.76	100.82769
K 766.491	9615.42	ppb	16.8905	0.2	238163	96.15422
Mg 279.078	9557.82	ppb	2.3327	0.0	13184.6	95.57820
Mn 257.610	510.028	ppb	0.3452	0.1	49398.3	102.00555
Mo 202.032	507.624	ppb	0.1913	0.0	1057.14	101.52474
Na 330.237	9233.77	ppb	301.327	3.3	268.716	92.33768
Ni 231.604	497.007	ppb	2.2983	0.5	637.122	99.40141
Pb 220.353	500.074	ppb	3.6729	0.7	266.042	100.01475
Sb 206.834	505.731	ppb	3.7760	0.7	212.607	101.14629
Se 196.026	464.103	ppb	17.7621	3.8	83.1577	92.82061
Si 288.158	4786.09	ppb	0.8103	0.0	23067.6	95.72179
Sn 189.925	491.332	ppb	6.8909	1.4	145.889	98.26630
Sr 216.596	513.557	ppb	1.0647	0.2	1960.61	102.71150
Ti 334.941	519.455	ppb	0.3343	0.1	57015.0	103.89095
Tl 190.794	502.065	ppb	1.7918	0.4	134.206	100.41309
V 292.401	516.587	ppb	0.6467	0.1	6723.60	103.31748
Zn 206.200	951.031	ppb	0.3799	0.0	535.035	95.10312

Cont Calib Blank (CCB) **12/16/2018, 2:51:14 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1697	-0.1651u	0.1636
Al 308.215	-3.9223u	-4.1576u	-3.5810u
As 188.980	2.4727	-0.2630u	0.1062
B 249.678	1.2045	0.3818	0.9044
Ba 389.178	0.5057	-0.0809u	0.6490
Be 313.042	0.0490	0.0544	0.0666
Ca 370.602	-2.401u	-1.852u	0.0519
Cd 226.502	-0.0309u	-0.0178u	0.2972
Co 228.615	-1.8198u	-0.6655u	0.5188
Cr 267.716	-0.1703u	0.1958	0.0534
Cu 324.754	-0.8994u	-0.9037u	-1.2148u
Fe 271.441	3.1841	7.6716	2.2891
K 766.491	-0.9463u	0.1571	-0.7352u
Mg 279.078	5.8272	1.5005	3.2169
Mn 257.610	0.0564	0.1118	0.1236
Mo 202.032	1.5368	-0.1031u	-0.4500u

Label	Replicates Concentration		
Na 330.237	59.2975	-214.245u	50.3064
Ni 231.604	0.2421	-0.5759u	-1.4125u
Pb 220.353	1.3653	2.5086	1.8823
Sb 206.834	6.2245	-0.3744u	-3.7423u
Se 196.026	-1.4519u	-20.6132u	-11.0074u
Si 288.158	-14.5585u	-14.8204u	-15.3728u
Sn 189.925	2.8599	0.8572	0.6419
Sr 216.596	-0.0148u	0.0395	0.3314
Ti 334.941	0.1036	0.0667	0.0867
Tl 190.794	-3.7065u	1.3775	0.3163
V 292.401	0.3365	0.6284	0.2165
Zn 206.200	-0.5418u	-1.1750u	0.9765

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0561	ppb	0.1915	341.6	-27.6780	0.05607
Al 308.215	-3.8870	ppb	0.2899	7.5	145.842	-3.88696
As 188.980	0.7720	ppb	1.4844	192.3	1.1591	0.77196
B 249.678	0.8302	ppb	0.4164	50.1	-61.4784	0.83024
Ba 389.178	0.3579	ppb	0.3867	108.0	-46.6281	0.35794
Be 313.042	0.0567	ppb	0.0090	15.9	-137.804	0.05665
Ca 370.602	-1.400	ppb	1.287	91.9	24.55	-1.40045
Cd 226.502	0.0828	ppb	0.1858	224.3	7.1030	0.08282
Co 228.615	-0.6555	ppb	1.1693	178.4	-10.5139	-0.65549
Cr 267.716	0.0263	ppb	0.1845	702.4	20.2645	0.02627
Cu 324.754	-1.0059	ppb	0.1809	18.0	187.890	-1.00594
Fe 271.441	4.3816	ppb	2.8842	65.8	20.8902	4.38161
K 766.491	-0.5081	ppb	0.5857	115.3	233.818	-0.50812
Mg 279.078	3.5148	ppb	2.1787	62.0	23.9642	3.51485
Mn 257.610	0.0973	ppb	0.0359	36.9	39.3110	0.09727
Mo 202.032	0.3279	ppb	1.0612	323.6	3.3971	0.32792
Na 330.237	-34.8805	ppb	155.400	445.5	44.6527	-34.88053
Ni 231.604	-0.5821	ppb	0.8273	142.1	-2.3150	-0.58208
Pb 220.353	1.9187	ppb	0.5725	29.8	7.1176	1.91870
Sb 206.834	0.7026	ppb	5.0700	721.6	6.0082	0.70259
Se 196.026	-11.0241	ppb	9.5807	86.9	-3.1576	-11.02415Z
Si 288.158	-14.9172uv	ppb	0.4156	2.8	266.789	-14.91724
Sn 189.925	1.4530	ppb	1.2231	84.2	0.2254	1.45298
Sr 216.596	0.1187	ppb	0.1862	156.9	5.9977	0.11870
Ti 334.941	0.0857	ppb	0.0185	21.6	-27.0662	0.08568
Tl 190.794	-0.6709	ppb	2.6819	399.7	-4.5377	-0.67091
V 292.401	0.3938	ppb	0.2118	53.8	2.8835	0.39380
Zn 206.200	-0.2468	ppb	1.1057	448.1	0.3895	-0.24677

660-91088-A-14-D (Samp) **12/16/2018, 2:55:56 PM** **Rack 1, Tube 21**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0118u	-0.0266u	0.4787
Al 308.215	6.3484	1.9939	3.4678
As 188.980	-3.5591u	0.3867	-2.4946u
B 249.678	51.4397	52.5668	51.9667
Ba 389.178	20.4772	20.0844	19.5789
Be 313.042	0.0213	0.0324	0.0315
Ca 370.602	2688	2683	2695

Label	Replicates Concentration		
Cd 226.502	5.8158	5.5833	5.6504
Co 228.615	-0.3217u	-1.1322u	-1.1043u
Cr 267.716	3.0388	2.7940	2.8862
Cu 324.754	1.6308	1.9623	2.2737
Fe 271.441	4.1930	-0.3022u	10.4711
K 766.491	384.927	384.789	383.386
Mg 279.078	241.823	244.256	236.606
Mn 257.610	13.7301	13.6316	13.6242
Mo 202.032	-1.0966u	0.1423	0.4649
Na 330.237	166028x	167073x	166498x
Ni 231.604	4.6505	1.8409	3.9616
Pb 220.353	10.1357	12.5724	6.8518
Sb 206.834	6.4956	2.2545	1.0939
Se 196.026	4.3865	-15.9417u	-4.7341u
Si 288.158	95.2048	96.3527	96.5334
Sn 189.925	-1.2793u	7.9587	4.1529
Sr 216.596	6.1083	6.4671	6.4598
Ti 334.941	0.0735	0.0954	0.0913
Tl 190.794	-10.5192u	3.0205	-9.7833u
V 292.401	-0.2959u	0.0237u	0.2390
Zn 206.200	545.665	543.846	543.742

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1468b	ppb	0.2876	196.0	-24.5278
Al 308.215	3.9367b	ppb	2.2148	56.3	164.274
As 188.980	-1.8890b	ppb	2.0414	108.1	0.4857
B 249.678	51.9911b	ppb	0.5639	1.1	275.422
Ba 389.178	20.0468b	ppb	0.4503	2.2	141.957
Be 313.042	0.0284b	ppb	0.0061	21.7	-168.237
Ca 370.602	2689b	ppb	6.009	0.2	5639
Cd 226.502	5.6832b	ppb	0.1196	2.1	91.9897
Co 228.615	-0.8528b	ppb	0.4601	54.0	-11.4241
Cr 267.716	2.9063b	ppb	0.1237	4.3	83.6329
Cu 324.754	1.9556b	ppb	0.3215	16.4	295.285
Fe 271.441	4.7873b	ppb	5.4112	113.0	21.1816
K 766.491	384.367b	ppb	0.8523	0.2	9756.86
Mg 279.078	240.895b	ppb	3.9087	1.6	350.981
Mn 257.610	13.6620b	ppb	0.0591	0.4	1351.38
Mo 202.032	-0.1631b	ppb	0.8243	505.4	2.3769
Na 330.237	166533xb	ppb	523.053	0.3	4136.97
Ni 231.604	3.4843b	ppb	1.4643	42.0	2.9154
Pb 220.353	9.8533b	ppb	2.8707	29.1	11.2489
Sb 206.834	3.2813b	ppb	2.8435	86.7	7.0868
Se 196.026	-5.4298b	ppb	10.1820	187.5	-2.1409
Si 288.158	96.0303b	ppb	0.7206	0.8	790.452
Sn 189.925	3.6108b	ppb	4.6428	128.6	0.8869
Sr 216.596	6.3451b	ppb	0.2051	3.2	29.7790
Ti 334.941	0.0867b	ppb	0.0116	13.4	-30.9577
Tl 190.794	-5.7606b	ppb	7.6136	132.2	-5.9368
V 292.401	-0.0111b	ppb	0.2692	2435.4	-3.0466
Zn 206.200	544.418b	ppb	1.0812	0.2	306.745

MB 680-551754/1-A (Samp) **12/16/2018, 3:00:38 PM** **Rack 1, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1222	0.2661	-0.6806u
Al 308.215	-4.1879u	-5.9489u	-6.9264u
As 188.980	-2.5166u	-0.1750u	-2.3982u
B 249.678	-1.2687u	-0.7198u	-1.1062u
Ba 389.178	-0.2322u	-0.4764u	0.5719
Be 313.042	0.0160	0.0233	0.0168
Ca 370.602	-5.392u	3.042	-0.1238u
Cd 226.502	0.0915	-0.1297u	0.0802
Co 228.615	-0.2670u	-0.5989u	-0.3460u
Cr 267.716	0.4521	0.4569	-0.0124u
Cu 324.754	-0.8137u	-1.3220u	-1.2416u
Fe 271.441	0.1257	2.8978	9.3014
K 766.491	-0.8170u	-1.4034u	-1.2765u
Mg 279.078	0.6900	2.4496	-1.2513u
Mn 257.610	-0.0224u	0.0142	-0.0324u
Mo 202.032	0.0464	-0.0449u	-0.0747u
Na 330.237	-115.235u	-198.077u	-43.7957u
Ni 231.604	-1.0240u	0.6219	0.5827
Pb 220.353	1.0552	0.4418	1.4484
Sb 206.834	-8.0431u	-4.3450u	6.6597
Se 196.026	0.0338	7.0260	-3.0544u
Si 288.158	-16.1856u	-16.2430u	-16.3672u
Sn 189.925	1.5163	-1.6832u	3.3534
Sr 216.596	-0.4305u	0.3387	0.1422
Ti 334.941	-0.1166u	-0.0241u	-0.0592u
Tl 190.794	5.5315	-13.2718u	-8.5888u
V 292.401	0.0469	0.0755	0.1258
Zn 206.200	-0.6213u	-1.8331u	1.0416

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0974	ppb	0.5102	523.8	-33.0126
Al 308.215	-5.6877	ppb	1.3878	24.4	141.580
As 188.980	-1.6966	ppb	1.3191	77.7	0.5348
B 249.678	-1.0316	ppb	0.2820	27.3	-73.7443
Ba 389.178	-0.0456	ppb	0.5485	1203.6	-50.4920
Be 313.042	0.0187	ppb	0.0040	21.4	-168.686
Ca 370.602	-0.8244	ppb	4.260	516.8	25.73
Cd 226.502	0.0140	ppb	0.1246	888.7	6.0599
Co 228.615	-0.4040	ppb	0.1734	42.9	-9.3423
Cr 267.716	0.2989	ppb	0.2696	90.2	26.1413
Cu 324.754	-1.1258	ppb	0.2733	24.3	183.541
Fe 271.441	4.1083	ppb	4.7061	114.6	20.6978
K 766.491	-1.1656	ppb	0.3085	26.5	217.550
Mg 279.078	0.6294	ppb	1.8512	294.1	19.9890
Mn 257.610	-0.0135	ppb	0.0245	181.2	28.5822
Mo 202.032	-0.0244	ppb	0.0631	258.4	2.6651
Na 330.237	-119.036	ppb	77.2108	64.9	42.5847
Ni 231.604	0.0602	ppb	0.9392	1560.2	-1.4892
Pb 220.353	0.9818	ppb	0.5073	51.7	6.6301
Sb 206.834	-1.9095	ppb	7.6480	400.5	4.9323
Se 196.026	1.3351	ppb	5.1647	386.8	-0.9143
Si 288.158	-16.2653uv	ppb	0.0928	0.6	260.393

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.0622	ppb	2.5488	240.0	0.1092
Sr 216.596	0.0168	ppb	0.3996	2379.8	5.6134
Ti 334.941	-0.0666	ppb	0.0467	70.0	-43.7977
Tl 190.794	-5.4430	ppb	9.7884	179.8	-5.8518
V 292.401	0.0827	ppb	0.0399	48.3	-1.1753
Zn 206.200	-0.4709	ppb	1.4433	306.5	0.2631

x (Samp) **12/16/2018, 3:05:20 PM** **Rack 1, Tube 23**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.2573	11.4173	11.8045
Al 308.215	219.652	217.858	221.457
As 188.980	16.7818	15.1606	21.9499
B 249.678	104.422	104.439	102.354
Ba 389.178	12.8253	9.6538	12.5433
Be 313.042	4.3577	4.3733	4.3770
Ca 370.602	580.2	586.1	583.2
Cd 226.502	5.6825	5.3823	5.7173
Co 228.615	10.7573	11.3491	10.7326
Cr 267.716	11.5718	11.7769	11.7428
Cu 324.754	21.6797	21.0256	21.5244
Fe 271.441	64.1035	65.3360	67.2905
K 766.491	1073.95	1071.18	1071.77
Mg 279.078	546.429	542.611	534.481
Mn 257.610	12.1458	12.1946	12.2417
Mo 202.032	10.7635	10.5073	11.6449
Na 330.237	1072.08	846.468	1088.72
Ni 231.604	44.2400	42.5555	44.4767
Pb 220.353	11.8851	14.3488	15.3923
Sb 206.834	20.5121	25.6001	17.8506
Se 196.026	20.2593	29.5533	8.5481
Si 288.158	97.3998	96.4602	95.8648
Sn 189.925	53.7361	56.8556	53.7829
Sr 216.596	12.0187	12.7968	12.7977
Ti 334.941	11.6224	11.8995	11.8583
Tl 190.794	17.2476	25.3272	25.1547
V 292.401	12.1067	11.7653	11.5534
Zn 206.200	20.0073	21.8355	20.1360

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.4930	ppb	0.2814	2.4	369.639
Al 308.215	219.656	ppb	1.8000	0.8	673.506
As 188.980	17.9641	ppb	3.5457	19.7	5.5038
B 249.678	103.738	ppb	1.1991	1.2	616.132
Ba 389.178	11.6741	ppb	1.7553	15.0	62.2348
Be 313.042	4.3693	ppb	0.0102	0.2	3373.00
Ca 370.602	583.2	ppb	2.958	0.5	1245
Cd 226.502	5.5940	ppb	0.1842	3.3	91.0382
Co 228.615	10.9463	ppb	0.3490	3.2	43.3847
Cr 267.716	11.6972	ppb	0.1099	0.9	271.901
Cu 324.754	21.4099	ppb	0.3418	1.6	1000.93
Fe 271.441	65.5767	ppb	1.6070	2.5	67.5241
K 766.491	1072.30	ppb	1.4609	0.1	26778.6

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	541.173	ppb	6.1025	1.1	764.803
Mn 257.610	12.1941	ppb	0.0479	0.4	1211.41
Mo 202.032	10.9719	ppb	0.5967	5.4	25.5086
Na 330.237	1002.42	ppb	135.317	13.5	70.0761
Ni 231.604	43.7574	ppb	1.0476	2.4	54.6985
Pb 220.353	13.8754	ppb	1.8009	13.0	13.3323
Sb 206.834	21.3210	ppb	3.9376	18.5	14.4875
Se 196.026	19.4536	ppb	10.5257	54.1	2.3756
Si 288.158	96.5749	ppb	0.7739	0.8	800.073
Sn 189.925	54.7915	ppb	1.7877	3.3	16.0854
Sr 216.596	12.5377	ppb	0.4495	3.6	52.9691
Ti 334.941	11.7934	ppb	0.1495	1.3	1259.83
Tl 190.794	22.5765	ppb	4.6158	20.4	1.8794
V 292.401	11.8085	ppb	0.2792	2.4	151.477
Zn 206.200	20.6596	ppb	1.0204	4.9	12.1413

x (Samp) **12/16/2018, 3:10:03 PM** **Rack 1, Tube 24**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.7751	11.1544	11.5509
Al 308.215	219.545	218.928	219.431
As 188.980	16.2764	20.6958	17.9644
B 249.678	105.262	104.983	103.949
Ba 389.178	11.3968	12.2583	12.1239
Be 313.042	4.3795	4.3741	4.3787
Ca 370.602	587.0	591.3	594.5
Cd 226.502	5.7852	5.5434	6.0064
Co 228.615	10.8760	11.9195	11.3800
Cr 267.716	11.5686	11.3383	11.3069
Cu 324.754	21.6193	21.3317	21.5064
Fe 271.441	66.1568	55.2545	66.4516
K 766.491	1078.42	1076.15	1076.58
Mg 279.078	551.712	551.349	547.388
Mn 257.610	12.4179	12.4321	12.4716
Mo 202.032	10.9169	10.7317	13.3600
Na 330.237	779.923	1012.64	1162.51
Ni 231.604	42.6626	46.6103	45.4974
Pb 220.353	14.0498	15.1500	14.3331
Sb 206.834	21.1763	22.2158	20.7758
Se 196.026	24.4937	29.3937	17.6349
Si 288.158	99.3736	99.3901	99.1831
Sn 189.925	56.1940	53.7888	66.0382
Sr 216.596	12.0176	12.3138	12.4700
Ti 334.941	11.6907	11.7107	11.8117
Tl 190.794	25.0992	21.0448	22.2775
V 292.401	11.7978	11.6730	11.7440
Zn 206.200	23.0564	21.5026	19.8083

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.4934	ppb	0.3143	2.7	369.650
Al 308.215	219.301	ppb	0.3283	0.1	672.678
As 188.980	18.3122	ppb	2.2301	12.2	5.5918
B 249.678	104.731	ppb	0.6919	0.7	622.675

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	11.9263	ppb	0.4635	3.9	64.6555
Be 313.042	4.3774	ppb	0.0029	0.1	3379.54
Ca 370.602	590.9	ppb	3.762	0.6	1261
Cd 226.502	5.7784	ppb	0.2316	4.0	93.8417
Co 228.615	11.3918	ppb	0.5219	4.6	45.4457
Cr 267.716	11.4046	ppb	0.1429	1.3	265.594
Cu 324.754	21.4858	ppb	0.1449	0.7	1003.70
Fe 271.441	62.6209	ppb	6.3813	10.2	65.3395
K 766.491	1077.05	ppb	1.2066	0.1	26896.0
Mg 279.078	550.150	ppb	2.3984	0.4	777.172
Mn 257.610	12.4405	ppb	0.0278	0.2	1235.26
Mo 202.032	11.6695	ppb	1.4669	12.6	26.9581
Na 330.237	985.026	ppb	192.784	19.6	69.6478
Ni 231.604	44.9234	ppb	2.0355	4.5	56.1976
Pb 220.353	14.5110	ppb	0.5713	3.9	13.6627
Sb 206.834	21.3893	ppb	0.7433	3.5	14.5089
Se 196.026	23.8408	ppb	5.9066	24.8	3.1719
Si 288.158	99.3156	ppb	0.1150	0.1	813.176
Sn 189.925	58.6737	ppb	6.4903	11.1	17.2397
Sr 216.596	12.2672	ppb	0.2298	1.9	51.9163
Ti 334.941	11.7377	ppb	0.0649	0.6	1253.74
Tl 190.794	22.8071	ppb	2.0784	9.1	1.9430
V 292.401	11.7383	ppb	0.0626	0.5	150.503
Zn 206.200	21.4558	ppb	1.6246	7.6	12.5892

x (Samp) **12/16/2018, 3:14:45 PM** **Rack 1, Tube 25**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.4097	11.2184	11.9109
Al 308.215	219.858	212.520	232.956
As 188.980	17.7395	20.8337	19.1785
B 249.678	105.496	102.275	107.941
Ba 389.178	12.5332	11.8482	13.1249
Be 313.042	4.4083	4.2649	4.5190
Ca 370.602	592.4	572.8	608.9
Cd 226.502	5.5982	5.5915	6.0336
Co 228.615	11.2190	10.2986	10.1860
Cr 267.716	11.5099	11.2230	12.1181
Cu 324.754	21.6474	21.2411	22.3168
Fe 271.441	65.2766	67.8408	68.2265
K 766.491	1080.91	1055.12	1094.04
Mg 279.078	547.843	528.117	563.784
Mn 257.610	12.3206	11.9272	12.8338
Mo 202.032	10.7964	11.3616	11.5767
Na 330.237	1033.19	997.004	949.077
Ni 231.604	45.9103	42.1462	46.4520
Pb 220.353	17.7510	11.5769	10.0544
Sb 206.834	24.8558	28.0617	28.5498
Se 196.026	9.3420	15.3387	17.2423
Si 288.158	96.8779	97.0037	103.914
Sn 189.925	58.0937	51.6353	55.7352
Sr 216.596	11.5223	11.7567	11.6759
Ti 334.941	11.7872	11.4509	12.2634

Label	Replicates Concentration		
Tl 190.794	24.1237	19.8118	27.5213
V 292.401	11.5209	11.3302	11.9669
Zn 206.200	19.2394	21.6058	21.2897

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.5130	ppb	0.3576	3.1	370.334
Al 308.215	221.778	ppb	10.3524	4.7	678.505
As 188.980	19.2506	ppb	1.5484	8.0	5.8292
B 249.678	105.238	ppb	2.8418	2.7	626.006
Ba 389.178	12.5021	ppb	0.6389	5.1	70.1595
Be 313.042	4.3974	ppb	0.1274	2.9	3395.84
Ca 370.602	591.4	ppb	18.06	3.1	1262
Cd 226.502	5.7411	ppb	0.2533	4.4	93.2763
Co 228.615	10.5678	ppb	0.5667	5.4	41.6256
Cr 267.716	11.6170	ppb	0.4571	3.9	270.174
Cu 324.754	21.7351	ppb	0.5432	2.5	1012.73
Fe 271.441	67.1146	ppb	1.6034	2.4	68.6624
K 766.491	1076.69	ppb	19.7997	1.8	26887.1
Mg 279.078	546.581	ppb	17.8666	3.3	772.254
Mn 257.610	12.3605	ppb	0.4546	3.7	1227.52
Mo 202.032	11.2449	ppb	0.4030	3.6	26.0758
Na 330.237	993.091	ppb	42.1948	4.2	69.8481
Ni 231.604	44.8362	ppb	2.3453	5.2	56.0863
Pb 220.353	13.1274	ppb	4.0758	31.0	12.9430
Sb 206.834	27.1557	ppb	2.0067	7.4	16.9007
Se 196.026	13.9743	ppb	4.1231	29.5	1.3811
Si 288.158	99.2653	ppb	4.0266	4.1	813.073
Sn 189.925	55.1547	ppb	3.2681	5.9	16.1934
Sr 216.596	11.6516	ppb	0.1191	1.0	49.5737
Ti 334.941	11.8338	ppb	0.4083	3.5	1264.28
Tl 190.794	23.8190	ppb	3.8638	16.2	2.2212
V 292.401	11.6060	ppb	0.3268	2.8	148.827
Zn 206.200	20.7116	ppb	1.2848	6.2	12.1705

cri (Samp) **12/16/2018, 3:19:25 PM** **Rack 1, Tube 26**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	10.9392	11.2059	11.0374
Al 308.215	213.808	214.676	215.810
As 188.980	17.4110	13.7802	22.4470
B 249.678	103.303	104.063	103.683
Ba 389.178	12.0088	12.2381	11.8947
Be 313.042	4.3294	4.3166	4.3252
Ca 370.602	579.7	582.5	576.2
Cd 226.502	5.5708	5.3191	5.4901
Co 228.615	10.4186	11.6893	10.2379
Cr 267.716	11.3128	11.3291	11.3744
Cu 324.754	21.3645	21.3891	21.3228
Fe 271.441	64.7373	67.2179	55.3143
K 766.491	1059.13	1058.87	1059.21
Mg 279.078	534.080	535.113	538.577
Mn 257.610	11.8656	11.7927	11.8778
Mo 202.032	11.2614	11.1962	11.1308

Label	Replicates Concentration		
Na 330.237	1074.80	1046.27	824.378
Ni 231.604	45.5771	44.6456	44.8165
Pb 220.353	14.0290	11.2277	12.8051
Sb 206.834	24.3994	25.7217	19.6359
Se 196.026	20.0615	15.5649	26.7430
Si 288.158	96.6540	95.9496	94.5164
Sn 189.925	59.0687	58.2271	61.5299
Sr 216.596	12.9696	11.6085	11.9670
Ti 334.941	11.5314	11.6543	11.6565
Tl 190.794	19.8992	21.0019	23.6506
V 292.401	11.0890	11.6767	11.4908
Zn 206.200	23.7180	20.7512	18.8842

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.0608	ppb	0.1349	1.2	354.622
Al 308.215	214.765	ppb	1.0037	0.5	661.962
As 188.980	17.8794	ppb	4.3524	24.3	5.4825
B 249.678	103.683	ppb	0.3799	0.4	615.768
Ba 389.178	12.0472	ppb	0.1749	1.5	65.7962
Be 313.042	4.3237	ppb	0.0065	0.2	3335.87
Ca 370.602	579.5	ppb	3.131	0.5	1237
Cd 226.502	5.4600	ppb	0.1285	2.4	88.9970
Co 228.615	10.7819	ppb	0.7910	7.3	42.6167
Cr 267.716	11.3388	ppb	0.0319	0.3	264.174
Cu 324.754	21.3588	ppb	0.0335	0.2	999.085
Fe 271.441	62.4232	ppb	6.2802	10.1	65.1562
K 766.491	1059.07	ppb	0.1809	0.0	26451.2
Mg 279.078	535.923	ppb	2.3556	0.4	757.572
Mn 257.610	11.8454	ppb	0.0460	0.4	1177.66
Mo 202.032	11.1961	ppb	0.0653	0.6	25.9746
Na 330.237	981.817	ppb	137.090	14.0	69.5710
Ni 231.604	45.0131	ppb	0.4959	1.1	56.3135
Pb 220.353	12.6873	ppb	1.4044	11.1	12.7138
Sb 206.834	23.2524	ppb	3.2009	13.8	15.2835
Se 196.026	20.7898	ppb	5.6245	27.1	2.6181
Si 288.158	95.7067	ppb	1.0893	1.1	796.082
Sn 189.925	59.6086	ppb	1.7163	2.9	17.5177
Sr 216.596	12.1817	ppb	0.7055	5.8	51.6028
Ti 334.941	11.6141	ppb	0.0716	0.6	1240.12
Tl 190.794	21.5173	ppb	1.9280	9.0	1.5871
V 292.401	11.4188	ppb	0.3004	2.6	146.366
Zn 206.200	21.1178	ppb	2.4376	11.5	12.3993

x (Samp) **12/16/2018, 3:24:05 PM** **Rack 1, Tube 27**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.0598	11.3336	11.3277
Al 308.215	217.766	212.385	214.720
As 188.980	13.1557	20.0257	16.3365
B 249.678	103.369	105.137	103.535
Ba 389.178	13.5135	11.4762	13.3095
Be 313.042	4.3368	4.3312	4.3138
Ca 370.602	574.3	574.8	578.6

Label	Replicates Concentration		
Cd 226.502	5.7657	5.3784	5.5642
Co 228.615	10.7835	10.4157	10.4274
Cr 267.716	11.2771	11.1400	10.9159
Cu 324.754	21.4577	21.2877	20.8006
Fe 271.441	55.4247	53.7668	60.9929
K 766.491	1059.36	1057.77	1056.12
Mg 279.078	537.999	539.466	540.469
Mn 257.610	11.7606	11.8201	11.9064
Mo 202.032	11.5232	11.0293	10.4672
Na 330.237	1058.18	897.291	966.204
Ni 231.604	47.7557	46.4088	43.6017
Pb 220.353	13.4818	16.8897	12.7589
Sb 206.834	19.2540	21.3229	27.5076
Se 196.026	24.5650	36.9436	16.2679
Si 288.158	95.5876	95.9115	95.7548
Sn 189.925	57.1221	55.9293	57.8255
Sr 216.596	11.6057	12.7076	12.2751
Ti 334.941	11.6478	11.6741	11.5253
Tl 190.794	21.2215	17.0791	28.0834
V 292.401	12.0932	11.6867	11.2264
Zn 206.200	24.6065	18.0254	24.3730

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.2404	ppb	0.1564	1.4	360.862
Al 308.215	214.957	ppb	2.6987	1.3	662.421
As 188.980	16.5060	ppb	3.4382	20.8	5.1352
B 249.678	104.014	ppb	0.9766	0.9	617.953
Ba 389.178	12.7664	ppb	1.1220	8.8	72.6754
Be 313.042	4.3273	ppb	0.0120	0.3	3338.80
Ca 370.602	575.9	ppb	2.343	0.4	1230
Cd 226.502	5.5694	ppb	0.1937	3.5	90.6572
Co 228.615	10.5422	ppb	0.2090	2.0	41.5066
Cr 267.716	11.1110	ppb	0.1823	1.6	259.262
Cu 324.754	21.1820	ppb	0.3411	1.6	992.664
Fe 271.441	56.7281	ppb	3.7853	6.7	60.8592
K 766.491	1057.75	ppb	1.6154	0.2	26418.5
Mg 279.078	539.312	ppb	1.2422	0.2	762.242
Mn 257.610	11.8290	ppb	0.0733	0.6	1176.08
Mo 202.032	11.0065	ppb	0.5284	4.8	25.5807
Na 330.237	973.892	ppb	80.7203	8.3	69.3735
Ni 231.604	45.9221	ppb	2.1194	4.6	57.4830
Pb 220.353	14.3768	ppb	2.2061	15.3	13.5934
Sb 206.834	22.6948	ppb	4.2944	18.9	15.0555
Se 196.026	25.9255	ppb	10.4048	40.1	3.5502
Si 288.158	95.7513	ppb	0.1620	0.2	796.041
Sn 189.925	56.9590	ppb	0.9586	1.7	16.7299
Sr 216.596	12.1961	ppb	0.5551	4.6	51.6507
Ti 334.941	11.6157	ppb	0.0794	0.7	1240.31
Tl 190.794	22.1280	ppb	5.5579	25.1	1.7556
V 292.401	11.6688	ppb	0.4337	3.7	149.666
Zn 206.200	22.3350	ppb	3.7340	16.7	13.0840

Cont Calib Verif (CCV) **12/16/2018, 3:28:48 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	495.999	497.893	497.929
Al 308.215	9952.90	9944.30	9926.69
As 188.980	472.990	476.747	464.493
B 249.678	472.236	471.372	471.441
Ba 389.178	537.742	537.822	536.129
Be 313.042	485.044	484.771	485.539
Ca 370.602	10144	10120	10137
Cd 226.502	491.715	492.246	492.922
Co 228.615	502.654	502.757	500.039
Cr 267.716	500.824	501.682	502.271
Cu 324.754	494.901	494.352	494.584
Fe 271.441	10115.5	10076.3	10112.4
K 766.491	9631.19	9625.40	9628.57
Mg 279.078	9601.37	9575.86	9598.66
Mn 257.610	510.061	510.450	510.916
Mo 202.032	506.690	503.902	503.666
Na 330.237	9260.22	9455.88	9554.15
Ni 231.604	495.803	499.774	495.585
Pb 220.353	512.365	500.444	507.085
Sb 206.834	505.108	504.279	516.508
Se 196.026	474.770	464.158	468.220
Si 288.158	4795.60	4796.89	4805.37
Sn 189.925	491.836	499.750	496.208
Sr 216.596	514.712	511.173	511.511
Ti 334.941	519.661	519.327	519.997
Tl 190.794	511.402	501.027	521.977
V 292.401	514.487	515.040	515.893
Zn 206.200	959.782	957.516	950.688

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	497.274	ppb	1.1039	0.2	17244.0	99.45481
Al 308.215	9941.29	ppb	13.3619	0.1	23621.9	99.41294
As 188.980	471.410	ppb	6.2780	1.3	120.061	94.28201
B 249.678	471.683	ppb	0.4800	0.1	3029.16	94.33665
Ba 389.178	537.231	ppb	0.9553	0.2	5103.26	107.44625
Be 313.042	485.118	ppb	0.3897	0.1	394765	97.02361
Ca 370.602	10134	ppb	12.54	0.1	21178	101.33695
Cd 226.502	492.294	ppb	0.6051	0.1	7506.39	98.45886
Co 228.615	501.817	ppb	1.5401	0.3	2324.34	100.36335
Cr 267.716	501.592	ppb	0.7275	0.1	10835.0	100.31850
Cu 324.754	494.612	ppb	0.2753	0.1	18169.7	98.92248
Fe 271.441	10101.4	ppb	21.7664	0.2	7628.90	100.96370
K 766.491	9628.39	ppb	2.8990	0.0	238483	96.28389
Mg 279.078	9591.96	ppb	14.0151	0.1	13231.6	95.91963
Mn 257.610	510.476	ppb	0.4280	0.1	49441.8	102.09514
Mo 202.032	504.753	ppb	1.6822	0.3	1051.17	100.95052
Na 330.237	9423.42	ppb	149.633	1.6	273.362	94.23417
Ni 231.604	497.054	ppb	2.3580	0.5	637.183	99.41079
Pb 220.353	506.631	ppb	5.9733	1.2	269.457	101.32629
Sb 206.834	508.632	ppb	6.8334	1.3	213.827	101.72638
Se 196.026	469.049	ppb	5.3542	1.1	84.0556	93.80986
Si 288.158	4799.29	ppb	5.3058	0.1	23129.9	95.98570

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	495.931	ppb	3.9640	0.8	147.256	99.18623
Sr 216.596	512.465	ppb	1.9529	0.4	1956.47	102.49300
Ti 334.941	519.662	ppb	0.3352	0.1	57037.8	103.93233
Tl 190.794	511.469	ppb	10.4751	2.0	136.795	102.29372
V 292.401	515.140	ppb	0.7085	0.1	6704.82	103.02799
Zn 206.200	955.995	ppb	4.7336	0.5	537.827	95.59954

Cont Calib Blank (CCB) **12/16/2018, 3:33:31 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2056u	0.2395	0.4303
Al 308.215	-6.2574u	-4.8297u	-3.7092u
As 188.980	-3.3400u	-0.4519u	-1.2129u
B 249.678	1.7388	1.2050	1.1089
Ba 389.178	0.2779	0.9172	-0.1914u
Be 313.042	0.0470	0.0442	0.0636
Ca 370.602	3.042	7.257	4.458
Cd 226.502	-0.0463u	-0.0819u	-0.1715u
Co 228.615	-0.6059u	-0.4557u	-0.7589u
Cr 267.716	-0.0767u	-0.1295u	0.1636
Cu 324.754	-0.8516u	-1.5578u	-1.0131u
Fe 271.441	8.1703	13.9783	13.1554
K 766.491	-0.5394u	0.3038	-0.7196u
Mg 279.078	4.2103	3.1653	6.7029
Mn 257.610	0.0113	0.0256	0.0980
Mo 202.032	0.6919	1.0792	-1.3404u
Na 330.237	-26.5000u	74.4728	86.7421
Ni 231.604	0.2729	1.4789	-0.9031u
Pb 220.353	-1.2115u	4.0038	-0.6973u
Sb 206.834	0.1554	6.7449	-2.7351u
Se 196.026	4.2647	-3.7357u	-4.0164u
Si 288.158	-15.8496u	-13.3762u	-16.1895u
Sn 189.925	5.0140	1.0171	0.4198
Sr 216.596	0.1217	1.9829	0.8076
Ti 334.941	0.0878	0.0791	0.1186
Tl 190.794	0.9774	-2.7832u	2.8570
V 292.401	0.4902	0.0914	0.2064
Zn 206.200	0.4186	-0.3108u	-0.5960u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1548	ppb	0.3263	210.8	-24.2527	0.15476
Al 308.215	-4.9321	ppb	1.2772	25.9	143.369	-4.93211
As 188.980	-1.6683	ppb	1.4969	89.7	0.5420	-1.66826
B 249.678	1.3509	ppb	0.3394	25.1	-58.0571	1.35092
Ba 389.178	0.3346	ppb	0.5565	166.3	-46.8470	0.33460
Be 313.042	0.0516	ppb	0.0104	20.2	-141.896	0.05161
Ca 370.602	4.919	ppb	2.145	43.6	37.72	4.91882
Cd 226.502	-0.0999	ppb	0.0645	64.6	4.3276	-0.09987
Co 228.615	-0.6068	ppb	0.1516	25.0	-10.2845	-0.60682
Cr 267.716	-0.0142	ppb	0.1563	1100.8	19.3931	-0.01419
Cu 324.754	-1.1408	ppb	0.3701	32.4	182.995	-1.14083
Fe 271.441	11.7680	ppb	3.1428	26.7	26.4357	11.76800
K 766.491	-0.3184	ppb	0.5463	171.6	238.512	-0.31840

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	4.6928	ppb	1.8175	38.7	25.5889	4.69281
Mn 257.610	0.0450	ppb	0.0465	103.4	34.2748	0.04497
Mo 202.032	0.1436	ppb	1.2997	905.3	3.0140	0.14356
Na 330.237	44.9051	ppb	62.1421	138.4	46.6123	44.90506
Ni 231.604	0.2829	ppb	1.1911	421.0	-1.2026	0.28291
Pb 220.353	0.6983	ppb	2.8741	411.6	6.4826	0.69834
Sb 206.834	1.3884	ppb	4.8588	350.0	6.2936	1.38837
Se 196.026	-1.1625	ppb	4.7022	404.5	-1.3676	-1.16247
Si 288.158	-15.1385uv	ppb	1.5356	10.1	265.680	-15.13846
Sn 189.925	2.1503	ppb	2.4980	116.2	0.4327	2.15030
Sr 216.596	0.9707	ppb	0.9412	97.0	9.2574	0.97072
Ti 334.941	0.0952	ppb	0.0208	21.9	-26.0166	0.09516
Tl 190.794	0.3504	ppb	2.8719	819.6	-4.2563	0.35041
V 292.401	0.2627	ppb	0.2053	78.1	1.1899	0.26268
Zn 206.200	-0.1627	ppb	0.5233	321.6	0.4367	-0.16274

Blank (Blk) **12/18/2018, 2:15:16 PM** **Rack S, Tube 1**

Label	Replicates	Concentration	
Ag 328.068	-0.1877	-0.0833	0.2709
Al 308.215	1.6880	-2.2100	0.5220
As 188.980	2.6082	-0.1704	-2.4377
B 249.678	-0.0582	0.1707	-0.1125
Ba 389.178	-1.2489	0.2744	0.9744
Be 313.042	-0.0022	0.0124	-0.0102
Ca 370.602	2.731	1.611	-4.341
Cd 226.502	0.0734	0.0401	-0.1136
Co 228.615	0.2840	0.3886	-0.6726
Cr 267.716	0.0469	0.0770	-0.1239
Cu 324.754	0.2968	-0.1255	-0.1712
Fe 271.441	-1.4683	-2.1749	3.6432
K 766.491	0.2514	-0.2180	-0.0334
Mg 279.078	-0.5329	2.5375	-2.0047
Mn 257.610	-0.0189	-0.0115	0.0305
Mo 202.032	-0.4860	0.3477	0.1383
Na 330.237	-113.442	0.0919	113.350
Ni 231.604	0.3142	0.8324	-1.1466
Pb 220.353	3.0990	-1.1526	-1.9464
Sb 206.834	-1.3360	2.9678	-1.6318
Se 196.026	4.1280	2.3900	-6.5179
Si 288.158	-1.3979	0.8482	0.5497
Sn 189.925	1.3231	-1.7059	0.3828
Sr 216.596	0.2098	0.6780	-0.8878
Ti 334.941	-0.0277	0.0664	-0.0387
Tl 190.794	-3.4332	3.9588	-0.5256
V 292.401	-0.0395	-0.0902	0.1297
Zn 206.200	2.6125	-1.3227	-1.2899

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Ag 328.068	0.0000	ppb	8.910	30.7	-29.0088
Al 308.215	0.0000	ppb	5.015	3.1	162.291
As 188.980	0.0000	ppb	0.667	53.5	1.2475
B 249.678	0.0000	ppb	1.012	1.0	-97.8404
Ba 389.178	0.0000	ppb	12.617	19.7	-64.0627
Be 313.042	0.0000	ppb	9.521	5.9	-160.889
Ca 370.602	0.0000	ppb	8.664	23.3	37.26
Cd 226.502	0.0000	ppb	1.628	13.5	12.0807
Co 228.615	0.0000	ppb	2.943	24.4	-12.0403
Cr 267.716	0.0000	ppb	2.515	10.7	23.5205
Cu 324.754	0.0000	ppb	10.180	5.0	202.264
Fe 271.441	0.0000	ppb	2.615	9.5	27.6344
K 766.491	0.0000	ppb	6.445	2.4	268.224
Mg 279.078	0.0000	ppb	3.339	10.7	31.0934
Mn 257.610	0.0000	ppb	2.916	13.7	21.3431
Mo 202.032	0.0000	ppb	0.977	23.1	4.2268
Na 330.237	0.0000	ppb	2.988	5.2	57.7568
Ni 231.604	0.0000	ppb	1.426	62.9	-2.2672
Pb 220.353	0.0000	ppb	1.590	23.8	6.6774
Sb 206.834	0.0000	ppb	1.154	9.9	11.6227
Se 196.026	0.0000	ppb	1.088	53.7	2.0260
Si 288.158	0.0000	ppb	5.854	2.1	283.271
Sn 189.925	0.0000	ppb	0.502	192.5	-0.2610

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Sr 216.596	0.0000	ppb	3.396	34.9	9.7434
Ti 334.941	0.0000	ppb	6.916	19.5	-35.5020
Tl 190.794	0.0000	ppb	1.551	15.1	-10.2713
V 292.401	0.0000	ppb	1.674	66.2	-2.5284
Zn 206.200	0.0000	ppb	0.814	308.8	-0.2637

HIGH STD (Std) **12/18/2018, 2:19:17 PM** **Rack S, Tube 2**

Label	Replicates Concentration		
Ag 328.068	993.951	1009.91	996.140
Al 308.215	19983.1	20014.5	20002.4
As 188.980	995.436	1003.78	1000.79
B 249.678	998.622	1000.61	1000.77
Ba 389.178	1000.21	999.260	1000.53
Be 313.042	1001.61	998.259	1000.13
Ca 370.602	20006	20004	19991
Cd 226.502	1000.53	999.957	999.509
Co 228.615	1001.94	996.911	1001.15
Cr 267.716	1000.57	999.813	999.621
Cu 324.754	998.331	1006.55	995.116
Fe 271.441	20007.1	20006.7	20016.2
K 766.491	20002.1	20007.9	19990.0
Mg 279.078	20001.3	20002.1	19996.5
Mn 257.610	1000.14	1000.56	999.301
Mo 202.032	999.021	1001.03	999.947
Na 330.237	20042.7	19881.4	20075.8
Ni 231.604	1003.00	1003.14	993.854
Pb 220.353	997.166	1009.21	993.623
Sb 206.834	998.636	1009.09	992.277
Se 196.026	1001.84	990.282	1007.88
Si 288.158	9999.58	10000.5	9999.89
Sn 189.925	1000.75	996.873	1002.38
Sr 216.596	1000.55	998.864	1000.59
Ti 334.941	1000.79	999.377	999.834
Tl 190.794	1003.32	1006.79	989.886
V 292.401	1000.79	999.237	999.973
Zn 206.200	1990.64	2003.25	2006.11

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Ag 328.068	1000.00	ppb	320.648	0.9	37035.6
Al 308.215	20000.0	ppb	39.713	0.1	50297.1
As 188.980	1000.00	ppb	1.115	0.4	265.129
B 249.678	1000.00	ppb	8.053	0.1	6633.64
Ba 389.178	1000.00	ppb	7.335	0.1	11034.7
Be 313.042	1000.00	ppb	1396.125	0.2	830622
Ca 370.602	20000	ppb	18.707	0.0	45626
Cd 226.502	1000.00	ppb	8.381	0.1	16336.0
Co 228.615	1000.00	ppb	13.606	0.3	5019.22
Cr 267.716	1000.00	ppb	11.591	0.0	23238.0
Cu 324.754	1000.00	ppb	232.701	0.6	39655.7
Fe 271.441	20010.0	ppb	4.429	0.0	16508.8
K 766.491	20000.0	ppb	249.283	0.0	545353
Mg 279.078	20000.0	ppb	4.352	0.0	28842.8
Mn 257.610	1000.00	ppb	70.113	0.1	109353

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Mo 202.032	1000.00	ppb	2.267	0.1	2257.15
Na 330.237	20000.0	ppb	2.741	0.5	584.835
Ni 231.604	1000.00	ppb	7.398	0.5	1387.54
Pb 220.353	1000.00	ppb	4.790	0.8	592.884
Sb 206.834	1000.00	ppb	3.805	0.8	459.932
Se 196.026	1000.00	ppb	1.704	0.9	192.536
Si 288.158	10000.0	ppb	2.302	0.0	48273.4
Sn 189.925	1000.00	ppb	0.916	0.3	323.814
Sr 216.596	1000.00	ppb	4.157	0.1	4234.67
Ti 334.941	1000.00	ppb	86.263	0.1	119718
Tl 190.794	1000.00	ppb	3.719	0.9	406.227
V 292.401	1000.00	ppb	11.279	0.1	14529.9
Zn 206.200	2000.00	ppb	2.964	0.4	719.496

Ag 328.068 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-29.0088	0.0000	0.0000	-	-
HIGH STD		37035.6	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: y = 37.1 x + -29.0

Al 308.215 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		162.291	0.0000	0.0000	-	-
HIGH STD		50297.1	20000.0	20000.0	-0.0020	0.0

Curve Type: Linear Equation: y = 2.5 x + 162.3

As 188.980 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		1.2475	0.0000	0.0000	-	-
HIGH STD		265.129	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: y = 0.3 x + 1.2

B 249.678 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-97.8404	0.0000	0.0000	-	-
HIGH STD		6633.64	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 6.7 x + -97.8

Ba 389.178 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-64.0627	0.0000	0.0000	-	-
HIGH STD		11034.7	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: y = 11.1 x + -64.1

Be 313.042 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-160.889	0.0000	0.0000	-	-
HIGH STD		830622	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 830.8 x + -160.9

Ca 370.602 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		37.26	0.0000	0.0000	-	-
HIGH STD		45626	20000	20000	-0.0020	0.0

Curve Type: Linear Equation: y = 2.3 x + 37.3

Cd 226.502 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		12.0807	0.0000	0.0000	-	-
HIGH STD		16336.0	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 16.3 x + 12.1

Co 228.615 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-12.0403	0.0000	0.0000	-	-
HIGH STD		5019.22	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: y = 5.0 x + -12.0

Cr 267.716 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		23.5205	0.0000	0.0000	-	-
HIGH STD		23238.0	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: y = 23.2 x + 23.5

Cu 324.754 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		202.264	0.0000	0.0000	-	-
HIGH STD		39655.7	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 39.5 x + 202.3

Fe 271.441 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		27.6344	0.0000	0.0000	-	-
HIGH STD		16508.8	20010.0	20010.0	0.0000	0.0

Curve Type: Linear Equation: y = 0.8 x + 27.6

K 766.491 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		268.224	0.0000	0.0000	-	-
HIGH STD		545353	20000.0	20000.0	0.0000	0.0

Curve Type: Linear Equation: y = 27.3 x + 268.2

Mg 279.078 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		31.0934	0.0000	0.0000	-	-
HIGH STD		28842.8	20000.0	20000.0	0.0020	0.0

Curve Type: Linear Equation: y = 1.4 x + 31.1

Mn 257.610 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		21.3431	0.0000	0.0000	-	-
HIGH STD		109353	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 109.3 x + 21.3

Mo 202.032 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		4.2268	0.0000	0.0000	-	-
HIGH STD		2257.15	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 2.3 x + 4.2

Na 330.237 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		57.7568	0.0000	0.0000	-	-
HIGH STD		584.835	20000.0	20000.0	0.0020	0.0

Curve Type: Linear Equation: y = 0.0 x + 57.8

Ni 231.604 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-2.2672	0.0000	0.0000	-	-
HIGH STD		1387.54	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 1.4 x + -2.3

Pb 220.353 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		6.6774	0.0000	0.0000	-	-
HIGH STD		592.884	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.6 x + 6.7

Sb 206.834 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		11.6227	0.0000	0.0000	-	-
HIGH STD		459.932	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.4 x + 11.6

Se 196.026 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		2.0260	0.0000	0.0000	-	-
HIGH STD		192.536	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: y = 0.2 x + 2.0

Si 288.158 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		283.271	0.0000	0.0000	-	-
HIGH STD		48273.4	10000.0	10000.0	0.0000	0.0

Curve Type: Linear Equation: y = 4.8 x + 283.3

Sn 189.925 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-0.2610	0.0000	0.0000	-	-
HIGH STD		323.814	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.3 x + -0.3

Sr 216.596 Calibration (ppb) 12/18/2018, 2:19:17 PM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		9.7434	0.0000	0.0000	-	-
HIGH STD		4234.67	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: y = 4.2 x + 9.7

Ti 334.941 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-35.5020	0.0000	0.0000	-	-
HIGH STD		119718	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 119.8 x + -35.5

Tl 190.794 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-10.2713	0.0000	0.0000	-	-
HIGH STD		406.227	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: y = 0.4 x + -10.3

V 292.401 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-2.5284	0.0000	0.0000	-	-
HIGH STD		14529.9	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: y = 14.5 x + -2.5

Zn 206.200 Calibration (ppb) **12/18/2018, 2:19:17 PM** **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-0.2637	0.0000	0.0000	-	-
HIGH STD		719.496	2000.00	2000.00	0.0000	0.0

Curve Type: Linear Equation: y = 0.4 x + -0.3

Lab Control Sample (LCS) **12/18/2018, 2:23:17 PM** **Rack S, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	991.483	993.250	998.395
Al 308.215	19978.5	19983.4	20021.6
As 188.980	990.014	984.306	994.162
B 249.678	1003.25	1007.74	1009.49
Ba 389.178	997.676	997.430	999.712
Be 313.042	999.386	998.965	1001.24
Ca 370.602	19941	19981	19979
Cd 226.502	998.880	999.669	1000.20
Co 228.615	1007.43	1005.80	1004.98
Cr 267.716	997.471	998.327	1000.31
Cu 324.754	1003.47	998.850	1002.29
Fe 271.441	19924.9	19906.1	19926.1
K 766.491	20018.0	20011.4	20068.1
Mg 279.078	19976.9	20006.9	20021.4
Mn 257.610	996.935	997.089	999.231
Mo 202.032	996.740	999.584	1001.47
Na 330.237	20074.9	19886.6	20241.0
Ni 231.604	993.230	995.310	995.126

Label	Replicates Concentration		
Pb 220.353	1000.30	986.255	989.061
Sb 206.834	1002.45	1005.49	997.798
Se 196.026	979.478	992.558	982.012
Si 288.158	9988.76	10000.3	10020.7
Sn 189.925	994.152	993.527	979.465
Sr 216.596	1000.34	1000.92	1005.55
Ti 334.941	1000.20	1000.30	1001.31
Tl 190.794	985.761	1003.33	991.000
V 292.401	1001.95	1002.15	1002.65
Zn 206.200	2005.53	2038.33	2028.69

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	994.376	ppb	3.5906	0.4	36821.2	99.43760
Al 308.215	19994.5	ppb	23.6047	0.1	50330.6	99.97250
As 188.980	989.494	ppb	4.9486	0.5	262.108	98.94939
B 249.678	1006.83	ppb	3.2189	0.3	6659.31	100.68260
Ba 389.178	998.272	ppb	1.2530	0.1	11045.4	99.82725
Be 313.042	999.863	ppb	1.2087	0.1	830466	99.98625
Ca 370.602	19967	ppb	22.65	0.1	45559	99.83437
Cd 226.502	999.581	ppb	0.6620	0.1	16345.6	99.95811
Co 228.615	1006.07	ppb	1.2460	0.1	5049.07	100.60670
Cr 267.716	998.703	ppb	1.4569	0.1	23211.1	99.87027
Cu 324.754	1001.54	ppb	2.4007	0.2	39734.9	100.15370
Fe 271.441	19919.0	ppb	11.2021	0.1	16495.0	99.54520
K 766.491	20032.5	ppb	31.0137	0.2	546238	100.16241
Mg 279.078	20001.7	ppb	22.7120	0.1	28830.3	100.00859
Mn 257.610	997.752	ppb	1.2834	0.1	109245	99.77520
Mo 202.032	999.265	ppb	2.3821	0.2	2254.95	99.92654
Na 330.237	20067.5	ppb	177.345	0.9	579.215	100.33743
Ni 231.604	994.555	ppb	1.1514	0.1	1378.86	99.45554
Pb 220.353	991.872	ppb	7.4320	0.7	587.294	99.18716
Sb 206.834	1001.91	ppb	3.8729	0.4	454.635	100.19109
Se 196.026	984.683	ppb	6.9371	0.7	189.648	98.46828
Si 288.158	10003.3	ppb	16.1833	0.2	48562.2	100.03250
Sn 189.925	989.048	ppb	8.3049	0.8	320.267	98.90480
Sr 216.596	1002.27	ppb	2.8516	0.3	4226.57	100.22697
Ti 334.941	1000.60	ppb	0.6121	0.1	119862	100.06013
Tl 190.794	993.364	ppb	9.0203	0.9	404.219	99.33638
V 292.401	1002.25	ppb	0.3625	0.0	14469.4	100.22527
Zn 206.200	2024.19	ppb	16.8557	0.8	727.869	101.20927

Initial Calib Verif (ICV) **12/18/2018, 2:27:18 PM** **Rack S, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1009.44x	1002.84	1007.63x
Al 308.215	1000.24	998.727	998.030
As 188.980	956.453	949.015	931.219
B 249.678	1016.17	1019.74	1017.12
Ba 389.178	1022.36	1016.19	1019.61
Be 313.042	1008.96x	1008.99x	1009.62x
Ca 370.602	1000	1001	999.8
Cd 226.502	1031.81x	1031.79x	1032.87x
Co 228.615	992.512	984.782	993.478

Label	Replicates Concentration		
Cr 267.716	1008.17	1008.07	1009.37
Cu 324.754	1000.52	995.519	985.494
Fe 271.441	1049.86	1058.66	1040.42
K 766.491	9788.45	9791.37	9768.41
Mg 279.078	1005.90	1003.20	1005.73
Mn 257.610	1002.67	1001.89	1002.65
Mo 202.032	1002.11	1002.72	1005.17
Na 330.237	9810.57	9911.02	9582.83
Ni 231.604	1001.02	1012.11	1002.39
Pb 220.353	1031.70	1039.19	1038.12
Sb 206.834	1056.46	1043.37	1046.31
Se 196.026	969.443	966.430	992.502
Si 288.158	578.794	580.973	579.135
Sn 189.925	4884.19	4906.54	4893.99
Sr 216.596	4947.52	4940.32	4946.50
Ti 334.941	1002.66	1003.43	1004.87
Tl 190.794	998.632	992.314	990.516
V 292.401	1020.30	1020.54	1019.27
Zn 206.200	1033.80	1026.43	1030.10

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	1006.64xb	ppb	3.4128	0.3	37265.3	100.66373
Al 308.215	999.000b	ppb	1.1320	0.1	2713.78	99.90004
As 188.980	945.563b	ppb	12.9666	1.4	250.474	94.55626
B 249.678	1017.68b	ppb	1.8453	0.2	6751.49	101.76762
Ba 389.178	1019.39b	ppb	3.0932	0.3	11254.7	101.93883
Be 313.042	1009.19xb	ppb	0.3759	0.0	838213	100.91899
Ca 370.602	1000b	ppb	0.8598	0.1	2370	100.04332
Cd 226.502	1032.16xb	ppb	0.6217	0.1	16861.5	103.21560
Co 228.615	990.258b	ppb	4.7664	0.5	4967.74	99.02576
Cr 267.716	1008.54b	ppb	0.7221	0.1	23437.0	100.85374
Cu 324.754	993.844b	ppb	7.6503	0.8	39426.8	99.38435
Fe 271.441	1049.65b	ppb	9.1199	0.9	952.560	104.96474
K 766.491	9782.74b	ppb	12.4996	0.1	266889	97.82742
Mg 279.078	1004.95b	ppb	1.5113	0.2	1467.62	100.49452
Mn 257.610	1002.40b	ppb	0.4414	0.0	109644	100.24028
Mo 202.032	1003.33b	ppb	1.6193	0.2	2264.41	100.33315
Na 330.237	9768.14b	ppb	168.161	1.7	311.620	97.68140
Ni 231.604	1005.17b	ppb	6.0454	0.6	1393.63	100.51723
Pb 220.353	1036.34b	ppb	4.0501	0.4	613.510	103.63391
Sb 206.834	1048.71b	ppb	6.8662	0.7	475.547	104.87135
Se 196.026	976.125b	ppb	14.2626	1.5	188.079	97.61248
Si 288.158	579.634b	ppb	1.1720	0.2	3678.09	115.92680Q
Sn 189.925	4894.91b	ppb	11.2037	0.2	1586.06	97.89816
Sr 216.596	4944.78b	ppb	3.8957	0.1	20878.5	98.89564
Ti 334.941	1003.66b	ppb	1.1204	0.1	120159	100.36559
Tl 190.794	993.821b	ppb	4.2625	0.4	405.106	99.38206
V 292.401	1020.04b	ppb	0.6793	0.1	14722.8	102.00367
Zn 206.200	1030.11b	ppb	3.6858	0.4	370.090	103.01073

Initial Calib Blank (ICB) **12/18/2018, 2:31:19 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.8403	-0.2079u	-0.3943u
Al 308.215	-0.4471u	2.0599	6.2163
As 188.980	4.3315	5.3998	2.6381
B 249.678	9.7300	9.8501	8.6705
Ba 389.178	1.0249	-1.8437u	-0.2092u
Be 313.042	0.0177	0.0245	0.0084
Ca 370.602	-2.920u	2.035	1.063
Cd 226.502	0.0203	-0.2337u	0.0367
Co 228.615	-0.2158u	-0.3157u	-0.0534u
Cr 267.716	-0.1824u	-0.1085u	-0.2621u
Cu 324.754	0.0297	0.2062	0.4348
Fe 271.441	9.4256	4.6021	2.0854
K 766.491	0.6974	0.8358	0.9582
Mg 279.078	-1.0725u	-0.1652u	0.9923
Mn 257.610	0.0664	0.0607	0.1006
Mo 202.032	-0.0715u	0.8081	0.4269
Na 330.237	-3.1944u	116.209	242.600
Ni 231.604	0.0164	0.3641	-0.5426u
Pb 220.353	-0.0776u	3.9202	-3.8054u
Sb 206.834	-0.1700u	-15.6636u	-2.2653u
Se 196.026	0.5462	9.4479	8.0730
Si 288.158	4.6644	2.9068	1.8801
Sn 189.925	-2.4411u	3.6354	6.3155
Sr 216.596	-0.0740u	0.2892	0.2202
Ti 334.941	0.3330	0.2545	0.3228
Tl 190.794	-4.2110u	-3.5261u	-6.8278u
V 292.401	-0.0317u	-0.3368u	0.3921
Zn 206.200	0.8207	0.5849	0.1991

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0794	ppb	0.6655	838.3	-26.0664	0.07939
Al 308.215	2.6097	ppb	3.3656	129.0	168.851	2.60968
As 188.980	4.1231	ppb	1.3926	33.8	2.3354	4.12313
B 249.678	9.4169	ppb	0.6491	6.9	-34.4529	9.41686
Ba 389.178	-0.3427	ppb	1.4390	419.9	-67.8621	-0.34271
Be 313.042	0.0169	ppb	0.0081	47.8	-146.950	0.01686
Ca 370.602	0.0595	ppb	2.625	4412.3	37.40	0.05950
Cd 226.502	-0.0589	ppb	0.1516	257.4	11.1214	-0.05888
Co 228.615	-0.1950	ppb	0.1324	67.9	-13.0311	-0.19498
Cr 267.716	-0.1843	ppb	0.0768	41.7	19.2417	-0.18433
Cu 324.754	0.2236	ppb	0.2031	90.8	211.107	0.22357
Fe 271.441	5.3710	ppb	3.7300	69.4	32.0535	5.37101
K 766.491	0.8305	ppb	0.1305	15.7	290.857	0.83046
Mg 279.078	-0.0818	ppb	1.0350	1265.1	30.9735	-0.08181
Mn 257.610	0.0759	ppb	0.0216	28.4	29.6565	0.07591
Mo 202.032	0.3878	ppb	0.4411	113.7	5.1005	0.38782
Na 330.237	118.538	ppb	122.914	103.7	60.8769	118.53812
Ni 231.604	-0.0540	ppb	0.4575	846.5	-2.3422	-0.05404
Pb 220.353	0.0124	ppb	3.8636	31118.6	6.6843	0.01242
Sb 206.834	-6.0330	ppb	8.4059	139.3	8.9081	-6.03298
Se 196.026	6.0224	ppb	4.7921	79.6	3.1733	6.02236
Si 288.158	3.1504	ppb	1.4081	44.7	298.792	3.15043

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	2.5033	ppb	4.4867	179.2	0.5502	2.50328
Sr 216.596	0.1452	ppb	0.1929	132.9	10.3435	0.14515
Ti 334.941	0.3034	ppb	0.0427	14.1	0.8368	0.30341
Tl 190.794	-4.8550	ppb	1.7425	35.9	-12.2940	-4.85496
V 292.401	0.0079	ppb	0.3661	4650.3	-2.4954	0.00787
Zn 206.200	0.5349	ppb	0.3138	58.7	-0.0712	0.53491

CRI (CRI) **12/18/2018, 2:35:19 PM** **Rack S, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.1345	11.0527	11.7971
Al 308.215	217.385	220.859	223.977
As 188.980	8.0138	18.3399	29.1753
B 249.678	115.811	114.288	112.958
Ba 389.178	10.5671	10.9029	11.1166
Be 313.042	4.4438	4.4521	4.4489
Ca 370.602	550.0	555.9	559.9
Cd 226.502	5.7261	5.4780	5.5257
Co 228.615	11.6966	11.4407	11.1908
Cr 267.716	11.1550	10.8593	10.7922
Cu 324.754	22.6475	22.5673	22.7930
Fe 271.441	51.5265	61.0596	50.5972
K 766.491	1070.78	1074.15	1074.53
Mg 279.078	543.615	549.608	546.248
Mn 257.610	11.3540	11.2455	11.3642
Mo 202.032	10.7826	12.0069	10.9680
Na 330.237	1137.53	1059.14	1072.37
Ni 231.604	42.6868	43.0347	41.7100
Pb 220.353	11.1165	10.3312	11.7478
Sb 206.834	24.5314	15.0908	22.1279
Se 196.026	25.8974	8.8234	25.9313
Si 288.158	119.865	120.636	119.248
Sn 189.925	62.5685	56.5466	61.5599
Sr 216.596	10.8097	11.4317	10.6735
Ti 334.941	11.1112	11.1059	11.1124
Tl 190.794	25.3064	26.2384	24.2143
V 292.401	10.9337	11.1006	11.4288
Zn 206.200	22.6451	22.2084	21.9785

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	11.3281	ppb	0.4082	3.6	390.834	113.28094
Al 308.215	220.741	ppb	3.2975	1.5	716.159	110.37029
As 188.980	18.5096	ppb	10.5817	57.2	6.1286	92.54822
B 249.678	114.353	ppb	1.4276	1.2	671.868	114.35264
Ba 389.178	10.8622	ppb	0.2770	2.6	57.0967	108.62189
Be 313.042	4.4483	ppb	0.0042	0.1	3534.15	111.20686
Ca 370.602	555.3	ppb	4.982	0.9	1303	111.05863
Cd 226.502	5.5766	ppb	0.1317	2.4	103.163	111.53164
Co 228.615	11.4427	ppb	0.2529	2.2	45.4967	114.42702
Cr 267.716	10.9355	ppb	0.1930	1.8	277.406	109.35506
Cu 324.754	22.6693	ppb	0.1144	0.5	1096.82	113.34633
Fe 271.441	54.3944	ppb	5.7909	10.6	73.1247	108.78883
K 766.491	1073.15	ppb	2.0623	0.2	29516.2	107.31547

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	546.490	ppb	3.0041	0.5	818.190	109.29805
Mn 257.610	11.3212	ppb	0.0658	0.6	1262.09	113.21243
Mo 202.032	11.2525	ppb	0.6599	5.9	29.5744	112.52492
Na 330.237	1089.68	ppb	41.9624	3.9	86.4099	108.96767
Ni 231.604	42.4772	ppb	0.6868	1.6	56.7553	106.19292
Pb 220.353	11.0652	ppb	0.7097	6.4	13.1535	110.65166
Sb 206.834	20.5834	ppb	4.9061	23.8	20.7737	102.91692
Se 196.026	20.2174	ppb	9.8675	48.8	5.8785	101.08685
Si 288.158	119.916	ppb	0.6950	0.6	866.057	119.91650
Sn 189.925	60.2250	ppb	3.2252	5.4	19.2565	120.45004R
Sr 216.596	10.9717	ppb	0.4042	3.7	55.5810	109.71671
Ti 334.941	11.1099	ppb	0.0034	0.0	1296.88	111.09864
Tl 190.794	25.2530	ppb	1.0131	4.0	0.2612	101.01207
V 292.401	11.1543	ppb	0.2519	2.3	158.445	111.54324
Zn 206.200	22.2774	ppb	0.3386	1.5	7.7496	111.38687

Interf Check A (ICSA) **12/18/2018, 2:39:21 PM** **Rack S, Tube 5**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1459u	0.0356u	-0.0538u
Al 308.215	562958	560984	561517
As 188.980	4.0538	-4.1182u	-0.1035
B 249.678	13.5847u	15.0506u	14.3096u
Ba 389.178	3.6915	3.5608	0.7584
Be 313.042	-0.1396u	-0.1589u	-0.1545u
Ca 370.602	533567	531821	533217
Cd 226.502	0.3892	0.3160	0.2423
Co 228.615	0.8293	-0.5417	0.1168
Cr 267.716	0.1188	-0.2084	-0.2527
Cu 324.754	1.1879	0.7386	1.0733
Fe 271.441	205202	205062	205385
K 766.491	2.1054	2.2955	1.7572
Mg 279.078	561172	560362	560116
Mn 257.610	-2.8387	-3.1196	-2.7987
Mo 202.032	0.7234u	0.7387u	-0.3510u
Na 330.237	-52.2723u	-569.951u	-214.102u
Ni 231.604	2.2610	6.9551	2.7907
Pb 220.353	17.6822	2.3744u	6.9612u
Sb 206.834	-1.2496	-7.5920	-25.6392u
Se 196.026	8.6576	-6.7469u	23.2737
Si 288.158	23.8346	27.0761	24.6405
Sn 189.925	1.3428	-5.2574u	-6.7262u
Sr 216.596	9.4506	7.3006	8.1972
Ti 334.941	2.8132	2.9601	3.0065
Tl 190.794	3.0949u	2.5658u	-4.0433u
V 292.401	2.4034	1.9388	2.0339
Zn 206.200	2.3945	2.6163	11.1665

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0426	ppb	0.1001	235.1	-76.3170	0.04257
Al 308.215	561820	ppb	1021.24	0.2	1408506	-
As 188.980	-0.0560	ppb	4.0862	7298.8	1.6646	-0.05599
B 249.678	14.3150	ppb	0.7329	5.1	-209.558	14.31495

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	2.6702	ppb	1.6570	62.1	590.885	2.67023
Be 313.042	-0.1510	ppb	0.0101	6.7	-190.411	-0.15099
Ca 370.602	532868	ppb	923.8	0.2	1214207	-
Cd 226.502	0.3158	ppb	0.0735	23.3	208.279	0.31583
Co 228.615	0.1348	ppb	0.6857	508.7	-4.9916	0.13478
Cr 267.716	-0.1141	ppb	0.2029	177.8	47.3706	-0.11408
Cu 324.754	0.9999	ppb	0.2334	23.3	290.124	0.99994
Fe 271.441	205216	ppb	161.655	0.1	169054	-
K 766.491	2.0527	ppb	0.2730	13.3	324.168	2.05268
Mg 279.078	560550	ppb	552.405	0.1	807437	-
Mn 257.610	-2.9190	ppb	0.1749	6.0	2640.34	-2.91901
Mo 202.032	0.3704	ppb	0.6248	168.7	1.8315	0.37037
Na 330.237	-278.775	ppb	264.830	95.0	30.9549	-278.77539
Ni 231.604	4.0023	ppb	2.5709	64.2	3.4043	4.00227
Pb 220.353	9.0059	ppb	7.8561	87.2	5.7691	9.00591
Sb 206.834	-11.4936	ppb	12.6542	110.1	10.8813	-11.49360
Se 196.026	8.3948	ppb	15.0120	178.8	2.9646	8.39481
Si 288.158	25.1837	ppb	1.6877	6.7	405.615	25.18373
Sn 189.925	-3.5469	ppb	4.2979	121.2	-1.4107	-3.54692
Sr 216.596	8.3161	ppb	1.0800	13.0	96.7402	8.31613
Ti 334.941	2.9266	ppb	0.1009	3.4	2339.04	2.92661
Tl 190.794	0.5391	ppb	3.9774	737.7	-17.7060	0.53913
V 292.401	2.1254	ppb	0.2454	11.5	77.4820	2.12536
Zn 206.200	5.3924	ppb	5.0017	92.8	1.9711	5.39242

Interf Check AB (ICSAB) **12/18/2018, 2:43:23 PM** **Rack S, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	217.810	216.265	217.245
Al 308.215	521618	521953	521141
As 188.980	111.553	95.0219	101.506
B 249.678	13.0624u	14.2277u	13.1599u
Ba 389.178	499.084	500.666	497.574
Be 313.042	502.774	503.071	502.778
Ca 370.602	496923	497169	495449
Cd 226.502	959.627	961.188	956.148
Co 228.615	477.530	480.537	477.922
Cr 267.716	483.381	484.067	483.974
Cu 324.754	533.221	529.710	528.422
Fe 271.441	190450	190547	190211
K 766.491	0.1879	0.1897	0.7239
Mg 279.078	519825	518739	519279
Mn 257.610	488.682	488.975	488.909
Mo 202.032	1014.06	1016.93	1014.55
Na 330.237	-318.162u	-134.408u	-391.613u
Ni 231.604	941.160	945.744	941.871
Pb 220.353	52.2593	50.1618	48.3334
Sb 206.834	669.250	679.726	653.085
Se 196.026	49.4555	60.6344	42.5648
Si 288.158	-29.0757	-34.7916	-33.4052
Sn 189.925	990.283	1001.11	977.216
Sr 216.596	9.4165	7.8487	10.1041
Ti 334.941	2.6209	2.6677	2.8021

Label	Replicates Concentration		
Tl 190.794	90.7500	89.1907	92.0381
V 292.401	496.834	495.894	494.714
Zn 206.200	946.005	950.857	958.853

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	217.107	ppb	0.7819	0.4	7974.34	108.55328
Al 308.215	521571	ppb	408.203	0.1	1307643	104.31411
As 188.980	102.694	ppb	8.3292	8.1	28.5375	102.69376
B 249.678	13.4833	ppb	0.6465	4.8	-200.528	-
Ba 389.178	499.108	ppb	1.5461	0.3	6058.53	99.82166
Be 313.042	502.874	ppb	0.1704	0.0	417651	100.57487
Ca 370.602	496514	ppb	930.5	0.2	1131385	99.30270
Cd 226.502	958.988	ppb	2.5799	0.3	15844.1	95.89876
Co 228.615	478.663	ppb	1.6351	0.3	2390.61	95.73259
Cr 267.716	483.807	ppb	0.3718	0.1	11279.4	96.76149
Cu 324.754	530.451	ppb	2.4838	0.5	21193.5	106.09016
Fe 271.441	190403	ppb	172.877	0.1	156882	95.20135
K 766.491	0.3672	ppb	0.3089	84.1	278.231	-
Mg 279.078	519281	ppb	543.034	0.1	747988	103.85611
Mn 257.610	488.855	ppb	0.1533	0.0	56194.4	97.77106
Mo 202.032	1015.18	ppb	1.5393	0.2	2288.24	101.51802
Na 330.237	-281.395	ppb	132.486	47.1	30.2925	-
Ni 231.604	942.925	ppb	2.4672	0.3	1307.79	94.29250
Pb 220.353	50.2515	ppb	1.9645	3.9	30.0157	100.50301
Sb 206.834	667.353	ppb	13.4212	2.0	306.535	111.22558
Se 196.026	50.8849	ppb	9.1192	17.9	11.1527	101.76982
Si 288.158	-32.4242	ppb	2.9816	9.2	355.839	-
Sn 189.925	989.537	ppb	11.9654	1.2	320.423	98.95369
Sr 216.596	9.1231	ppb	1.1560	12.7	74.0003	-
Ti 334.941	2.6969	ppb	0.0941	3.5	2164.89	-
Tl 190.794	90.6596	ppb	1.4258	1.6	20.8691	90.65961
V 292.401	495.814	ppb	1.0620	0.2	7155.90	99.16285
Zn 206.200	951.905	ppb	6.4877	0.7	342.407	95.19051

LRA1 (CCV) **12/18/2018, 2:47:26 PM** **Rack S, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5293	-0.2005u	0.7336
Al 308.215	222.597	278.859	314.953
As 188.980	10673.8x	10623.1x	10634.8x
B 249.678	5095.38x	5111.30x	5109.45x
Ba 389.178	0.4679	0.7027	0.4843
Be 313.042	0.1614	0.1932	0.2280
Ca 370.602	230.7	271.4	292.6
Cd 226.502	0.3301	0.3739	0.5632
Co 228.615	37.6370	37.5383	38.3677
Cr 267.716	-0.1897u	0.2326	0.4232
Cu 324.754	1.3052	1.4340	1.3313
Fe 271.441	96.0726	123.372	135.316
K 766.491	40438.0x	40545.9x	40522.9x
Mg 279.078	201.612	248.521	270.017
Mn 257.610	118.933	118.977	118.843
Mo 202.032	0.5750	1.2360	0.0289

Label	Replicates Concentration		
Na 330.237	108393x	108237x	108233x
Ni 231.604	35.8095	35.0292	34.9102
Pb 220.353	20718.8x	20672.8x	20668.8x
Sb 206.834	-1.4316u	-8.7628u	-3.0622u
Se 196.026	-4.8347u	4.4727	1.1821
Si 288.158	42.7445	43.7526	42.7087
Sn 189.925	0.7966	-3.3709u	2.3323
Sr 216.596	0.1675	1.0475	-0.4926u
Ti 334.941	86.6552	86.7385	86.7534
Tl 190.794	0.7383	-2.7573u	1.6224
V 292.401	0.3085	0.7161	0.4573
Zn 206.200	-3.0587u	-0.5376u	3.5917

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3541b	ppb	0.4910	138.7	-15.7644	-
Al 308.215	272.136b	ppb	46.5434	17.1	844.410	-
As 188.980	10643.9xb	ppb	26.5192	0.2	2809.97	106.43904
B 249.678	5105.38xb	ppb	8.7044	0.2	34268.8	102.10756
Ba 389.178	0.5516b	ppb	0.1311	23.8	-57.6584	-
Be 313.042	0.1942b	ppb	0.0333	17.1	-8.7076	-
Ca 370.602	264.9b	ppb	31.44	11.9	645.6	-
Cd 226.502	0.4224b	ppb	0.1239	29.3	18.9572	-
Co 228.615	37.8477b	ppb	0.4530	1.2	179.214	-
Cr 267.716	0.1554b	ppb	0.3137	201.9	28.3374	-
Cu 324.754	1.3568b	ppb	0.0681	5.0	255.843	-
Fe 271.441	118.253b	ppb	20.1161	17.0	127.070	-
K 766.491	40502.2xb	ppb	56.8229	0.1	1104127	101.25562
Mg 279.078	240.050b	ppb	34.9802	14.6	375.548	-
Mn 257.610	118.918b	ppb	0.0684	0.1	13025.7	-
Mo 202.032	0.6133b	ppb	0.6045	98.6	5.6065	-
Na 330.237	108288xb	ppb	91.0756	0.1	2911.44	108.28771
Ni 231.604	35.2496b	ppb	0.4885	1.4	46.6808	-
Pb 220.353	20686.8xb	ppb	27.8064	0.1	12133.4	103.43394
Sb 206.834	-4.4188b	ppb	3.8493	87.1	9.6344	-
Se 196.026	0.2734b	ppb	4.7198	1726.6	2.0890	-
Si 288.158	43.0686b	ppb	0.5926	1.4	494.203	-
Sn 189.925	-0.0807b	ppb	2.9511	3657.6	-0.2732	-
Sr 216.596	0.2408b	ppb	0.7727	320.9	10.4802	-
Ti 334.941	86.7157b	ppb	0.0529	0.1	10346.5	-
Tl 190.794	-0.1322b	ppb	2.3160	1751.8	-10.2471	-
V 292.401	0.4939b	ppb	0.2063	41.8	4.6634	-
Zn 206.200	-0.0015b	ppb	3.3574	220615.5	-0.2641	-

rinse (Samp) **12/18/2018, 2:51:30 PM** **Rack S, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1997u	-0.0378u	-0.5444u
Al 308.215	41.9467	45.3244	48.0982
As 188.980	-3.2858u	-3.1382u	-2.0072u
B 249.678	35.5524	31.6878	27.6664
Ba 389.178	0.7121	0.2969	0.9768
Be 313.042	-0.0176u	-0.0072u	-0.0150u
Ca 370.602	46.35	52.17	52.18

Label	Replicates Concentration		
Cd 226.502	-0.1709u	-0.0591u	0.1034
Co 228.615	0.2890	0.6642	0.2521
Cr 267.716	0.0035	0.2016	-0.0039u
Cu 324.754	1.3335	1.0365	1.0491
Fe 271.441	38.3285	41.4793	33.6824
K 766.491	25.3248	28.0727	27.0961
Mg 279.078	27.7344	32.5733	33.5283
Mn 257.610	0.8997	0.9476	0.9487
Mo 202.032	-0.2266u	-1.2022u	-0.1519u
Na 330.237	189.468	-103.076u	145.001
Ni 231.604	-1.3822u	1.6049	-2.1460u
Pb 220.353	0.7397	2.1731	9.3394
Sb 206.834	0.2260	-11.3526u	-10.3019u
Se 196.026	-1.7753u	2.0863	1.9568
Si 288.158	11.5075	11.2608	12.8984
Sn 189.925	3.8891	6.6585	1.5286
Sr 216.596	-0.1461u	-0.1725u	-0.2680u
Ti 334.941	0.1258	0.1156	0.1165
Tl 190.794	3.2643	-0.8659u	-0.7164u
V 292.401	0.3150	-0.3307u	0.1258
Zn 206.200	8.3285	10.0963	9.4581

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2606	ppb	0.2587	99.3	-38.6738
Al 308.215	45.1231	ppb	3.0807	6.8	275.405
As 188.980	-2.8104	ppb	0.6995	24.9	0.5059
B 249.678	31.6356	ppb	3.9433	12.5	115.078
Ba 389.178	0.6620	ppb	0.3427	51.8	-56.6748
Be 313.042	-0.0133	ppb	0.0054	41.0	-171.896
Ca 370.602	50.23	ppb	3.362	6.7	151.7
Cd 226.502	-0.0422	ppb	0.1379	326.7	11.4216
Co 228.615	0.4018	ppb	0.2280	56.7	-10.0171
Cr 267.716	0.0671	ppb	0.1165	173.7	25.0849
Cu 324.754	1.1397	ppb	0.1680	14.7	247.237
Fe 271.441	37.8301	ppb	3.9223	10.4	58.8230
K 766.491	26.8312	ppb	1.3930	5.2	999.488
Mg 279.078	31.2787	ppb	3.1063	9.9	76.1327
Mn 257.610	0.9320	ppb	0.0280	3.0	123.417
Mo 202.032	-0.5269	ppb	0.5861	111.2	3.0392
Na 330.237	77.1312	ppb	157.640	204.4	59.7652
Ni 231.604	-0.6411	ppb	1.9822	309.2	-3.1589
Pb 220.353	4.0841	ppb	4.6073	112.8	9.0710
Sb 206.834	-7.1428	ppb	6.4032	89.6	8.4211
Se 196.026	0.7560	ppb	2.1931	290.1	2.1700
Si 288.158	11.8889	ppb	0.8829	7.4	340.383
Sn 189.925	4.0254	ppb	2.5677	63.8	1.0435
Sr 216.596	-0.1955	ppb	0.0641	32.8	8.9254
Ti 334.941	0.1193	ppb	0.0057	4.8	-21.1110
Tl 190.794	0.5607	ppb	2.3426	417.8	-10.0382
V 292.401	0.0367	ppb	0.3319	904.5	-1.9919
Zn 206.200	9.2943	ppb	0.8952	9.6	3.0812

Cont Calib Verif (CCV) **12/18/2018, 2:55:34 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	498.365	499.453	495.526
Al 308.215	9906.89	9915.35	9904.25
As 188.980	496.076	505.911	486.187
B 249.678	510.365	511.831	508.758
Ba 389.178	495.300	496.244	496.667
Be 313.042	509.449	510.270	509.604
Ca 370.602	9969	9987	9978
Cd 226.502	501.826	500.929	499.633
Co 228.615	503.658	502.231	503.153
Cr 267.716	496.922	497.767	497.549
Cu 324.754	500.448	500.388	497.799
Fe 271.441	9964.12	9963.31	9970.76
K 766.491	9935.18	9936.58	9924.79
Mg 279.078	9993.25	10007.9	9987.64
Mn 257.610	501.758	501.910	501.584
Mo 202.032	499.488	495.326	494.434
Na 330.237	9815.54	9885.15	9822.66
Ni 231.604	500.157	500.358	500.707
Pb 220.353	494.911	497.066	503.303
Sb 206.834	499.633	503.795	495.729
Se 196.026	475.430	477.896	502.163
Si 288.158	5069.05	5070.05	5056.68
Sn 189.925	506.418	494.612	508.691
Sr 216.596	501.747	504.326	504.565
Ti 334.941	499.917	500.986	500.218
Tl 190.794	505.241	483.948	488.545
V 292.401	497.182	498.824	495.943
Zn 206.200	1024.82	1014.45	1011.88

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	497.781	ppb	2.0273	0.4	18418.1	99.55630
Al 308.215	9908.83	ppb	5.7968	0.1	25024.6	99.08828
As 188.980	496.058	ppb	9.8621	2.0	132.024	99.21156
B 249.678	510.318	ppb	1.5372	0.3	3327.20	102.06361
Ba 389.178	496.070	ppb	0.6999	0.1	5456.62	99.21400
Be 313.042	509.775	ppb	0.4361	0.1	423330	101.95490
Ca 370.602	9978	ppb	8.942	0.1	22786	99.77972
Cd 226.502	500.796	ppb	1.1027	0.2	8195.25	100.15928
Co 228.615	503.014	ppb	0.7237	0.1	2518.44	100.60283
Cr 267.716	497.413	ppb	0.4388	0.1	11572.3	99.48254
Cu 324.754	499.545	ppb	1.5122	0.3	19920.3	99.90903
Fe 271.441	9966.07	ppb	4.0854	0.0	8266.71	99.61085
K 766.491	9932.18	ppb	6.4454	0.1	270962	99.32184
Mg 279.078	9996.25	ppb	10.4320	0.1	14424.0	99.96249
Mn 257.610	501.751	ppb	0.1631	0.0	54947.5	100.35011
Mo 202.032	496.416	ppb	2.6976	0.5	1122.34	99.28316
Na 330.237	9841.12	ppb	38.2967	0.4	313.402	98.41117
Ni 231.604	500.407	ppb	0.2782	0.1	692.645	100.08141
Pb 220.353	498.427	ppb	4.3586	0.9	298.448	99.68533
Sb 206.834	499.719	ppb	4.0336	0.8	232.597	99.94386
Se 196.026	485.163	ppb	14.7739	3.0	94.4698	97.03256
Si 288.158	5065.26	ppb	7.4502	0.1	24728.4	101.30520

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	503.240	ppb	7.5584	1.5	162.828	100.64805
Sr 216.596	503.546	ppb	1.5622	0.3	2128.36	100.70921
Ti 334.941	500.374	ppb	0.5510	0.1	59922.0	100.07478
Tl 190.794	492.578	ppb	11.2049	2.3	195.264	98.51557
V 292.401	497.316	ppb	1.4452	0.3	7178.27	99.46322
Zn 206.200	1017.05	ppb	6.8539	0.7	365.587	101.70500

Cont Calib Blank (CCB) **12/18/2018, 2:59:37 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1307	-0.2635u	-0.4193u
Al 308.215	0.9534	1.1570	4.1366
As 188.980	2.6782	0.6542	-0.3361u
B 249.678	9.7988	9.7541	7.8063
Ba 389.178	0.7346	0.0066	-0.3550u
Be 313.042	0.0264	0.0004	0.0154
Ca 370.602	-2.708u	-4.015u	0.4642
Cd 226.502	-0.2229u	-0.0048u	0.1149
Co 228.615	0.4172	-0.2686u	0.3724
Cr 267.716	0.3839	-0.0853u	-0.0537u
Cu 324.754	0.0763	0.3433	0.3256
Fe 271.441	6.1905	6.9741	7.6235
K 766.491	1.2702	0.4322	0.9564
Mg 279.078	-5.5869u	-1.2375u	-0.4555u
Mn 257.610	0.1135	0.0442	0.1126
Mo 202.032	-0.3863u	-1.1363u	-0.4707u
Na 330.237	-122.440u	-63.2279u	25.4588
Ni 231.604	0.0074	-0.8204u	0.3683
Pb 220.353	4.1440	2.3171	-1.0756u
Sb 206.834	-5.7356u	-5.5612u	1.1849
Se 196.026	6.9076	11.2985	11.0882
Si 288.158	2.6091	3.2045	3.0371
Sn 189.925	-0.2921u	6.5114	2.5403
Sr 216.596	0.2865	-0.7036u	0.5647
Ti 334.941	0.1256	0.2963	0.0544
Tl 190.794	1.4645	2.3552	-2.0415u
V 292.401	0.0375	0.3266	-0.3368u
Zn 206.200	1.6494	-0.9577u	0.0085

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1840	ppb	0.2835	154.1	-35.8315	-0.18401
Al 308.215	2.0823	ppb	1.7820	85.6	167.510	2.08234
As 188.980	0.9988	ppb	1.5364	153.8	1.5110	0.99877
B 249.678	9.1197	ppb	1.1377	12.5	-36.4538	9.11973
Ba 389.178	0.1287	ppb	0.5550	431.1	-62.6351	0.12873
Be 313.042	0.0141	ppb	0.0130	92.8	-149.215	0.01405
Ca 370.602	-2.086	ppb	2.303	110.4	32.50	-2.08602
Cd 226.502	-0.0376	ppb	0.1713	455.6	11.4694	-0.03760
Co 228.615	0.1737	ppb	0.3837	220.9	-11.1652	0.17365
Cr 267.716	0.0816	ppb	0.2623	321.3	25.4156	0.08163
Cu 324.754	0.2484	ppb	0.1493	60.1	212.063	0.24837
Fe 271.441	6.9294	ppb	0.7175	10.4	33.3511	6.92938
K 766.491	0.8863	ppb	0.4234	47.8	292.378	0.88626

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-2.4267	ppb	2.7647	113.9	27.5958	-2.42665
Mn 257.610	0.0901	ppb	0.0398	44.1	31.1918	0.09012
Mo 202.032	-0.6644	ppb	0.4108	61.8	2.7299	-0.66442
Na 330.237	-53.4031	ppb	74.4374	139.4	56.3494	-53.40307
Ni 231.604	-0.1482	ppb	0.6094	411.2	-2.4734	-0.14822
Pb 220.353	1.7952	ppb	2.6486	147.5	7.7296	1.79517
Sb 206.834	-3.3706	ppb	3.9462	117.1	10.1119	-3.37062
Se 196.026	9.7648	ppb	2.4766	25.4	3.8863	9.76477
Si 288.158	2.9502	ppb	0.3071	10.4	297.503	2.95024
Sn 189.925	2.9199	ppb	3.4176	117.0	0.6852	2.91989
Sr 216.596	0.0492	ppb	0.6666	1354.4	9.9549	0.04922
Ti 334.941	0.1588	ppb	0.1243	78.3	-16.4918	0.15879
Tl 190.794	0.5927	ppb	2.3244	392.1	-10.0243	0.59274
V 292.401	0.0091	ppb	0.3326	3647.1	-2.3969	0.00912
Zn 206.200	0.2334	ppb	1.3180	564.7	-0.1797	0.23339

MB 680-552058/1-A (Samp) **12/18/2018, 3:26:59 PM** **Rack 1, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2768	-0.3813u	0.3414
Al 308.215	1.5275	2.9361	0.2213
As 188.980	-2.4375u	0.6642	1.5718
B 249.678	1.5498	1.7286	1.4518
Ba 389.178	-0.2931u	-0.0260u	-0.0207u
Be 313.042	-0.0354u	-0.0255u	-0.0325u
Ca 370.602	4.944	1.820	5.266
Cd 226.502	-0.3072u	-0.2743u	-0.1856u
Co 228.615	-0.4844u	0.0593	0.3823
Cr 267.716	-0.0507u	0.0444	0.0992
Cu 324.754	0.5714	-0.1310u	0.3865
Fe 271.441	8.2916	-3.1176u	8.9201
K 766.491	3.1532	2.4657	3.2116
Mg 279.078	-7.1961u	-3.8390u	1.0451
Mn 257.610	0.1565	0.2119	0.1701
Mo 202.032	-0.4033u	-1.5639u	-1.1137u
Na 330.237	-95.5041u	-36.1494u	-120.970u
Ni 231.604	0.0427	-1.1749u	-1.4904u
Pb 220.353	-5.2576u	-1.7914u	4.1559
Sb 206.834	-1.3422u	-9.7700u	-0.9526u
Se 196.026	-15.0755u	11.2810	-7.7490u
Si 288.158	2.8998	3.5334	4.1705
Sn 189.925	4.5026	5.0138	0.2865
Sr 216.596	-0.4381u	-0.2664u	-0.0658u
Ti 334.941	0.1191	0.0570	0.0598
Tl 190.794	0.3080	-6.1615u	2.6378
V 292.401	-0.8433u	-0.5403u	0.3611
Zn 206.200	-2.7153u	0.2856	-0.8202u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0790	ppb	0.3999	506.5	-26.0824
Al 308.215	1.5616	ppb	1.3577	86.9	166.189
As 188.980	-0.0671	ppb	2.1023	3130.9	1.2298
B 249.678	1.5768	ppb	0.1403	8.9	-87.2303

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.1133	ppb	0.1558	137.5	-65.3229
Be 313.042	-0.0312	ppb	0.0051	16.4	-186.750
Ca 370.602	4.010	ppb	1.904	47.5	46.39
Cd 226.502	-0.2557	ppb	0.0629	24.6	7.9102
Co 228.615	-0.0143	ppb	0.4380	3062.2	-12.1086
Cr 267.716	0.0310	ppb	0.0758	244.9	24.2402
Cu 324.754	0.2756	ppb	0.3641	132.1	213.133
Fe 271.441	4.6980	ppb	6.7758	144.2	31.4999
K 766.491	2.9435	ppb	0.4148	14.1	348.447
Mg 279.078	-3.3300	ppb	4.1441	124.4	26.2936
Mn 257.610	0.1795	ppb	0.0289	16.1	40.9640
Mo 202.032	-1.0270	ppb	0.5851	57.0	1.9131
Na 330.237	-84.2078	ppb	43.5238	51.7	55.5351
Ni 231.604	-0.8742	ppb	0.8096	92.6	-3.4822
Pb 220.353	-0.9644	ppb	4.7610	493.7	6.1122
Sb 206.834	-4.0216	ppb	4.9821	123.9	9.8241
Se 196.026	-3.8478	ppb	13.6044	353.6	1.2929
Si 288.158	3.5346	ppb	0.6353	18.0	300.593
Sn 189.925	3.2676	ppb	2.5944	79.4	0.7979
Sr 216.596	-0.2568	ppb	0.1863	72.6	8.6733
Ti 334.941	0.0787	ppb	0.0350	44.6	-26.0906
Tl 190.794	-1.0719	ppb	4.5591	425.3	-10.7179
V 292.401	-0.3408	ppb	0.6265	183.8	-7.4548
Zn 206.200	-1.0833	ppb	1.5177	140.1	-0.6536

LCS 680-552058/2-A (Samp) **12/18/2018, 3:30:58 PM** **Rack 1, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	54.7038	54.1811	54.4567
Al 308.215	5186.66	5183.24	5193.38
As 188.980	106.763	98.9327	94.8967
B 249.678	209.495	209.438	208.340
Ba 389.178	105.958	105.529	105.371
Be 313.042	54.2490	54.1836	54.1849
Ca 370.602	5247	5248	5246
Cd 226.502	54.4092	54.1054	53.7327
Co 228.615	53.0008	54.2604	53.4193
Cr 267.716	108.210	107.750	107.539
Cu 324.754	107.043	107.491	105.925
Fe 271.441	5331.75	5333.53	5327.19
K 766.491	8136.23	8128.26	8133.78
Mg 279.078	5232.52	5222.10	5219.81
Mn 257.610	534.870	534.621	534.417
Mo 202.032	105.390	106.354	105.958
Na 330.237	4983.17	4958.71	5252.22
Ni 231.604	104.523	107.065	104.521
Pb 220.353	527.150	532.386	536.112
Sb 206.834	51.7846	46.4335	52.1279
Se 196.026	99.0106	92.4204	96.5644
Si 288.158	-2.4296	-1.1916	-4.6874
Sn 189.925	103.846	111.596	109.129
Sr 216.596	108.539	107.483	106.881
Ti 334.941	106.110	105.959	106.102

Label	Replicates Concentration		
Tl 190.794	45.1551	42.8661	36.7265
V 292.401	105.885	105.288	105.462
Zn 206.200	109.699	110.127	107.755

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.4472	ppb	0.2615	0.5	1988.65
Al 308.215	5187.76	ppb	5.1576	0.1	13171.9
As 188.980	100.197	ppb	6.0335	6.0	27.6678
B 249.678	209.091	ppb	0.6511	0.3	1304.26
Ba 389.178	105.620	ppb	0.3035	0.3	1115.46
Be 313.042	54.2058	ppb	0.0374	0.1	44868.1
Ca 370.602	5247	ppb	1.106	0.0	12000
Cd 226.502	54.0824	ppb	0.3389	0.6	899.328
Co 228.615	53.5602	ppb	0.6415	1.2	257.459
Cr 267.716	107.833	ppb	0.3430	0.3	2528.46
Cu 324.754	106.820	ppb	0.8065	0.8	4419.40
Fe 271.441	5330.82	ppb	3.2730	0.1	4421.99
K 766.491	8132.76	ppb	4.0818	0.1	221920
Mg 279.078	5224.81	ppb	6.7767	0.1	7550.95
Mn 257.610	534.636	ppb	0.2268	0.0	58506.5
Mo 202.032	105.901	ppb	0.4843	0.5	242.705
Na 330.237	5064.70	ppb	162.858	3.2	190.361
Ni 231.604	105.370	ppb	1.4685	1.4	144.118
Pb 220.353	531.883	ppb	4.5021	0.8	318.409
Sb 206.834	50.1154	ppb	3.1932	6.4	33.4870
Se 196.026	95.9984	ppb	3.3313	3.5	20.3485
Si 288.158	-2.7696	ppb	1.7725	64.0	298.964
Sn 189.925	108.190	ppb	3.9592	3.7	34.8014
Sr 216.596	107.634	ppb	0.8396	0.8	463.416
Ti 334.941	106.057	ppb	0.0848	0.1	12683.9
Tl 190.794	41.5826	ppb	4.3585	10.5	7.1133
V 292.401	105.545	ppb	0.3069	0.3	1522.06
Zn 206.200	109.194	ppb	1.2643	1.2	39.0018

680-161766-B-2-D (Samp) **12/18/2018, 3:34:58 PM** **Rack 1, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3396u	0.0666	-0.1767u
Al 308.215	5.1112	4.5485	2.5259
As 188.980	9.4409	-3.9986u	1.2753
B 249.678	111.886	112.567	110.652
Ba 389.178	-1.1087u	0.1926	-0.2673u
Be 313.042	-0.0236u	-0.0407u	-0.0437u
Ca 370.602	99.59	94.11	101.6
Cd 226.502	-0.2503u	-0.3250u	-0.3933u
Co 228.615	-0.6749u	-0.4492u	0.3190
Cr 267.716	-0.0575u	0.1027	0.2370
Cu 324.754	0.1165	0.1519	0.3054
Fe 271.441	7.3221	2.7677	6.1997
K 766.491	353.854	354.292	352.738
Mg 279.078	7.2970	10.1913	8.2944
Mn 257.610	0.2856	0.2062	0.1917
Mo 202.032	0.3538	-0.6813u	-1.3196u

Label	Replicates Concentration		
Na 330.237	3247.88	3142.77	3332.56
Ni 231.604	-0.2756u	0.0576	-0.1187u
Pb 220.353	4.4302	1.5583	-1.6512u
Sb 206.834	2.6408	-10.9801u	-8.2458u
Se 196.026	3.4936	6.3028	-1.1322u
Si 288.158	176.943	179.487	180.352
Sn 189.925	-3.9370u	3.5549	3.3647
Sr 216.596	-0.0477u	0.2558	0.7670
Ti 334.941	0.0379	0.1624	0.0757
Tl 190.794	0.5322	-5.4132u	2.1601
V 292.401	0.0652	0.4928	-0.0087u
Zn 206.200	1.6682	1.7924	2.0043

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1499	ppb	0.2044	136.4	-34.5688
Al 308.215	4.0618	ppb	1.3596	33.5	172.477
As 188.980	2.2392	ppb	6.7714	302.4	1.8384
B 249.678	111.702	ppb	0.9706	0.9	654.067
Ba 389.178	-0.3945	ppb	0.6599	167.3	-68.4302
Be 313.042	-0.0360	ppb	0.0109	30.1	-190.937
Ca 370.602	98.43	ppb	3.874	3.9	261.6
Cd 226.502	-0.3229	ppb	0.0715	22.2	6.8121
Co 228.615	-0.2684	ppb	0.5210	194.2	-13.3868
Cr 267.716	0.0941	ppb	0.1474	156.7	25.7319
Cu 324.754	0.1913	ppb	0.1004	52.5	209.809
Fe 271.441	5.4299	ppb	2.3728	43.7	32.0974
K 766.491	353.628	ppb	0.8013	0.2	9906.09
Mg 279.078	8.5942	ppb	1.4702	17.1	43.4704
Mn 257.610	0.2278	ppb	0.0505	22.2	46.2900
Mo 202.032	-0.5490	ppb	0.8445	153.8	2.9896
Na 330.237	3241.07	ppb	95.0773	2.9	143.166
Ni 231.604	-0.1122	ppb	0.1667	148.5	-2.4230
Pb 220.353	1.4458	ppb	3.0422	210.4	7.5250
Sb 206.834	-5.5284	ppb	7.2056	130.3	9.1464
Se 196.026	2.8881	ppb	3.7543	130.0	2.5762
Si 288.158	178.928	ppb	1.7724	1.0	1141.78
Sn 189.925	0.9942	ppb	4.2716	429.7	0.0616
Sr 216.596	0.3251	ppb	0.4117	126.7	11.1200
Ti 334.941	0.0920	ppb	0.0638	69.4	-24.5615
Tl 190.794	-0.9069	ppb	3.9865	439.6	-10.6494
V 292.401	0.1831	ppb	0.2707	147.8	0.1289
Zn 206.200	1.8216	ppb	0.1699	9.3	0.3918

680-161766-B-2-D (Samp) **12/18/2018, 3:38:58 PM** **Rack 1, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4000	0.7840	0.1633
Al 308.215	-1.6847u	-0.5202u	-0.7628u
As 188.980	-3.7741u	3.6746	0.5628
B 249.678	25.2601	24.6251	25.3504
Ba 389.178	-0.5236u	-0.2560u	0.7194
Be 313.042	-0.0264u	-0.0348u	-0.0437u
Ca 370.602	11.51	18.00	11.65

Label	Replicates Concentration		
Cd 226.502	-0.1701u	-0.0795u	-0.1879u
Co 228.615	0.3405	0.0075	-0.7295u
Cr 267.716	0.0376	-0.2780u	-0.4022u
Cu 324.754	0.4164	0.1798	-0.1317u
Fe 271.441	-4.4678u	4.4406	-3.6045u
K 766.491	69.8390	68.6069	68.6965
Mg 279.078	1.0882	0.2560	-1.6558u
Mn 257.610	-0.0336u	0.0325	0.0695
Mo 202.032	-1.3274u	-2.1917u	-1.4530u
Na 330.237	535.485	672.942	738.883
Ni 231.604	-0.1359u	-1.0264u	-1.0810u
Pb 220.353	1.1447	2.1012	-1.4487u
Sb 206.834	-13.5065u	-13.7567u	-4.0609u
Se 196.026	17.3859	2.0217	-6.1411u
Si 288.158	34.6050	36.4485	35.4770
Sn 189.925	1.0156	1.0592	-0.5652u
Sr 216.596	-0.9261u	0.4308	-1.0021u
Ti 334.941	0.0352	-0.0388u	-0.0429u
Tl 190.794	0.6906	-1.2050u	1.3689
V 292.401	-0.1208u	-0.5069u	-0.1606u
Zn 206.200	-0.0759u	-0.8369u	-1.7069u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4491	ppb	0.3132	69.7	-12.3624
Al 308.215	-0.9892	ppb	0.6144	62.1	159.785
As 188.980	0.1544	ppb	3.7411	2422.6	1.2884
B 249.678	25.0785	ppb	0.3953	1.6	70.9749
Ba 389.178	-0.0201	ppb	0.6542	3259.1	-64.2876
Be 313.042	-0.0350	ppb	0.0086	24.6	-189.894
Ca 370.602	13.72	ppb	3.707	27.0	68.52
Cd 226.502	-0.1458	ppb	0.0581	39.8	9.6990
Co 228.615	-0.1272	ppb	0.5476	430.6	-12.6662
Cr 267.716	-0.2142	ppb	0.2267	105.8	18.5533
Cu 324.754	0.1548	ppb	0.2749	177.5	208.348
Fe 271.441	-1.2106	ppb	4.9131	405.8	26.6325
K 766.491	69.0474	ppb	0.6870	1.0	2150.06
Mg 279.078	-0.1038	ppb	1.4069	1354.9	30.9438
Mn 257.610	0.0228	ppb	0.0522	229.3	23.8360
Mo 202.032	-1.6573	ppb	0.4670	28.2	0.4930
Na 330.237	649.103	ppb	103.773	16.0	74.8629
Ni 231.604	-0.7478	ppb	0.5306	71.0	-3.3065
Pb 220.353	0.5991	ppb	1.8368	306.6	7.0290
Sb 206.834	-10.4414	ppb	5.5271	52.9	6.9537
Se 196.026	4.4222	ppb	11.9458	270.1	2.8685
Si 288.158	35.5102	ppb	0.9222	2.6	453.495
Sn 189.925	0.5032	ppb	0.9255	183.9	-0.0979
Sr 216.596	-0.4991	ppb	0.8063	161.5	7.6578
Ti 334.941	-0.0155	ppb	0.0439	283.2	-37.3768
Tl 190.794	0.2848	ppb	1.3341	468.4	-10.1524
V 292.401	-0.2627	ppb	0.2124	80.8	-6.2535
Zn 206.200	-0.8732	ppb	0.8161	93.5	-0.5780

680-161766-B-2-D (Samp) **12/18/2018, 3:42:59 PM** **Rack 1, Tube 5**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.5471	50.9841	51.4113
Al 308.215	4983.75	4989.78	4987.82
As 188.980	107.799	94.4437	96.6249
B 249.678	309.730	308.731	311.755
Ba 389.178	101.695	102.097	102.673
Be 313.042	52.0132	51.9140	52.0392
Ca 370.602	5145	5137	5147
Cd 226.502	52.2052	51.8852	51.9805
Co 228.615	51.3275	51.6610	51.3463
Cr 267.716	103.429	103.841	103.575
Cu 324.754	102.004	101.423	102.522
Fe 271.441	5113.10	5138.43	5134.80
K 766.491	8193.13	8187.05	8209.85
Mg 279.078	5054.85	5042.37	5055.95
Mn 257.610	514.213	514.284	515.134
Mo 202.032	102.637	102.224	101.042
Na 330.237	8141.83	8155.06	8389.61
Ni 231.604	102.393	102.760	102.192
Pb 220.353	517.116	510.074	510.779
Sb 206.834	51.1722	52.7495	47.3182
Se 196.026	104.871	82.3945	103.313
Si 288.158	169.270	172.156	171.724
Sn 189.925	100.989	101.896	105.270
Sr 216.596	103.214	102.338	103.403
Ti 334.941	102.162	102.226	102.358
Tl 190.794	39.8587	34.5769	37.8437
V 292.401	102.373	102.329	102.383
Zn 206.200	108.991	101.891	103.101

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9809	ppb	0.4321	0.8	1860.19
Al 308.215	4987.12	ppb	3.0750	0.1	12668.8
As 188.980	99.6225	ppb	7.1645	7.2	27.5168
B 249.678	310.072	ppb	1.5406	0.5	1984.22
Ba 389.178	102.155	ppb	0.4917	0.5	1076.76
Be 313.042	51.9888	ppb	0.0661	0.1	43026.3
Ca 370.602	5143	ppb	4.932	0.1	11763
Cd 226.502	52.0236	ppb	0.1643	0.3	865.542
Co 228.615	51.4449	ppb	0.1874	0.4	246.822
Cr 267.716	103.615	ppb	0.2088	0.2	2430.50
Cu 324.754	101.983	ppb	0.5499	0.5	4228.46
Fe 271.441	5128.77	ppb	13.6952	0.3	4255.44
K 766.491	8196.67	ppb	11.8052	0.1	223662
Mg 279.078	5051.06	ppb	7.5412	0.1	7300.92
Mn 257.610	514.544	ppb	0.5123	0.1	56308.7
Mo 202.032	101.968	ppb	0.8279	0.8	233.849
Na 330.237	8228.83	ppb	139.391	1.7	273.784
Ni 231.604	102.448	ppb	0.2881	0.3	140.060
Pb 220.353	512.656	ppb	3.8783	0.8	307.140
Sb 206.834	50.4133	ppb	2.7940	5.5	33.6469
Se 196.026	96.8595	ppb	12.5513	13.0	20.5113
Si 288.158	171.050	ppb	1.5566	0.9	1132.03

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	102.718	ppb	2.2559	2.2	33.0285
Sr 216.596	102.985	ppb	0.5682	0.6	443.811
Ti 334.941	102.249	ppb	0.1003	0.1	12227.1
Tl 190.794	37.4264	ppb	2.6655	7.1	5.3806
V 292.401	102.362	ppb	0.0290	0.0	1476.16
Zn 206.200	104.661	ppb	3.7984	3.6	37.3717

680-161766-B-2-E MS (Samp) **12/18/2018, 3:46:59 PM** **Rack 1, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.1742	50.3776	49.9280
Al 308.215	4826.06	4840.57	4833.07
As 188.980	93.0101	100.645	98.2760
B 249.678	304.702	305.292	302.867
Ba 389.178	99.5611	99.8142	98.4922
Be 313.042	50.4934	50.5662	50.4445
Ca 370.602	4994	4985	4976
Cd 226.502	50.4001	50.7416	50.6192
Co 228.615	49.2111	50.4512	49.0536
Cr 267.716	101.176	101.245	101.356
Cu 324.754	99.5301	99.1800	99.3915
Fe 271.441	4986.65	4978.61	4993.95
K 766.491	7958.74	7951.66	7935.78
Mg 279.078	4905.58	4907.39	4887.62
Mn 257.610	499.193	499.476	498.990
Mo 202.032	97.0258	96.5029	97.9062
Na 330.237	8172.18	7857.08	7835.26
Ni 231.604	100.159	98.6185	98.3160
Pb 220.353	497.792	500.133	489.758
Sb 206.834	42.7641	51.9200	48.1530
Se 196.026	85.4865	85.4671	98.8583
Si 288.158	172.892	170.628	172.381
Sn 189.925	102.593	100.814	94.1466
Sr 216.596	102.232	99.9977	100.756
Ti 334.941	99.6500	99.6127	99.2772
Tl 190.794	43.5130	43.1349	43.4558
V 292.401	98.7896	99.0123	98.4862
Zn 206.200	102.084	101.306	103.504

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.1599	ppb	0.2251	0.4	1829.77
Al 308.215	4833.23	ppb	7.2546	0.2	12282.8
As 188.980	97.3104	ppb	3.9080	4.0	26.9074
B 249.678	304.287	ppb	1.2645	0.4	1945.42
Ba 389.178	99.2891	ppb	0.7017	0.7	1044.74
Be 313.042	50.5013	ppb	0.0613	0.1	41790.7
Ca 370.602	4985	ppb	9.146	0.2	11402
Cd 226.502	50.5870	ppb	0.1730	0.3	841.972
Co 228.615	49.5720	ppb	0.7655	1.5	237.416
Cr 267.716	101.259	ppb	0.0913	0.1	2375.76
Cu 324.754	99.3672	ppb	0.1763	0.2	4125.16
Fe 271.441	4986.40	ppb	7.6743	0.2	4138.05
K 766.491	7948.73	ppb	11.7584	0.1	216905

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	4900.20	ppb	10.9300	0.2	7083.77
Mn 257.610	499.220	ppb	0.2440	0.0	54632.4
Mo 202.032	97.1449	ppb	0.7092	0.7	222.986
Na 330.237	7954.84	ppb	188.537	2.4	266.584
Ni 231.604	99.0311	ppb	0.9883	1.0	135.313
Pb 220.353	495.894	ppb	5.4417	1.1	297.317
Sb 206.834	47.6123	ppb	4.6018	9.7	32.4226
Se 196.026	89.9373	ppb	7.7258	8.6	19.1916
Si 288.158	171.967	ppb	1.1874	0.7	1135.43
Sn 189.925	99.1845	ppb	4.4526	4.5	31.8832
Sr 216.596	100.996	ppb	1.1364	1.1	435.465
Ti 334.941	99.5133	ppb	0.2053	0.2	11899.0
Tl 190.794	43.3679	ppb	0.2038	0.5	7.8531
V 292.401	98.7627	ppb	0.2641	0.3	1424.22
Zn 206.200	102.298	ppb	1.1148	1.1	36.5220

680-161766-B-2-F MSD (Samp) **12/18/2018, 3:51:00 PM** **Rack 1, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.3376	52.2443	52.0949
Al 308.215	5000.28	4994.73	5000.79
As 188.980	93.4934	95.6125	93.6911
B 249.678	317.807	317.921	320.597
Ba 389.178	102.799	102.804	102.962
Be 313.042	52.1753	52.1724	52.1467
Ca 370.602	5150	5163	5156
Cd 226.502	52.5830	52.5088	52.4364
Co 228.615	52.7733	52.0163	51.8695
Cr 267.716	104.043	104.133	103.529
Cu 324.754	101.348	102.296	102.029
Fe 271.441	5145.55	5147.02	5136.56
K 766.491	8187.10	8188.29	8197.32
Mg 279.078	5068.89	5059.31	5064.57
Mn 257.610	515.969	516.187	515.979
Mo 202.032	102.618	102.644	102.596
Na 330.237	8466.82	8495.99	8416.28
Ni 231.604	101.207	102.871	104.146
Pb 220.353	512.005	516.812	514.827
Sb 206.834	57.9995	53.8451	41.4617
Se 196.026	85.2319	86.4398	113.670
Si 288.158	180.900	179.620	181.887
Sn 189.925	104.658	104.224	101.419
Sr 216.596	103.568	103.447	103.765
Ti 334.941	102.534	102.767	102.709
Tl 190.794	38.2535	40.8547	42.2786
V 292.401	102.018	102.334	102.335
Zn 206.200	102.487	107.400	102.273

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.8923	ppb	0.4861	0.9	1893.97
Al 308.215	4998.60	ppb	3.3631	0.1	12697.6
As 188.980	94.2657	ppb	1.1706	1.2	26.1031
B 249.678	318.775	ppb	1.5790	0.5	2042.78

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	102.855	ppb	0.0922	0.1	1084.55
Be 313.042	52.1648	ppb	0.0157	0.0	43172.4
Ca 370.602	5156	ppb	6.718	0.1	11793
Cd 226.502	52.5094	ppb	0.0733	0.1	873.488
Co 228.615	52.2197	ppb	0.4850	0.9	250.709
Cr 267.716	103.902	ppb	0.3261	0.3	2437.17
Cu 324.754	101.891	ppb	0.4886	0.5	4224.87
Fe 271.441	5143.04	ppb	5.6624	0.1	4267.23
K 766.491	8190.90	ppb	5.5882	0.1	223505
Mg 279.078	5064.25	ppb	4.7968	0.1	7319.90
Mn 257.610	516.045	ppb	0.1232	0.0	56472.9
Mo 202.032	102.619	ppb	0.0240	0.0	235.316
Na 330.237	8459.70	ppb	40.3279	0.5	279.858
Ni 231.604	102.742	ppb	1.4738	1.4	140.467
Pb 220.353	514.548	ppb	2.4157	0.5	308.249
Sb 206.834	51.1021	ppb	8.6033	16.8	33.9442
Se 196.026	95.1138	ppb	16.0811	16.9	20.1788
Si 288.158	180.802	ppb	1.1365	0.6	1179.24
Sn 189.925	103.433	ppb	1.7582	1.7	33.2602
Sr 216.596	103.593	ppb	0.1607	0.2	446.367
Ti 334.941	102.670	ppb	0.1210	0.1	12277.6
Tl 190.794	40.4623	ppb	2.0410	5.0	6.6450
V 292.401	102.229	ppb	0.1830	0.2	1474.13
Zn 206.200	104.053	ppb	2.9005	2.8	37.1529

680-161773-D-2-B (Samp) **12/18/2018, 3:55:02 PM** **Rack 1, Tube 8**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1558u	0.3313	0.2905
Al 308.215	1076.97	1073.22	1077.88
As 188.980	2.8897	9.0788	1.5267
B 249.678	36.7017	36.3469	35.3763
Ba 389.178	20.2822	20.9109	19.6241
Be 313.042	0.1535	0.1499	0.1502
Ca 370.602	30767	30793	30772
Cd 226.502	-0.3233u	-0.1164u	-0.1635u
Co 228.615	5.3124	4.6696	5.1629
Cr 267.716	0.6231	0.9078	0.5358
Cu 324.754	3.4668	2.9309	3.7981
Fe 271.441	344.125	334.624	319.393
K 766.491	3049.55	3051.33	3051.74
Mg 279.078	4203.50	4213.74	4214.13
Mn 257.610	22.9320	22.9653	22.9188
Mo 202.032	1.4996	0.8547	0.5206
Na 330.237	27442.5	27651.0	27450.9
Ni 231.604	-1.1907u	0.2182	0.9082
Pb 220.353	3.2854	1.1610	9.1825
Sb 206.834	-4.7295u	-0.9863u	-6.3724u
Se 196.026	0.0573	-2.1856u	-9.4055u
Si 288.158	6510.10	6503.70	6500.87
Sn 189.925	-0.4621u	-1.4598u	-2.8256u
Sr 216.596	120.271	118.310	121.334
Ti 334.941	4.1735	4.1291	4.0711

Label	Replicates Concentration		
Tl 190.794	-1.3320u	-4.7776u	-2.4091u
V 292.401	1.0810	1.6553	1.4896
Zn 206.200	59.2335	51.6920	46.6967

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1553	ppb	0.2702	173.9	-23.7837
Al 308.215	1076.03	ppb	2.4695	0.2	2859.68
As 188.980	4.4984	ppb	4.0249	89.5	2.4350
B 249.678	36.1416	ppb	0.6861	1.9	145.112
Ba 389.178	20.2724	ppb	0.6435	3.2	165.241
Be 313.042	0.1512	ppb	0.0020	1.3	-31.8468
Ca 370.602	30778	ppb	13.50	0.0	70192
Cd 226.502	-0.2011	ppb	0.1084	53.9	9.0708
Co 228.615	5.0483	ppb	0.3364	6.7	13.3996
Cr 267.716	0.6889	ppb	0.1945	28.2	39.8255
Cu 324.754	3.3986	ppb	0.4376	12.9	336.439
Fe 271.441	332.714	ppb	12.4763	3.7	301.958
K 766.491	3050.87	ppb	1.1638	0.0	83417.4
Mg 279.078	4210.46	ppb	6.0262	0.1	6096.15
Mn 257.610	22.9387	ppb	0.0240	0.1	2550.44
Mo 202.032	0.9583	ppb	0.4977	51.9	6.3801
Na 330.237	27514.8	ppb	118.037	0.4	782.732
Ni 231.604	-0.0214	ppb	1.0697	4988.6	-2.3025
Pb 220.353	4.5430	ppb	4.1560	91.5	9.3274
Sb 206.834	-4.0294	ppb	2.7604	68.5	9.8144
Se 196.026	-3.8446	ppb	4.9447	128.6	1.2947
Si 288.158	6504.89	ppb	4.7315	0.1	31500.4
Sn 189.925	-1.5825	ppb	1.1865	75.0	-0.7704
Sr 216.596	119.972	ppb	1.5337	1.3	516.679
Ti 334.941	4.1245	ppb	0.0513	1.2	472.686
Tl 190.794	-2.8396	ppb	1.7627	62.1	-11.4521
V 292.401	1.4086	ppb	0.2956	21.0	17.8587
Zn 206.200	52.5407	ppb	6.3113	12.0	18.6449

680-161779-E-16-E (Samp) **12/18/2018, 3:59:03 PM** **Rack 1, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0084u	0.0396	0.4343
Al 308.215	14.6365	13.5324	15.2383
As 188.980	-2.4564u	-4.5774u	-2.3566u
B 249.678	41.4800	41.0124	41.5128
Ba 389.178	285.624	287.204	287.548
Be 313.042	-0.0342u	-0.0443u	-0.0523u
Ca 370.602	88660	88641	88632
Cd 226.502	-0.2615u	-0.0106u	-0.2805u
Co 228.615	0.1740	0.4291	0.3275
Cr 267.716	9.5944	9.5856	9.5475
Cu 324.754	0.7478	0.4327	0.5623
Fe 271.441	5.5691	13.5658	-0.9361u
K 766.491	2357.79	2357.26	2355.67
Mg 279.078	31345.5	31279.7	31256.3
Mn 257.610	-1.1090	-1.0811	-1.1397
Mo 202.032	1.0192	-1.1429u	1.2797

Label	Replicates Concentration		
Na 330.237	60876.7	60790.6	60461.7
Ni 231.604	0.4750	0.6157	1.8279
Pb 220.353	-4.9221u	-2.2232u	6.2762
Sb 206.834	-7.6782u	2.1715	-3.5117u
Se 196.026	3.6380	1.6946	3.6003
Si 288.158	10282.1	10272.9	10272.3
Sn 189.925	-2.4476u	4.5043	0.6233
Sr 216.596	181.193	181.896	182.599
Ti 334.941	-0.7170	-0.6422	-0.6472
Tl 190.794	-5.4798u	2.3851	-3.1926u
V 292.401	1.1035	1.1389	0.8784
Zn 206.200	6.2905	2.7268	4.8330

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1552	ppb	0.2429	156.6	-24.2506
Al 308.215	14.4691	ppb	0.8652	6.0	198.611
As 188.980	-3.1302	ppb	1.2543	40.1	0.4198
B 249.678	41.3351	ppb	0.2799	0.7	180.407
Ba 389.178	286.792	ppb	1.0262	0.4	3150.13
Be 313.042	-0.0436	ppb	0.0091	20.8	-186.624
Ca 370.602	88644	ppb	14.32	0.0	202096
Cd 226.502	-0.1842	ppb	0.1506	81.8	9.1092
Co 228.615	0.3102	ppb	0.1284	41.4	-10.4742
Cr 267.716	9.5758	ppb	0.0249	0.3	246.298
Cu 324.754	0.5809	ppb	0.1584	27.3	225.190
Fe 271.441	6.0663	ppb	7.2637	119.7	32.6756
K 766.491	2356.90	ppb	1.1039	0.0	64503.9
Mg 279.078	31293.8	ppb	46.2439	0.1	45112.6
Mn 257.610	-1.1100	ppb	0.0293	2.6	53.8942
Mo 202.032	0.3853	ppb	1.3299	345.1	5.0946
Na 330.237	60709.7	ppb	218.991	0.4	1657.68
Ni 231.604	0.9729	ppb	0.7438	76.5	-0.9157
Pb 220.353	-0.2897	ppb	5.8442	2017.4	6.5077
Sb 206.834	-3.0062	ppb	4.9442	164.5	10.2951
Se 196.026	2.9776	ppb	1.1113	37.3	2.5933
Si 288.158	10275.8	ppb	5.4866	0.1	49596.7
Sn 189.925	0.8933	ppb	3.4838	390.0	0.0362
Sr 216.596	181.896	ppb	0.7029	0.4	778.218
Ti 334.941	-0.6688	ppb	0.0418	6.3	-5.3902
Tl 190.794	-2.0958	ppb	4.0455	193.0	-11.1433
V 292.401	1.0403	ppb	0.1413	13.6	12.2620
Zn 206.200	4.6168	ppb	1.7917	38.8	1.3943

MB 680-552106/1-B (Samp) **12/18/2018, 4:03:05 PM** **Rack 1, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1919	0.0521	0.1643
Al 308.215	-0.7286u	-0.6866u	-1.8553u
As 188.980	-0.7587u	-0.9488u	-1.4855u
B 249.678	1.1227	1.8904	1.7478
Ba 389.178	0.7809	-0.2123u	0.2487
Be 313.042	-0.0336u	-0.0315u	-0.0487u
Ca 370.602	18.19	8.694	11.59

Label	Replicates Concentration		
Cd 226.502	-0.3342u	-0.2250u	-0.3388u
Co 228.615	-0.2792u	-0.5609u	0.0363
Cr 267.716	-0.4251u	-0.1908u	-0.2340u
Cu 324.754	0.0492	0.7723	0.0922
Fe 271.441	-0.5656u	4.2057	2.5753
K 766.491	1.4106	0.7251	0.7836
Mg 279.078	-1.5465u	0.5410	0.1009
Mn 257.610	0.3265	0.3672	0.4421
Mo 202.032	-1.4592u	-1.9783u	-0.8307u
Na 330.237	-185.496u	-437.395u	-36.0023u
Ni 231.604	-0.6489u	-0.2874u	-0.2051u
Pb 220.353	-2.6812u	1.9277	-0.0717u
Sb 206.834	-7.2447u	-5.9991u	-7.5278u
Se 196.026	-8.0690u	-7.0606u	-0.6102u
Si 288.158	-1.4779u	-2.8148u	-3.2818u
Sn 189.925	-0.1008u	6.3479	7.4980
Sr 216.596	-1.0165u	-0.4313u	0.7620
Ti 334.941	0.0830	-0.1080u	-0.0636u
Tl 190.794	3.0699	-0.3543u	-3.5429u
V 292.401	-0.1642u	0.4929	0.3810
Zn 206.200	-1.0457u	0.3105	1.3650

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1361	ppb	0.0741	54.4	-23.9657
Al 308.215	-1.0902	ppb	0.6629	60.8	159.551
As 188.980	-1.0643	ppb	0.3769	35.4	0.9668
B 249.678	1.5870	ppb	0.4083	25.7	-87.1588
Ba 389.178	0.2724	ppb	0.4970	182.4	-61.0380
Be 313.042	-0.0380	ppb	0.0094	24.7	-192.352
Ca 370.602	12.83	ppb	4.866	37.9	66.50
Cd 226.502	-0.2994	ppb	0.0644	21.5	7.1954
Co 228.615	-0.2680	ppb	0.2987	111.5	-13.3788
Cr 267.716	-0.2833	ppb	0.1247	44.0	16.9417
Cu 324.754	0.3046	ppb	0.4056	133.2	214.258
Fe 271.441	2.0718	ppb	2.4252	117.1	29.3387
K 766.491	0.9731	ppb	0.3800	39.1	294.745
Mg 279.078	-0.3015	ppb	1.1004	364.9	30.6552
Mn 257.610	0.3786	ppb	0.0586	15.5	62.7514
Mo 202.032	-1.4227	ppb	0.5747	40.4	1.0214
Na 330.237	-219.631	ppb	202.862	92.4	51.9680
Ni 231.604	-0.3805	ppb	0.2361	62.0	-2.7960
Pb 220.353	-0.2751	ppb	2.3112	840.2	6.5165
Sb 206.834	-6.9239	ppb	0.8133	11.7	8.5276
Se 196.026	-5.2466	ppb	4.0468	77.1	1.0265
Si 288.158	-2.5248uv	ppb	0.9362	37.1	271.214
Sn 189.925	4.5817	ppb	4.0957	89.4	1.2238
Sr 216.596	-0.2286	ppb	0.9064	396.5	8.7972
Ti 334.941	-0.0295	ppb	0.1000	338.4	-39.0241
Tl 190.794	-0.2758	ppb	3.3071	1199.2	-10.3856
V 292.401	0.2366	ppb	0.3515	148.6	0.9879
Zn 206.200	0.2099	ppb	1.2085	575.7	-0.1881

Cont Calib Verif (CCV) **12/18/2018, 4:07:08 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	488.957	492.899	496.540
Al 308.215	9826.64	9803.32	9790.70
As 188.980	494.524	493.669	494.169
B 249.678	493.605	491.877	494.863
Ba 389.178	495.923	496.009	495.372
Be 313.042	508.589	509.279	508.651
Ca 370.602	9970	9982	9982
Cd 226.502	503.729	504.529	504.720
Co 228.615	503.952	504.120	504.136
Cr 267.716	499.587	500.633	499.340
Cu 324.754	488.153	491.157	494.266
Fe 271.441	9943.02	9997.89	9987.33
K 766.491	9760.59	9762.19	9723.82
Mg 279.078	9960.75	9980.56	9975.10
Mn 257.610	500.180	500.208	499.892
Mo 202.032	497.284	497.359	493.940
Na 330.237	9853.08	10219.9	9933.39
Ni 231.604	498.885	498.864	495.420
Pb 220.353	500.879	489.977	499.966
Sb 206.834	484.825	489.834	492.279
Se 196.026	482.071	499.069	485.057
Si 288.158	5028.52	5028.45	5024.86
Sn 189.925	485.066	501.357	503.910
Sr 216.596	504.688	500.640	505.107
Ti 334.941	500.790	501.016	500.692
Tl 190.794	489.419	492.054	484.662
V 292.401	496.253	496.909	496.794
Zn 206.200	1008.74	1001.25	1008.67

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	492.799	ppb	3.7921	0.8	18233.4	98.55971
Al 308.215	9806.89	ppb	18.2341	0.2	24769.1	98.06887
As 188.980	494.121	ppb	0.4297	0.1	131.513	98.82415
B 249.678	493.448	ppb	1.4993	0.3	3213.67	98.68968
Ba 389.178	495.768	ppb	0.3457	0.1	5453.20	99.15360
Be 313.042	508.840	ppb	0.3820	0.1	422554	101.76797
Ca 370.602	9978	ppb	6.920	0.1	22786	99.78067
Cd 226.502	504.326	ppb	0.5256	0.1	8252.84	100.86519
Co 228.615	504.069	ppb	0.1018	0.0	2523.76	100.81389
Cr 267.716	499.853	ppb	0.6862	0.1	11629.0	99.97066
Cu 324.754	491.192	ppb	3.0565	0.6	19590.7	98.23840
Fe 271.441	9976.08	ppb	29.1171	0.3	8275.01	99.71095
K 766.491	9748.87	ppb	21.7045	0.2	265966	97.48870
Mg 279.078	9972.13	ppb	10.2283	0.1	14389.3	99.72134
Mn 257.610	500.093	ppb	0.1752	0.0	54765.9	100.01863
Mo 202.032	496.194	ppb	1.9524	0.4	1121.85	99.23888
Na 330.237	10002.1	ppb	192.807	1.9	317.608	100.02110
Ni 231.604	497.723	ppb	1.9944	0.4	688.914	99.54461
Pb 220.353	496.941	ppb	6.0481	1.2	297.577	99.38811
Sb 206.834	488.979	ppb	3.7998	0.8	227.796	97.79587
Se 196.026	488.732	ppb	9.0753	1.9	95.1500	97.74648
Si 288.158	5027.28	ppb	2.0948	0.0	24545.6	100.54552

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	496.778	ppb	10.2229	2.1	160.734	99.35555
Sr 216.596	503.479	ppb	2.4670	0.5	2128.10	100.69571
Ti 334.941	500.833	ppb	0.1662	0.0	59976.7	100.16653
Tl 190.794	488.711	ppb	3.7464	0.8	193.656	97.74229
V 292.401	496.652	ppb	0.3501	0.1	7168.61	99.33044
Zn 206.200	1006.22	ppb	4.3043	0.4	361.688	100.62172

Cont Calib Blank (CCB) **12/18/2018, 4:11:11 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5686	-0.0805u	-0.1576u
Al 308.215	3.0072	0.5678	1.9582
As 188.980	2.0753	-4.1736u	-2.6983u
B 249.678	4.6215	3.8705	4.0740
Ba 389.178	0.2051	0.7422	-0.2379u
Be 313.042	0.0180	0.0061	0.0141
Ca 370.602	1.934	0.9251	0.8027
Cd 226.502	-0.2176u	-0.1241u	0.0579
Co 228.615	-0.1814u	0.6322	0.0159
Cr 267.716	-0.3056u	-0.1194u	-0.1099u
Cu 324.754	-0.0518u	0.1798	0.0814
Fe 271.441	-2.8622u	8.4362	9.3623
K 766.491	1.3009	0.2164	0.7288
Mg 279.078	-1.7470u	-2.5325u	-2.8859u
Mn 257.610	0.0722	0.0967	0.1199
Mo 202.032	-0.8133u	-0.4518u	-0.0919u
Na 330.237	-262.638u	-43.0965u	-88.4179u
Ni 231.604	-1.1717u	-1.4668u	-1.0234u
Pb 220.353	-3.4946u	1.6288	-4.1150u
Sb 206.834	-3.7659u	-5.5178u	-5.9477u
Se 196.026	0.6889	-16.2732u	-15.2525u
Si 288.158	2.5299	1.5974	1.5016
Sn 189.925	2.7110	1.3467	5.9779
Sr 216.596	0.3779	-1.3864u	-0.3469u
Ti 334.941	0.1318	0.1540	0.1017
Tl 190.794	1.4251	-2.4282u	-6.8763u
V 292.401	0.4774	0.4034	0.5847
Zn 206.200	2.1003	1.9439	1.1750

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1102	ppb	0.3989	362.0	-24.9248	0.11017
Al 308.215	1.8444	ppb	1.2237	66.3	166.931	1.84439
As 188.980	-1.5989	ppb	3.2663	204.3	0.8255	-1.59889
B 249.678	4.1887	ppb	0.3884	9.3	-69.6441	4.18869
Ba 389.178	0.2365	ppb	0.4908	207.6	-61.4399	0.23645
Be 313.042	0.0127	ppb	0.0060	47.5	-150.313	0.01271
Ca 370.602	1.220	ppb	0.6206	50.9	40.05	1.22045
Cd 226.502	-0.0946	ppb	0.1401	148.1	10.5369	-0.09458
Co 228.615	0.1555	ppb	0.4244	272.9	-11.2583	0.15554
Cr 267.716	-0.1783	ppb	0.1103	61.9	19.3794	-0.17831
Cu 324.754	0.0698	ppb	0.1162	166.5	205.014	0.06979
Fe 271.441	4.9788	ppb	6.8062	136.7	31.7460	4.97878
K 766.491	0.7487	ppb	0.5425	72.5	288.629	0.74872

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-2.3885	ppb	0.5829	24.4	27.6516	-2.38848
Mn 257.610	0.0963	ppb	0.0238	24.7	31.8621	0.09628
Mo 202.032	-0.4523	ppb	0.3607	79.7	3.2076	-0.45235
Na 330.237	-131.384	ppb	115.906	88.2	54.2948	-131.38414
Ni 231.604	-1.2206	ppb	0.2257	18.5	-3.9638	-1.22063
Pb 220.353	-1.9936	ppb	3.1524	158.1	5.5087	-1.99358
Sb 206.834	-5.0772	ppb	1.1557	22.8	9.3464	-5.07715
Se 196.026	-10.2789	ppb	9.5121	92.5	0.0678	-10.27892Z
Si 288.158	1.8763	ppb	0.5681	30.3	292.582	1.87627
Sn 189.925	3.3452	ppb	2.3799	71.1	0.8230	3.34520
Sr 216.596	-0.4518	ppb	0.8868	196.3	7.8438	-0.45180
Ti 334.941	0.1292	ppb	0.0263	20.3	-20.0356	0.12919
Tl 190.794	-2.6265	ppb	4.1542	158.2	-11.3648	-2.62646
V 292.401	0.4885	ppb	0.0911	18.7	4.5670	0.48854
Zn 206.200	1.7398	ppb	0.4953	28.5	0.3624	1.73976

LCS 680-552106/2-B (Samp) **12/18/2018, 4:15:11 PM** **Rack 1, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.5110	51.5908	51.2197
Al 308.215	4866.83	4861.63	4885.72
As 188.980	95.5658	91.1531	88.8683
B 249.678	194.143	195.412	195.615
Ba 389.178	101.775	100.358	100.882
Be 313.042	50.0588	49.9549	50.1056
Ca 370.602	4975	4969	4965
Cd 226.502	52.0121	52.0349	52.2863
Co 228.615	50.2303	51.7677	50.9360
Cr 267.716	100.413	99.7731	99.7309
Cu 324.754	98.1269	99.0613	99.2260
Fe 271.441	4929.36	4931.01	4956.54
K 766.491	8186.56	8172.72	8192.78
Mg 279.078	5016.63	4982.82	4976.64
Mn 257.610	505.251	504.360	505.223
Mo 202.032	94.2487	94.3696	96.7952
Na 330.237	4793.69	4695.55	4559.39
Ni 231.604	100.464	98.5300	97.2969
Pb 220.353	520.380	506.086	512.940
Sb 206.834	47.8846	42.2099	44.0339
Se 196.026	86.5917	82.5385	108.889
Si 288.158	-6.4138u	-6.4233u	-4.2535
Sn 189.925	89.4847	90.9624	95.7820
Sr 216.596	102.236	103.040	101.910
Ti 334.941	97.7992	97.5491	97.6827
Tl 190.794	40.4448	43.9567	39.6257
V 292.401	98.2505	98.4023	98.5218
Zn 206.200	104.843	104.895	108.806

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.4405	ppb	0.1954	0.4	1877.26
Al 308.215	4871.39	ppb	12.6788	0.3	12378.4
As 188.980	91.8624	ppb	3.4046	3.7	25.4701
B 249.678	195.056	ppb	0.7974	0.4	1210.19

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	101.005	ppb	0.7164	0.7	1063.85
Be 313.042	50.0397	ppb	0.0771	0.2	41407.5
Ca 370.602	4970	ppb	4.921	0.1	11368
Cd 226.502	52.1111	ppb	0.1522	0.3	866.818
Co 228.615	50.9780	ppb	0.7696	1.5	244.497
Cr 267.716	99.9724	ppb	0.3824	0.4	2345.88
Cu 324.754	98.8047	ppb	0.5927	0.6	4102.91
Fe 271.441	4938.97	ppb	15.2373	0.3	4099.05
K 766.491	8184.02	ppb	10.2658	0.1	223318
Mg 279.078	4992.03	ppb	21.5284	0.4	7216.00
Mn 257.610	504.945	ppb	0.5063	0.1	55258.7
Mo 202.032	95.1378	ppb	1.4366	1.5	218.465
Na 330.237	4682.88	ppb	117.663	2.5	180.358
Ni 231.604	98.7637	ppb	1.5965	1.6	134.940
Pb 220.353	513.135	ppb	7.1488	1.4	307.424
Sb 206.834	44.7095	ppb	2.8971	6.5	31.1377
Se 196.026	92.6729	ppb	14.1887	15.3	19.7135
Si 288.158	-5.6968uv	ppb	1.2500	21.9	281.945
Sn 189.925	92.0764	ppb	3.2931	3.6	29.5792
Sr 216.596	102.395	ppb	0.5817	0.6	441.393
Ti 334.941	97.6770	ppb	0.1252	0.1	11679.5
Tl 190.794	41.3424	ppb	2.3008	5.6	7.0157
V 292.401	98.3915	ppb	0.1360	0.1	1419.02
Zn 206.200	106.181	ppb	2.2734	2.1	37.9199

680-161907-A-2-D (Samp) **12/18/2018, 4:19:14 PM** **Rack 1, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0039u	0.0858	-0.0368u
Al 308.215	3194.20	3186.01	3204.70
As 188.980	-1.0488u	5.1950	-0.3001u
B 249.678	52.0140	52.3607	50.9543
Ba 389.178	19.9150	19.1236	19.2725
Be 313.042	0.0199	0.0168	0.0252
Ca 370.602	8289	8295	8301
Cd 226.502	0.0533	-0.0061	-0.2377u
Co 228.615	-0.1076	-0.5218u	0.7391
Cr 267.716	19.4330	19.5762	19.5429
Cu 324.754	13.8762	13.6612	13.1005
Fe 271.441	800.300	779.568	810.225
K 766.491	3147.70	3143.46	3152.02
Mg 279.078	924.873	919.189	930.298
Mn 257.610	2.2961	2.3286	2.4008
Mo 202.032	1.7201	2.2784	2.2828
Na 330.237	10668.8	10686.8	10775.8
Ni 231.604	1.6815	3.5271	2.5628
Pb 220.353	4.7238	-0.8398u	6.4554
Sb 206.834	-9.4174u	-2.0510u	-1.5085u
Se 196.026	-18.0431u	1.0661	-4.1746u
Si 288.158	6059.13	6031.69	6056.39
Sn 189.925	8.0540	3.1938	2.4180
Sr 216.596	138.274	137.541	139.418
Ti 334.941	104.598	102.733	104.523

Label	Replicates Concentration		
Tl 190.794	2.2146	-2.6208u	2.3638
V 292.401	4.7266	5.0262	4.7609
Zn 206.200	23.9299	31.1349	29.5263

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0150	ppb	0.0635	422.0	-29.2850
Al 308.215	3194.97	ppb	9.3701	0.3	8171.48
As 188.980	1.2820	ppb	3.4093	265.9	1.5840
B 249.678	51.7763	ppb	0.7327	1.4	249.897
Ba 389.178	19.4370	ppb	0.4206	2.2	152.848
Be 313.042	0.0206	ppb	0.0042	20.5	-142.943
Ca 370.602	8295	ppb	6.140	0.1	18946
Cd 226.502	-0.0635	ppb	0.1538	242.2	11.7634
Co 228.615	0.0366	ppb	0.6427	1758.1	-10.8473
Cr 267.716	19.5174	ppb	0.0749	0.4	476.886
Cu 324.754	13.5460	ppb	0.4005	3.0	736.896
Fe 271.441	796.697	ppb	15.6428	2.0	683.892
K 766.491	3147.72	ppb	4.2813	0.1	86057.1
Mg 279.078	924.787	ppb	5.5553	0.6	1362.65
Mn 257.610	2.3418	ppb	0.0536	2.3	284.897
Mo 202.032	2.0938	ppb	0.3236	15.5	8.9305
Na 330.237	10710.5	ppb	57.2649	0.5	339.755
Ni 231.604	2.5905	ppb	0.9231	35.6	1.3334
Pb 220.353	3.4465	ppb	3.8117	110.6	8.6396
Sb 206.834	-4.3256	ppb	4.4179	102.1	9.7326
Se 196.026	-7.0505	ppb	9.8739	140.0	0.6805
Si 288.158	6049.07	ppb	15.1152	0.2	29318.7
Sn 189.925	4.5553	ppb	3.0547	67.1	1.2166
Sr 216.596	138.411	ppb	0.9464	0.7	594.664
Ti 334.941	103.951	ppb	1.0561	1.0	12416.1
Tl 190.794	0.6525	ppb	2.8358	434.6	-10.0263
V 292.401	4.8379	ppb	0.1640	3.4	67.8576
Zn 206.200	28.1970	ppb	3.7820	13.4	9.8779

680-161907-A-2-D (Samp) **12/18/2018, 4:23:15 PM** **Rack 1, Tube 13**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0641	-0.0104u	-0.1205u
Al 308.215	870.054	876.763	878.908
As 188.980	-0.0771u	6.1823	2.4211
B 249.678	12.3227	11.9252	12.1900
Ba 389.178	4.1105	4.0727	3.8210
Be 313.042	-0.0245u	-0.0247u	-0.0274u
Ca 370.602	1655	1659	1672
Cd 226.502	-0.3140u	-0.2053u	-0.4019u
Co 228.615	-0.1103u	0.5204	1.8220
Cr 267.716	4.2342	3.8684	4.1598
Cu 324.754	2.6754	2.5689	2.5013
Fe 271.441	206.417	206.251	218.067
K 766.491	610.672	616.697	621.011
Mg 279.078	181.901	187.357	189.544
Mn 257.610	0.3955	0.3160	0.4275
Mo 202.032	-0.1283u	-0.0496u	0.1186

Label	Replicates Concentration		
Na 330.237	2051.72	2220.30	1864.72
Ni 231.604	-0.2573u	0.2921	0.2351
Pb 220.353	-3.4494u	0.4129	-0.6008u
Sb 206.834	-7.6134u	-6.2453u	-0.3524u
Se 196.026	12.2747	-3.9214u	2.4455
Si 288.158	1565.99	1572.82	1578.23
Sn 189.925	0.1052	2.8303	1.4350
Sr 216.596	28.2862	26.1026	26.4676
Ti 334.941	33.8430	33.3814	32.7906
Tl 190.794	-7.7444u	0.9831	-0.4355u
V 292.401	1.5711	0.8916	1.6903
Zn 206.200	5.5884	7.0180	7.5198

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0223	ppb	0.0929	417.1	-30.0274
Al 308.215	875.242	ppb	4.6192	0.5	2356.35
As 188.980	2.8421	ppb	3.1509	110.9	1.9972
B 249.678	12.1460	ppb	0.2024	1.7	-16.2900
Ba 389.178	4.0014	ppb	0.1574	3.9	-19.3966
Be 313.042	-0.0255	ppb	0.0017	6.5	-181.923
Ca 370.602	1662	ppb	9.256	0.6	3826
Cd 226.502	-0.3071	ppb	0.0985	32.1	7.2589
Co 228.615	0.7440	ppb	0.9854	132.4	-7.9745
Cr 267.716	4.0875	ppb	0.1933	4.7	118.482
Cu 324.754	2.5819	ppb	0.0878	3.4	304.177
Fe 271.441	210.245	ppb	6.7748	3.2	200.864
K 766.491	616.126	ppb	5.1933	0.8	17060.3
Mg 279.078	186.267	ppb	3.9364	2.1	299.244
Mn 257.610	0.3797	ppb	0.0574	15.1	64.6848
Mo 202.032	-0.0198	ppb	0.1261	638.3	4.1787
Na 330.237	2045.58	ppb	177.872	8.7	111.591
Ni 231.604	0.0899	ppb	0.3021	335.9	-2.1431
Pb 220.353	-1.2124	ppb	2.0025	165.2	5.9494
Sb 206.834	-4.7371	ppb	3.8583	81.4	9.5104
Se 196.026	3.5996	ppb	8.1595	226.7	2.7111
Si 288.158	1572.35	ppb	6.1356	0.4	7830.91
Sn 189.925	1.4568	ppb	1.3627	93.5	0.2114
Sr 216.596	26.9521	ppb	1.1697	4.3	123.656
Ti 334.941	33.3383	ppb	0.5275	1.6	3957.51
Tl 190.794	-2.3990	ppb	4.6833	195.2	-11.2767
V 292.401	1.3843	ppb	0.4309	31.1	17.6772
Zn 206.200	6.7087	ppb	1.0022	14.9	2.1494

680-161907-A-2-D (Samp) **12/18/2018, 4:27:14 PM** **Rack 1, Tube 14**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.6245	50.1386	50.8909
Al 308.215	8889.79	8872.75	8855.77
As 188.980	101.779	94.6779	100.645
B 249.678	244.160	245.553	247.255
Ba 389.178	119.255	120.036	119.129
Be 313.042	50.1979	50.2295	50.4064
Ca 370.602	13103	13123	13129

Label	Replicates Concentration		
Cd 226.502	51.6813	51.6647	51.6823
Co 228.615	51.2760	52.2307	50.6270
Cr 267.716	121.240	120.972	121.161
Cu 324.754	112.093	111.415	111.819
Fe 271.441	5981.07	5992.65	5977.32
K 766.491	11297.4	11306.7	11312.9
Mg 279.078	5854.08	5861.74	5864.01
Mn 257.610	503.001	503.718	504.211
Mo 202.032	98.8276	100.358	101.329
Na 330.237	15365.6	15529.5	15695.4
Ni 231.604	106.179	104.513	105.315
Pb 220.353	507.933	503.228	508.389
Sb 206.834	45.2978	48.6468	44.6703
Se 196.026	110.457	86.8824	103.482
Si 288.158	7209.04	7165.02	7177.10
Sn 189.925	98.2666	92.9694	98.3854
Sr 216.596	237.984	237.317	236.941
Ti 334.941	242.746	241.260	241.587
Tl 190.794	46.6077	46.2010	40.9142
V 292.401	105.724	106.119	104.958
Zn 206.200	131.751	129.812	130.370

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.5513	ppb	0.3814	0.8	1843.36
Al 308.215	8872.77	ppb	17.0107	0.2	22409.2
As 188.980	99.0342	ppb	3.8150	3.9	27.3608
B 249.678	245.656	ppb	1.5503	0.6	1549.74
Ba 389.178	119.473	ppb	0.4914	0.4	1270.05
Be 313.042	50.2779	ppb	0.1124	0.2	41606.0
Ca 370.602	13118	ppb	13.76	0.1	29943
Cd 226.502	51.6761	ppb	0.0099	0.0	860.667
Co 228.615	51.3779	ppb	0.8067	1.6	247.875
Cr 267.716	121.124	ppb	0.1375	0.1	2837.25
Cu 324.754	111.776	ppb	0.3412	0.3	4614.97
Fe 271.441	5983.68	ppb	7.9916	0.1	4959.62
K 766.491	11305.6	ppb	7.8035	0.1	308395
Mg 279.078	5859.94	ppb	5.2020	0.1	8465.50
Mn 257.610	503.643	ppb	0.6087	0.1	55124.8
Mo 202.032	100.171	ppb	1.2609	1.3	229.787
Na 330.237	15530.2	ppb	164.943	1.1	465.881
Ni 231.604	105.336	ppb	0.8334	0.8	144.074
Pb 220.353	506.517	ppb	2.8575	0.6	303.467
Sb 206.834	46.2050	ppb	2.1378	4.6	31.8352
Se 196.026	100.274	ppb	12.1106	12.1	21.1581
Si 288.158	7183.72	ppb	22.7412	0.3	34792.3
Sn 189.925	96.5405	ppb	3.0932	3.2	31.0273
Sr 216.596	237.414	ppb	0.5281	0.2	1011.98
Ti 334.941	241.864	ppb	0.7808	0.3	28949.3
Tl 190.794	44.5743	ppb	3.1763	7.1	8.3242
V 292.401	105.600	ppb	0.5903	0.6	1523.85
Zn 206.200	130.644	ppb	0.9978	0.8	46.7175

680-161907-A-2-E MS (Samp) **12/18/2018, 4:31:14 PM** **Rack 1, Tube 15**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.5253	50.5140	51.7403
Al 308.215	7728.27	7787.20	7762.87
As 188.980	90.6096	100.468	93.7222
B 249.678	245.913	246.887	249.523
Ba 389.178	120.209	120.547	120.250
Be 313.042	50.5657	50.7154	50.6203
Ca 370.602	13257	13293	13293
Cd 226.502	51.8972	51.8791	51.8876
Co 228.615	52.2065	51.7578	51.8976
Cr 267.716	119.044	119.162	119.655
Cu 324.754	111.184	111.708	112.293
Fe 271.441	5703.06	5738.65	5730.34
K 766.491	11269.9	11314.0	11307.1
Mg 279.078	5862.99	5887.61	5882.11
Mn 257.610	505.772	507.087	506.387
Mo 202.032	100.067	101.389	101.408
Na 330.237	15944.2	15636.5	15874.6
Ni 231.604	102.322	104.021	101.613
Pb 220.353	502.560	505.976	508.700
Sb 206.834	49.4489	46.9187	47.4516
Se 196.026	97.6531	93.0597	85.2913
Si 288.158	5607.49	5684.31	5656.94
Sn 189.925	98.3603	92.4760	96.5218
Sr 216.596	237.557	239.802	239.493
Ti 334.941	185.383	187.549	186.089
Tl 190.794	37.2178	33.6965	40.4133
V 292.401	104.593	105.084	105.280
Zn 206.200	129.563	130.762	131.777

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9265	ppb	0.7048	1.4	1857.40
Al 308.215	7759.44	ppb	29.6127	0.4	19618.4
As 188.980	94.9334	ppb	5.0397	5.3	26.2783
B 249.678	247.441	ppb	1.8675	0.8	1562.02
Ba 389.178	120.336	ppb	0.1845	0.2	1279.54
Be 313.042	50.6338	ppb	0.0758	0.1	41901.6
Ca 370.602	13281	ppb	20.68	0.2	30313
Cd 226.502	51.8880	ppb	0.0090	0.0	863.883
Co 228.615	51.9540	ppb	0.2296	0.4	250.231
Cr 267.716	119.287	ppb	0.3242	0.3	2794.53
Cu 324.754	111.729	ppb	0.5548	0.5	4613.06
Fe 271.441	5724.02	ppb	18.6213	0.3	4745.78
K 766.491	11297.0	ppb	23.7031	0.2	308160
Mg 279.078	5877.57	ppb	12.9240	0.2	8491.08
Mn 257.610	506.415	ppb	0.6581	0.1	55426.4
Mo 202.032	100.955	ppb	0.7688	0.8	231.557
Na 330.237	15818.4	ppb	161.377	1.0	473.579
Ni 231.604	102.652	ppb	1.2375	1.2	140.343
Pb 220.353	505.746	ppb	3.0768	0.6	303.040
Sb 206.834	47.9398	ppb	1.3339	2.8	32.5998
Se 196.026	92.0014	ppb	6.2485	6.8	19.5832
Si 288.158	5649.58	ppb	38.9362	0.7	27427.1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	95.7860	ppb	3.0103	3.1	30.7829
Sr 216.596	238.951	ppb	1.2172	0.5	1018.42
Ti 334.941	186.340	ppb	1.1048	0.6	22300.1
Tl 190.794	37.1092	ppb	3.3597	9.1	5.2262
V 292.401	104.986	ppb	0.3538	0.3	1514.57
Zn 206.200	130.701	ppb	1.1081	0.8	46.7381

680-161907-A-2-F MSD (Samp) **12/18/2018, 4:35:15 PM** **Rack 1, Tube 16**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.5237	53.3441	51.6536
Al 308.215	7676.53	7622.72	7614.70
As 188.980	90.7582	107.421	94.4573
B 249.678	252.196	253.159	252.360
Ba 389.178	125.065	123.996	124.792
Be 313.042	51.7280	51.8207	51.9500
Ca 370.602	13865	13897	13918
Cd 226.502	53.1749	52.9973	53.3935
Co 228.615	53.1729	53.1758	53.6485
Cr 267.716	121.251	120.977	121.334
Cu 324.754	115.432	116.449	115.663
Fe 271.441	5733.50	5732.08	5749.46
K 766.491	11711.7	11734.2	11754.4
Mg 279.078	6046.62	6037.28	6066.47
Mn 257.610	518.724	519.488	520.122
Mo 202.032	101.469	102.866	101.449
Na 330.237	16445.0	16591.1	16471.8
Ni 231.604	105.653	106.107	105.794
Pb 220.353	519.586	512.583	512.788
Sb 206.834	48.9886	43.0271	43.9104
Se 196.026	87.4601	113.746	110.815
Si 288.158	5475.26	5385.71	5350.17
Sn 189.925	95.0997	101.470	100.336
Sr 216.596	251.858	249.775	251.608
Ti 334.941	183.571	181.351	178.780
Tl 190.794	47.8623	42.6404	32.7974
V 292.401	106.860	106.872	106.363
Zn 206.200	141.173	134.887	132.799

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.1738	ppb	1.0156	1.9	1903.62
Al 308.215	7637.98	ppb	33.6241	0.4	19314.0
As 188.980	97.5455	ppb	8.7501	9.0	26.9672
B 249.678	252.572	ppb	0.5153	0.2	1596.55
Ba 389.178	124.618	ppb	0.5556	0.4	1327.25
Be 313.042	51.8329	ppb	0.1115	0.2	42897.8
Ca 370.602	13893	ppb	26.84	0.2	31710
Cd 226.502	53.1886	ppb	0.1985	0.4	885.118
Co 228.615	53.3324	ppb	0.2738	0.5	257.107
Cr 267.716	121.188	ppb	0.1866	0.2	2838.66
Cu 324.754	115.848	ppb	0.5327	0.5	4775.60
Fe 271.441	5738.35	ppb	9.6476	0.2	4757.67
K 766.491	11733.4	ppb	21.3557	0.2	320054

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6050.12	ppb	14.9104	0.2	8739.54
Mn 257.610	519.445	ppb	0.7000	0.1	56851.7
Mo 202.032	101.928	ppb	0.8124	0.8	233.749
Na 330.237	16502.6	ppb	77.7749	0.5	491.598
Ni 231.604	105.852	ppb	0.2321	0.2	144.788
Pb 220.353	514.985	ppb	3.9851	0.8	308.459
Sb 206.834	45.3087	ppb	3.2174	7.1	31.4165
Se 196.026	104.007	ppb	14.4049	13.8	21.8716
Si 288.158	5403.71	ppb	64.4627	1.2	26247.2
Sn 189.925	98.9688	ppb	3.3984	3.4	31.8144
Sr 216.596	251.080	ppb	1.1370	0.5	1069.62
Ti 334.941	181.234	ppb	2.3977	1.3	21689.3
Tl 190.794	41.1000	ppb	7.6497	18.6	6.8946
V 292.401	106.698	ppb	0.2903	0.3	1539.29
Zn 206.200	136.286	ppb	4.3587	3.2	48.7474

680-162037-A-5-B (Samp) **12/18/2018, 4:39:15 PM** **Rack 1, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1192u	-0.1219u	0.1983
Al 308.215	14.4793	16.0899	12.9299
As 188.980	5.8921	1.1145	-0.0043u
B 249.678	78.3286	78.9030	77.8580
Ba 389.178	151.979	153.545	153.599
Be 313.042	-0.0277u	-0.0313u	-0.0379u
Ca 370.602	80322	80495	80456
Cd 226.502	-0.3356u	-0.1845u	-0.1927u
Co 228.615	0.5546	-0.1677u	0.4360
Cr 267.716	-0.3537u	-0.7467u	-0.7772u
Cu 324.754	0.7116	-0.4521u	0.0773
Fe 271.441	34.9961	34.9767	39.0896
K 766.491	3668.67	3685.02	3685.04
Mg 279.078	17412.3	17487.9	17465.8
Mn 257.610	1188.46	1191.91	1192.30
Mo 202.032	0.6750	1.8365	1.6005
Na 330.237	42463.5	42486.8	42474.8
Ni 231.604	-0.5896u	-1.5215u	1.7349
Pb 220.353	-8.0471u	0.8406	-2.9186u
Sb 206.834	-10.4380u	-10.0203u	-4.3692u
Se 196.026	-23.0827u	4.1340	-0.0040
Si 288.158	4673.70	4679.80	4681.95
Sn 189.925	1.7243	-0.3494u	-2.4162u
Sr 216.596	398.618	400.596	399.919
Ti 334.941	-0.0452	0.0272	-0.0125
Tl 190.794	6.3613	-1.9630u	1.9185
V 292.401	0.5972	1.1072	0.7331
Zn 206.200	-1.2233u	7.9024	5.4753

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0143	ppb	0.1841	1289.8	-28.5381
Al 308.215	14.4997	ppb	1.5801	10.9	198.697
As 188.980	2.3341	ppb	3.1317	134.2	1.8633
B 249.678	78.3632	ppb	0.5234	0.7	429.627

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	153.041	ppb	0.9200	0.6	1651.88
Be 313.042	-0.0323	ppb	0.0052	16.1	-177.670
Ca 370.602	80425	ppb	90.52	0.1	183384
Cd 226.502	-0.2376	ppb	0.0849	35.8	8.2310
Co 228.615	0.2743	ppb	0.3874	141.2	-10.6736
Cr 267.716	-0.6259	ppb	0.2362	37.7	11.8324
Cu 324.754	0.1123	ppb	0.5826	519.0	206.730
Fe 271.441	36.3542	ppb	2.3690	6.5	57.5994
K 766.491	3679.57	ppb	9.4469	0.3	100552
Mg 279.078	17455.3	ppb	38.9098	0.2	25163.9
Mn 257.610	1190.89	ppb	2.1159	0.2	130309
Mo 202.032	1.3707	ppb	0.6139	44.8	7.3140
Na 330.237	42475.0	ppb	11.6443	0.0	1177.13
Ni 231.604	-0.1254	ppb	1.6771	1337.4	-2.4418
Pb 220.353	-3.3750	ppb	4.4614	132.2	4.7895
Sb 206.834	-8.2758	ppb	3.3897	41.0	7.8964
Se 196.026	-6.3176	ppb	14.6657	232.1	0.9364
Si 288.158	4678.48	ppb	4.2767	0.1	22735.9
Sn 189.925	-0.3471	ppb	2.0703	596.5	-0.3681
Sr 216.596	399.711	ppb	1.0049	0.3	1698.48
Ti 334.941	-0.0102	ppb	0.0363	356.7	24.4029
Tl 190.794	2.1056	ppb	4.1653	197.8	-8.9467
V 292.401	0.8125	ppb	0.2641	32.5	9.1072
Zn 206.200	4.0515	ppb	4.7265	116.7	1.1945

MB 680-552101/1-A (Samp) **12/18/2018, 4:43:16 PM** **Rack 1, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0152	-0.3708u	0.1596
Al 308.215	6.8595	3.1224	3.9304
As 188.980	5.5228	-0.1263u	-3.8032u
B 249.678	1.5747	1.6073	2.1324
Ba 389.178	-1.5543u	-0.5507u	-0.8123u
Be 313.042	-0.0206u	-0.0408u	-0.0275u
Ca 370.602	13.69	12.23	16.18
Cd 226.502	-0.0523u	-0.5369u	-0.3437u
Co 228.615	-0.0147u	-0.7470u	-0.2713u
Cr 267.716	0.0236	-0.0972u	-0.3991u
Cu 324.754	-0.0240u	-0.0698u	0.1477
Fe 271.441	12.3984	-2.8689u	0.1965
K 766.491	5.1578	5.7348	5.7990
Mg 279.078	-2.5050u	0.9774	3.4456
Mn 257.610	0.2177	0.2121	0.4113
Mo 202.032	-0.7435u	-0.5283u	-1.1790u
Na 330.237	121.780	-191.271u	324.660
Ni 231.604	1.2798	1.5652	-0.0362u
Pb 220.353	-5.9463u	1.5980	-6.7893u
Sb 206.834	-4.9585u	-5.6941u	-10.1271u
Se 196.026	-5.2464u	-10.1341u	-1.6093u
Si 288.158	9.6110	8.5201	6.4562
Sn 189.925	4.7817	-0.4440u	1.1561
Sr 216.596	0.2959	0.3015	-0.0174u
Ti 334.941	0.1961	0.1352	0.2373

Label	Replicates Concentration		
Tl 190.794	-0.6651u	0.6425	-0.6571u
V 292.401	-0.1806u	-0.1358u	0.4879
Zn 206.200	0.6390	-3.5287u	4.5316

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0653	ppb	0.2742	419.8	-31.4310
Al 308.215	4.6374	ppb	1.9663	42.4	173.916
As 188.980	0.5311	ppb	4.6976	884.5	1.3876
B 249.678	1.7715	ppb	0.3130	17.7	-85.9116
Ba 389.178	-0.9725	ppb	0.5206	53.5	-74.8584
Be 313.042	-0.0296	ppb	0.0103	34.6	-185.494
Ca 370.602	14.03	ppb	1.995	14.2	69.27
Cd 226.502	-0.3110	ppb	0.2440	78.5	7.0012
Co 228.615	-0.3443	ppb	0.3716	107.9	-13.7692
Cr 267.716	-0.1576	ppb	0.2177	138.2	19.8636
Cu 324.754	0.0180	ppb	0.1146	637.2	202.967
Fe 271.441	3.2420	ppb	8.0764	249.1	30.2816
K 766.491	5.5638	ppb	0.3531	6.3	419.862
Mg 279.078	0.6393	ppb	2.9897	467.6	32.0105
Mn 257.610	0.2804	ppb	0.1134	40.4	51.9947
Mo 202.032	-0.8169	ppb	0.3315	40.6	2.3864
Na 330.237	85.0563	ppb	259.919	305.6	60.0007
Ni 231.604	0.9363	ppb	0.8542	91.2	-0.9655
Pb 220.353	-3.7125	ppb	4.6184	124.4	4.5012
Sb 206.834	-6.9266	ppb	2.7960	40.4	8.5196
Se 196.026	-5.6633	ppb	4.2776	75.5	0.9471
Si 288.158	8.1958	ppb	1.6022	19.5	322.731
Sn 189.925	1.8313	ppb	2.6774	146.2	0.3325
Sr 216.596	0.1933	ppb	0.1826	94.4	10.5544
Ti 334.941	0.1895	ppb	0.0514	27.1	-12.8116
Tl 190.794	-0.2266	ppb	0.7527	332.2	-10.3657
V 292.401	0.0572	ppb	0.3737	653.6	-1.6817
Zn 206.200	0.5473	ppb	4.0309	736.5	-0.0667

LCS 680-552101/2-A (Samp) **12/18/2018, 4:47:17 PM** **Rack 1, Tube 19**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.7549	50.7086	50.8291
Al 308.215	4905.70	4907.86	4900.62
As 188.980	97.9253	100.644	88.9186
B 249.678	196.153	198.142	197.932
Ba 389.178	100.412	100.492	99.7602
Be 313.042	50.9677	50.9822	50.9794
Ca 370.602	4961	4979	4956
Cd 226.502	51.6215	51.5531	51.2859
Co 228.615	51.6279	51.0941	51.8421
Cr 267.716	101.564	101.078	101.112
Cu 324.754	99.9126	99.6549	98.8174
Fe 271.441	5031.40	5035.44	5021.80
K 766.491	7858.59	7861.29	7852.26
Mg 279.078	4991.60	4983.89	4987.57
Mn 257.610	504.756	504.791	504.112
Mo 202.032	101.113	101.169	99.2868

Label	Replicates Concentration		
Na 330.237	4632.62	4881.37	4731.28
Ni 231.604	99.2511	101.554	98.2747
Pb 220.353	507.789	506.210	507.710
Sb 206.834	42.2375	51.4204	50.4176
Se 196.026	92.5999	85.9647	89.6119
Si 288.158	-0.6135	-1.4481	-3.0428
Sn 189.925	93.0297	101.275	97.8821
Sr 216.596	101.584	101.347	100.510
Ti 334.941	100.704	100.501	100.699
Tl 190.794	38.6594	40.2428	40.9145
V 292.401	99.8701	100.893	100.008
Zn 206.200	99.7264	108.052	101.458

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.7642	ppb	0.0608	0.1	1852.17
Al 308.215	4904.73	ppb	3.7143	0.1	12462.2
As 188.980	95.8292	ppb	6.1372	6.4	26.5162
B 249.678	197.409	ppb	1.0932	0.6	1225.93
Ba 389.178	100.221	ppb	0.4013	0.4	1055.19
Be 313.042	50.9764	ppb	0.0077	0.0	42185.4
Ca 370.602	4966	ppb	12.35	0.2	11358
Cd 226.502	51.4869	ppb	0.1773	0.3	856.703
Co 228.615	51.5214	ppb	0.3853	0.7	247.203
Cr 267.716	101.251	ppb	0.2712	0.3	2375.58
Cu 324.754	99.4616	ppb	0.5726	0.6	4128.94
Fe 271.441	5029.55	ppb	7.0062	0.1	4173.71
K 766.491	7857.38	ppb	4.6319	0.1	214415
Mg 279.078	4987.69	ppb	3.8576	0.1	7209.74
Mn 257.610	504.553	ppb	0.3826	0.1	55215.9
Mo 202.032	100.523	ppb	1.0709	1.1	230.596
Na 330.237	4748.43	ppb	125.260	2.6	182.073
Ni 231.604	99.6932	ppb	1.6837	1.7	136.231
Pb 220.353	507.236	ppb	0.8899	0.2	303.963
Sb 206.834	48.0252	ppb	5.0373	10.5	32.5814
Se 196.026	89.3922	ppb	3.3231	3.7	19.0881
Si 288.158	-1.7015	ppb	1.2343	72.5	302.534
Sn 189.925	97.3955	ppb	4.1439	4.3	31.3030
Sr 216.596	101.147	ppb	0.5646	0.6	436.068
Ti 334.941	100.634	ppb	0.1157	0.1	12033.6
Tl 190.794	39.9389	ppb	1.1579	2.9	6.4270
V 292.401	100.257	ppb	0.5550	0.6	1445.73
Zn 206.200	103.079	ppb	4.3932	4.3	36.8029

680-161900-C-2-G (Samp) **12/18/2018, 4:51:18 PM** **Rack 1, Tube 20**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1990	0.3602	0.4246
Al 308.215	35.2389	36.3152	36.2438
As 188.980	1.7877	0.7887	0.5649
B 249.678	95.9336	93.8570	94.6216
Ba 389.178	3.6804	3.6978	3.6688
Be 313.042	-0.0417u	-0.0337u	-0.0267u
Ca 370.602	4510	4507	4493

Label	Replicates Concentration		
Cd 226.502	-0.2584u	0.2447	-0.2667u
Co 228.615	0.1928	0.2978	-0.3039u
Cr 267.716	2.9474	3.2008	2.8297
Cu 324.754	1.5136	1.7091	1.4307
Fe 271.441	22.0394	24.3403	26.8288
K 766.491	1679.75	1678.76	1680.47
Mg 279.078	542.625	545.406	550.452
Mn 257.610	1.2188	1.2632	1.1892
Mo 202.032	6.9943	6.4695	6.9480
Na 330.237	2394.68	2547.79	2228.54
Ni 231.604	-1.0198u	1.0532	0.8892
Pb 220.353	4.5926	-2.7302u	-7.1826u
Sb 206.834	-5.4841u	-3.3062u	-6.2478u
Se 196.026	-6.8392u	-1.0577u	-1.0718u
Si 288.158	572.377	575.588	575.203
Sn 189.925	6.0795	4.0274	-0.4754u
Sr 216.596	12.4747	12.4594	12.9789
Ti 334.941	0.9931	1.0694	1.1049
Tl 190.794	5.8305	3.0573	1.7136
V 292.401	16.4595	16.2457	16.5819
Zn 206.200	38.2692	43.3094	40.2890

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3279	ppb	0.1162	35.4	-16.8909
Al 308.215	35.9327	ppb	0.6019	1.7	253.016
As 188.980	1.0471	ppb	0.6511	62.2	1.5224
B 249.678	94.8041	ppb	1.0503	1.1	540.315
Ba 389.178	3.6823	ppb	0.0146	0.4	-22.6107
Be 313.042	-0.0340	ppb	0.0075	22.1	-188.683
Ca 370.602	4503	ppb	9.353	0.2	10302
Cd 226.502	-0.0935	ppb	0.2929	313.3	10.5680
Co 228.615	0.0623	ppb	0.3214	516.2	-11.7946
Cr 267.716	2.9927	ppb	0.1896	6.3	92.9792
Cu 324.754	1.5511	ppb	0.1429	9.2	263.488
Fe 271.441	24.4028	ppb	2.3953	9.8	47.8355
K 766.491	1679.66	ppb	0.8613	0.1	46046.2
Mg 279.078	546.161	ppb	3.9675	0.7	817.865
Mn 257.610	1.2238	ppb	0.0372	3.0	157.875
Mo 202.032	6.8039	ppb	0.2906	4.3	19.5515
Na 330.237	2390.34	ppb	159.668	6.7	120.661
Ni 231.604	0.3075	ppb	1.1524	374.7	-1.8398
Pb 220.353	-1.7734	ppb	5.9457	335.3	5.6353
Sb 206.834	-5.0127	ppb	1.5264	30.5	9.3156
Se 196.026	-2.9895	ppb	3.3339	111.5	1.4565
Si 288.158	574.389	ppb	1.7534	0.3	3041.00
Sn 189.925	3.2105	ppb	3.3530	104.4	0.7797
Sr 216.596	12.6377	ppb	0.2956	2.3	63.0393
Ti 334.941	1.0558	ppb	0.0572	5.4	92.8166
Tl 190.794	3.5338	ppb	2.0994	59.4	-8.7944
V 292.401	16.4291	ppb	0.1702	1.0	235.590
Zn 206.200	40.6225	ppb	2.5366	6.2	14.3544

Cont Calib Verif (CCV) **12/18/2018, 4:55:22 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	489.557	493.948	491.701
Al 308.215	9789.96	9800.06	9803.67
As 188.980	501.801	496.217	488.584
B 249.678	492.607	492.299	491.075
Ba 389.178	493.777	493.135	494.929
Be 313.042	509.630	509.526	509.660
Ca 370.602	9964	9950	9958
Cd 226.502	503.949	503.471	502.929
Co 228.615	503.375	503.156	501.945
Cr 267.716	499.331	499.050	498.971
Cu 324.754	488.509	492.743	490.074
Fe 271.441	9975.63	9977.08	9971.89
K 766.491	9755.63	9745.90	9749.21
Mg 279.078	9987.59	9984.05	9971.63
Mn 257.610	499.783	498.845	499.539
Mo 202.032	495.361	492.139	494.412
Na 330.237	9980.84	9920.96	9751.25
Ni 231.604	499.099	499.806	493.687
Pb 220.353	494.752	496.785	495.475
Sb 206.834	483.261	496.062	481.794
Se 196.026	477.848	484.374	490.857
Si 288.158	5021.48	5020.78	5024.21
Sn 189.925	495.831	497.399	491.543
Sr 216.596	507.126	507.105	502.571
Ti 334.941	499.871	500.387	500.805
Tl 190.794	488.745	487.335	488.084
V 292.401	494.100	495.757	494.338
Zn 206.200	1001.75	1002.13	1015.17

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.736	ppb	2.1956	0.4	18194.0	98.34712
Al 308.215	9797.90	ppb	7.1056	0.1	24746.4	97.97900
As 188.980	495.534	ppb	6.6348	1.3	131.886	99.10675
B 249.678	491.994	ppb	0.8105	0.2	3203.90	98.39873
Ba 389.178	493.947	ppb	0.9093	0.2	5432.97	98.78938
Be 313.042	509.605	ppb	0.0704	0.0	423190	101.92102
Ca 370.602	9957	ppb	7.084	0.1	22739	99.57402
Cd 226.502	503.449	ppb	0.5103	0.1	8238.52	100.68990
Co 228.615	502.825	ppb	0.7707	0.2	2517.53	100.56508
Cr 267.716	499.117	ppb	0.1892	0.0	11611.9	99.82339
Cu 324.754	490.442	ppb	2.1413	0.4	19561.1	98.08839
Fe 271.441	9974.86	ppb	2.6778	0.0	8273.93	99.69879
K 766.491	9750.25	ppb	4.9452	0.1	266004	97.50245
Mg 279.078	9981.09	ppb	8.3838	0.1	14402.2	99.81088
Mn 257.610	499.389	ppb	0.4862	0.1	54688.9	99.87779
Mo 202.032	493.971	ppb	1.6560	0.3	1116.84	98.79415
Na 330.237	9884.35	ppb	119.093	1.2	314.509	98.84348
Ni 231.604	497.531	ppb	3.3472	0.7	688.648	99.50612
Pb 220.353	495.671	ppb	1.0304	0.2	296.834	99.13411
Sb 206.834	487.039	ppb	7.8482	1.6	226.943	97.40778
Se 196.026	484.360	ppb	6.5042	1.3	94.3170	96.87196
Si 288.158	5022.16	ppb	1.8160	0.0	24520.4	100.44314

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	494.925	ppb	3.0315	0.6	160.133	98.98491
Sr 216.596	505.601	ppb	2.6237	0.5	2137.09	101.12019
Ti 334.941	500.354	ppb	0.4681	0.1	59919.4	100.07084
Tl 190.794	488.055	ppb	0.7054	0.1	193.381	97.61095
V 292.401	494.732	ppb	0.8958	0.2	7140.88	98.94630
Zn 206.200	1006.35	ppb	7.6398	0.8	361.736	100.63502

Cont Calib Blank (CCB) **12/18/2018, 4:59:24 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1443	-0.2680u	0.0339
Al 308.215	1.1001	-2.2178u	2.0878
As 188.980	-3.6559u	-3.8329u	-0.9267u
B 249.678	3.8327	3.1591	4.0887
Ba 389.178	-0.0361u	-0.0044u	1.2476
Be 313.042	0.0193	0.0125	0.0111
Ca 370.602	-1.874u	0.9512	0.8630
Cd 226.502	-0.0595u	0.0684	0.0684
Co 228.615	0.7339	-0.4099u	-0.2526u
Cr 267.716	0.1229	-0.0692u	-0.2402u
Cu 324.754	0.1092	-0.2099u	0.2127
Fe 271.441	6.1380	3.4162	-11.1037u
K 766.491	0.9735	-0.3605u	0.3138
Mg 279.078	-1.4443u	0.7972	0.5890
Mn 257.610	0.1110	0.0516	0.0829
Mo 202.032	-0.4251u	-0.4291u	0.0070
Na 330.237	-203.692u	73.7365	-30.9408u
Ni 231.604	-0.1909u	0.9070	0.6266
Pb 220.353	-2.2310u	-1.6534u	0.9185
Sb 206.834	-1.4164u	-15.7099u	-12.6381u
Se 196.026	-1.7153u	-2.1882u	-12.6982u
Si 288.158	3.5562	5.2154	4.7448
Sn 189.925	2.9634	4.3440	0.0631
Sr 216.596	-1.2059u	0.3940	0.8080
Ti 334.941	0.2629	0.2678	0.2886
Tl 190.794	-1.7226u	2.4934	2.2631
V 292.401	0.6742	0.4005	0.0327
Zn 206.200	1.4583	-1.3966u	-2.9459u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0299	ppb	0.2134	712.8	-30.1180	-0.02994
Al 308.215	0.3234	ppb	2.2554	697.5	163.110	0.32335
As 188.980	-2.8051	ppb	1.6292	58.1	0.5073	-2.80514
B 249.678	3.6935	ppb	0.4802	13.0	-72.9776	3.69349
Ba 389.178	0.4024	ppb	0.7321	182.0	-59.5961	0.40237
Be 313.042	0.0143	ppb	0.0044	30.6	-148.979	0.01431
Ca 370.602	-0.0199	ppb	1.606	8063.8	37.22	-0.01992
Cd 226.502	0.0257	ppb	0.0738	286.9	12.5010	0.02574
Co 228.615	0.0238	ppb	0.6200	2609.7	-11.9160	0.02376
Cr 267.716	-0.0622	ppb	0.1817	292.1	22.0759	-0.06219
Cu 324.754	0.0373	ppb	0.2202	590.1	203.729	0.03732
Fe 271.441	-0.5165	ppb	9.2692	1794.7	27.2137	-0.51647
K 766.491	0.3089	ppb	0.6670	215.9	276.643	0.30893

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-0.0194	ppb	1.2384	6393.8	31.0647	-0.01937
Mn 257.610	0.0818	ppb	0.0297	36.3	30.3004	0.08183
Mo 202.032	-0.2824	ppb	0.2507	88.8	3.5905	-0.28238
Na 330.237	-53.6320	ppb	140.099	261.2	56.3446	-53.63203
Ni 231.604	0.4476	ppb	0.5704	127.4	-1.6452	0.44758
Pb 220.353	-0.9886	ppb	1.6766	169.6	6.0979	-0.98862
Sb 206.834	-9.9215	ppb	7.5240	75.8	7.1770	-9.92147
Se 196.026	-5.5339	ppb	6.2089	112.2	0.9717	-5.53389
Si 288.158	4.5055	ppb	0.8551	19.0	304.888	4.50548
Sn 189.925	2.4568	ppb	2.1849	88.9	0.5352	2.45683
Sr 216.596	-0.0013	ppb	1.0635	81191.8	9.7417	-0.00131
Ti 334.941	0.2731	ppb	0.0136	5.0	-2.7921	0.27310
Tl 190.794	1.0113	ppb	2.3704	234.4	-9.8498	1.01129
V 292.401	0.3691	ppb	0.3219	87.2	2.8499	0.36910
Zn 206.200	-0.9614	ppb	2.2341	232.4	-0.6097	-0.96141

680-161900-C-2-G (Samp) **12/18/2018, 5:03:25 PM** **Rack 1, Tube 21**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1762	0.4896	0.2085
Al 308.215	4.5529	5.3966	7.0743
As 188.980	5.1408	6.5120	2.9576
B 249.678	21.7716	20.4450	21.7251
Ba 389.178	0.5215	1.0040	1.7751
Be 313.042	-0.0346u	-0.0390u	-0.0352u
Ca 370.602	931.4	935.0	929.3
Cd 226.502	-0.4516u	-0.2236u	-0.1032u
Co 228.615	-1.0123u	-0.7451u	0.3795
Cr 267.716	0.7265	0.4403	0.5917
Cu 324.754	0.4051	0.3541	0.4723
Fe 271.441	5.4573	14.3843	2.1667
K 766.491	338.434	337.556	338.064
Mg 279.078	106.421	109.213	112.257
Mn 257.610	0.1520	0.2259	0.2997
Mo 202.032	1.2927	0.4646	-0.4881u
Na 330.237	492.904	394.554	440.975
Ni 231.604	-1.7266u	-0.5204u	-1.0159u
Pb 220.353	-3.9382u	4.7867	-2.3318u
Sb 206.834	-5.8817u	-0.3366u	-3.4887u
Se 196.026	6.3556	-6.1234u	3.2299
Si 288.158	117.972	119.973	118.262
Sn 189.925	0.9970	5.5549	1.9766
Sr 216.596	1.4790	3.3762	2.5328
Ti 334.941	0.2515	0.2029	0.2807
Tl 190.794	-2.5415u	0.4372	-0.2264u
V 292.401	2.9738	3.6553	3.3595
Zn 206.200	8.4505	12.2100	4.7410

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2914	ppb	0.1723	59.1	-18.2142
Al 308.215	5.6746	ppb	1.2834	22.6	176.646
As 188.980	4.8701	ppb	1.7926	36.8	2.5323
B 249.678	21.3139	ppb	0.7529	3.5	45.6287

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1.1002	ppb	0.6323	57.5	-51.7338
Be 313.042	-0.0362	ppb	0.0024	6.6	-190.881
Ca 370.602	931.9	ppb	2.883	0.3	2161
Cd 226.502	-0.2595	ppb	0.1769	68.2	7.8487
Co 228.615	-0.4593	ppb	0.7386	160.8	-14.3632
Cr 267.716	0.5862	ppb	0.1432	24.4	37.1251
Cu 324.754	0.4105	ppb	0.0593	14.4	218.461
Fe 271.441	7.3361	ppb	6.3218	86.2	33.6695
K 766.491	338.018	ppb	0.4412	0.1	9480.65
Mg 279.078	109.297	ppb	2.9189	2.7	188.542
Mn 257.610	0.2259	ppb	0.0739	32.7	46.5978
Mo 202.032	0.4230	ppb	0.8911	210.6	5.1790
Na 330.237	442.811	ppb	49.2008	11.1	69.4092
Ni 231.604	-1.0876	ppb	0.6063	55.7	-3.7782
Pb 220.353	-0.4944	ppb	4.6436	939.2	6.3873
Sb 206.834	-3.2357	ppb	2.7812	86.0	10.1624
Se 196.026	1.1540	ppb	6.4933	562.7	2.2459
Si 288.158	118.735	ppb	1.0811	0.9	853.600
Sn 189.925	2.8428	ppb	2.3992	84.4	0.6603
Sr 216.596	2.4627	ppb	0.9505	38.6	20.1453
Ti 334.941	0.2450	ppb	0.0393	16.0	-5.7747
Tl 190.794	-0.7769	ppb	1.5638	201.3	-10.5944
V 292.401	3.3295	ppb	0.3418	10.3	45.7454
Zn 206.200	8.4671	ppb	3.7345	44.1	2.7832

680-161900-C-2-G (Samp) **12/18/2018, 5:07:27 PM** **Rack 1, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.3511	50.8740	51.6298
Al 308.215	4978.52	4971.98	4965.97
As 188.980	91.1136	98.8768	97.8923
B 249.678	293.836	294.289	294.456
Ba 389.178	104.496	102.953	104.044
Be 313.042	51.4214	51.3728	51.3015
Ca 370.602	9545	9537	9520
Cd 226.502	51.4672	51.6111	51.8737
Co 228.615	51.4305	50.6564	51.7625
Cr 267.716	105.563	105.488	105.582
Cu 324.754	103.013	101.462	101.259
Fe 271.441	5090.58	5099.03	5095.39
K 766.491	9582.09	9578.41	9546.56
Mg 279.078	5543.15	5551.90	5541.13
Mn 257.610	509.253	508.866	507.418
Mo 202.032	108.862	108.719	107.738
Na 330.237	7539.56	7187.91	7472.03
Ni 231.604	101.572	103.962	102.443
Pb 220.353	510.768	499.736	491.583
Sb 206.834	49.7437	48.9018	47.0395
Se 196.026	100.255	96.2133	103.600
Si 288.158	571.864	573.725	569.981
Sn 189.925	100.436	104.289	106.831
Sr 216.596	115.099	116.372	114.692
Ti 334.941	102.220	102.119	102.036

Label	Replicates Concentration		
Tl 190.794	42.7880	44.7740	36.8236
V 292.401	117.028	117.325	117.508
Zn 206.200	148.951	140.365	136.842

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.2850	ppb	0.3822	0.7	1871.43
Al 308.215	4972.16	ppb	6.2790	0.1	12631.9
As 188.980	95.9609	ppb	4.2267	4.4	26.5494
B 249.678	294.193	ppb	0.3207	0.1	1877.37
Ba 389.178	103.831	ppb	0.7935	0.8	1095.86
Be 313.042	51.3652	ppb	0.0603	0.1	42508.9
Ca 370.602	9534	ppb	12.87	0.1	21772
Cd 226.502	51.6507	ppb	0.2061	0.4	859.427
Co 228.615	51.2831	ppb	0.5676	1.1	245.933
Cr 267.716	105.544	ppb	0.0495	0.0	2475.23
Cu 324.754	101.912	ppb	0.9592	0.9	4225.65
Fe 271.441	5095.00	ppb	4.2383	0.1	4227.70
K 766.491	9569.02	ppb	19.5390	0.2	261065
Mg 279.078	5545.40	ppb	5.7239	0.1	8013.11
Mn 257.610	508.513	ppb	0.9671	0.2	55651.7
Mo 202.032	108.440	ppb	0.6122	0.6	248.427
Na 330.237	7399.83	ppb	186.610	2.5	251.859
Ni 231.604	102.659	ppb	1.2096	1.2	140.353
Pb 220.353	500.696	ppb	9.6287	1.9	300.127
Sb 206.834	48.5616	ppb	1.3838	2.8	32.7573
Se 196.026	100.022	ppb	3.6986	3.7	21.1135
Si 288.158	571.857	ppb	1.8723	0.3	3056.54
Sn 189.925	103.852	ppb	3.2198	3.1	33.3958
Sr 216.596	115.388	ppb	0.8762	0.8	496.105
Ti 334.941	102.125	ppb	0.0920	0.1	12214.0
Tl 190.794	41.4618	ppb	4.1378	10.0	7.0654
V 292.401	117.287	ppb	0.2421	0.2	1692.50
Zn 206.200	142.053	ppb	6.2286	4.4	50.8275

680-161900-C-2-H MS (Samp) **12/18/2018, 5:11:29 PM** **Rack 1, Tube 23**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	47.5180	48.3690	47.7420
Al 308.215	4777.62	4774.06	4774.52
As 188.980	86.6706	91.7185	92.1289
B 249.678	284.021	283.037	283.492
Ba 389.178	100.998	99.5037	101.416
Be 313.042	49.5129	49.5627	49.5105
Ca 370.602	9124	9116	9108
Cd 226.502	49.9898	50.0978	49.6049
Co 228.615	49.0363	49.2375	49.3826
Cr 267.716	100.977	100.850	100.688
Cu 324.754	98.9741	97.9278	98.2689
Fe 271.441	4895.05	4895.56	4884.83
K 766.491	9209.99	9208.23	9205.55
Mg 279.078	5333.80	5324.68	5309.98
Mn 257.610	490.275	490.278	490.270
Mo 202.032	101.933	104.120	101.849

Label	Replicates Concentration		
Na 330.237	7172.72	7280.68	7212.61
Ni 231.604	98.0466	96.4399	98.8010
Pb 220.353	487.125	488.789	496.595
Sb 206.834	48.2268	46.0545	45.6802
Se 196.026	99.2154	96.1134	88.5908
Si 288.158	533.301	530.788	529.104
Sn 189.925	105.525	106.487	96.1009
Sr 216.596	110.871	111.052	110.972
Ti 334.941	97.9666	97.8834	97.8221
Tl 190.794	38.6586	35.7997	47.0021
V 292.401	111.906	112.756	112.861
Zn 206.200	137.924	144.492	141.143

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	47.8763	ppb	0.4411	0.9	1745.11
Al 308.215	4775.40	ppb	1.9354	0.0	12138.4
As 188.980	90.1727	ppb	3.0398	3.4	25.0230
B 249.678	283.517	ppb	0.4923	0.2	1805.70
Ba 389.178	100.639	ppb	1.0052	1.0	1060.14
Be 313.042	49.5287	ppb	0.0294	0.1	40983.3
Ca 370.602	9116	ppb	8.233	0.1	20819
Cd 226.502	49.8975	ppb	0.2591	0.5	830.644
Co 228.615	49.2188	ppb	0.1739	0.4	235.555
Cr 267.716	100.838	ppb	0.1450	0.1	2365.93
Cu 324.754	98.3903	ppb	0.5336	0.5	4086.61
Fe 271.441	4891.81	ppb	6.0557	0.1	4060.21
K 766.491	9207.92	ppb	2.2310	0.0	251223
Mg 279.078	5322.82	ppb	12.0173	0.2	7692.71
Mn 257.610	490.274	ppb	0.0039	0.0	53656.4
Mo 202.032	102.634	ppb	1.2879	1.3	235.351
Na 330.237	7222.00	ppb	54.5886	0.8	247.207
Ni 231.604	97.7625	ppb	1.2059	1.2	133.550
Pb 220.353	490.836	ppb	5.0559	1.0	294.350
Sb 206.834	46.6538	ppb	1.3750	2.9	31.9354
Se 196.026	94.6399	ppb	5.4634	5.8	20.0870
Si 288.158	531.064	ppb	2.1122	0.4	2859.94
Sn 189.925	102.704	ppb	5.7390	5.6	33.0238
Sr 216.596	110.965	ppb	0.0907	0.1	477.489
Ti 334.941	97.8907	ppb	0.0725	0.1	11706.2
Tl 190.794	40.4868	ppb	5.8207	14.4	6.6577
V 292.401	112.508	ppb	0.5233	0.5	1623.50
Zn 206.200	141.187	ppb	3.2844	2.3	50.5172

680-161900-C-2-I MSD (Samp) **12/18/2018, 5:15:32 PM** **Rack 1, Tube 24**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.9117	52.2947	52.3425
Al 308.215	5026.83	5022.91	5017.52
As 188.980	98.6612	100.992	100.448
B 249.678	303.938	303.067	303.435
Ba 389.178	106.520	106.527	105.888
Be 313.042	51.9920	52.0593	51.8161
Ca 370.602	9936	9946	9906

Label	Replicates Concentration		
Cd 226.502	52.2868	52.6469	52.4633
Co 228.615	52.2679	52.5317	52.1398
Cr 267.716	106.753	106.733	105.775
Cu 324.754	111.801	111.843	110.776
Fe 271.441	5117.59	5153.80	5113.53
K 766.491	9754.88	9756.01	9727.28
Mg 279.078	5640.08	5638.05	5624.45
Mn 257.610	514.258	514.988	513.298
Mo 202.032	107.740	106.307	108.338
Na 330.237	7661.86	7515.96	7620.92
Ni 231.604	104.212	103.871	101.101
Pb 220.353	514.728	521.800	518.102
Sb 206.834	48.6466	47.5213	44.4278
Se 196.026	84.7564	118.432	92.8219
Si 288.158	589.760	592.679	589.361
Sn 189.925	100.002	103.860	98.9513
Sr 216.596	115.685	118.281	115.916
Ti 334.941	102.701	102.758	102.614
Tl 190.794	39.6472	38.0084	37.1843
V 292.401	119.375	119.706	119.118
Zn 206.200	156.397	154.804	154.811

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.5163	ppb	0.3432	0.7	1917.07
Al 308.215	5022.42	ppb	4.6761	0.1	12757.9
As 188.980	100.033	ppb	1.2191	1.2	27.6241
B 249.678	303.480	ppb	0.4372	0.1	1939.84
Ba 389.178	106.311	ppb	0.3668	0.3	1123.49
Be 313.042	51.9558	ppb	0.1256	0.2	42999.6
Ca 370.602	9929	ppb	21.01	0.2	22673
Cd 226.502	52.4657	ppb	0.1801	0.3	872.764
Co 228.615	52.3131	ppb	0.1998	0.4	251.131
Cr 267.716	106.420	ppb	0.5586	0.5	2495.58
Cu 324.754	111.473	ppb	0.6042	0.5	4602.87
Fe 271.441	5128.31	ppb	22.1712	0.4	4255.21
K 766.491	9746.06	ppb	16.2717	0.2	265890
Mg 279.078	5634.20	ppb	8.4974	0.2	8140.96
Mn 257.610	514.181	ppb	0.8478	0.2	56271.9
Mo 202.032	107.462	ppb	1.0438	1.0	246.223
Na 330.237	7599.58	ppb	75.2511	1.0	257.088
Ni 231.604	103.061	ppb	1.7063	1.7	140.911
Pb 220.353	518.210	ppb	3.5376	0.7	310.393
Sb 206.834	46.8652	ppb	2.1846	4.7	32.0072
Se 196.026	98.6701	ppb	17.5831	17.8	20.8562
Si 288.158	590.600	ppb	1.8114	0.3	3146.29
Sn 189.925	100.938	ppb	2.5849	2.6	32.4514
Sr 216.596	116.627	ppb	1.4370	1.2	501.365
Ti 334.941	102.691	ppb	0.0724	0.1	12282.1
Tl 190.794	38.2800	ppb	1.2537	3.3	5.7433
V 292.401	119.400	ppb	0.2948	0.2	1723.24
Zn 206.200	155.337	ppb	0.9176	0.6	55.6080

490-164412-D-2-E (Samp) **12/18/2018, 5:19:33 PM** **Rack 1, Tube 25**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.6569	0.7227	0.6929
Al 308.215	43587.1	43524.0	43497.5
As 188.980	7.6822	3.0865	3.0587
B 249.678	40.4912	42.9504	42.4752
Ba 389.178	121.321	120.916	121.366
Be 313.042	3.5047	3.4976	3.5125
Ca 370.602	161997	161959	161861
Cd 226.502	1.5418	1.2954	0.9587
Co 228.615	36.3556	35.6293	36.5814
Cr 267.716	0.0335	0.6044	0.6173
Cu 324.754	15.8114	15.8864	15.9194
Fe 271.441	68.8849	60.6007	65.9175
K 766.491	381857x	380562x	380765x
Mg 279.078	59391.5	59561.7	59612.1
Mn 257.610	4674.10	4672.66	4669.39
Mo 202.032	-0.7201u	-2.3952u	-1.5658u
Na 330.237	1075293x	1077560x	1075023x
Ni 231.604	45.5561	46.9894	48.4445
Pb 220.353	2.1859	1.7004	-9.1540u
Sb 206.834	3.5908	1.0632	-8.4901u
Se 196.026	1.5494	24.5408	-2.4213u
Si 288.158	5608.31	5610.94	5601.48
Sn 189.925	6.1444	-3.0614u	-5.1869u
Sr 216.596	886.829	887.934	891.331
Ti 334.941	-0.7491	-0.7242	-0.6200
Tl 190.794	-16.2593u	-0.2387	-7.3852u
V 292.401	0.0391u	1.0472	0.5406
Zn 206.200	66.0710	63.4672	60.8992

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6908b	ppb	0.0330	4.8	3.3969
Al 308.215	43536.2b	ppb	46.0388	0.1	109296
As 188.980	4.6091b	ppb	2.6614	57.7	2.4638
B 249.678	41.9723b	ppb	1.3044	3.1	185.082
Ba 389.178	121.201b	ppb	0.2483	0.2	1340.36
Be 313.042	3.5049b	ppb	0.0075	0.2	2717.43
Ca 370.602	161939b	ppb	69.87	0.0	369261
Cd 226.502	1.2653b	ppb	0.2927	23.1	32.8079
Co 228.615	36.1888b	ppb	0.4975	1.4	170.179
Cr 267.716	0.4184b	ppb	0.3334	79.7	51.8658
Cu 324.754	15.8724b	ppb	0.0553	0.3	828.466
Fe 271.441	65.1343b	ppb	4.1973	6.4	83.2384
K 766.491	381061xb	ppb	696.378	0.2	10385809
Mg 279.078	59521.8b	ppb	115.619	0.2	85717.0
Mn 257.610	4672.05b	ppb	2.4141	0.1	511114
Mo 202.032	-1.5604b	ppb	0.8375	53.7	0.7102
Na 330.237	1075958xb	ppb	1393.18	0.1	28413.3
Ni 231.604	46.9967b	ppb	1.4442	3.1	63.0172
Pb 220.353	-1.7559b	ppb	6.4116	365.1	5.4322
Sb 206.834	-1.2787b	ppb	6.3719	498.3	11.0707
Se 196.026	7.8896b	ppb	14.5564	184.5	3.9763
Si 288.158	5606.91b	ppb	4.8804	0.1	27191.0

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.7013b	ppb	6.0230	858.8	-0.3500
Sr 216.596	888.698b	ppb	2.3458	0.3	3764.06
Ti 334.941	-0.6978b	ppb	0.0685	9.8	61.5738
Tl 190.794	-7.9611b	ppb	8.0258	100.8	-11.7899
V 292.401	0.5423b	ppb	0.5041	92.9	1.4554
Zn 206.200	63.4791b	ppb	2.5859	4.1	22.5806

490-164412-D-3-E (Samp) **12/18/2018, 5:23:33 PM** **Rack 1, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	7.0137	6.3510	6.2356
Al 308.215	34.3935	37.0511	37.9690
As 188.980	-1.1067u	-1.5977u	-1.3012u
B 249.678	5.3306	5.9430	5.2725
Ba 389.178	548.502	550.066	548.067
Be 313.042	-0.0060	-0.0034	-0.0035
Ca 370.602	180714	180819	180793
Cd 226.502	0.1426	0.1289	0.1017
Co 228.615	1.0499	0.5955	0.1364
Cr 267.716	-0.4475u	-0.7825u	-0.4975u
Cu 324.754	-0.0389u	0.3356	0.1876
Fe 271.441	2.2291	12.1675	6.2107
K 766.491	7699.46	7686.80	7685.64
Mg 279.078	69178.9	69159.9	69142.0
Mn 257.610	1412.28	1413.03	1412.64
Mo 202.032	-0.0121u	-0.4709u	-1.0042u
Na 330.237	275513x	276002x	277039x
Ni 231.604	8.5182	10.6623	6.4154
Pb 220.353	0.5211	4.8968	3.5128
Sb 206.834	-16.8829u	-8.3885u	-14.4818u
Se 196.026	6.2141	10.1173	10.7703
Si 288.158	4370.32	4370.10	4368.81
Sn 189.925	-2.5390u	1.7784	2.3711
Sr 216.596	322.252	321.010	323.109
Ti 334.941	-1.7280	-1.6239	-1.6067
Tl 190.794	-1.6942u	-13.6757u	-2.5553u
V 292.401	1.1816	1.1351	0.4424
Zn 206.200	18.6335	23.1196	17.2670

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	6.5334b	ppb	0.4199	6.4	214.484
Al 308.215	36.4712b	ppb	1.8569	5.1	253.758
As 188.980	-1.3352b	ppb	0.2473	18.5	0.8952
B 249.678	5.5154b	ppb	0.3714	6.7	-60.7178
Ba 389.178	548.878b	ppb	1.0510	0.2	6096.66
Be 313.042	-0.0043b	ppb	0.0015	34.5	-150.615
Ca 370.602	180775b	ppb	54.45	0.0	412131
Cd 226.502	0.1244b	ppb	0.0208	16.7	13.8739
Co 228.615	0.5939b	ppb	0.4567	76.9	-9.0498
Cr 267.716	-0.5758b	ppb	0.1807	31.4	15.3265
Cu 324.754	0.1614b	ppb	0.1886	116.8	208.631
Fe 271.441	6.8691b	ppb	5.0018	72.8	33.3382
K 766.491	7690.63b	ppb	7.6673	0.1	209871

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	69160.3b	ppb	18.4947	0.0	99647.0
Mn 257.610	1412.65b	ppb	0.3756	0.0	154809
Mo 202.032	-0.4957b	ppb	0.4965	100.2	3.1095
Na 330.237	276185xb	ppb	779.311	0.3	7336.27
Ni 231.604	8.5320b	ppb	2.1235	24.9	9.5897
Pb 220.353	2.9769b	ppb	2.2365	75.1	8.5300
Sb 206.834	-13.2510b	ppb	4.3789	33.0	5.6792
Se 196.026	9.0339b	ppb	2.4637	27.3	3.8824
Si 288.158	4369.75b	ppb	0.8159	0.0	21254.0
Sn 189.925	0.5368b	ppb	2.6802	499.3	-0.0516
Sr 216.596	322.124b	ppb	1.0555	0.3	1370.61
Ti 334.941	-1.6529b	ppb	0.0656	4.0	5.6956
Tl 190.794	-5.9751b	ppb	6.6828	111.8	-12.2263
V 292.401	0.9197b	ppb	0.4140	45.0	10.1929
Zn 206.200	19.6734b	ppb	3.0617	15.6	6.8165

490-164412-D-4-E (Samp) **12/18/2018, 5:27:33 PM** **Rack 1, Tube 27**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	0.2887	-0.3933u	0.1706
Al 308.215	87.4088	85.9622	86.1712
As 188.980	-1.1576u	-4.4107u	-4.4261u
B 249.678	20.8803	20.7053	21.5006
Ba 389.178	0.7746	1.2308	0.7582
Be 313.042	-0.0338u	-0.0453u	-0.0463u
Ca 370.602	15042	15068	15075
Cd 226.502	-0.3126u	-0.1527u	-0.0873u
Co 228.615	-0.1468u	-0.3364u	0.2768
Cr 267.716	0.8591	0.5625	0.5753
Cu 324.754	0.2505	-0.1898u	-0.3847u
Fe 271.441	67.0464	73.9471	73.5077
K 766.491	2142.54	2144.52	2141.43
Mg 279.078	1727.94	1728.47	1726.89
Mn 257.610	1.5148	1.5154	1.4850
Mo 202.032	0.7955	-0.2022u	-0.5507u
Na 330.237	8388.04	8520.04	8260.97
Ni 231.604	1.0110	1.2316	2.7670
Pb 220.353	2.5902	-3.5347u	-1.5286u
Sb 206.834	-11.4776u	-0.2173u	-6.9074u
Se 196.026	-7.5700u	1.7578	-11.9881u
Si 288.158	5827.34	5828.82	5836.54
Sn 189.925	1.8940	-1.0295u	2.1809
Sr 216.596	7.8430	9.5312	9.0736
Ti 334.941	0.7054	0.5596	0.7488
Tl 190.794	5.3014	4.3256	3.1071
V 292.401	2.5185	2.1608	2.2472
Zn 206.200	18.0149	19.2337	12.3234

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0220	ppb	0.3645	1657.4	-28.2634
Al 308.215	86.5141	ppb	0.7819	0.9	379.246
As 188.980	-3.3315	ppb	1.8826	56.5	0.3683
B 249.678	21.0287	ppb	0.4179	2.0	43.6464

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.9212	ppb	0.2683	29.1	-52.0884
Be 313.042	-0.0418	ppb	0.0070	16.7	-193.684
Ca 370.602	15062	ppb	17.65	0.1	34369
Cd 226.502	-0.1842	ppb	0.1159	62.9	9.1226
Co 228.615	-0.0688	ppb	0.3140	456.4	-12.3828
Cr 267.716	0.6656	ppb	0.1677	25.2	39.0458
Cu 324.754	-0.1080	ppb	0.3254	301.4	198.012
Fe 271.441	71.5004	ppb	3.8636	5.4	86.5381
K 766.491	2142.83	ppb	1.5690	0.1	58669.4
Mg 279.078	1727.77	ppb	0.8007	0.0	2520.06
Mn 257.610	1.5051	ppb	0.0174	1.2	194.540
Mo 202.032	0.0142	ppb	0.6987	4929.1	4.2571
Na 330.237	8389.68	ppb	129.543	1.5	278.822
Ni 231.604	1.6698	ppb	0.9565	57.3	0.0536
Pb 220.353	-0.8244	ppb	3.1226	378.8	6.1933
Sb 206.834	-6.2008	ppb	5.6633	91.3	8.8419
Se 196.026	-5.9334	ppb	7.0176	118.3	0.8955
Si 288.158	5830.90	ppb	4.9400	0.1	28266.3
Sn 189.925	1.0151	ppb	1.7765	175.0	0.0690
Sr 216.596	8.8159	ppb	0.8731	9.9	46.9893
Ti 334.941	0.6713	ppb	0.0991	14.8	50.8307
Tl 190.794	4.2447	ppb	1.0994	25.9	-8.5044
V 292.401	2.3088	ppb	0.1867	8.1	30.9690
Zn 206.200	16.5240	ppb	3.6885	22.3	5.6828

680-161900-A-4-C (Samp) **12/18/2018, 5:31:33 PM** **Rack 1, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1076	-0.2232u	0.2327
Al 308.215	23.0462	24.8309	23.6320
As 188.980	5.0770	-0.5595u	9.5372
B 249.678	79.2166	79.1726	80.3599
Ba 389.178	3.9474	2.7557	2.5847
Be 313.042	-0.0423u	-0.0449u	-0.0359u
Ca 370.602	5735	5740	5744
Cd 226.502	-0.2658u	-0.3385u	-0.5119u
Co 228.615	0.3456	0.6887	-0.3693u
Cr 267.716	-0.0846u	0.2223	0.3087
Cu 324.754	2.1678	2.0359	1.9596
Fe 271.441	28.5073	14.7366	22.4896
K 766.491	2730.45	2734.19	2732.20
Mg 279.078	257.282	262.103	259.539
Mn 257.610	16.6573	16.7480	16.5946
Mo 202.032	0.5545	-0.0115u	-0.1839u
Na 330.237	2544.18	2349.15	2176.09
Ni 231.604	-0.9281u	0.3867	1.9661
Pb 220.353	-4.7086u	2.4931	-3.4585u
Sb 206.834	-12.0998u	-3.4357u	-2.9498u
Se 196.026	8.0461	6.4268	-7.6770u
Si 288.158	515.578	514.177	513.913
Sn 189.925	3.6247	8.0302	2.2234
Sr 216.596	12.2829	11.9249	11.9173
Ti 334.941	0.8136	0.7206	0.7908

Label	Replicates Concentration		
Tl 190.794	-1.4185u	13.5330	-1.7987u
V 292.401	6.8646	6.9923	7.1633
Zn 206.200	33.1525	32.0527	35.4062

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0390	ppb	0.2356	603.6	-27.5700
Al 308.215	23.8364	ppb	0.9097	3.8	222.276
As 188.980	4.6849	ppb	5.0598	108.0	2.4837
B 249.678	79.5830	ppb	0.6731	0.8	437.859
Ba 389.178	3.0959	ppb	0.7423	24.0	-29.4299
Be 313.042	-0.0410	ppb	0.0046	11.2	-194.098
Ca 370.602	5740	ppb	4.384	0.1	13121
Cd 226.502	-0.3721	ppb	0.1264	34.0	6.0161
Co 228.615	0.2217	ppb	0.5398	243.5	-10.9202
Cr 267.716	0.1488	ppb	0.2067	138.9	27.0140
Cu 324.754	2.0544	ppb	0.1054	5.1	283.273
Fe 271.441	21.9112	ppb	6.9035	31.5	45.7358
K 766.491	2732.28	ppb	1.8696	0.1	74734.5
Mg 279.078	259.641	ppb	2.4125	0.9	404.942
Mn 257.610	16.6666	ppb	0.0771	0.5	1844.87
Mo 202.032	0.1197	ppb	0.3863	322.7	4.4947
Na 330.237	2356.47	ppb	184.156	7.8	119.794
Ni 231.604	0.4749	ppb	1.4491	305.1	-1.6075
Pb 220.353	-1.8913	ppb	3.8482	203.5	5.5694
Sb 206.834	-6.1618	ppb	5.1482	83.6	8.8588
Se 196.026	2.2653	ppb	8.6483	381.8	2.4591
Si 288.158	514.556	ppb	0.8952	0.2	2752.93
Sn 189.925	4.6261	ppb	3.0302	65.5	1.2385
Sr 216.596	12.0417	ppb	0.2089	1.7	60.6089
Ti 334.941	0.7750	ppb	0.0484	6.3	58.1664
Tl 190.794	3.4386	ppb	8.7441	254.3	-8.8298
V 292.401	7.0067	ppb	0.1499	2.1	99.2654
Zn 206.200	33.5371	ppb	1.7095	5.1	11.8056

MB 680-551628/1-A (Samp) **12/18/2018, 5:35:33 PM** **Rack 1, Tube 29**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2968	0.5190	0.1684
Al 308.215	2.6882	4.1681	1.7804
As 188.980	-0.8049u	-5.2191u	-3.7158u
B 249.678	1.9184	2.5625	1.7978
Ba 389.178	-0.1495u	0.6284	-0.2380u
Be 313.042	-0.0465u	-0.0277u	-0.0387u
Ca 370.602	25.77	26.31	30.47
Cd 226.502	-0.0721u	-0.2323u	-0.1506u
Co 228.615	-0.1008u	0.2561	0.4129
Cr 267.716	0.3481	0.4374	-0.0152u
Cu 324.754	0.0701	-0.2668u	0.1330
Fe 271.441	7.2807	13.8962	16.9832
K 766.491	15.6311	15.2196	15.4955
Mg 279.078	0.4884	0.1326	-1.3397u
Mn 257.610	0.3670	0.3339	0.3249
Mo 202.032	-0.7866u	-0.1394u	-1.0028u

Label	Replicates Concentration		
Na 330.237	-268.894u	143.258	236.323
Ni 231.604	-0.6728u	-1.3374u	-0.5070u
Pb 220.353	1.1638	6.2008	0.3554
Sb 206.834	-5.1756u	-3.0376u	3.8369
Se 196.026	-1.8684u	-4.2204u	-3.0719u
Si 288.158	4.7373	2.3551	3.0978
Sn 189.925	11.4562	13.5816	9.5795
Sr 216.596	0.7833	-0.1274u	-0.0218u
Ti 334.941	0.1345	0.2577	0.2654
Tl 190.794	-6.2196u	4.9759	-2.2784u
V 292.401	0.4838	-0.1432u	-0.4111u
Zn 206.200	4.6624	4.3489	9.1049

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3281	ppb	0.1774	54.1	-16.8505
Al 308.215	2.8789	ppb	1.2052	41.9	169.506
As 188.980	-3.2466	ppb	2.2442	69.1	0.3907
B 249.678	2.0929	ppb	0.4112	19.6	-83.7609
Ba 389.178	0.0803	ppb	0.4767	593.8	-63.1691
Be 313.042	-0.0376	ppb	0.0094	25.1	-192.155
Ca 370.602	27.52	ppb	2.573	9.3	99.98
Cd 226.502	-0.1516	ppb	0.0801	52.8	9.6124
Co 228.615	0.1894	ppb	0.2633	139.0	-11.0878
Cr 267.716	0.2568	ppb	0.2397	93.4	29.4826
Cu 324.754	-0.0212	ppb	0.2149	1012.9	201.428
Fe 271.441	12.7200	ppb	4.9570	39.0	38.1292
K 766.491	15.4488	ppb	0.2097	1.4	689.268
Mg 279.078	-0.2395	ppb	0.9692	404.6	30.7437
Mn 257.610	0.3419	ppb	0.0222	6.5	58.7388
Mo 202.032	-0.6429	ppb	0.4493	69.9	2.7782
Na 330.237	36.8960	ppb	268.879	728.7	58.7216
Ni 231.604	-0.8391	ppb	0.4394	52.4	-3.4337
Pb 220.353	2.5733	ppb	3.1674	123.1	8.1858
Sb 206.834	-1.4587	ppb	4.7091	322.8	10.9715
Se 196.026	-3.0535	ppb	1.1761	38.5	1.4443
Si 288.158	3.3967	ppb	1.2189	35.9	300.609
Sn 189.925	11.5391	ppb	2.0023	17.4	3.4785
Sr 216.596	0.2114	ppb	0.4981	235.6	10.6395
Ti 334.941	0.2192	ppb	0.0735	33.5	-9.2497
Tl 190.794	-1.1740	ppb	5.6789	483.7	-10.7601
V 292.401	-0.0235	ppb	0.4593	1953.0	-2.8718
Zn 206.200	6.0387	ppb	2.6600	44.0	1.9094

LCS 680-551628/2-A (Samp) **12/18/2018, 5:39:34 PM** **Rack 1, Tube 30**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	49.5109	49.3184	50.2651
Al 308.215	4594.72	4577.17	4577.91
As 188.980	88.4015	96.2513	89.4465
B 249.678	181.850	180.801	181.560
Ba 389.178	93.4353	93.4833	92.6871
Be 313.042	47.9344	48.0066	47.9405
Ca 370.602	4679	4684	4673

Label	Replicates Concentration		
Cd 226.502	48.4605	48.2635	47.9981
Co 228.615	47.9126	47.8989	48.0540
Cr 267.716	96.0421	96.0743	95.9015
Cu 324.754	94.1059	94.2986	94.6615
Fe 271.441	4724.22	4740.55	4722.11
K 766.491	7258.21	7251.57	7245.72
Mg 279.078	4656.24	4660.82	4665.27
Mn 257.610	474.170	473.421	473.757
Mo 202.032	93.4909	92.7101	95.0130
Na 330.237	4608.58	4665.60	4569.99
Ni 231.604	93.5717	94.5779	92.9824
Pb 220.353	473.719	469.347	470.219
Sb 206.834	41.0846	43.8612	36.9356
Se 196.026	83.7704	105.098	84.2076
Si 288.158	-1.9601	-1.2367	-1.5939
Sn 189.925	107.435	97.2276	101.168
Sr 216.596	95.0162	93.2182	94.6563
Ti 334.941	94.4952	94.4898	94.2257
Tl 190.794	43.4996	34.4574	42.2699
V 292.401	93.8357	93.1068	94.5602
Zn 206.200	95.4391	91.7443	91.9940

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.6982	ppb	0.5004	1.0	1812.68
Al 308.215	4583.27	ppb	9.9237	0.2	11656.0
As 188.980	91.3664	ppb	4.2626	4.7	25.3396
B 249.678	181.404	ppb	0.5421	0.3	1118.49
Ba 389.178	93.2019	ppb	0.4464	0.5	976.835
Be 313.042	47.9605	ppb	0.0401	0.1	39680.0
Ca 370.602	4678	ppb	5.571	0.1	10703
Cd 226.502	48.2407	ppb	0.2321	0.5	803.465
Co 228.615	47.9552	ppb	0.0859	0.2	229.256
Cr 267.716	96.0060	ppb	0.0919	0.1	2253.72
Cu 324.754	94.3553	ppb	0.2821	0.3	3927.33
Fe 271.441	4728.96	ppb	10.0902	0.2	3925.89
K 766.491	7251.83	ppb	6.2532	0.1	197911
Mg 279.078	4660.77	ppb	4.5158	0.1	6739.19
Mn 257.610	473.783	ppb	0.3753	0.1	51849.8
Mo 202.032	93.7380	ppb	1.1712	1.2	215.316
Na 330.237	4614.72	ppb	48.1019	1.0	178.601
Ni 231.604	93.7106	ppb	0.8068	0.9	127.920
Pb 220.353	471.095	ppb	2.3141	0.5	282.781
Sb 206.834	40.6271	ppb	3.4854	8.6	29.3034
Se 196.026	91.0252	ppb	12.1891	13.4	19.3973
Si 288.158	-1.5969	ppb	0.3617	22.7	302.265
Sn 189.925	101.944	ppb	5.1478	5.0	32.7770
Sr 216.596	94.2969	ppb	0.9513	1.0	407.190
Ti 334.941	94.4036	ppb	0.1541	0.2	11286.3
Tl 190.794	40.0756	ppb	4.9042	12.2	6.4794
V 292.401	93.8342	ppb	0.7267	0.8	1352.91
Zn 206.200	93.0591	ppb	2.0649	2.2	33.1986

Cont Calib Verif (CCV) **12/18/2018, 5:43:37 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	491.612	492.205	491.465
Al 308.215	9822.98	9827.70	9822.33
As 188.980	500.992	493.127	496.020
B 249.678	491.515	493.994	494.077
Ba 389.178	494.095	492.484	493.934
Be 313.042	510.968	510.518	511.050
Ca 370.602	9970	9945	9963
Cd 226.502	503.672	503.243	504.177
Co 228.615	506.676	505.836	504.053
Cr 267.716	499.886	499.016	500.098
Cu 324.754	490.935	493.655	489.915
Fe 271.441	9969.72	9971.18	9996.57
K 766.491	9762.18	9763.18	9771.77
Mg 279.078	10013.6	9999.72	10011.7
Mn 257.610	499.797	499.597	499.419
Mo 202.032	493.015	495.939	498.721
Na 330.237	9934.12	10199.7	9781.64
Ni 231.604	497.635	493.509	496.511
Pb 220.353	503.964	502.693	498.533
Sb 206.834	487.805	493.474	492.350
Se 196.026	479.431	487.280	473.000
Si 288.158	5027.71	5026.50	5024.99
Sn 189.925	496.726	490.572	507.988
Sr 216.596	507.289	503.076	504.630
Ti 334.941	500.071	499.950	500.152
Tl 190.794	498.421	492.891	501.267
V 292.401	495.817	495.798	495.499
Zn 206.200	1007.46	1020.04	1023.37

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.761	ppb	0.3916	0.1	18194.9	98.35217
Al 308.215	9824.34	ppb	2.9320	0.0	24812.8	98.24338
As 188.980	496.713	ppb	3.9782	0.8	132.197	99.34258
B 249.678	493.195	ppb	1.4559	0.3	3211.97	98.63903
Ba 389.178	493.504	ppb	0.8874	0.2	5428.10	98.70087
Be 313.042	510.845	ppb	0.2863	0.1	424220	102.16905
Ca 370.602	9959	ppb	13.23	0.1	22743	99.59323
Cd 226.502	503.697	ppb	0.4673	0.1	8242.57	100.73942
Co 228.615	505.522	ppb	1.3397	0.3	2531.07	101.10435
Cr 267.716	499.667	ppb	0.5733	0.1	11624.7	99.93339
Cu 324.754	491.501	ppb	1.9336	0.4	19602.9	98.30028
Fe 271.441	9979.16	ppb	15.1010	0.2	8277.62	99.74170
K 766.491	9765.71	ppb	5.2749	0.1	266425	97.65710
Mg 279.078	10008.3	ppb	7.5061	0.1	14441.4	100.08322
Mn 257.610	499.604	ppb	0.1888	0.0	54712.6	99.92089
Mo 202.032	495.891	ppb	2.8535	0.6	1121.16	99.17829
Na 330.237	9971.82	ppb	211.557	2.1	316.823	99.71815
Ni 231.604	495.885	ppb	2.1331	0.4	686.358	99.17706
Pb 220.353	501.730	ppb	2.8407	0.6	300.385	100.34600
Sb 206.834	491.210	ppb	3.0017	0.6	228.803	98.24196
Se 196.026	479.904	ppb	7.1517	1.5	93.4680	95.98071
Si 288.158	5026.40	ppb	1.3619	0.0	24541.2	100.52797

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	498.429	ppb	8.8323	1.8	161.269	99.68574
Sr 216.596	504.998	ppb	2.1309	0.4	2134.54	100.99969
Ti 334.941	500.058	ppb	0.1016	0.0	59884.0	100.01151
Tl 190.794	497.527	ppb	4.2590	0.9	197.329	99.50531
V 292.401	495.704	ppb	0.1785	0.0	7154.91	99.14088
Zn 206.200	1016.96	ppb	8.3928	0.8	365.552	101.69552

Cont Calib Blank (CCB) **12/18/2018, 5:47:40 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1772	0.2232	0.2386
Al 308.215	-1.7206u	-2.8821u	-3.8785u
As 188.980	-0.8956u	5.0188	6.9365
B 249.678	2.9694	3.8553	3.9068
Ba 389.178	0.2266	-0.1259u	0.8681
Be 313.042	0.0317	0.0312	0.0241
Ca 370.602	5.679	-0.0305u	2.748
Cd 226.502	0.0520	-0.1674u	-0.1326u
Co 228.615	-0.1108u	-0.0720u	-0.7153u
Cr 267.716	-0.2413u	-0.0060u	-0.1301u
Cu 324.754	-0.1852u	-0.4646u	0.1848
Fe 271.441	-5.1056u	7.7971	7.3034
K 766.491	2.6762	2.2581	2.8881
Mg 279.078	2.1051	-4.0291u	-4.5507u
Mn 257.610	0.0729	0.0626	0.1476
Mo 202.032	0.3357	-0.2907u	0.5405
Na 330.237	68.8344	-63.2026u	-45.6100u
Ni 231.604	-0.0867u	1.3366	-1.6417u
Pb 220.353	-0.0898u	1.2969	-1.2207u
Sb 206.834	-7.4405u	-7.6685u	-8.6688u
Se 196.026	3.7738	-5.3445u	-1.1491u
Si 288.158	1.1251	1.9550	0.8804
Sn 189.925	2.9133	2.6686	6.6348
Sr 216.596	0.3616	-0.2446u	0.6894
Ti 334.941	0.2118	0.2127	0.1794
Tl 190.794	8.8048	2.9106	0.0876
V 292.401	0.1361	0.1421	-0.0707u
Zn 206.200	1.7252	-1.0409u	1.9172

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2130	ppb	0.0319	15.0	-21.1159	0.21300
Al 308.215	-2.8271	ppb	1.0800	38.2	155.215	-2.82708
As 188.980	3.6866	ppb	4.0825	110.7	2.2202	3.68657
B 249.678	3.5771	ppb	0.5270	14.7	-73.7635	3.57714
Ba 389.178	0.3230	ppb	0.5040	156.0	-60.4768	0.32297
Be 313.042	0.0290	ppb	0.0042	14.6	-136.804	0.02902
Ca 370.602	2.799	ppb	2.855	102.0	43.64	2.79879
Cd 226.502	-0.0827	ppb	0.1179	142.7	10.7334	-0.08265
Co 228.615	-0.2994	ppb	0.3607	120.5	-13.5494	-0.29939
Cr 267.716	-0.1258	ppb	0.1177	93.5	20.6000	-0.12581
Cu 324.754	-0.1550	ppb	0.3258	210.2	196.157	-0.15500
Fe 271.441	3.3316	ppb	7.3110	219.4	30.3592	3.33163
K 766.491	2.6075	ppb	0.3206	12.3	339.288	2.60748

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-2.1582	ppb	3.7014	171.5	27.9837	-2.15821
Mn 257.610	0.0944	ppb	0.0464	49.1	31.6652	0.09438
Mo 202.032	0.1952	ppb	0.4330	221.9	4.6664	0.19515
Na 330.237	-13.3261	ppb	71.6947	538.0	57.4044	-13.32611
Ni 231.604	-0.1306	ppb	1.4896	1140.4	-2.4484	-0.13062
Pb 220.353	-0.0046	ppb	1.2610	27697.2	6.6748	-0.00455
Sb 206.834	-7.9259	ppb	0.6534	8.2	8.0657	-7.92591
Se 196.026	-0.9066	ppb	4.5639	503.4	1.8533	-0.90661
Si 288.158	1.3202	ppb	0.5633	42.7	289.730	1.32016
Sn 189.925	4.0723	ppb	2.2226	54.6	1.0587	4.07225
Sr 216.596	0.2688	ppb	0.4739	176.3	10.8715	0.26884
Ti 334.941	0.2013	ppb	0.0190	9.4	-11.3975	0.20129
Tl 190.794	3.9343	ppb	4.4479	113.1	-8.6332	3.93434
V 292.401	0.0692	ppb	0.1212	175.2	-1.5536	0.06917
Zn 206.200	0.8672	ppb	1.6552	190.9	0.0484	0.86718

680-161405-A-133-A (Samp) **12/18/2018, 5:51:40 PM** **Rack 1, Tube 31**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1212u	-0.3774u	-0.2251u
Al 308.215	120692	120695	120845
As 188.980	91.3584	87.5979	84.7674
B 249.678	46.7128	46.6748	45.9122
Ba 389.178	1303.44	1302.74	1304.57
Be 313.042	6.1005	6.1022	6.1234
Ca 370.602	23247	23249	23285
Cd 226.502	0.2069	0.8394	0.8786
Co 228.615	80.2470	79.7658	82.2889
Cr 267.716	174.409	173.687	173.997
Cu 324.754	192.339	192.766	193.063
Fe 271.441	251060	250831	251462
K 766.491	10827.8	10831.1	10851.8
Mg 279.078	38981.8	38940.0	38980.5
Mn 257.610	4962.61	4963.53	4971.20
Mo 202.032	5.3325	7.4745	7.2332
Na 330.237	2671.35	2313.47	2529.85
Ni 231.604	168.276	168.995	170.865
Pb 220.353	91.8246	99.8183	101.780
Sb 206.834	-12.9359	-7.3701	-8.1606
Se 196.026	17.9218	6.7841	3.7611
Si 288.158	2433.42	2426.03	2427.42
Sn 189.925	17.6073	15.0681	16.7183
Sr 216.596	102.041	100.576	102.549
Ti 334.941	1671.14	1671.85	1670.17
Tl 190.794	16.0056u	7.9463u	-1.4661u
V 292.401	297.731	296.795	298.069
Zn 206.200	503.065	498.243	513.578

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1604	ppb	0.2555	159.3	-81.6463
Al 308.215	120744	ppb	87.5016	0.1	302855
As 188.980	87.9079	ppb	3.3064	3.8	24.9434
B 249.678	46.4333	ppb	0.4516	1.0	-39.1231

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1303.58	ppb	0.9218	0.1	14523.5
Be 313.042	6.1087	ppb	0.0128	0.2	4925.18
Ca 370.602	23260	ppb	21.39	0.1	52637
Cd 226.502	0.6417	ppb	0.3770	58.8	223.856
Co 228.615	80.7672	ppb	1.3396	1.7	417.962
Cr 267.716	174.031	ppb	0.3623	0.2	4104.42
Cu 324.754	192.723	ppb	0.3638	0.2	7862.67
Fe 271.441	251118	ppb	319.244	0.1	206867
K 766.491	10836.9	ppb	12.9947	0.1	295620
Mg 279.078	38967.4	ppb	23.7992	0.1	56087.6
Mn 257.610	4965.78	ppb	4.7139	0.1	543384
Mo 202.032	6.6801	ppb	1.1733	17.6	15.2698
Na 330.237	2504.89	ppb	180.243	7.2	96.8418
Ni 231.604	169.379	ppb	1.3365	0.8	233.065
Pb 220.353	97.8078	ppb	5.2736	5.4	63.7837
Sb 206.834	-9.4889	ppb	3.0113	31.7	13.1919
Se 196.026	9.4890	ppb	7.4578	78.6	3.5007
Si 288.158	2428.96	ppb	3.9274	0.2	12021.9
Sn 189.925	16.4646	ppb	1.2885	7.8	5.0749
Sr 216.596	101.722	ppb	1.0247	1.0	501.329
Ti 334.941	1671.05	ppb	0.8410	0.1	200221
Tl 190.794	7.4953	ppb	8.7446	116.7	-14.4000
V 292.401	297.532	ppb	0.6600	0.2	4384.19
Zn 206.200	504.962	ppb	7.8416	1.6	181.758

680-161405-A-133-Asd (Samp) **12/18/2018, 6:01:45 PM** **Rack 1, Tube 32**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3380	-0.0950u	-0.0247u
Al 308.215	24498.3	24510.7	24501.5
As 188.980	19.7773	15.8492	20.5003
B 249.678	10.2785	10.6985	10.5474
Ba 389.178	270.348	270.856	272.683
Be 313.042	1.1912	1.1963	1.2068
Ca 370.602	4797	4799	4805
Cd 226.502	-0.0845	0.3598	-0.3386
Co 228.615	17.5634	16.2099	17.9287
Cr 267.716	35.8612	35.7617	35.4778
Cu 324.754	38.7241	38.7300	38.9156
Fe 271.441	52201.0	52185.5	52209.3
K 766.491	2124.06	2124.35	2123.64
Mg 279.078	8051.61	8025.92	8036.15
Mn 257.610	1028.72	1030.35	1029.25
Mo 202.032	1.3478	0.1855u	0.3469u
Na 330.237	402.283	566.322	712.257
Ni 231.604	34.3983	33.2119	34.9150
Pb 220.353	22.1275	25.6851	15.3477
Sb 206.834	-10.0831u	-7.4381u	-10.2907u
Se 196.026	-11.6601u	-2.2505u	8.0261
Si 288.158	491.772	494.251	493.901
Sn 189.925	7.1638	6.1321	4.3712
Sr 216.596	21.1605	21.0732	21.1327
Ti 334.941	344.016	344.574	345.819

Label	Replicates Concentration		
Tl 190.794	-1.3406u	2.2214u	-2.8798u
V 292.401	60.6596	61.3316	60.9752
Zn 206.200	106.523	113.658	111.133

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0728	ppb	0.2324	319.3	-36.0404
Al 308.215	24503.5	ppb	6.4063	0.0	61590.2
As 188.980	18.7089	ppb	2.5028	13.4	6.2884
B 249.678	10.5082	ppb	0.2127	2.0	-79.9454
Ba 389.178	271.295	ppb	1.2277	0.5	2971.78
Be 313.042	1.1981	ppb	0.0080	0.7	836.805
Ca 370.602	4800	ppb	4.130	0.1	10891
Cd 226.502	-0.0211	ppb	0.3535	1674.1	53.6076
Co 228.615	17.2340	ppb	0.9055	5.3	79.5661
Cr 267.716	35.7002	ppb	0.1989	0.6	860.775
Cu 324.754	38.7899	ppb	0.1089	0.3	1744.48
Fe 271.441	52198.6	ppb	12.0678	0.0	43022.2
K 766.491	2124.02	ppb	0.3581	0.0	58156.7
Mg 279.078	8037.90	ppb	12.9372	0.2	11594.0
Mn 257.610	1029.44	ppb	0.8306	0.1	112664
Mo 202.032	0.6267	ppb	0.6297	100.5	4.8049
Na 330.237	560.287	ppb	155.075	27.7	66.9234
Ni 231.604	34.1751	ppb	0.8732	2.6	45.2140
Pb 220.353	21.0534	ppb	5.2517	24.9	18.9799
Sb 206.834	-9.2706	ppb	1.5904	17.2	8.6843
Se 196.026	-1.9615	ppb	9.8463	502.0	1.5825
Si 288.158	493.308	ppb	1.3420	0.3	2667.75
Sn 189.925	5.8890	ppb	1.4121	24.0	1.6475
Sr 216.596	21.1221	ppb	0.0446	0.2	111.867
Ti 334.941	344.803	ppb	0.9228	0.3	41285.3
Tl 190.794	-0.6663	ppb	2.6166	392.7	-12.0595
V 292.401	60.9888	ppb	0.3362	0.6	896.919
Zn 206.200	110.438	ppb	3.6182	3.3	39.5424

680-161405-A-133-Apd (Samp) **12/18/2018, 6:05:47 PM** **Rack 1, Tube 33**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.6020	50.6695	50.7811
Al 308.215	123158	123374	123329
As 188.980	177.251	189.542	180.679
B 249.678	241.985	242.869	243.538
Ba 389.178	1377.46	1376.94	1378.85
Be 313.042	57.6828	57.6623	57.7081
Ca 370.602	27757	27733	27737
Cd 226.502	52.4604	52.9394	52.2783
Co 228.615	130.612	129.180	129.852
Cr 267.716	273.048	272.862	272.571
Cu 324.754	288.454	289.748	288.772
Fe 271.441	249736	249892	249374
K 766.491	18970.0	18972.5	18994.3
Mg 279.078	43149.7	43134.3	43114.8
Mn 257.610	5248.92	5274.52	5259.72
Mo 202.032	107.640	106.439	105.452

Label	Replicates Concentration		
Na 330.237	7521.31	7340.07	7579.04
Ni 231.604	265.655	262.535	259.436
Pb 220.353	595.225	602.281	595.329
Sb 206.834	47.3781	44.0407	44.2004
Se 196.026	100.839	107.654	107.580
Si 288.158	2408.25	2407.85	2407.38
Sn 189.925	117.185	124.752	113.673
Sr 216.596	200.004	199.081	199.405
Ti 334.941	1736.65	1735.14	1736.35
Tl 190.794	41.7800	42.5552	40.8502
V 292.401	390.597	392.654	392.849
Zn 206.200	588.430	592.459	588.986

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.6842	ppb	0.0904	0.2	1803.39
Al 308.215	123287	ppb	113.753	0.1	309235
As 188.980	182.491	ppb	6.3425	3.5	49.8714
B 249.678	242.798	ppb	0.7790	0.3	1283.48
Ba 389.178	1377.75	ppb	0.9892	0.1	15351.0
Be 313.042	57.6844	ppb	0.0230	0.0	47769.1
Ca 370.602	27742	ppb	12.80	0.0	62863
Cd 226.502	52.5594	ppb	0.3415	0.6	1070.89
Co 228.615	129.881	ppb	0.7165	0.6	664.561
Cr 267.716	272.827	ppb	0.2406	0.1	6398.35
Cu 324.754	288.992	ppb	0.6739	0.2	11662.1
Fe 271.441	249667	ppb	265.845	0.1	205675
K 766.491	18978.9	ppb	13.3605	0.1	517524
Mg 279.078	43132.9	ppb	17.4959	0.0	62084.5
Mn 257.610	5261.05	ppb	12.8542	0.2	575688
Mo 202.032	106.510	ppb	1.0953	1.0	240.170
Na 330.237	7480.14	ppb	124.693	1.7	227.758
Ni 231.604	262.542	ppb	3.1094	1.2	362.490
Pb 220.353	597.612	ppb	4.0440	0.7	356.703
Sb 206.834	45.2064	ppb	1.8824	4.2	37.0093
Se 196.026	105.358	ppb	3.9133	3.7	21.7955
Si 288.158	2407.83	ppb	0.4329	0.0	11947.3
Sn 189.925	118.537	ppb	5.6616	4.8	38.1546
Sr 216.596	199.497	ppb	0.4686	0.2	911.988
Ti 334.941	1736.05	ppb	0.8022	0.0	208019
Tl 190.794	41.7285	ppb	0.8537	2.0	0.0543
V 292.401	392.033	ppb	1.2479	0.3	5747.30
Zn 206.200	589.958	ppb	2.1834	0.4	212.310

680-161405-A-133-B M (Samp) **12/18/2018, 6:09:49 PM** **Rack 1, Tube 34**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	49.5653	48.3136	48.9729
Al 308.215	158715	158563	158660
As 188.980	289.803	294.504	288.666
B 249.678	191.310	192.888	192.896
Ba 389.178	2454.03	2465.50	2458.01
Be 313.042	55.7648	55.7318	55.8027
Ca 370.602	43847	43854	43891

Label	Replicates Concentration		
Cd 226.502	55.1006	53.9956	55.0301
Co 228.615	263.311	260.057	259.725
Cr 267.716	283.845	284.056	284.423
Cu 324.754	377.957	375.502	379.144
Fe 271.441	272444	272409	272531
K 766.491	19146.8	19123.8	19149.0
Mg 279.078	44673.9	44669.2	44706.5
Mn 257.610	23839.1	23883.3	23816.0
Mo 202.032	103.870	102.063	105.254
Na 330.237	7752.47	8112.20	7760.32
Ni 231.604	305.193	306.362	308.159
Pb 220.353	621.833	626.090	624.390
Sb 206.834	26.7799	27.8576	39.2837
Se 196.026	79.4620	83.6063	103.796
Si 288.158	2632.75	2634.02	2635.98
Sn 189.925	101.218	112.857	103.629
Sr 216.596	225.909	226.664	225.610
Ti 334.941	2021.01	2021.54	2021.94
Tl 190.794	33.0122	31.7101	39.1129
V 292.401	428.197	428.744	428.954
Zn 206.200	696.711	701.448	699.406

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.9506	ppb	0.6261	1.3	1775.85
Al 308.215	158646	ppb	76.8882	0.0	397873
As 188.980	290.991	ppb	3.0952	1.1	78.5487
B 249.678	192.365	ppb	0.9134	0.5	920.846
Ba 389.178	2459.18	ppb	5.8212	0.2	27362.3
Be 313.042	55.7664	ppb	0.0355	0.1	46178.0
Ca 370.602	43864	ppb	23.43	0.1	99946
Cd 226.502	54.7088	ppb	0.6186	1.1	1125.46
Co 228.615	261.031	ppb	1.9816	0.8	1327.88
Cr 267.716	284.108	ppb	0.2925	0.1	6702.20
Cu 324.754	377.534	ppb	1.8574	0.5	15160.4
Fe 271.441	272461	ppb	62.4125	0.0	224457
K 766.491	19139.9	ppb	13.9613	0.1	521912
Mg 279.078	44683.2	ppb	20.3037	0.0	64106.3
Mn 257.610	23846.1	ppb	34.1811	0.1	2607655
Mo 202.032	103.729	ppb	1.6005	1.5	233.537
Na 330.237	7875.00	ppb	205.465	2.6	235.419
Ni 231.604	306.571	ppb	1.4939	0.5	423.542
Pb 220.353	624.104	ppb	2.1430	0.3	373.224
Sb 206.834	31.3071	ppb	6.9290	22.1	31.3393
Se 196.026	88.9548	ppb	13.0189	14.6	20.3740
Si 288.158	2634.25	ppb	1.6268	0.1	13045.8
Sn 189.925	105.901	ppb	6.1432	5.8	34.0598
Sr 216.596	226.061	ppb	0.5435	0.2	1029.67
Ti 334.941	2021.50	ppb	0.4648	0.0	242209
Tl 190.794	34.6117	ppb	3.9521	11.4	3.3874
V 292.401	428.632	ppb	0.3913	0.1	6285.90
Zn 206.200	699.188	ppb	2.3759	0.3	251.647

680-161405-A-133-C M (Samp) **12/18/2018, 6:13:51 PM** **Rack 1, Tube 35**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.2268	50.0448	50.2044
Al 308.215	156613	156443	156785
As 188.980	218.006	219.031	212.523
B 249.678	194.915	195.637	195.427
Ba 389.178	1874.71	1876.13	1877.34
Be 313.042	55.2955	55.3159	55.3407
Ca 370.602	31937	31962	31998
Cd 226.502	48.8725	49.0344	49.3078
Co 228.615	121.827	121.695	122.402
Cr 267.716	304.819	306.489	306.520
Cu 324.754	333.204	330.819	335.175
Fe 271.441	241338	241500	241975
K 766.491	19950.0	19941.7	19944.3
Mg 279.078	43748.4	43762.8	43772.2
Mn 257.610	5316.20	5319.90	5336.68
Mo 202.032	98.8226	97.6765	101.176
Na 330.237	8037.51	7949.47	7967.88
Ni 231.604	259.490	262.050	258.870
Pb 220.353	594.112	591.033	588.977
Sb 206.834	28.1600	29.5656	27.8159
Se 196.026	102.932	95.1922	79.9928
Si 288.158	2605.03	2604.96	2600.20
Sn 189.925	95.2621	106.926	102.256
Sr 216.596	210.258	211.046	210.867
Ti 334.941	2245.85	2246.95	2247.63
Tl 190.794	35.5804	36.3128	42.2935
V 292.401	403.218	404.006	404.705
Zn 206.200	611.779	599.121	600.932

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.1587	ppb	0.0992	0.2	1785.19
Al 308.215	156613	ppb	170.900	0.1	392775
As 188.980	216.520	ppb	3.4992	1.6	58.8298
B 249.678	195.326	ppb	0.3716	0.2	972.159
Ba 389.178	1876.06	ppb	1.3168	0.1	20879.7
Be 313.042	55.3174	ppb	0.0226	0.0	45805.5
Ca 370.602	31966	ppb	30.54	0.1	72525
Cd 226.502	49.0716	ppb	0.2200	0.4	1009.10
Co 228.615	121.975	ppb	0.3756	0.3	629.535
Cr 267.716	305.943	ppb	0.9736	0.3	7166.91
Cu 324.754	333.066	ppb	2.1814	0.7	13398.8
Fe 271.441	241604	ppb	330.814	0.1	199034
K 766.491	19945.3	ppb	4.2770	0.0	543863
Mg 279.078	43761.1	ppb	12.0132	0.0	62981.9
Mn 257.610	5324.26	ppb	10.9119	0.2	582606
Mo 202.032	99.2249	ppb	1.7840	1.8	223.882
Na 330.237	7984.96	ppb	46.4371	0.6	241.154
Ni 231.604	260.137	ppb	1.6859	0.6	359.161
Pb 220.353	591.374	ppb	2.5848	0.4	352.474
Sb 206.834	28.5138	ppb	0.9270	3.3	29.5152
Se 196.026	92.7057	ppb	11.6700	12.6	19.4175
Si 288.158	2603.40	ppb	2.7648	0.1	12907.7

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	101.481	ppb	5.8703	5.8	32.6275
Sr 216.596	210.724	ppb	0.4128	0.2	957.502
Ti 334.941	2246.81	ppb	0.8971	0.0	269189
Tl 190.794	38.0623	ppb	3.6827	9.7	-1.1436
V 292.401	403.976	ppb	0.7439	0.2	5921.61
Zn 206.200	603.944	ppb	6.8452	1.1	217.319

680-162108-C-1-B (Samp) **12/18/2018, 6:19:06 PM** **Rack 1, Tube 36**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1646u	0.1150u	0.0765u
Al 308.215	49922.3	49936.4	49819.9
As 188.980	27.6387	25.0221	24.4276
B 249.678	19.9140	19.9750	19.4982
Ba 389.178	63.1634	62.8749	62.5568
Be 313.042	2.1388	2.1460	2.1481
Ca 370.602	5530	5541	5544
Cd 226.502	0.1930	0.8681	0.4365
Co 228.615	21.2095	21.3487	19.5629
Cr 267.716	62.9356	63.0238	63.0765
Cu 324.754	63.2243	63.3410	63.7600
Fe 271.441	71442.6	71437.1	71493.7
K 766.491	2818.36	2818.29	2813.65
Mg 279.078	7892.43	7899.51	7898.29
Mn 257.610	710.732	709.886	709.074
Mo 202.032	3.0628	2.8050	3.5661
Na 330.237	-34.7013u	-77.7238u	-182.433u
Ni 231.604	36.0306	34.9729	36.6019
Pb 220.353	58.5199	65.2791	57.9105
Sb 206.834	-3.1491	-3.2212	-6.1814u
Se 196.026	23.1859	8.1300	-0.2650u
Si 288.158	1983.65	1994.49	1983.47
Sn 189.925	17.6330	10.2953	11.4244
Sr 216.596	17.6979	20.4701	19.1373
Ti 334.941	2053.63	2052.51	2054.73
Tl 190.794	1.6131u	-1.1223u	6.0774
V 292.401	111.645	112.258	111.876
Zn 206.200	137.409	130.512	135.836

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0090	ppb	0.1515	1687.9	-45.6473
Al 308.215	49892.8	ppb	63.5881	0.1	125237
As 188.980	25.6961	ppb	1.7084	6.6	8.1678
B 249.678	19.7957	ppb	0.2595	1.3	-36.8887
Ba 389.178	62.8650	ppb	0.3034	0.5	664.530
Be 313.042	2.1443	ppb	0.0049	0.2	1625.08
Ca 370.602	5538	ppb	7.366	0.1	12571
Cd 226.502	0.4992	ppb	0.3419	68.5	77.8111
Co 228.615	20.7070	ppb	0.9932	4.8	113.925
Cr 267.716	63.0120	ppb	0.0712	0.1	1497.94
Cu 324.754	63.4418	ppb	0.2817	0.4	2721.27
Fe 271.441	71457.8	ppb	31.2261	0.0	58885.7
K 766.491	2816.77	ppb	2.7015	0.1	77037.1

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	7896.74	ppb	3.7824	0.0	11388.9
Mn 257.610	709.897	ppb	0.8295	0.1	77781.2
Mo 202.032	3.1446	ppb	0.3871	12.3	10.1640
Na 330.237	-98.2859	ppb	75.9820	77.3	45.4834
Ni 231.604	35.8685	ppb	0.8265	2.3	47.5650
Pb 220.353	60.5698	ppb	4.0898	6.8	41.5327
Sb 206.834	-4.1839	ppb	1.7303	41.4	11.4266
Se 196.026	10.3503	ppb	11.8821	114.8	3.8357
Si 288.158	1987.20	ppb	6.3102	0.3	9919.90
Sn 189.925	13.1176	ppb	3.9510	30.1	3.9900
Sr 216.596	19.1018	ppb	1.3864	7.3	108.138
Ti 334.941	2053.62	ppb	1.1117	0.1	245923
Tl 190.794	2.1894	ppb	3.6343	166.0	-11.6757
V 292.401	111.926	ppb	0.3096	0.3	1650.42
Zn 206.200	134.586	ppb	3.6147	2.7	48.2503

680-162112-B-1-B (Samp) **12/18/2018, 6:23:29 PM** **Rack 1, Tube 37**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.4116	1.8000	1.5494
Al 308.215	2123.07	2130.25	2125.21
As 188.980	-1.7900u	-4.4339u	5.6747
B 249.678	469.304	472.029	469.602
Ba 389.178	760.042	760.927	761.579
Be 313.042	0.0050u	-0.0005u	-0.0001u
Ca 370.602	53652	53693	53632
Cd 226.502	12.6981	12.0692	12.4326
Co 228.615	5.7086	5.7218	6.0395
Cr 267.716	77.2888	77.0558	77.2156
Cu 324.754	863.809	856.167	859.153
Fe 271.441	29753.8	29821.5	29744.8
K 766.491	493.920	494.039	492.109
Mg 279.078	9871.73	9870.65	9864.22
Mn 257.610	255.593	255.259	254.901
Mo 202.032	653.158	651.975	658.421
Na 330.237	3169.50	3292.95	3316.19
Ni 231.604	51.5371	51.2768	49.8740
Pb 220.353	330.326	343.887	333.340
Sb 206.834	30.4535	30.0024	35.2810
Se 196.026	-12.1371u	6.0523	7.9711
Si 288.158	1405.20	1407.18	1405.52
Sn 189.925	124.432	124.128	128.100
Sr 216.596	88.3455	87.5436	87.2326
Ti 334.941	102.613	102.749	102.297
Tl 190.794	-3.8695u	-5.5085u	-2.7137u
V 292.401	4.6307	5.5493	5.6533
Zn 206.200	18285.2	18330.2	18286.7

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.5870	ppb	0.1969	12.4	23.1825
Al 308.215	2126.18	ppb	3.6837	0.2	5504.15
As 188.980	-0.1830	ppb	5.2424	2864.1	1.1632
B 249.678	470.312	ppb	1.4949	0.3	3037.82

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	760.849	ppb	0.7716	0.1	8401.43
Be 313.042	0.0015	ppb	0.0031	206.9	-196.026
Ca 370.602	53659	ppb	30.94	0.1	122289
Cd 226.502	12.4000	ppb	0.3157	2.5	237.926
Co 228.615	5.8233	ppb	0.1873	3.2	11.5886
Cr 267.716	77.1867	ppb	0.1191	0.2	1819.32
Cu 324.754	859.710	ppb	3.8514	0.4	34142.0
Fe 271.441	29773.4	ppb	41.9490	0.1	24551.1
K 766.491	493.356	ppb	1.0818	0.2	13714.3
Mg 279.078	9868.87	ppb	4.0613	0.0	14244.8
Mn 257.610	255.251	ppb	0.3461	0.1	28005.6
Mo 202.032	654.518	ppb	3.4316	0.5	1478.34
Na 330.237	3259.55	ppb	78.8415	2.4	102.059
Ni 231.604	50.8959	ppb	0.8946	1.8	68.4724
Pb 220.353	335.851	ppb	7.1208	2.1	203.479
Sb 206.834	31.9123	ppb	2.9261	9.2	20.3277
Se 196.026	0.6288	ppb	11.0971	1764.9	2.0739
Si 288.158	1405.97	ppb	1.0618	0.1	7137.73
Sn 189.925	125.553	ppb	2.2107	1.8	40.4279
Sr 216.596	87.7072	ppb	0.5742	0.7	377.981
Ti 334.941	102.553	ppb	0.2315	0.2	12281.1
Tl 190.794	-4.0306	ppb	1.4043	34.8	-13.2358
V 292.401	5.2778	ppb	0.5628	10.7	27.4562
Zn 206.200	18300.7	ppb	25.5469	0.1	6585.80

680-162112-B-3-B (Samp) **12/18/2018, 6:27:51 PM** **Rack 1, Tube 38**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0443u	-0.3090u	-0.1710u
Al 308.215	21.4298	19.9558	19.4497
As 188.980	-3.9440u	0.0761	4.6397
B 249.678	5.1725	3.1594	4.4577
Ba 389.178	-0.1966u	0.0729	-0.4274u
Be 313.042	-0.0380u	-0.0429u	-0.0310u
Ca 370.602	39.43	36.09	37.45
Cd 226.502	-0.2055u	-0.2768u	-0.2292u
Co 228.615	0.4522	-0.2463u	0.1340
Cr 267.716	0.5146	0.5328	0.3557
Cu 324.754	0.0130	0.6210	0.3066
Fe 271.441	97.7285	95.5169	96.4537
K 766.491	11.9981	11.4579	11.9216
Mg 279.078	4.4482	4.0612	1.6199
Mn 257.610	1.1264	1.0639	1.1078
Mo 202.032	-0.6301u	-0.8539u	-0.8796u
Na 330.237	-68.0833u	210.466	62.7567
Ni 231.604	1.1523	-2.2293u	-1.1602u
Pb 220.353	-1.7584u	2.9055	1.3953
Sb 206.834	-11.5287u	-4.3363u	-11.9327u
Se 196.026	-22.1055u	-1.4353u	8.8243
Si 288.158	5.4206	5.8145	5.4687
Sn 189.925	8.6737	12.9781	13.3529
Sr 216.596	-0.3493u	0.4071	-0.5534u
Ti 334.941	4.2834	4.3032	4.3273

Label	Replicates Concentration		
Tl 190.794	-2.6233u	-1.3257u	-2.1786u
V 292.401	-0.4107u	0.1345	0.3880
Zn 206.200	2.1832	5.3383	6.6162

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1748	ppb	0.1324	75.8	-35.5089
Al 308.215	20.2784	ppb	1.0287	5.1	213.124
As 188.980	0.2573	ppb	4.2947	1669.4	1.3155
B 249.678	4.2632	ppb	1.0206	23.9	-69.2372
Ba 389.178	-0.1837	ppb	0.2504	136.3	-66.0670
Be 313.042	-0.0373	ppb	0.0060	16.0	-191.866
Ca 370.602	37.66	ppb	1.676	4.5	123.0
Cd 226.502	-0.2372	ppb	0.0363	15.3	8.2817
Co 228.615	0.1133	ppb	0.3497	308.6	-11.4264
Cr 267.716	0.4677	ppb	0.0974	20.8	34.3955
Cu 324.754	0.3135	ppb	0.3041	97.0	214.650
Fe 271.441	96.5664	ppb	1.1101	1.1	107.186
K 766.491	11.7926	ppb	0.2923	2.5	589.621
Mg 279.078	3.3764	ppb	1.5334	45.4	35.9417
Mn 257.610	1.0994	ppb	0.0321	2.9	141.739
Mo 202.032	-0.7879	ppb	0.1372	17.4	2.4503
Na 330.237	68.3799	ppb	139.360	203.8	59.5350
Ni 231.604	-0.7457	ppb	1.7285	231.8	-3.3040
Pb 220.353	0.8474	ppb	2.3797	280.8	7.1737
Sb 206.834	-9.2659	ppb	4.2739	46.1	7.4760
Se 196.026	-4.9055	ppb	15.7542	321.2	1.0912
Si 288.158	5.5680	ppb	0.2149	3.9	311.176
Sn 189.925	11.6682	ppb	2.6001	22.3	3.5204
Sr 216.596	-0.1652	ppb	0.5060	306.3	9.0772
Ti 334.941	4.3046	ppb	0.0220	0.5	480.007
Tl 190.794	-2.0425	ppb	0.6595	32.3	-11.1247
V 292.401	0.0373	ppb	0.4081	1094.8	-1.9359
Zn 206.200	4.7126	ppb	2.2818	48.4	1.4322

680-162112-B-14-B (Samp) **12/18/2018, 6:32:13 PM** **Rack 1, Tube 39**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.7337u	0.3502	0.2069
Al 308.215	23.5478	26.3842	25.4725
As 188.980	-2.3256u	3.6499	5.4537
B 249.678	12.3267	11.4398	12.1202
Ba 389.178	0.6136	0.3325	0.6515
Be 313.042	-0.0304u	-0.0413u	-0.0346u
Ca 370.602	76.17	72.36	77.24
Cd 226.502	-0.0969u	-0.3646u	-0.3905u
Co 228.615	-0.2535u	0.2764	-0.1698u
Cr 267.716	0.8557	0.5863	0.6520
Cu 324.754	5.9720	5.1799	5.5419
Fe 271.441	224.664	229.827	232.702
K 766.491	15.8398	14.9265	15.7960
Mg 279.078	6.3599	4.3421	4.1677
Mn 257.610	1.6251	1.6469	1.6986
Mo 202.032	-1.8419u	-0.8548u	-1.5925u

Label	Replicates Concentration		
Na 330.237	-179.565u	120.349	6.0576
Ni 231.604	1.0180	-0.3418u	0.6968
Pb 220.353	-2.0020u	-2.8822u	1.9407
Sb 206.834	-10.3782u	2.0895	3.4996
Se 196.026	-13.1666u	-4.4055u	-12.6763u
Si 288.158	72.2695	72.3104	71.1915
Sn 189.925	8.7685	16.6442	10.4522
Sr 216.596	0.3512	-0.2954u	-0.3727u
Ti 334.941	3.5841	3.7214	3.5018
Tl 190.794	-8.1197u	-2.8602u	2.7320
V 292.401	0.3196	0.4090	0.1635
Zn 206.200	-1.2240u	4.6054	4.8710

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0589	ppb	0.5888	1000.4	-31.2431
Al 308.215	25.1349	ppb	1.4480	5.8	225.295
As 188.980	2.2594	ppb	4.0718	180.2	1.8442
B 249.678	11.9622	ppb	0.4641	3.9	-17.5478
Ba 389.178	0.5325	ppb	0.1743	32.7	-58.0763
Be 313.042	-0.0354	ppb	0.0055	15.5	-190.239
Ca 370.602	75.26	ppb	2.563	3.4	208.4
Cd 226.502	-0.2840	ppb	0.1626	57.2	7.6233
Co 228.615	-0.0490	ppb	0.2849	581.9	-12.2345
Cr 267.716	0.6980	ppb	0.1405	20.1	39.7564
Cu 324.754	5.5646	ppb	0.3966	7.1	421.832
Fe 271.441	229.064	ppb	4.0727	1.8	216.315
K 766.491	15.5207	ppb	0.5151	3.3	691.230
Mg 279.078	4.9566	ppb	1.2184	24.6	38.2109
Mn 257.610	1.6568	ppb	0.0378	2.3	202.793
Mo 202.032	-1.4297	ppb	0.5133	35.9	1.0021
Na 330.237	-17.7194	ppb	151.364	854.2	57.2578
Ni 231.604	0.4577	ppb	0.7107	155.3	-1.6314
Pb 220.353	-0.9812	ppb	2.5684	261.8	6.1029
Sb 206.834	-1.5964	ppb	7.6379	478.5	10.9268
Se 196.026	-10.0828	ppb	4.9228	48.8	0.1045
Si 288.158	71.9238	ppb	0.6345	0.9	629.449
Sn 189.925	11.9550	ppb	4.1474	34.7	3.6133
Sr 216.596	-0.1056	ppb	0.3975	376.3	9.3650
Ti 334.941	3.6024	ppb	0.1110	3.1	395.921
Tl 190.794	-2.7493	ppb	5.4267	197.4	-11.4235
V 292.401	0.2974	ppb	0.1242	41.8	1.9435
Zn 206.200	2.7508	ppb	3.4448	125.2	0.7263

680-161405-A-86-A (Samp) **12/18/2018, 6:36:36 PM** **Rack 1, Tube 40**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1100u	0.7478	0.2195u
Al 308.215	136989	136925	136960
As 188.980	310.556	313.512	306.582
B 249.678	42.8639	40.7099	42.1197
Ba 389.178	1549.33	1548.28	1548.31
Be 313.042	7.9231	7.9339	7.9180
Ca 370.602	52004	52073	52048

Label	Replicates Concentration		
Cd 226.502	3.8235	3.8001	4.0081
Co 228.615	79.0543	81.1412	80.1541
Cr 267.716	155.855	155.784	155.154
Cu 324.754	312.656	315.542	313.815
Fe 271.441	191415	191508	191581
K 766.491	11282.5	11276.2	11277.0
Mg 279.078	29893.0	29910.2	29881.8
Mn 257.610	12922.9	12927.3	12944.0
Mo 202.032	9.4319	11.8964	8.8991
Na 330.237	843.144u	1080.47	1046.00
Ni 231.604	148.048	146.172	147.780
Pb 220.353	1254.71	1261.28	1266.92
Sb 206.834	-1.7280	-11.3239u	-7.2178
Se 196.026	6.8210	6.4361	-8.9904u
Si 288.158	2504.25	2510.92	2510.32
Sn 189.925	102.370	92.9219	92.3996
Sr 216.596	573.599	576.533	576.101
Ti 334.941	1354.94	1355.96	1355.31
Tl 190.794	12.2089	0.8349u	4.6813u
V 292.401	247.953	247.520	248.219
Zn 206.200	1119.83	1118.90	1126.04

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3591	ppb	0.3410	95.0	-32.5384
Al 308.215	136958	ppb	31.8610	0.0	343496
As 188.980	310.217	ppb	3.4772	1.1	83.4850
B 249.678	41.8978	ppb	1.0940	2.6	-10.1474
Ba 389.178	1548.64	ppb	0.6006	0.0	17215.4
Be 313.042	7.9250	ppb	0.0081	0.1	6437.64
Ca 370.602	52042	ppb	34.93	0.1	118529
Cd 226.502	3.8772	ppb	0.1139	2.9	231.689
Co 228.615	80.1165	ppb	1.0439	1.3	409.793
Cr 267.716	155.598	ppb	0.3856	0.2	3686.34
Cu 324.754	314.004	ppb	1.4521	0.5	12634.3
Fe 271.441	191501	ppb	83.2992	0.0	157763
K 766.491	11278.6	ppb	3.4429	0.0	307657
Mg 279.078	29895.0	ppb	14.3224	0.0	42926.8
Mn 257.610	12931.4	ppb	11.0959	0.1	1414175
Mo 202.032	10.0758	ppb	1.5991	15.9	23.8548
Na 330.237	989.870	ppb	128.232	13.0	61.5574
Ni 231.604	147.333	ppb	1.0149	0.7	202.432
Pb 220.353	1260.97	ppb	6.1098	0.5	745.786
Sb 206.834	-6.7566	ppb	4.8145	71.3	13.0724
Se 196.026	1.4222	ppb	9.0197	634.2	2.9168
Si 288.158	2508.50	ppb	3.6886	0.1	12396.3
Sn 189.925	95.8970	ppb	5.6115	5.9	30.8168
Sr 216.596	575.411	ppb	1.5842	0.3	2487.90
Ti 334.941	1355.40	ppb	0.5186	0.0	162389
Tl 190.794	5.9084	ppb	5.7854	97.9	-9.8920
V 292.401	247.897	ppb	0.3533	0.1	3647.38
Zn 206.200	1121.59	ppb	3.8838	0.3	403.591

Cont Calib Verif (CCV) **12/18/2018, 6:41:00 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	490.609	492.762	492.703
Al 308.215	9837.25	9848.81	9828.24
As 188.980	488.752	499.100	496.766
B 249.678	494.284	494.836	494.244
Ba 389.178	495.323	496.511	498.242
Be 313.042	512.026	512.855	512.341
Ca 370.602	10038	10029	10033
Cd 226.502	506.018	506.018	504.863
Co 228.615	504.268	506.071	504.670
Cr 267.716	501.628	501.042	501.931
Cu 324.754	487.482	488.653	486.628
Fe 271.441	9997.43	9998.71	10009.7
K 766.491	9783.04	9810.67	9801.89
Mg 279.078	10026.1	10012.2	10004.1
Mn 257.610	502.134	502.052	501.384
Mo 202.032	494.604	499.825	496.177
Na 330.237	9819.51	10205.5	9929.22
Ni 231.604	500.829	503.019	504.037
Pb 220.353	497.451	500.748	505.663
Sb 206.834	489.697	480.298	486.850
Se 196.026	480.146	484.269	488.755
Si 288.158	5059.28	5066.13	5063.38
Sn 189.925	499.765	492.406	503.714
Sr 216.596	504.922	505.800	506.637
Ti 334.941	504.045	504.376	504.112
Tl 190.794	491.294	488.128	494.027
V 292.401	497.407	497.680	496.795
Zn 206.200	1007.57	1012.96	1011.49

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	492.025	ppb	1.2261	0.2	18204.7	98.40496
Al 308.215	9838.10	ppb	10.3119	0.1	24847.3	98.38103
As 188.980	494.873	ppb	5.4273	1.1	131.711	98.97455
B 249.678	494.454	ppb	0.3313	0.1	3220.39	98.89089
Ba 389.178	496.692	ppb	1.4679	0.3	5463.54	99.33846
Be 313.042	512.407	ppb	0.4184	0.1	425517	102.48143
Ca 370.602	10033	ppb	4.904	0.0	22912	100.33460
Cd 226.502	505.633	ppb	0.6673	0.1	8274.22	101.12663
Co 228.615	505.003	ppb	0.9467	0.2	2528.47	101.00064
Cr 267.716	501.534	ppb	0.4521	0.1	11668.0	100.30671
Cu 324.754	487.588	ppb	1.0165	0.2	19448.6	97.51760
Fe 271.441	10001.9	ppb	6.7295	0.1	8296.37	99.96938
K 766.491	9798.54	ppb	14.1165	0.1	267320	97.98536
Mg 279.078	10014.2	ppb	11.1359	0.1	14449.8	100.14157
Mn 257.610	501.857	ppb	0.4113	0.1	54959.2	100.37132
Mo 202.032	496.869	ppb	2.6782	0.5	1123.36	99.37373
Na 330.237	9984.74	ppb	198.893	2.0	317.151	99.84740
Ni 231.604	502.628	ppb	1.6396	0.3	695.730	100.52566
Pb 220.353	501.287	ppb	4.1325	0.8	300.123	100.25739
Sb 206.834	485.615	ppb	4.8201	1.0	226.274	97.12302
Se 196.026	484.390	ppb	4.3058	0.9	94.3227	96.87794
Si 288.158	5062.93	ppb	3.4491	0.1	24717.1	101.25857

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	498.628	ppb	5.7393	1.2	161.333	99.72566
Sr 216.596	505.786	ppb	0.8572	0.2	2137.80	101.15726
Ti 334.941	504.178	ppb	0.1752	0.0	60377.5	100.83556
Tl 190.794	491.149	ppb	2.9521	0.6	194.670	98.22987
V 292.401	497.294	ppb	0.4534	0.1	7177.75	99.45884
Zn 206.200	1010.67	ppb	2.7862	0.3	363.291	101.06721

Cont Calib Blank (CCB) **12/18/2018, 6:45:24 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0532u	-0.0714u	0.1374
Al 308.215	2.8455	-1.8285u	-2.2341u
As 188.980	-0.6651u	-2.0661u	1.7950
B 249.678	3.0749	3.3038	1.9708
Ba 389.178	-0.0332u	1.1323	-1.0432u
Be 313.042	0.0301	0.0193	0.0353
Ca 370.602	-2.150u	1.942	1.137
Cd 226.502	0.0329	-0.1064u	-0.0355u
Co 228.615	0.3955	-0.6161u	-0.1429u
Cr 267.716	-0.5067u	-0.2047u	0.1076
Cu 324.754	-0.0653u	-0.0070u	-0.4730u
Fe 271.441	0.7487	4.9394	4.5231
K 766.491	0.6599	1.3127	1.6987
Mg 279.078	-3.3456u	1.8030	4.8507
Mn 257.610	0.0918	0.1596	0.1151
Mo 202.032	-0.0510u	0.7548	-0.1075u
Na 330.237	-47.5806u	-57.6458u	-147.604u
Ni 231.604	0.6030	-0.7033u	-0.5878u
Pb 220.353	2.3475	-3.3468u	1.4921
Sb 206.834	2.7957	-12.6589u	-3.7490u
Se 196.026	3.4016	10.7818	-10.1890u
Si 288.158	5.6068	2.8804	2.4889
Sn 189.925	0.8578	1.0128	-0.4638u
Sr 216.596	-0.1529u	-0.0258u	0.3605
Ti 334.941	0.3481	0.2708	0.3649
Tl 190.794	8.4976	2.3393	-0.3972u
V 292.401	0.6835	-0.0232u	0.2298
Zn 206.200	1.0844	-0.2162u	-2.4541u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0042	ppb	0.1156	2727.2	-28.8516	0.00424
Al 308.215	-0.4057	ppb	2.8229	695.8	161.293	-0.40571
As 188.980	-0.3120	ppb	1.9546	626.4	1.1651	-0.31203
B 249.678	2.7832	ppb	0.7128	25.6	-79.1122	2.78317
Ba 389.178	0.0186	ppb	1.0887	5840.1	-63.8526	0.01864
Be 313.042	0.0282	ppb	0.0082	29.0	-137.450	0.02824
Ca 370.602	0.3097	ppb	2.168	700.0	37.96	0.30967
Cd 226.502	-0.0363	ppb	0.0696	191.7	11.4930	-0.03632
Co 228.615	-0.1212	ppb	0.5061	417.7	-12.6532	-0.12117
Cr 267.716	-0.2013	ppb	0.3072	152.6	18.8475	-0.20128
Cu 324.754	-0.1818	ppb	0.2539	139.7	195.103	-0.18178
Fe 271.441	3.4037	ppb	2.3087	67.8	30.4303	3.40370
K 766.491	1.2238	ppb	0.5251	42.9	301.576	1.22376

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	1.1027	ppb	4.1428	375.7	32.6809	1.10270
Mn 257.610	0.1222	ppb	0.0344	28.2	34.7089	0.12216
Mo 202.032	0.1988	ppb	0.4824	242.7	4.6744	0.19877
Na 330.237	-84.2769	ppb	55.0733	65.3	55.5343	-84.27686
Ni 231.604	-0.2293	ppb	0.7231	315.3	-2.5858	-0.22934
Pb 220.353	0.1643	ppb	3.0706	1869.4	6.7736	0.16425
Sb 206.834	-4.5374	ppb	7.7574	171.0	9.5829	-4.53742
Se 196.026	1.3314	ppb	10.6376	798.9	2.2796	1.33145
Si 288.158	3.6587	ppb	1.6984	46.4	300.913	3.65869
Sn 189.925	0.4689	ppb	0.8115	173.1	-0.1091	0.46893
Sr 216.596	0.0606	ppb	0.2674	441.4	9.9958	0.06057
Ti 334.941	0.3279	ppb	0.0502	15.3	3.7689	0.32792
Tl 190.794	3.4799	ppb	4.5558	130.9	-8.8224	3.47990
V 292.401	0.2967	ppb	0.3581	120.7	1.7453	0.29670
Zn 206.200	-0.5286	ppb	1.7898	338.6	-0.4539	-0.52863

680-161405-A-101-A (Samp) **12/18/2018, 6:49:46 PM** **Rack 1, Tube 41**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.6540u	0.6830u	0.8377
Al 308.215	135437	135619	135842
As 188.980	224.991	240.127	225.905
B 249.678	53.4242	52.2620	53.0551
Ba 389.178	1439.76	1440.18	1440.83
Be 313.042	6.5357	6.5314	6.5472
Ca 370.602	35489	35543	35372
Cd 226.502	5.5364	5.4116	5.2642
Co 228.615	68.4848	67.0622	67.8926
Cr 267.716	185.068	185.148	184.767
Cu 324.754	355.834	358.601	357.133
Fe 271.441	191268	191112	191315
K 766.491	13223.2	13225.4	13262.3
Mg 279.078	30499.1	30471.8	30523.7
Mn 257.610	7050.01	7038.70	7049.01
Mo 202.032	7.1914	7.1920	6.9964
Na 330.237	1215.51	1304.86	1285.53
Ni 231.604	170.059	169.107	167.034
Pb 220.353	1935.55	1927.66	1949.73
Sb 206.834	-2.6175	0.9740	-5.5230
Se 196.026	17.7463	10.8170	-8.0311u
Si 288.158	2632.07	2631.83	2620.69
Sn 189.925	63.8488	66.7871	59.2755
Sr 216.596	200.038	202.026	201.892
Ti 334.941	1466.33	1469.51	1470.70
Tl 190.794	-4.4151u	3.0605u	11.8256
V 292.401	252.586	253.228	253.613
Zn 206.200	2107.10	2082.58	2114.08

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7249	ppb	0.0988	13.6	-31.0929
Al 308.215	135633	ppb	202.868	0.1	340174
As 188.980	230.341	ppb	8.4874	3.7	62.4028
B 249.678	52.9138	ppb	0.5939	1.1	64.2319

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1440.26	ppb	0.5378	0.0	16013.1
Be 313.042	6.5381	ppb	0.0082	0.1	5283.78
Ca 370.602	35468	ppb	87.43	0.2	80634
Cd 226.502	5.4041	ppb	0.1363	2.5	256.330
Co 228.615	67.8132	ppb	0.7146	1.1	349.051
Cr 267.716	184.994	ppb	0.2008	0.1	4356.42
Cu 324.754	357.190	ppb	1.3846	0.4	14337.9
Fe 271.441	191232	ppb	106.074	0.1	157541
K 766.491	13236.9	ppb	21.9687	0.2	361031
Mg 279.078	30498.2	ppb	25.9534	0.1	43861.0
Mn 257.610	7045.91	ppb	6.2632	0.1	770710
Mo 202.032	7.1266	ppb	0.1128	1.6	17.2127
Na 330.237	1268.63	ppb	47.0076	3.7	66.7156
Ni 231.604	168.733	ppb	1.5468	0.9	232.187
Pb 220.353	1937.64	ppb	11.1815	0.6	1142.01
Sb 206.834	-2.3888	ppb	3.2545	136.2	15.1345
Se 196.026	6.8440	ppb	13.3400	194.9	3.3851
Si 288.158	2628.20	ppb	6.5007	0.2	12972.7
Sn 189.925	63.3038	ppb	3.7854	6.0	20.2542
Sr 216.596	201.319	ppb	1.1108	0.6	907.198
Ti 334.941	1468.84	ppb	2.2594	0.2	175976
Tl 190.794	3.4903	ppb	8.1289	232.9	-13.1239
V 292.401	253.142	ppb	0.5187	0.2	3723.81
Zn 206.200	2101.25	ppb	16.5406	0.8	756.142

680-161405-A-75-A (Samp) **12/18/2018, 6:54:09 PM** **Rack 1, Tube 42**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.4152	1.5074	0.9553
Al 308.215	120603	120579	120766
As 188.980	176.172	185.389	166.527
B 249.678	39.2939	40.5835	40.6191
Ba 389.178	1121.94	1124.93	1125.12
Be 313.042	5.0938	5.1107	5.0922
Ca 370.602	29959	29961	29994
Cd 226.502	3.3524	3.1685	3.1126
Co 228.615	56.6924	59.0389	58.4151
Cr 267.716	154.493	154.939	155.297
Cu 324.754	228.221	225.150	228.455
Fe 271.441	164971	164993	165040
K 766.491	7529.53	7522.69	7528.61
Mg 279.078	26752.6	26720.6	26747.2
Mn 257.610	4828.42	4830.23	4833.87
Mo 202.032	6.6870	6.7179	5.4214
Na 330.237	306.548u	307.523u	627.276u
Ni 231.604	129.524	132.836	134.631
Pb 220.353	1918.60	1911.84	1919.44
Sb 206.834	-8.3701	-2.6626	-14.9136u
Se 196.026	4.8731	7.2487	19.4344
Si 288.158	2421.71	2421.95	2427.90
Sn 189.925	32.9252	33.2140	33.1203
Sr 216.596	112.228	111.858	113.032
Ti 334.941	1163.71	1162.85	1163.75

Label	Replicates Concentration		
Tl 190.794	0.1186u	15.0051	5.3622u
V 292.401	214.327	215.024	214.433
Zn 206.200	1955.58	1968.33	1994.31

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.2926	ppb	0.2957	22.9	-8.5224
Al 308.215	120649	ppb	101.987	0.1	302613
As 188.980	176.029	ppb	9.4318	5.4	48.0206
B 249.678	40.1655	ppb	0.7550	1.9	5.0707
Ba 389.178	1124.00	ppb	1.7836	0.2	12490.8
Be 313.042	5.0989	ppb	0.0103	0.2	4086.55
Ca 370.602	29971	ppb	19.67	0.1	68111
Cd 226.502	3.2112	ppb	0.1255	3.9	199.329
Co 228.615	58.0488	ppb	1.2154	2.1	296.196
Cr 267.716	154.910	ppb	0.4029	0.3	3650.06
Cu 324.754	227.275	ppb	1.8445	0.8	9206.45
Fe 271.441	165001	ppb	35.5718	0.0	135935
K 766.491	7526.94	ppb	3.7134	0.0	205409
Mg 279.078	26740.1	ppb	17.1215	0.1	38474.6
Mn 257.610	4830.84	ppb	2.7759	0.1	528485
Mo 202.032	6.2754	ppb	0.7398	11.8	15.7176
Na 330.237	413.782	ppb	184.892	44.7	47.3438
Ni 231.604	132.330	ppb	2.5904	2.0	181.603
Pb 220.353	1916.62	ppb	4.1681	0.2	1129.64
Sb 206.834	-8.6488	ppb	6.1303	70.9	11.6798
Se 196.026	10.5187	ppb	7.8120	74.3	3.9586
Si 288.158	2423.85	ppb	3.5040	0.1	11974.6
Sn 189.925	33.0865	ppb	0.1473	0.4	10.4614
Sr 216.596	112.373	ppb	0.5998	0.5	525.079
Ti 334.941	1163.43	ppb	0.5053	0.0	139389
Tl 190.794	6.8286	ppb	7.5508	110.6	-11.6132
V 292.401	214.595	ppb	0.3756	0.2	3156.58
Zn 206.200	1972.74	ppb	19.7389	1.0	709.866

680-161405-A-131-A (Samp) **12/18/2018, 6:58:32 PM** **Rack 1, Tube 43**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4410u	0.0137u	0.3474u
Al 308.215	97157.1	97087.6	96998.2
As 188.980	558.669	575.781	557.168
B 249.678	40.5533	40.1006	40.9364
Ba 389.178	719.478	720.615	716.867
Be 313.042	4.5195	4.4948	4.5114
Ca 370.602	51939	51894	51879
Cd 226.502	2.8623	2.6419	2.8207
Co 228.615	54.3526	54.5805	54.4064
Cr 267.716	127.237	126.649	126.642
Cu 324.754	217.340	217.848	215.786
Fe 271.441	151890	151766	151921
K 766.491	8360.89	8359.68	8352.92
Mg 279.078	38985.0	38923.7	38954.1
Mn 257.610	3655.16	3654.33	3651.06
Mo 202.032	2.9901	3.6104	3.6998

Label	Replicates Concentration		
Na 330.237	4591.98	4738.29	4625.23
Ni 231.604	127.228	122.473	121.123
Pb 220.353	1011.61	998.274	1016.49
Sb 206.834	-0.0514	-15.4801u	5.6441
Se 196.026	1.0752	-1.7643u	18.9872
Si 288.158	2165.98	2167.54	2163.13
Sn 189.925	51.1760	50.8171	38.8153
Sr 216.596	135.861	135.013	136.876
Ti 334.941	1194.17	1195.21	1194.37
Tl 190.794	7.1344u	2.0086u	0.6030u
V 292.401	198.505	197.953	198.545
Zn 206.200	894.339	881.908	885.210

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2674	ppb	0.2246	84.0	-46.5966
Al 308.215	97081.0	ppb	79.6433	0.1	243532
As 188.980	563.872	ppb	10.3399	1.8	150.342
B 249.678	40.5301	ppb	0.4184	1.0	20.8594
Ba 389.178	718.987	ppb	1.9214	0.3	8003.70
Be 313.042	4.5086	ppb	0.0126	0.3	3598.35
Ca 370.602	51904	ppb	31.24	0.1	118112
Cd 226.502	2.7750	ppb	0.1171	4.2	180.810
Co 228.615	54.4465	ppb	0.1192	0.2	277.974
Cr 267.716	126.843	ppb	0.3412	0.3	2994.51
Cu 324.754	216.991	ppb	1.0742	0.5	8797.68
Fe 271.441	151859	ppb	81.7831	0.1	125110
K 766.491	8357.83	ppb	4.2973	0.1	228055
Mg 279.078	38954.3	ppb	30.6918	0.1	56087.9
Mn 257.610	3653.51	ppb	2.1685	0.1	399816
Mo 202.032	3.4334	ppb	0.3865	11.3	9.5254
Na 330.237	4651.83	ppb	76.6992	1.6	162.551
Ni 231.604	123.608	ppb	3.2070	2.6	169.480
Pb 220.353	1008.79	ppb	9.4316	0.9	597.600
Sb 206.834	-3.2958	ppb	10.9294	331.6	13.7459
Se 196.026	6.0994	ppb	11.2511	184.5	3.0466
Si 288.158	2165.55	ppb	2.2359	0.1	10737.5
Sn 189.925	46.9361	ppb	7.0352	15.0	14.9503
Sr 216.596	135.917	ppb	0.9327	0.7	621.337
Ti 334.941	1194.58	ppb	0.5510	0.0	143162
Tl 190.794	3.2487	ppb	3.4377	105.8	-13.0664
V 292.401	198.334	ppb	0.3306	0.2	2918.44
Zn 206.200	887.152	ppb	6.4391	0.7	319.177

680-161405-A-85-A (Samp) **12/18/2018, 7:02:55 PM** **Rack 1, Tube 44**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.2326	1.3595	1.2676
Al 308.215	99889.7	99864.5	99922.9
As 188.980	298.519	308.051	310.340
B 249.678	47.7529	48.9908	48.4766
Ba 389.178	1653.01	1657.60	1654.31
Be 313.042	5.1739	5.1422	5.1582
Ca 370.602	82781	82711	82746

Label	Replicates Concentration		
Cd 226.502	5.1290	5.3067	4.8790
Co 228.615	77.5248	77.2049	77.3407
Cr 267.716	152.265	152.133	152.805
Cu 324.754	1556.83	1548.18	1543.94
Fe 271.441	201238	201163	201342
K 766.491	9686.58	9674.99	9688.91
Mg 279.078	38086.9	38076.8	38054.4
Mn 257.610	7936.16	7926.27	7944.37
Mo 202.032	5.9414	5.4212	5.4438
Na 330.237	584.129u	424.161u	502.456u
Ni 231.604	157.685	157.838	155.136
Pb 220.353	1977.71	1972.39	1963.22
Sb 206.834	0.1525	-2.3693	-4.1643
Se 196.026	15.3419	-11.3496u	24.3183
Si 288.158	2061.61	2063.06	2061.98
Sn 189.925	148.375	146.346	143.214
Sr 216.596	176.452	176.134	175.334
Ti 334.941	1158.55	1159.10	1158.45
Tl 190.794	-2.8335u	-3.6412u	5.1406u
V 292.401	233.718	234.594	233.034
Zn 206.200	2186.98	2188.90	2191.29

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.2866	ppb	0.0655	5.1	-10.1435
Al 308.215	99892.4	ppb	29.2692	0.0	250582
As 188.980	305.637	ppb	6.2695	2.1	82.2982
B 249.678	48.4068	ppb	0.6219	1.3	23.7762
Ba 389.178	1654.97	ppb	2.3661	0.1	18407.0
Be 313.042	5.1581	ppb	0.0159	0.3	4142.57
Ca 370.602	82746	ppb	35.22	0.0	188388
Cd 226.502	5.1049	ppb	0.2148	4.2	257.631
Co 228.615	77.3568	ppb	0.1606	0.2	394.368
Cr 267.716	152.401	ppb	0.3563	0.2	3602.40
Cu 324.754	1549.65	ppb	6.5666	0.4	61387.1
Fe 271.441	201248	ppb	89.5800	0.0	165790
K 766.491	9683.49	ppb	7.4560	0.1	264184
Mg 279.078	38072.7	ppb	16.6392	0.0	54770.2
Mn 257.610	7935.60	ppb	9.0625	0.1	868022
Mo 202.032	5.6021	ppb	0.2940	5.2	13.6257
Na 330.237	503.582	ppb	79.9898	15.9	45.8183
Ni 231.604	156.886	ppb	1.5179	1.0	215.705
Pb 220.353	1971.10	ppb	7.3298	0.4	1162.27
Sb 206.834	-2.1270	ppb	2.1686	102.0	15.3980
Se 196.026	9.4369	ppb	18.5527	196.6	3.9326
Si 288.158	2062.22	ppb	0.7525	0.0	10248.2
Sn 189.925	145.978	ppb	2.6004	1.8	47.0468
Sr 216.596	175.973	ppb	0.5761	0.3	802.772
Ti 334.941	1158.70	ppb	0.3494	0.0	138862
Tl 190.794	-0.4447	ppb	4.8538	1091.5	-14.7978
V 292.401	233.782	ppb	0.7820	0.3	3444.08
Zn 206.200	2189.06	ppb	2.1583	0.1	787.768

680-161405-A-76-A (Samp) **12/18/2018, 7:07:18 PM** **Rack 1, Tube 45**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4103u	0.0369u	-0.1709u
Al 308.215	132810	132539	132525
As 188.980	35.3138	49.7904	32.0932
B 249.678	55.8524	56.5576	55.3765
Ba 389.178	1613.03	1607.37	1606.54
Be 313.042	5.8962	5.9115	5.8751
Ca 370.602	43879	43901	43871
Cd 226.502	0.6075	0.9745	0.8527
Co 228.615	74.3489	73.8369	73.8852
Cr 267.716	190.914	191.329	190.584
Cu 324.754	198.759	196.054	197.147
Fe 271.441	216218	216477	216273
K 766.491	14670.7	14653.5	14643.0
Mg 279.078	41949.8	42005.7	41969.7
Mn 257.610	5954.80	5952.31	5945.57
Mo 202.032	3.1791	3.7975	4.8531
Na 330.237	336.113u	460.267u	222.648u
Ni 231.604	179.273	178.575	177.278
Pb 220.353	116.409	103.219	112.103
Sb 206.834	-10.7870	-9.6852	-7.8579
Se 196.026	-3.1977u	9.5305	4.2150
Si 288.158	2765.20	2758.01	2761.76
Sn 189.925	19.6215	17.0236	27.6404
Sr 216.596	144.712	143.610	142.122
Ti 334.941	1582.00	1584.13	1579.77
Tl 190.794	4.0352u	7.4559u	-1.4646u
V 292.401	255.452	256.643	255.798
Zn 206.200	546.000	542.333	539.528

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1814	ppb	0.2238	123.3	-72.7447
Al 308.215	132625	ppb	160.822	0.1	332635
As 188.980	39.0658	ppb	9.4263	24.1	11.9810
B 249.678	55.9288	ppb	0.5943	1.1	59.1599
Ba 389.178	1608.98	ppb	3.5289	0.2	17905.2
Be 313.042	5.8943	ppb	0.0183	0.3	4750.18
Ca 370.602	43884	ppb	15.64	0.0	99742
Cd 226.502	0.8115	ppb	0.1869	23.0	200.809
Co 228.615	74.0237	ppb	0.2827	0.4	382.185
Cr 267.716	190.943	ppb	0.3734	0.2	4495.22
Cu 324.754	197.320	ppb	1.3611	0.7	8036.34
Fe 271.441	216323	ppb	136.112	0.1	178207
K 766.491	14655.7	ppb	13.9892	0.1	399699
Mg 279.078	41975.1	ppb	28.3628	0.1	60406.9
Mn 257.610	5950.89	ppb	4.7738	0.1	651072
Mo 202.032	3.9432	ppb	0.8465	21.5	9.6465
Na 330.237	339.676	ppb	118.849	35.0	43.0321
Ni 231.604	178.375	ppb	1.0125	0.6	245.579
Pb 220.353	110.577	ppb	6.7260	6.1	71.0271
Sb 206.834	-9.4433	ppb	1.4794	15.7	12.5537
Se 196.026	3.5159	ppb	6.3928	181.8	2.5667
Si 288.158	2761.66	ppb	3.5916	0.1	13614.2

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	21.4285	ppb	5.5342	25.8	6.6833
Sr 216.596	143.481	ppb	1.3000	0.9	669.139
Ti 334.941	1581.97	ppb	2.1816	0.1	189564
Tl 190.794	3.3421	ppb	4.5004	134.7	-14.5186
V 292.401	255.965	ppb	0.6127	0.2	3771.48
Zn 206.200	542.620	ppb	3.2457	0.6	195.256

680-161405-A-98-A (Samp) **12/18/2018, 7:11:42 PM** **Rack 1, Tube 46**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.9425	1.4367	0.8047u
Al 308.215	115848	115989	115925
As 188.980	367.777	373.206	373.131
B 249.678	50.2673	50.7531	51.4599
Ba 389.178	1066.33	1069.45	1067.34
Be 313.042	5.7073	5.7083	5.7049
Ca 370.602	36398	36476	36360
Cd 226.502	4.3679	4.1705	4.5491
Co 228.615	54.5338	53.8992	52.3108
Cr 267.716	164.511	164.379	163.838
Cu 324.754	486.139	486.014	487.497
Fe 271.441	169580	169774	169638
K 766.491	8808.01	8825.67	8818.71
Mg 279.078	26136.5	26148.4	26133.9
Mn 257.610	3780.28	3786.81	3781.82
Mo 202.032	5.9467	4.9571	6.0463
Na 330.237	1539.62	1535.26	1629.86
Ni 231.604	139.901	139.247	139.856
Pb 220.353	2215.39	2228.37	2222.88
Sb 206.834	-7.7804	-5.5754	-0.8336
Se 196.026	2.4406	4.9436	22.2996
Si 288.158	2359.30	2353.08	2354.14
Sn 189.925	47.2924	50.0295	46.1694
Sr 216.596	189.379	187.605	187.529
Ti 334.941	1149.30	1153.20	1149.95
Tl 190.794	-0.3015u	5.7535u	11.3378u
V 292.401	228.520	228.140	227.298
Zn 206.200	1780.87	1775.47	1785.20

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.0613	ppb	0.3324	31.3	-20.7619
Al 308.215	115921	ppb	70.3901	0.1	290760
As 188.980	371.371	ppb	3.1134	0.8	99.5760
B 249.678	50.8268	ppb	0.5997	1.2	72.1229
Ba 389.178	1067.71	ppb	1.5923	0.1	11867.0
Be 313.042	5.7068	ppb	0.0017	0.0	4592.72
Ca 370.602	36411	ppb	59.14	0.2	82759
Cd 226.502	4.3625	ppb	0.1893	4.3	221.524
Co 228.615	53.5813	ppb	1.1451	2.1	273.746
Cr 267.716	164.243	ppb	0.3565	0.2	3865.02
Cu 324.754	486.550	ppb	0.8224	0.2	19436.7
Fe 271.441	169664	ppb	99.6638	0.1	139775
K 766.491	8817.46	ppb	8.8976	0.1	240582

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	26139.6	ppb	7.7432	0.0	37621.9
Mn 257.610	3782.97	ppb	3.4158	0.1	413922
Mo 202.032	5.6500	ppb	0.6022	10.7	14.2324
Na 330.237	1568.25	ppb	53.4060	3.4	77.7534
Ni 231.604	139.668	ppb	0.3653	0.3	191.805
Pb 220.353	2222.21	ppb	6.5170	0.3	1308.79
Sb 206.834	-4.7298	ppb	3.5497	75.1	13.5680
Se 196.026	9.8946	ppb	10.8157	109.3	3.7246
Si 288.158	2355.51	ppb	3.3264	0.1	11647.5
Sn 189.925	47.8304	ppb	1.9855	4.2	15.2397
Sr 216.596	188.171	ppb	1.0471	0.6	846.440
Ti 334.941	1150.82	ppb	2.0916	0.2	137876
Tl 190.794	5.5966	ppb	5.8212	104.0	-12.6916
V 292.401	227.986	ppb	0.6255	0.3	3352.01
Zn 206.200	1780.52	ppb	4.8740	0.3	640.692

680-161405-A-84-A (Samp) **12/18/2018, 7:16:06 PM** **Rack 1, Tube 47**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.0949	1.1594	1.3056
Al 308.215	103145	103039	103210
As 188.980	145.971	150.922	143.429
B 249.678	48.5062	47.4255	47.2477
Ba 389.178	1362.78	1360.88	1358.76
Be 313.042	4.9427	4.9637	4.9629
Ca 370.602	43512	43494	43489
Cd 226.502	4.5158	5.1209	4.6892
Co 228.615	56.2245	55.5676	57.8275
Cr 267.716	152.248	151.935	151.495
Cu 324.754	395.603	399.094	396.929
Fe 271.441	142286	142105	141991
K 766.491	9887.45	9878.11	9888.38
Mg 279.078	30732.8	30695.2	30728.8
Mn 257.610	4044.93	4047.57	4050.05
Mo 202.032	3.6553	5.1970	2.5039
Na 330.237	851.299	662.051u	779.064
Ni 231.604	145.674	146.132	149.905
Pb 220.353	1640.20	1621.85	1638.30
Sb 206.834	10.6413	-6.7659	-0.8750
Se 196.026	8.7696	-4.9207u	10.9840
Si 288.158	2269.85	2257.79	2258.20
Sn 189.925	85.9335	77.6600	81.5277
Sr 216.596	163.429	163.364	162.106
Ti 334.941	894.985	893.842	894.543
Tl 190.794	4.0252u	8.5533u	3.9899u
V 292.401	188.539	187.754	187.633
Zn 206.200	1998.62	1995.69	1982.85

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1866	ppb	0.1079	9.1	-9.0506
Al 308.215	103131	ppb	86.6129	0.1	258697
As 188.980	146.774	ppb	3.8102	2.6	40.2531
B 249.678	47.7265	ppb	0.6811	1.4	79.2313

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1360.80	ppb	2.0123	0.1	15115.7
Be 313.042	4.9564	ppb	0.0119	0.2	3969.30
Ca 370.602	43498	ppb	11.90	0.0	98973
Cd 226.502	4.7753	ppb	0.3116	6.5	206.179
Co 228.615	56.5399	ppb	1.1625	2.1	285.353
Cr 267.716	151.892	ppb	0.3783	0.2	3575.47
Cu 324.754	397.208	ppb	1.7623	0.4	15905.6
Fe 271.441	142127	ppb	148.680	0.1	117095
K 766.491	9884.65	ppb	5.6812	0.1	269667
Mg 279.078	30719.0	ppb	20.6715	0.1	44218.6
Mn 257.610	4047.52	ppb	2.5615	0.1	442838
Mo 202.032	3.7854	ppb	1.3512	35.7	10.4747
Na 330.237	764.138	ppb	95.5030	12.5	59.0335
Ni 231.604	147.237	ppb	2.3219	1.6	202.319
Pb 220.353	1633.45	ppb	10.0904	0.6	963.740
Sb 206.834	1.0001	ppb	8.8538	885.3	15.5307
Se 196.026	4.9443	ppb	8.6148	174.2	2.8963
Si 288.158	2261.95	ppb	6.8459	0.3	11188.7
Sn 189.925	81.7071	ppb	4.1397	5.1	26.2182
Sr 216.596	162.966	ppb	0.7458	0.5	732.939
Ti 334.941	894.456	ppb	0.5761	0.1	107192
Tl 190.794	5.5228	ppb	2.6245	47.5	-11.6070
V 292.401	187.975	ppb	0.4921	0.3	2763.21
Zn 206.200	1992.38	ppb	8.3854	0.4	716.904

680-161405-A-100-A (Samp) **12/18/2018, 7:20:30 PM** **Rack 1, Tube 48**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.3647	1.3866	0.7350
Al 308.215	101648	101714	101651
As 188.980	263.983	268.423	261.737
B 249.678	52.1493	51.7313	51.9394
Ba 389.178	1278.92	1277.73	1276.82
Be 313.042	4.7175	4.6985	4.6901
Ca 370.602	36191	36240	36199
Cd 226.502	5.4787	5.7216	5.7026
Co 228.615	58.6784	57.4356	56.3103
Cr 267.716	144.533	145.084	144.425
Cu 324.754	625.096	622.837	621.730
Fe 271.441	155851	155984	155913
K 766.491	9087.38	9109.88	9101.85
Mg 279.078	23475.3	23471.8	23454.8
Mn 257.610	6942.71	6942.87	6933.51
Mo 202.032	5.8440	6.1430	6.8872
Na 330.237	1621.28	1406.07	1856.37
Ni 231.604	158.534	150.377	153.338
Pb 220.353	2499.64	2490.86	2488.44
Sb 206.834	0.3273	-2.0813	2.2643
Se 196.026	8.5558	5.9563	16.8168
Si 288.158	2375.84	2377.84	2372.13
Sn 189.925	47.3909	49.3094	48.1369
Sr 216.596	215.331	213.896	214.599
Ti 334.941	1233.65	1236.33	1236.69

Label	Replicates Concentration		
Tl 190.794	4.2409u	0.2348u	-0.2207u
V 292.401	200.649	200.191	201.062
Zn 206.200	2058.18	2059.03	2057.12

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1621	ppb	0.3700	31.8	-7.0803
Al 308.215	101671	ppb	37.1647	0.0	255037
As 188.980	264.715	ppb	3.4027	1.3	71.4053
B 249.678	51.9400	ppb	0.2090	0.4	93.5528
Ba 389.178	1277.82	ppb	1.0533	0.1	14191.9
Be 313.042	4.7020	ppb	0.0140	0.3	3756.38
Ca 370.602	36210	ppb	26.38	0.1	82397
Cd 226.502	5.6343	ppb	0.1351	2.4	230.800
Co 228.615	57.4747	ppb	1.1845	2.1	293.704
Cr 267.716	144.681	ppb	0.3534	0.2	3415.99
Cu 324.754	623.221	ppb	1.7157	0.3	24825.8
Fe 271.441	155916	ppb	66.6300	0.0	128452
K 766.491	9099.70	ppb	11.4005	0.1	248274
Mg 279.078	23467.3	ppb	10.9721	0.0	33740.5
Mn 257.610	6939.70	ppb	5.3555	0.1	759028
Mo 202.032	6.2914	ppb	0.5372	8.5	15.8998
Na 330.237	1627.91	ppb	225.222	13.8	79.9436
Ni 231.604	154.083	ppb	4.1295	2.7	211.832
Pb 220.353	2492.98	ppb	5.8953	0.2	1467.84
Sb 206.834	0.1701	ppb	2.1771	1280.0	15.4091
Se 196.026	10.4430	ppb	5.6709	54.3	4.1754
Si 288.158	2375.27	ppb	2.8955	0.1	11746.4
Sn 189.925	48.2791	ppb	0.9671	2.0	15.3851
Sr 216.596	214.608	ppb	0.7171	0.3	954.535
Ti 334.941	1235.55	ppb	1.6589	0.1	148013
Tl 190.794	1.4183	ppb	2.4550	173.1	-12.7398
V 292.401	200.634	ppb	0.4357	0.2	2952.27
Zn 206.200	2058.11	ppb	0.9550	0.0	740.580

680-161405-A-99-A (Samp) **12/18/2018, 7:24:54 PM** **Rack 1, Tube 49**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.3233	1.3669	1.3581
Al 308.215	98828.4	98740.6	98715.6
As 188.980	199.190	205.216	203.253
B 249.678	53.5663	53.2091	53.3175
Ba 389.178	1029.22	1027.58	1027.73
Be 313.042	4.5674	4.5444	4.5403
Ca 370.602	34611	34570	34592
Cd 226.502	5.4565	5.5822	5.0737
Co 228.615	49.2722	48.1078	49.6097
Cr 267.716	152.225	151.637	151.957
Cu 324.754	314.298	316.307	314.554
Fe 271.441	137030	136937	137003
K 766.491	8413.07	8408.57	8407.11
Mg 279.078	23406.9	23398.8	23371.2
Mn 257.610	4178.22	4176.90	4175.50
Mo 202.032	3.0536	3.2697	4.7908

Label	Replicates Concentration		
Na 330.237	1901.35	1241.16	1637.33
Ni 231.604	138.313	140.154	136.667
Pb 220.353	2488.43	2471.23	2480.12
Sb 206.834	-2.6557	-6.4289	-6.3896
Se 196.026	18.7035	22.5420	-2.4480u
Si 288.158	2196.16	2189.88	2184.48
Sn 189.925	54.6862	58.0164	58.2840
Sr 216.596	158.206	156.295	156.084
Ti 334.941	1170.52	1168.31	1168.78
Tl 190.794	-2.0277u	12.1617	7.0273u
V 292.401	184.269	183.862	183.650
Zn 206.200	2188.03	2182.91	2195.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.3495	ppb	0.0230	1.7	-1.9069
Al 308.215	98761.5	ppb	59.2570	0.1	247743
As 188.980	202.553	ppb	3.0731	1.5	54.9614
B 249.678	53.3643	ppb	0.1831	0.3	122.380
Ba 389.178	1028.17	ppb	0.9050	0.1	11414.9
Be 313.042	4.5507	ppb	0.0146	0.3	3630.64
Ca 370.602	34591	ppb	20.61	0.1	78692
Cd 226.502	5.3708	ppb	0.2649	4.9	211.550
Co 228.615	48.9966	ppb	0.7880	1.6	249.876
Cr 267.716	151.940	ppb	0.2939	0.2	3576.48
Cu 324.754	315.053	ppb	1.0935	0.3	12663.2
Fe 271.441	136990	ppb	48.0783	0.0	112863
K 766.491	8409.58	ppb	3.1052	0.0	229465
Mg 279.078	23392.3	ppb	18.6880	0.1	33663.4
Mn 257.610	4176.87	ppb	1.3642	0.0	456945
Mo 202.032	3.7047	ppb	0.9468	25.6	10.3745
Na 330.237	1593.28	ppb	332.295	20.9	80.6071
Ni 231.604	138.378	ppb	1.7448	1.3	190.014
Pb 220.353	2479.93	ppb	8.6034	0.3	1459.94
Sb 206.834	-5.1581	ppb	2.1672	42.0	12.6586
Se 196.026	12.9325	ppb	13.4575	104.1	4.4468
Si 288.158	2190.17	ppb	5.8417	0.3	10855.3
Sn 189.925	56.9956	ppb	2.0044	3.5	18.2099
Sr 216.596	156.862	ppb	1.1690	0.7	705.933
Ti 334.941	1169.20	ppb	1.1613	0.1	140067
Tl 190.794	5.7204	ppb	7.1844	125.6	-11.2946
V 292.401	183.927	ppb	0.3147	0.2	2704.75
Zn 206.200	2188.85	ppb	6.3920	0.3	787.601

680-161405-A-120-A (Samp) **12/18/2018, 7:29:16 PM** **Rack 1, Tube 50**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3069u	0.2635u	0.6288u
Al 308.215	117052	117002	116987
As 188.980	92.8724	88.3776	89.9213
B 249.678	33.4904	32.8537	34.4129
Ba 389.178	538.514	536.929	538.941
Be 313.042	4.4514	4.4490	4.4575
Ca 370.602	19895	19897	19877

Label	Replicates Concentration		
Cd 226.502	1.4557	1.9448	1.6548
Co 228.615	67.6547	66.5165	66.4434
Cr 267.716	118.694	118.564	119.264
Cu 324.754	100.678	100.157	100.548
Fe 271.441	188392	188609	189059
K 766.491	4754.46	4753.82	4753.40
Mg 279.078	27570.9	27616.9	27651.2
Mn 257.610	5714.40	5728.52	5731.13
Mo 202.032	6.8038	5.1987	5.5514
Na 330.237	870.991	905.246	880.256
Ni 231.604	117.168	113.274	113.507
Pb 220.353	436.460	427.125	440.919
Sb 206.834	6.9996	-1.7617	-5.3682
Se 196.026	17.7057	7.0441	17.6709
Si 288.158	2787.89	2789.60	2786.45
Sn 189.925	18.8836	14.9001	20.1505
Sr 216.596	79.6326	79.2404	80.3680
Ti 334.941	1039.34	1036.90	1041.88
Tl 190.794	0.1599u	6.0755u	10.9623u
V 292.401	227.025	228.192	228.174
Zn 206.200	529.388	506.856	512.844

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3997	ppb	0.1995	49.9	-44.5235
Al 308.215	117014	ppb	33.8915	0.0	293500
As 188.980	90.3904	ppb	2.2838	2.5	25.4777
B 249.678	33.5857	ppb	0.7840	2.3	-63.2437
Ba 389.178	538.128	ppb	1.0604	0.2	5996.91
Be 313.042	4.4526	ppb	0.0044	0.1	3548.14
Ca 370.602	19889	ppb	10.95	0.1	45091
Cd 226.502	1.6851	ppb	0.2460	14.6	192.794
Co 228.615	66.8715	ppb	0.6792	1.0	340.088
Cr 267.716	118.841	ppb	0.3723	0.3	2817.24
Cu 324.754	100.461	ppb	0.2709	0.3	4208.67
Fe 271.441	188687	ppb	339.906	0.2	155444
K 766.491	4753.89	ppb	0.5310	0.0	129832
Mg 279.078	27613.0	ppb	40.2727	0.1	39722.8
Mn 257.610	5724.69	ppb	8.9988	0.2	626233
Mo 202.032	5.8513	ppb	0.8435	14.4	14.3863
Na 330.237	885.498	ppb	17.7190	2.0	60.7796
Ni 231.604	114.650	ppb	2.1838	1.9	157.019
Pb 220.353	434.835	ppb	7.0390	1.6	261.262
Sb 206.834	-0.0434	ppb	6.3604	14640.0	15.9520
Se 196.026	14.1402	ppb	6.1454	43.5	4.6585
Si 288.158	2787.98	ppb	1.5766	0.1	13715.0
Sn 189.925	17.9781	ppb	2.7398	15.2	5.5652
Sr 216.596	79.7470	ppb	0.5725	0.7	393.387
Ti 334.941	1039.37	ppb	2.4883	0.2	124535
Tl 190.794	5.7326	ppb	5.4094	94.4	-12.5987
V 292.401	227.797	ppb	0.6684	0.3	3354.15
Zn 206.200	516.363	ppb	11.6709	2.3	185.792

Cont Calib Verif (CCV) **12/18/2018, 7:33:40 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	492.090	489.090	491.565
Al 308.215	9798.98	9804.65	9782.19
As 188.980	492.972	488.746	491.980
B 249.678	493.053	487.594	493.282
Ba 389.178	492.801	494.463	492.562
Be 313.042	511.507	511.678	511.648
Ca 370.602	10006	10025	10006
Cd 226.502	506.865	506.102	505.723
Co 228.615	504.092	503.533	504.021
Cr 267.716	501.478	499.837	500.655
Cu 324.754	486.586	481.996	484.205
Fe 271.441	9981.60	9982.95	9980.64
K 766.491	9758.46	9748.27	9766.80
Mg 279.078	9992.73	9988.16	9995.93
Mn 257.610	500.158	499.702	499.388
Mo 202.032	494.929	495.221	495.832
Na 330.237	9926.13	9993.61	9604.05
Ni 231.604	498.616	495.649	496.550
Pb 220.353	497.340	493.442	497.809
Sb 206.834	492.704	489.542	488.625
Se 196.026	476.751	486.850	494.448
Si 288.158	5035.91	5032.61	5047.47
Sn 189.925	493.330	494.822	490.101
Sr 216.596	504.637	506.154	504.848
Ti 334.941	502.637	502.855	502.893
Tl 190.794	487.373	491.640	488.339
V 292.401	494.865	495.205	495.924
Zn 206.200	1004.11	1007.23	1006.52

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	490.915	ppb	1.6023	0.3	18163.5	98.18298
Al 308.215	9795.28	ppb	11.6825	0.1	24739.9	97.95277
As 188.980	491.233	ppb	2.2100	0.4	130.751	98.24656
B 249.678	491.310	ppb	3.2198	0.7	3199.25	98.26199
Ba 389.178	493.275	ppb	1.0356	0.2	5425.59	98.65508
Be 313.042	511.611	ppb	0.0912	0.0	424856	102.32216
Ca 370.602	10012	ppb	10.85	0.1	22863	100.12000
Cd 226.502	506.230	ppb	0.5813	0.1	8283.94	101.24598
Co 228.615	503.882	ppb	0.3043	0.1	2522.83	100.77636
Cr 267.716	500.656	ppb	0.8203	0.2	11647.6	100.13129
Cu 324.754	484.263	ppb	2.2952	0.5	19317.3	96.85250
Fe 271.441	9981.73	ppb	1.1606	0.0	8279.66	99.76740
K 766.491	9757.84	ppb	9.2826	0.1	266211	97.57843
Mg 279.078	9992.27	ppb	3.9087	0.0	14418.3	99.92272
Mn 257.610	499.750	ppb	0.3872	0.1	54728.7	99.94993
Mo 202.032	495.327	ppb	0.4609	0.1	1119.89	99.06540
Na 330.237	9841.26	ppb	208.186	2.1	313.379	98.41262
Ni 231.604	496.938	ppb	1.5210	0.3	687.823	99.38764
Pb 220.353	496.197	ppb	2.3976	0.5	297.141	99.23939
Sb 206.834	490.290	ppb	2.1403	0.4	228.382	98.05804
Se 196.026	486.016	ppb	8.8775	1.8	94.6324	97.20322
Si 288.158	5038.66	ppb	7.8018	0.2	24600.0	100.77325

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	492.751	ppb	2.4132	0.5	159.429	98.55018
Sr 216.596	505.213	ppb	0.8214	0.2	2135.44	101.04259
Ti 334.941	502.795	ppb	0.1381	0.0	60211.9	100.55901
Tl 190.794	489.117	ppb	2.2370	0.5	193.823	97.82346
V 292.401	495.331	ppb	0.5406	0.1	7149.35	99.06628
Zn 206.200	1005.95	ppb	1.6374	0.2	361.592	100.59518

Cont Calib Blank (CCB) **12/18/2018, 7:38:04 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7422	-0.2312u	-0.1481u
Al 308.215	-1.2889u	-3.6525u	-2.4850u
As 188.980	-2.8813u	-3.6055u	1.8771
B 249.678	3.5237	3.5825	2.3200
Ba 389.178	0.0619	0.5686	1.7605
Be 313.042	0.0411	0.0316	0.0169
Ca 370.602	1.582	-0.9202u	-0.6297u
Cd 226.502	-0.2630u	-0.0088u	-0.2551u
Co 228.615	0.3312	-0.2676u	0.0829
Cr 267.716	0.1491	-0.0175u	0.0485
Cu 324.754	-0.2845u	-0.2893u	-0.2996u
Fe 271.441	9.5315	9.3376	12.1422
K 766.491	1.9082	1.4571	1.8006
Mg 279.078	-2.6060u	-3.3986u	-1.1378u
Mn 257.610	0.1325	0.1122	0.1350
Mo 202.032	-1.2816u	0.7533	-0.4725u
Na 330.237	103.102	72.6754	140.745
Ni 231.604	0.6053	0.3643	-0.2557u
Pb 220.353	-0.4936u	-0.9527u	1.5584
Sb 206.834	-5.5464u	-10.5921u	-9.3530u
Se 196.026	0.6476	3.8496	8.3492
Si 288.158	1.0297	0.9653	-0.2455u
Sn 189.925	-0.4499u	-0.1663u	4.2324
Sr 216.596	-0.6814u	-0.3287u	0.0622
Ti 334.941	0.3752	0.3838	0.2895
Tl 190.794	1.0006	-6.5897u	3.7508
V 292.401	0.0949	0.0418	-0.0770u
Zn 206.200	-4.0243u	2.4525	3.5513

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1209	ppb	0.5396	446.2	-24.5286	0.12095
Al 308.215	-2.4755	ppb	1.1818	47.7	156.088	-2.47545
As 188.980	-1.5365	ppb	2.9784	193.8	0.8420	-1.53655
B 249.678	3.1421	ppb	0.7125	22.7	-76.6994	3.14207
Ba 389.178	0.7970	ppb	0.8720	109.4	-55.2137	0.79702
Be 313.042	0.0299	ppb	0.0122	40.8	-136.065	0.02988
Ca 370.602	0.0108	ppb	1.369	12627.5	37.27	0.01084
Cd 226.502	-0.1757	ppb	0.1445	82.3	9.2207	-0.17565
Co 228.615	0.0488	ppb	0.3008	616.3	-11.7911	0.04882
Cr 267.716	0.0600	ppb	0.0839	139.8	24.9154	0.06002
Cu 324.754	-0.2911	ppb	0.0078	2.7	190.781	-0.29113
Fe 271.441	10.3371	ppb	1.5663	15.2	36.1528	10.33708
K 766.491	1.7220	ppb	0.2356	13.7	315.156	1.72200

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-2.3808	ppb	1.1471	48.2	27.6634	-2.38081
Mn 257.610	0.1266	ppb	0.0125	9.9	35.1971	0.12658
Mo 202.032	-0.3336	ppb	1.0246	307.1	3.4750	-0.33362
Na 330.237	105.507	ppb	34.0986	32.3	60.5360	105.50747
Ni 231.604	0.2379	ppb	0.4442	186.7	-1.9366	0.23793
Pb 220.353	0.0374	ppb	1.3371	3578.5	6.6994	0.03737
Sb 206.834	-8.4972	ppb	2.6295	30.9	7.8136	-8.49719
Se 196.026	4.2821	ppb	3.8690	90.4	2.8418	4.28212
Si 288.158	0.5831uv	ppb	0.7184	123.2	285.989	0.58315
Sn 189.925	1.2054	ppb	2.6253	217.8	0.1296	1.20540
Sr 216.596	-0.3160	ppb	0.3720	117.7	8.4077	-0.31596
Ti 334.941	0.3495	ppb	0.0521	14.9	6.3502	0.34949
Tl 190.794	-0.6128	ppb	5.3557	874.0	-10.5268	-0.61276
V 292.401	0.0199	ppb	0.0881	442.3	-2.2454	0.01991
Zn 206.200	0.6598	ppb	4.0936	620.4	-0.0263	0.65984

680-162068-A-1-D (Samp) **12/18/2018, 7:42:27 PM** **Rack 1, Tube 51**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.0330	0.5537	0.7507
Al 308.215	18251.3	18262.7	18245.6
As 188.980	13.8088	6.7173	-1.2833u
B 249.678	47.1850	48.4504	46.4140
Ba 389.178	894.396	893.447	896.704
Be 313.042	0.4512	0.4402	0.4452
Ca 370.602	20320	20316	20308
Cd 226.502	1.1032	1.4252	1.2398
Co 228.615	7.7492	8.7304	8.3402
Cr 267.716	42.7862	42.4014	42.8038
Cu 324.754	204.759	203.292	201.804
Fe 271.441	26518.3	26530.0	26516.8
K 766.491	2571.04	2572.76	2573.02
Mg 279.078	2828.18	2821.39	2824.81
Mn 257.610	10297.6	10290.2	10302.3
Mo 202.032	37.0255	38.6416	39.0739
Na 330.237	3474.43	3520.07	3546.15
Ni 231.604	31.0499	31.4967	33.9746
Pb 220.353	24.9476	27.3973	27.7628
Sb 206.834	-10.7645u	-5.2678u	-1.9922u
Se 196.026	4.8455	13.1377	5.9852
Si 288.158	2036.93	2041.69	2033.06
Sn 189.925	32.3874	38.5480	39.4362
Sr 216.596	147.746	148.587	149.187
Ti 334.941	289.541	286.798	288.446
Tl 190.794	2.8713	-0.0679	-8.9771u
V 292.401	29.8105	30.2028	29.8429
Zn 206.200	584.759	581.443	578.597

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7791	ppb	0.2409	30.9	16.4878
Al 308.215	18253.2	ppb	8.7203	0.0	45921.0
As 188.980	6.4143	ppb	7.5506	117.7	2.9837
B 249.678	47.3498	ppb	1.0281	2.2	194.029

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	894.849	ppb	1.6750	0.2	9878.99
Be 313.042	0.4455	ppb	0.0055	1.2	209.380
Ca 370.602	20315	ppb	6.018	0.0	46502
Cd 226.502	1.2561	ppb	0.1616	12.9	54.1127
Co 228.615	8.2733	ppb	0.4940	6.0	32.7254
Cr 267.716	42.6638	ppb	0.2274	0.5	1038.96
Cu 324.754	203.285	ppb	1.4774	0.7	8229.41
Fe 271.441	26521.7	ppb	7.1902	0.0	21872.9
K 766.491	2572.27	ppb	1.0748	0.0	70373.6
Mg 279.078	2824.79	ppb	3.3913	0.1	3983.26
Mn 257.610	10296.7	ppb	6.0800	0.1	1125816
Mo 202.032	38.2470	ppb	1.0797	2.8	89.9706
Na 330.237	3513.55	ppb	36.3016	1.0	146.227
Ni 231.604	32.1737	ppb	1.5755	4.9	42.4420
Pb 220.353	26.7025	ppb	1.5308	5.7	22.9503
Sb 206.834	-6.0082	ppb	4.4328	73.8	9.2471
Se 196.026	7.9895	ppb	4.4948	56.3	4.4492
Si 288.158	2037.22	ppb	4.3229	0.2	10082.2
Sn 189.925	36.7905	ppb	3.8390	10.4	11.6623
Sr 216.596	148.507	ppb	0.7239	0.5	643.050
Ti 334.941	288.261	ppb	1.3809	0.5	34495.0
Tl 190.794	-2.0579	ppb	6.1698	299.8	-8.2274
V 292.401	29.9521	ppb	0.2177	0.7	436.345
Zn 206.200	581.600	ppb	3.0841	0.5	209.064

680-162068-A-2-B (Samp) **12/18/2018, 7:46:49 PM** **Rack 1, Tube 52**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.3464	10.9667	10.9835
Al 308.215	17228.7	17222.6	17230.2
As 188.980	14.3495	0.2074	11.1606
B 249.678	53.5226	53.1345	53.6135
Ba 389.178	1135.14	1135.84	1135.51
Be 313.042	1.1070	1.0938	1.0991
Ca 370.602	19960	19947	19947
Cd 226.502	2.0469	2.3038	2.2082
Co 228.615	6.3344	6.9488	7.6423
Cr 267.716	57.4158	57.2094	57.3220
Cu 324.754	1019.51	1014.42	1016.03
Fe 271.441	47071.2	46982.9	47009.7
K 766.491	1751.67	1748.77	1748.24
Mg 279.078	3732.41	3714.43	3701.68
Mn 257.610	1198.06	1196.97	1196.37
Mo 202.032	16.9664	15.5660	16.2899
Na 330.237	1010.31	1104.20	854.053
Ni 231.604	31.3139	33.9055	32.8516
Pb 220.353	96.7466	93.6703	98.7463
Sb 206.834	26.9708	31.4469	16.7075
Se 196.026	27.2317	17.1586	38.3144
Si 288.158	2459.90	2458.84	2455.57
Sn 189.925	82.1298	80.6317	80.2677
Sr 216.596	188.682	187.378	185.616
Ti 334.941	252.976	253.200	252.640

Label	Replicates Concentration		
Tl 190.794	1.3257u	-0.7061u	-5.1944u
V 292.401	31.8303	32.0298	31.6295
Zn 206.200	1636.10	1649.10	1663.64

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.0988	ppb	0.2145	1.9	373.616
Al 308.215	17227.2	ppb	4.0304	0.0	43349.5
As 188.980	8.5725	ppb	7.4178	86.5	3.5973
B 249.678	53.4235	ppb	0.2544	0.5	214.073
Ba 389.178	1135.50	ppb	0.3471	0.0	12557.4
Be 313.042	1.1000	ppb	0.0067	0.6	755.606
Ca 370.602	19951	ppb	7.619	0.0	45439
Cd 226.502	2.1863	ppb	0.1298	5.9	85.3355
Co 228.615	6.9752	ppb	0.6543	9.4	26.7294
Cr 267.716	57.3157	ppb	0.1033	0.2	1362.27
Cu 324.754	1016.65	ppb	2.6039	0.3	40323.9
Fe 271.441	47021.3	ppb	45.3003	0.1	38757.2
K 766.491	1749.56	ppb	1.8467	0.1	47951.1
Mg 279.078	3716.17	ppb	15.4404	0.4	5367.81
Mn 257.610	1197.13	ppb	0.8579	0.1	130971
Mo 202.032	16.2741	ppb	0.7004	4.3	40.1436
Na 330.237	989.524	ppb	126.365	12.8	75.5264
Ni 231.604	32.6903	ppb	1.3033	4.0	43.1614
Pb 220.353	96.3877	ppb	2.5569	2.7	63.2396
Sb 206.834	25.0417	ppb	7.5567	30.2	23.8668
Se 196.026	27.5682	ppb	10.5819	38.4	7.2408
Si 288.158	2458.10	ppb	2.2565	0.1	12101.4
Sn 189.925	81.0097	ppb	0.9870	1.2	25.9923
Sr 216.596	187.225	ppb	1.5386	0.8	812.141
Ti 334.941	252.939	ppb	0.2818	0.1	30268.5
Tl 190.794	-1.5249	ppb	3.3363	218.8	-12.1961
V 292.401	31.8299	ppb	0.2002	0.6	469.664
Zn 206.200	1649.61	ppb	13.7759	0.8	593.446

680-162068-A-3-B (Samp) **12/18/2018, 7:51:12 PM** **Rack 1, Tube 53**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	2.4391	1.6528	1.5343
Al 308.215	16996.6	16968.1	16976.1
As 188.980	4.4179	10.2043	-3.3346u
B 249.678	46.4929	48.2690	47.5350
Ba 389.178	905.400	902.715	903.983
Be 313.042	0.4983	0.4874	0.4827
Ca 370.602	19661	19608	19657
Cd 226.502	1.4794	1.1297	1.3126
Co 228.615	8.3938	7.5649	7.0104
Cr 267.716	42.4884	42.4050	42.9124
Cu 324.754	304.072	307.151	304.447
Fe 271.441	27793.7	27724.7	27762.8
K 766.491	2281.30	2278.32	2275.54
Mg 279.078	2719.92	2725.38	2723.02
Mn 257.610	8846.53	8834.15	8812.84
Mo 202.032	35.1122	35.8924	35.6776

Label	Replicates Concentration		
Na 330.237	2689.72	3057.03	3154.42
Ni 231.604	29.6644	28.6399	27.9694
Pb 220.353	31.8428	34.9705	31.5494
Sb 206.834	4.7357	9.7243	-3.0759u
Se 196.026	-0.3088	8.4296	7.2186
Si 288.158	2099.02	2096.19	2101.51
Sn 189.925	39.0347	40.3669	41.0472
Sr 216.596	149.184	149.004	148.613
Ti 334.941	286.907	282.545	287.592
Tl 190.794	3.2619	-3.8644	-2.3326
V 292.401	28.1392	28.1990	28.0305
Zn 206.200	717.956	701.735	704.888

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.8754	ppb	0.4917	26.2	53.5183
Al 308.215	16980.3	ppb	14.6738	0.1	42730.0
As 188.980	3.7625	ppb	6.7932	180.5	2.2869
B 249.678	47.4323	ppb	0.8924	1.9	193.334
Ba 389.178	904.032	ppb	1.3433	0.1	9981.22
Be 313.042	0.4895	ppb	0.0080	1.6	246.069
Ca 370.602	19642	ppb	29.58	0.2	44935
Cd 226.502	1.3072	ppb	0.1749	13.4	55.8504
Co 228.615	7.6564	ppb	0.6962	9.1	29.6632
Cr 267.716	42.6020	ppb	0.2721	0.6	1034.58
Cu 324.754	305.223	ppb	1.6801	0.6	12251.5
Fe 271.441	27760.4	ppb	34.5686	0.1	22893.1
K 766.491	2278.39	ppb	2.8772	0.1	62363.9
Mg 279.078	2722.78	ppb	2.7386	0.1	3852.65
Mn 257.610	8831.17	ppb	17.0393	0.2	965591
Mo 202.032	35.5607	ppb	0.4030	1.1	83.8997
Na 330.237	2967.06	ppb	245.071	8.3	131.438
Ni 231.604	28.7579	ppb	0.8536	3.0	37.6951
Pb 220.353	32.7875	ppb	1.8961	5.8	26.4298
Sb 206.834	3.7947	ppb	6.4518	170.0	13.6930
Se 196.026	5.1131	ppb	4.7344	92.6	3.7573
Si 288.158	2098.91	ppb	2.6600	0.1	10377.7
Sn 189.925	40.1496	ppb	1.0237	2.5	12.7508
Sr 216.596	148.934	ppb	0.2919	0.2	645.224
Ti 334.941	285.681	ppb	2.7373	1.0	34185.7
Tl 190.794	-0.9784	ppb	3.7512	383.4	-8.3753
V 292.401	28.1229	ppb	0.0854	0.3	410.247
Zn 206.200	708.193	ppb	8.6006	1.2	254.625

680-162068-C-4-B (Samp) **12/18/2018, 7:55:34 PM** **Rack 1, Tube 54**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6325u	-1.1371u	-1.0691u
Al 308.215	311433	311599	312174
As 188.980	18.4686	24.5030	22.4718
B 249.678	16.7584	16.9588	16.5712
Ba 389.178	429.494	429.272	429.139
Be 313.042	1.8848	1.8844	1.8947
Ca 370.602	701894	698916	700333

Label	Replicates Concentration		
Cd 226.502	-0.5929	-0.3775	-0.0921
Co 228.615	14.7677	14.3955	13.5040
Cr 267.716	32.5189	32.7515	32.6973
Cu 324.754	98.4526	97.7304	99.1582
Fe 271.441	41345.9	41330.3	41301.7
K 766.491	2216.64	2219.38	2221.16
Mg 279.078	21864.0	21849.8	21854.2
Mn 257.610	13326.3	13329.1	13329.6
Mo 202.032	5.4970	4.2429	3.5979
Na 330.237	628.811	522.118	645.275
Ni 231.604	19.5725	18.5655	18.5792
Pb 220.353	14.6607	20.0536	19.2365
Sb 206.834	-3.7451u	1.9656	-7.8951u
Se 196.026	-0.7540	-3.3133	0.8936
Si 288.158	8098.10	8100.20	8096.85
Sn 189.925	9.6373	11.9576	11.6551
Sr 216.596	331.326	335.096	330.357
Ti 334.941	647.938	647.827	648.194
Tl 190.794	-12.0079u	-4.6451	-10.1972u
V 292.401	104.249	105.086	104.652
Zn 206.200	105.596	102.599	102.157

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9462b	ppb	0.2738	28.9	-44.8591
Al 308.215	311735b	ppb	389.246	0.1	781606
As 188.980	21.8144b	ppb	3.0704	14.1	7.0846
B 249.678	16.7628b	ppb	0.1939	1.2	-26.8385
Ba 389.178	429.302b	ppb	0.1793	0.0	4735.67
Be 313.042	1.8880b	ppb	0.0058	0.3	1531.25
Ca 370.602	700381b	ppb	1490	0.2	1596704
Cd 226.502	-0.3541b	ppb	0.2512	70.9	53.9059
Co 228.615	14.2224b	ppb	0.6494	4.6	66.9252
Cr 267.716	32.6559b	ppb	0.1217	0.4	816.322
Cu 324.754	98.4471b	ppb	0.7140	0.7	4095.35
Fe 271.441	41326.0b	ppb	22.4329	0.1	34067.2
K 766.491	2219.06b	ppb	2.2766	0.1	60747.1
Mg 279.078	21856.0b	ppb	7.2712	0.0	31305.0
Mn 257.610	13328.3b	ppb	1.8175	0.0	1457390
Mo 202.032	4.4459b	ppb	0.9657	21.7	13.5701
Na 330.237	598.734b	ppb	66.8608	11.2	68.5743
Ni 231.604	18.9057b	ppb	0.5775	3.1	24.0531
Pb 220.353	17.9836b	ppb	2.9066	16.2	14.2541
Sb 206.834	-3.2249b	ppb	4.9509	153.5	11.1140
Se 196.026	-1.0579b	ppb	2.1198	200.4	2.9709
Si 288.158	8098.39b	ppb	1.6922	0.0	39180.4
Sn 189.925	11.0833b	ppb	1.2614	11.4	3.3308
Sr 216.596	332.260b	ppb	2.5037	0.8	1423.72
Ti 334.941	647.986b	ppb	0.1880	0.0	77647.9
Tl 190.794	-8.9501b	ppb	3.8366	42.9	-10.4383
V 292.401	104.662b	ppb	0.4184	0.4	1529.48
Zn 206.200	103.450b	ppb	1.8708	1.8	37.0127

cri (Samp) **12/18/2018, 7:59:57 PM** **Rack 1, Tube 55**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	10.8963	10.9202	11.0216
Al 308.215	225.546	224.283	228.037
As 188.980	22.5654	21.6793	21.1206
B 249.678	107.948	108.501	108.943
Ba 389.178	10.8766	11.2711	11.6693
Be 313.042	4.4573	4.4514	4.4364
Ca 370.602	587.7	595.3	600.5
Cd 226.502	5.3323	5.4316	5.4318
Co 228.615	10.7820	11.2334	10.9002
Cr 267.716	10.9201	10.4674	11.0224
Cu 324.754	21.3964	21.7619	21.0762
Fe 271.441	64.0709	58.0699	64.8149
K 766.491	1064.27	1060.76	1059.36
Mg 279.078	551.940	551.325	553.268
Mn 257.610	12.0751	12.2331	12.2858
Mo 202.032	10.8179	10.3999	11.4419
Na 330.237	1003.92	1123.97	1183.07
Ni 231.604	43.9444	46.4938	41.5714
Pb 220.353	14.0322	10.1596	5.8718
Sb 206.834	19.5651	8.1179	10.9308
Se 196.026	20.8719	10.1100	20.6161
Si 288.158	123.001	124.822	120.831
Sn 189.925	53.2949	57.4897	58.6233
Sr 216.596	10.7254	11.4015	11.3998
Ti 334.941	11.3258	11.3028	11.2789
Tl 190.794	29.6097	25.2938	25.5573
V 292.401	11.0849	11.3714	11.1085
Zn 206.200	22.5863	28.9793	21.3445

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.9461	ppb	0.0665	0.6	376.674
Al 308.215	225.955	ppb	1.9101	0.8	729.217
As 188.980	21.7884	ppb	0.7285	3.3	6.9940
B 249.678	108.464	ppb	0.4989	0.5	632.225
Ba 389.178	11.2723	ppb	0.3964	3.5	61.6528
Be 313.042	4.4484	ppb	0.0107	0.2	3534.28
Ca 370.602	594.5	ppb	6.463	1.1	1393
Cd 226.502	5.3986	ppb	0.0574	1.1	100.260
Co 228.615	10.9718	ppb	0.2341	2.1	43.1414
Cr 267.716	10.8033	ppb	0.2953	2.7	274.339
Cu 324.754	21.4115	ppb	0.3431	1.6	1047.18
Fe 271.441	62.3186	ppb	3.6982	5.9	79.6374
K 766.491	1061.46	ppb	2.5330	0.2	29197.6
Mg 279.078	552.178	ppb	0.9935	0.2	826.373
Mn 257.610	12.1980	ppb	0.1097	0.9	1357.98
Mo 202.032	10.8866	ppb	0.5244	4.8	28.7500
Na 330.237	1103.65	ppb	91.2887	8.3	86.7755
Ni 231.604	44.0032	ppb	2.4617	5.6	58.8764
Pb 220.353	10.0212	ppb	4.0820	40.7	12.5420
Sb 206.834	12.8713	ppb	5.9652	46.3	17.3251
Se 196.026	17.1993	ppb	6.1409	35.7	5.3036
Si 288.158	122.885	ppb	1.9983	1.6	879.806

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	56.4693	ppb	2.8069	5.0	18.0394
Sr 216.596	11.1756	ppb	0.3898	3.5	56.4480
Ti 334.941	11.3025	ppb	0.0235	0.2	1319.97
Tl 190.794	26.8203	ppb	2.4193	9.0	0.9144
V 292.401	11.1882	ppb	0.1590	1.4	159.015
Zn 206.200	24.3034	ppb	4.0968	16.9	8.4787

Cont Calib Verif (CCV) **12/18/2018, 8:04:22 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	492.377	491.534	491.872
Al 308.215	9746.73	9774.75	9769.80
As 188.980	488.124	486.844	493.466
B 249.678	491.150	493.469	492.469
Ba 389.178	492.997	491.366	493.116
Be 313.042	511.317	512.015	511.438
Ca 370.602	9990	10012	9999
Cd 226.502	505.568	505.642	504.894
Co 228.615	500.952	502.506	502.450
Cr 267.716	500.377	499.589	498.717
Cu 324.754	482.320	483.327	483.916
Fe 271.441	9978.21	9976.53	9956.31
K 766.491	9709.32	9733.00	9716.75
Mg 279.078	9969.51	9987.85	9981.14
Mn 257.610	498.475	499.297	498.164
Mo 202.032	496.385	494.201	494.510
Na 330.237	10058.9	10009.4	9806.05
Ni 231.604	496.814	495.650	497.994
Pb 220.353	499.153	501.791	489.960
Sb 206.834	478.871	502.150	479.557
Se 196.026	494.321	482.322	473.949
Si 288.158	5044.38	5052.41	5050.98
Sn 189.925	496.425	484.632	499.215
Sr 216.596	500.739	506.519	504.896
Ti 334.941	501.770	502.119	501.735
Tl 190.794	489.162	484.275	493.055
V 292.401	494.521	494.410	494.754
Zn 206.200	1012.28	1009.09	1000.84

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.928	ppb	0.4244	0.1	18201.1	98.38557
Al 308.215	9763.76	ppb	14.9540	0.2	24660.9	97.63760
As 188.980	489.478	ppb	3.5127	0.7	130.288	97.89556
B 249.678	492.363	ppb	1.1631	0.2	3206.35	98.47257
Ba 389.178	492.493	ppb	0.9778	0.2	5416.89	98.49860
Be 313.042	511.590	ppb	0.3731	0.1	424838	102.31801
Ca 370.602	10000	ppb	11.08	0.1	22837	100.00288
Cd 226.502	505.368	ppb	0.4120	0.1	8269.86	101.07363
Co 228.615	501.969	ppb	0.8817	0.2	2513.19	100.39388
Cr 267.716	499.561	ppb	0.8305	0.2	11622.2	99.91219
Cu 324.754	483.188	ppb	0.8070	0.2	19274.9	96.63750
Fe 271.441	9970.35	ppb	12.1856	0.1	8270.17	99.65370
K 766.491	9719.69	ppb	12.1104	0.1	265171	97.19691

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	9979.50	ppb	9.2784	0.1	14399.9	99.79499
Mn 257.610	498.645	ppb	0.5856	0.1	54607.8	99.72908
Mo 202.032	495.032	ppb	1.1819	0.2	1119.23	99.00639
Na 330.237	9958.09	ppb	133.979	1.3	316.448	99.58092
Ni 231.604	496.819	ppb	1.1718	0.2	687.660	99.36390
Pb 220.353	496.968	ppb	6.2110	1.2	297.593	99.39366
Sb 206.834	486.859	ppb	13.2468	2.7	226.838	97.37183
Se 196.026	483.531	ppb	10.2397	2.1	94.1590	96.70620
Si 288.158	5049.26	ppb	4.2848	0.1	24651.1	100.98514
Sn 189.925	493.424	ppb	7.7407	1.6	159.647	98.68484
Sr 216.596	504.051	ppb	2.9814	0.6	2130.52	100.81023
Ti 334.941	501.875	ppb	0.2126	0.0	60101.6	100.37495
Tl 190.794	488.831	ppb	4.3996	0.9	193.701	97.76619
V 292.401	494.562	ppb	0.1758	0.0	7138.15	98.91233
Zn 206.200	1007.40	ppb	5.9057	0.6	362.115	100.74028

Cont Calib Blank (CCB) **12/18/2018, 8:08:46 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2902u	-0.0419u	0.0988
Al 308.215	-3.3494u	-3.8345u	0.8884
As 188.980	0.3814	1.4243	-4.0763u
B 249.678	2.9704	3.3880	3.4018
Ba 389.178	-0.2913u	0.6995	1.3847
Be 313.042	0.0285	0.0116	0.0331
Ca 370.602	0.4737	0.7811	4.853
Cd 226.502	-0.0284u	0.0761	-0.3024u
Co 228.615	-0.0260u	0.4598	-0.5231u
Cr 267.716	0.0530	-0.2574u	0.2532
Cu 324.754	-0.1255u	-0.0628u	0.1080
Fe 271.441	1.9151	-7.3552u	6.4350
K 766.491	1.8628	1.0219	1.4273
Mg 279.078	-1.5170u	-4.1845u	0.5610
Mn 257.610	0.1315	0.1790	0.1186
Mo 202.032	-0.6810u	0.4324	-0.1542u
Na 330.237	273.768	-74.5212u	69.1003
Ni 231.604	1.8443	-0.2736u	-0.1004u
Pb 220.353	-0.3572u	1.5727	-1.1070u
Sb 206.834	-11.5317u	-6.4012u	-4.6381u
Se 196.026	6.9651	3.8757	-6.7743u
Si 288.158	6.9769	7.1135	5.1433
Sn 189.925	-1.4283u	4.4382	4.3314
Sr 216.596	-0.2071u	0.2129	-0.3037u
Ti 334.941	0.2724	0.2012	0.2302
Tl 190.794	6.1063	-3.4965u	4.3082
V 292.401	0.4552	-0.2664u	-0.2483u
Zn 206.200	-0.8015u	0.7693	2.2096

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0778	ppb	0.1969	253.2	-31.8903	-0.07778
Al 308.215	-2.0985	ppb	2.5981	123.8	157.033	-2.09851
As 188.980	-0.7569	ppb	2.9216	386.0	1.0477	-0.75689
B 249.678	3.2534	ppb	0.2452	7.5	-75.9375	3.25339

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	0.5976	ppb	0.8426	141.0	-57.4327	0.59763
Be 313.042	0.0244	ppb	0.0113	46.3	-140.628	0.02441
Ca 370.602	2.036	ppb	2.444	120.1	41.91	2.03587
Cd 226.502	-0.0849	ppb	0.1955	230.3	10.6925	-0.08489
Co 228.615	-0.0298	ppb	0.4914	1651.7	-12.1896	-0.02975
Cr 267.716	0.0163	ppb	0.2573	1580.4	23.8989	0.01628
Cu 324.754	-0.0267	ppb	0.1209	451.9	201.211	-0.02675
Fe 271.441	0.3316	ppb	7.0301	2119.9	27.9145	0.33163
K 766.491	1.4373	ppb	0.4205	29.3	307.397	1.43734
Mg 279.078	-1.7135	ppb	2.3789	138.8	28.6247	-1.71350
Mn 257.610	0.1430	ppb	0.0318	22.3	36.9731	0.14305
Mo 202.032	-0.1342	ppb	0.5570	414.9	3.9244	-0.13424
Na 330.237	89.4491	ppb	175.034	195.7	60.1150	89.44908
Ni 231.604	0.4901	ppb	1.1760	239.9	-1.5862	0.49013
Pb 220.353	0.0362	ppb	1.3825	3824.1	6.6985	0.03615
Sb 206.834	-7.5237	ppb	3.5813	47.6	8.2480	-7.52366
Se 196.026	1.3555	ppb	7.2081	531.8	2.2842	1.35549
Si 288.158	6.4112	ppb	1.1002	17.2	314.026	6.41123
Sn 189.925	2.4471	ppb	3.3566	137.2	0.5320	2.44712
Sr 216.596	-0.0993	ppb	0.2747	276.5	9.3147	-0.09932
Ti 334.941	0.2346	ppb	0.0358	15.3	-7.4227	0.23456
Tl 190.794	2.3060	ppb	5.1049	221.4	-9.3107	2.30599
V 292.401	-0.0198	ppb	0.4115	2077.5	-2.8283	-0.01981
Zn 206.200	0.7258	ppb	1.5060	207.5	-0.0025	0.72578

MB 680-551751/1-A (Samp) **12/18/2018, 8:13:09 PM** **Rack 2, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0277	-0.2684u	0.3965
Al 308.215	3.4043	-0.0307u	0.4501
As 188.980	6.1161	3.2018	-4.4422u
B 249.678	1.3343	2.3418	2.2552
Ba 389.178	1.2385	0.5596	2.1698
Be 313.042	-0.0192u	-0.0109u	-0.0178u
Ca 370.602	7.983	6.458	7.430
Cd 226.502	0.1398	-0.0080u	-0.2651u
Co 228.615	1.0101	0.3701	0.3320
Cr 267.716	-0.5397u	-0.3307u	-0.1632u
Cu 324.754	0.0214	-0.4967u	-0.8414u
Fe 271.441	12.0021	-2.6945u	5.7548
K 766.491	2.3821	1.8386	1.7545
Mg 279.078	3.2058	-1.9617u	-0.8967u
Mn 257.610	0.3729	0.2831	0.1964
Mo 202.032	-1.4627u	-0.6347u	-0.2614u
Na 330.237	79.8763	-178.017u	-246.457u
Ni 231.604	-1.5755u	-0.9413u	-1.8298u
Pb 220.353	-1.5657u	-0.5504u	1.2121
Sb 206.834	-5.7972u	-1.6659u	-12.6896u
Se 196.026	-0.8780u	-0.4285u	5.2899
Si 288.158	2.6058	1.3716	2.6371
Sn 189.925	-0.1300u	-1.8987u	-0.5625u
Sr 216.596	0.0127	0.3679	-0.3370u
Ti 334.941	0.1640	0.1702	0.0311

Label	Replicates Concentration		
Tl 190.794	7.4729	-4.1676u	-4.4453u
V 292.401	0.4598	0.1191	0.4003
Zn 206.200	0.0953	0.5015	4.8999

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0520	ppb	0.3331	641.1	-27.0856
Al 308.215	1.2745	ppb	1.8600	145.9	165.487
As 188.980	1.6252	ppb	5.4529	335.5	1.6764
B 249.678	1.9771	ppb	0.5584	28.2	-84.5308
Ba 389.178	1.3226	ppb	0.8084	61.1	-49.3826
Be 313.042	-0.0160	ppb	0.0045	28.0	-174.102
Ca 370.602	7.290	ppb	0.7721	10.6	53.89
Cd 226.502	-0.0444	ppb	0.2049	461.1	11.3553
Co 228.615	0.5708	ppb	0.3810	66.7	-9.1622
Cr 267.716	-0.3445	ppb	0.1887	54.8	15.5206
Cu 324.754	-0.4389	ppb	0.4343	99.0	184.935
Fe 271.441	5.0208	ppb	7.3757	146.9	31.8058
K 766.491	1.9917	ppb	0.3406	17.1	322.507
Mg 279.078	0.1158	ppb	2.7285	2356.0	31.2575
Mn 257.610	0.2841	ppb	0.0883	31.1	52.4188
Mo 202.032	-0.7863	ppb	0.6148	78.2	2.4553
Na 330.237	-114.866	ppb	172.088	149.8	54.7281
Ni 231.604	-1.4489	ppb	0.4576	31.6	-4.2816
Pb 220.353	-0.3013	ppb	1.4055	466.4	6.5007
Sb 206.834	-6.7176	ppb	5.5692	82.9	8.6158
Se 196.026	1.3278	ppb	3.4386	259.0	2.2790
Si 288.158	2.2048	ppb	0.7218	32.7	293.823
Sn 189.925	-0.8637	ppb	0.9220	106.7	-0.5410
Sr 216.596	0.0145	ppb	0.3524	2425.3	9.8176
Ti 334.941	0.1218	ppb	0.0786	64.6	-20.9079
Tl 190.794	-0.3800	ppb	6.8022	1790.0	-10.4284
V 292.401	0.3264	ppb	0.1820	55.8	2.2556
Zn 206.200	1.8323	ppb	2.6644	145.4	0.3957

LCS 680-551751/2-A (Samp) **12/18/2018, 8:17:32 PM** **Rack 2, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.4787	50.6108	51.2736
Al 308.215	4881.31	4885.76	4878.41
As 188.980	103.818	95.2763	92.9488
B 249.678	197.607	198.117	198.744
Ba 389.178	99.7382	101.147	99.9417
Be 313.042	51.4044	51.4683	51.3808
Ca 370.602	4991	4993	4981
Cd 226.502	52.0448	51.8018	51.9159
Co 228.615	51.0499	51.4003	51.2485
Cr 267.716	101.500	101.976	101.485
Cu 324.754	97.9793	98.3637	97.9454
Fe 271.441	5034.79	5050.56	5028.02
K 766.491	7824.21	7822.38	7825.11
Mg 279.078	4999.98	5008.61	5010.85
Mn 257.610	503.440	504.914	503.425
Mo 202.032	98.6476	99.8752	98.8042

Label	Replicates Concentration		
Na 330.237	5012.43	4817.00	4971.96
Ni 231.604	98.1516	99.6894	101.981
Pb 220.353	502.636	505.479	500.632
Sb 206.834	51.3257	43.7486	38.0936
Se 196.026	104.457	96.2342	86.3141
Si 288.158	-4.0405	-2.6533	-3.6092
Sn 189.925	102.547	103.386	94.7306
Sr 216.596	100.490	101.150	102.267
Ti 334.941	100.879	100.838	100.914
Tl 190.794	33.5492	35.3708	33.1618
V 292.401	99.4682	100.184	100.056
Zn 206.200	107.623	106.883	102.425

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.7877	ppb	0.4260	0.8	1853.03
Al 308.215	4881.83	ppb	3.7042	0.1	12404.7
As 188.980	97.3478	ppb	5.7231	5.9	26.9170
B 249.678	198.156	ppb	0.5698	0.3	1230.93
Ba 389.178	100.276	ppb	0.7613	0.8	1055.83
Be 313.042	51.4178	ppb	0.0452	0.1	42552.1
Ca 370.602	4988	ppb	6.657	0.1	11410
Cd 226.502	51.9208	ppb	0.1216	0.2	863.808
Co 228.615	51.2329	ppb	0.1757	0.3	245.761
Cr 267.716	101.654	ppb	0.2793	0.3	2384.92
Cu 324.754	98.0961	ppb	0.2323	0.2	4075.07
Fe 271.441	5037.79	ppb	11.5659	0.2	4180.47
K 766.491	7823.90	ppb	1.3931	0.0	213503
Mg 279.078	5006.48	ppb	5.7365	0.1	7236.80
Mn 257.610	503.926	ppb	0.8558	0.2	55147.6
Mo 202.032	99.1090	ppb	0.6681	0.7	227.410
Na 330.237	4933.79	ppb	103.153	2.1	186.956
Ni 231.604	99.9408	ppb	1.9272	1.9	136.575
Pb 220.353	502.916	ppb	2.4360	0.5	301.431
Sb 206.834	44.3893	ppb	6.6393	15.0	30.9604
Se 196.026	95.6685	ppb	9.0847	9.5	20.2838
Si 288.158	-3.4344	ppb	0.7099	20.7	294.316
Sn 189.925	100.221	ppb	4.7735	4.8	32.2188
Sr 216.596	101.302	ppb	0.8981	0.9	436.738
Ti 334.941	100.877	ppb	0.0376	0.0	12062.8
Tl 190.794	34.0273	ppb	1.1796	3.5	3.9639
V 292.401	99.9029	ppb	0.3818	0.4	1440.64
Zn 206.200	105.644	ppb	2.8117	2.7	37.7259

680-162184-B-18-A (Samp) **12/18/2018, 8:21:54 PM** **Rack 2, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2533u	-0.4108u	-0.3387u
Al 308.215	71.1183	70.5098	70.3047
As 188.980	-0.6143u	-3.6335u	0.9568
B 249.678	14.0467	13.8623	13.2210
Ba 389.178	37.6187	38.0484	37.2202
Be 313.042	-0.0271u	-0.0203u	-0.0307u
Ca 370.602	44717	44570	44546

Label	Replicates Concentration		
Cd 226.502	-0.2488u	-0.2300u	-0.2013u
Co 228.615	0.8897	-0.0249u	-0.6069u
Cr 267.716	-0.0722u	-0.4338u	0.0577
Cu 324.754	27.4439	27.3842	27.7880
Fe 271.441	647.734	634.682	645.903
K 766.491	886.465	877.863	877.224
Mg 279.078	5100.52	5122.78	5121.31
Mn 257.610	126.004	125.557	125.213
Mo 202.032	-1.2655u	-1.3016u	-0.6243u
Na 330.237	14322.8	14316.0	14770.8
Ni 231.604	2.7860	1.1843	0.5980
Pb 220.353	2.0132	5.0470	4.9614
Sb 206.834	1.7091	-0.0827u	-15.7134u
Se 196.026	4.7222	8.9927	2.7570
Si 288.158	3892.53	3884.86	3889.38
Sn 189.925	-0.4034u	-2.8980u	3.5746
Sr 216.596	123.822	121.875	122.257
Ti 334.941	0.8605	0.7503	0.7620
Tl 190.794	3.0909	-0.7915u	4.4055
V 292.401	0.7110	0.9321	0.2542
Zn 206.200	17.1054	15.0854	15.1911

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3343	ppb	0.0788	23.6	-41.7920
Al 308.215	70.6443	ppb	0.4231	0.6	339.417
As 188.980	-1.0970	ppb	2.3330	212.7	0.9594
B 249.678	13.7100	ppb	0.4334	3.2	-6.1979
Ba 389.178	37.6291	ppb	0.4142	1.1	358.878
Be 313.042	-0.0260	ppb	0.0053	20.3	-176.194
Ca 370.602	44611	ppb	92.56	0.2	101726
Cd 226.502	-0.2267	ppb	0.0239	10.5	8.8778
Co 228.615	0.0860	ppb	0.7544	877.5	-11.5710
Cr 267.716	-0.1494	ppb	0.2547	170.4	20.5037
Cu 324.754	27.5387	ppb	0.2180	0.8	1288.89
Fe 271.441	642.773	ppb	7.0663	1.1	557.056
K 766.491	880.517	ppb	5.1607	0.6	24266.1
Mg 279.078	5114.87	ppb	12.4522	0.2	7398.11
Mn 257.610	125.591	ppb	0.3964	0.3	13778.4
Mo 202.032	-1.0638	ppb	0.3811	35.8	1.8200
Na 330.237	14469.9	ppb	260.656	1.8	439.009
Ni 231.604	1.5228	ppb	1.1326	74.4	-0.1508
Pb 220.353	4.0072	ppb	1.7274	43.1	9.0386
Sb 206.834	-4.6957	ppb	9.5836	204.1	9.5378
Se 196.026	5.4906	ppb	3.1880	58.1	3.0820
Si 288.158	3888.92	ppb	3.8514	0.1	18946.1
Sn 189.925	0.0911	ppb	3.2645	3585.3	-0.2297
Sr 216.596	122.651	ppb	1.0318	0.8	528.089
Ti 334.941	0.7909	ppb	0.0605	7.6	77.1217
Tl 190.794	2.2350	ppb	2.7022	120.9	-9.3162
V 292.401	0.6324	ppb	0.3457	54.7	6.8440
Zn 206.200	15.7940	ppb	1.1370	7.2	5.4211

680-162184-B-3-A (Samp) **12/18/2018, 8:26:17 PM** **Rack 2, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4897	0.1234	-0.0799u
Al 308.215	0.0535	0.1492	1.9677
As 188.980	-0.5200u	-2.4709u	1.9971
B 249.678	77.3454	77.2782	76.9029
Ba 389.178	99.7983	97.5805	97.0137
Be 313.042	-0.0415u	-0.0393u	-0.0507u
Ca 370.602	43465	43533	43503
Cd 226.502	-0.0088u	0.0031	0.0323
Co 228.615	-0.2510u	-1.5844u	0.2022
Cr 267.716	0.2766	0.0700	0.2096
Cu 324.754	-0.3267u	-0.0021u	-0.2550u
Fe 271.441	-0.0202u	5.0634	7.6638
K 766.491	4085.14	4094.75	4095.85
Mg 279.078	11456.1	11463.2	11437.1
Mn 257.610	7.1682	7.2339	7.1363
Mo 202.032	0.9192	3.2901	2.3733
Na 330.237	6608.99	6535.19	6689.20
Ni 231.604	1.2539	0.2275	-1.2658u
Pb 220.353	-1.3789u	4.0905	2.1597
Sb 206.834	-5.4366u	-9.1725u	-11.2324u
Se 196.026	351.280	362.899	347.712
Si 288.158	5764.41	5754.82	5754.26
Sn 189.925	8.1475	0.6003	-2.2597u
Sr 216.596	294.901	296.546	295.486
Ti 334.941	-0.1103	-0.0900	-0.0831
Tl 190.794	0.8231	7.4070	-0.5670u
V 292.401	0.7112	0.2384	0.2977
Zn 206.200	3.3736	5.1477	4.1238

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1777	ppb	0.2887	162.4	-23.6455
Al 308.215	0.7234	ppb	1.0786	149.1	164.159
As 188.980	-0.3313	ppb	2.2399	676.2	1.1598
B 249.678	77.1755	ppb	0.2385	0.3	421.664
Ba 389.178	98.1308	ppb	1.4716	1.5	1036.49
Be 313.042	-0.0438	ppb	0.0060	13.8	-191.234
Ca 370.602	43501	ppb	34.06	0.1	99194
Cd 226.502	0.0089	ppb	0.0211	238.1	12.2770
Co 228.615	-0.5444	ppb	0.9287	170.6	-14.8021
Cr 267.716	0.1854	ppb	0.1054	56.8	27.8935
Cu 324.754	-0.1946	ppb	0.1705	87.6	194.634
Fe 271.441	4.2357	ppb	3.9083	92.3	31.0931
K 766.491	4091.92	ppb	5.8890	0.1	111790
Mg 279.078	11452.1	ppb	13.5187	0.1	16528.8
Mn 257.610	7.1794	ppb	0.0498	0.7	862.809
Mo 202.032	2.1942	ppb	1.1956	54.5	9.1699
Na 330.237	6611.13	ppb	77.0252	1.2	231.979
Ni 231.604	0.0718	ppb	1.2671	1763.6	-2.1667
Pb 220.353	1.6237	ppb	2.7738	170.8	7.6293
Sb 206.834	-8.6138	ppb	2.9380	34.1	7.7391
Se 196.026	353.964	ppb	7.9413	2.2	69.4604
Si 288.158	5757.83	ppb	5.7028	0.1	27915.6

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	2.1627	ppb	5.3766	248.6	0.4407
Sr 216.596	295.645	ppb	0.8339	0.3	1258.79
Ti 334.941	-0.0945	ppb	0.0142	15.0	-5.9433
Tl 190.794	2.5544	ppb	4.2596	166.8	-9.2061
V 292.401	0.4158	ppb	0.2576	61.9	3.3811
Zn 206.200	4.2150	ppb	0.8906	21.1	1.2532

680-162184-B-3-Asd (Samp) **12/18/2018, 8:30:40 PM** **Rack 2, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1063u	-0.0309u	0.0492
Al 308.215	-0.0699u	-1.0701u	-1.2408u
As 188.980	1.0756	-4.4742u	3.9744
B 249.678	19.0276	18.2583	18.0922
Ba 389.178	23.1453	23.3425	23.3464
Be 313.042	-0.0393u	-0.0321u	-0.0408u
Ca 370.602	10378	10372	10342
Cd 226.502	-0.3497u	-0.3806u	-0.2705u
Co 228.615	0.1222	-0.3772u	0.4040
Cr 267.716	-0.3123u	-0.6231u	-0.2705u
Cu 324.754	-0.5034u	0.2762	-0.3893u
Fe 271.441	-1.1873u	4.5180	7.4416
K 766.491	931.003	932.502	929.670
Mg 279.078	2724.64	2731.55	2714.08
Mn 257.610	1.7355	1.8766	1.8466
Mo 202.032	-0.3575u	-0.4749u	-0.3154u
Na 330.237	1195.36	1523.94	1701.35
Ni 231.604	-1.1782u	-1.3561u	1.1181
Pb 220.353	-2.8755u	0.8118	-2.5998u
Sb 206.834	-7.0503u	-8.6649u	-8.0062u
Se 196.026	74.8145	67.7559	84.9150
Si 288.158	1334.18	1329.07	1331.59
Sn 189.925	5.4812	3.8539	-0.9156u
Sr 216.596	69.7641	70.5836	70.0853
Ti 334.941	-0.1151u	0.0168	0.0154
Tl 190.794	2.1894	-2.9425u	4.7414
V 292.401	0.2646	0.0644	0.4707
Zn 206.200	4.8538	3.3526	-2.8806u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0293	ppb	0.0777	265.1	-30.3867
Al 308.215	-0.7936	ppb	0.6325	79.7	160.314
As 188.980	0.1920	ppb	4.2931	2236.5	1.2982
B 249.678	18.4594	ppb	0.4991	2.7	26.4179
Ba 389.178	23.2781	ppb	0.1150	0.5	197.014
Be 313.042	-0.0374	ppb	0.0047	12.4	-190.468
Ca 370.602	10364	ppb	19.18	0.2	23662
Cd 226.502	-0.3336	ppb	0.0568	17.0	6.6475
Co 228.615	0.0497	ppb	0.3956	796.7	-11.7904
Cr 267.716	-0.4020	ppb	0.1926	47.9	14.2039
Cu 324.754	-0.2055	ppb	0.4210	204.9	194.157
Fe 271.441	3.5908	ppb	4.3885	122.2	30.6041
K 766.491	931.059	ppb	1.4167	0.2	25643.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2723.42	ppb	8.7962	0.3	3954.40
Mn 257.610	1.8196	ppb	0.0743	4.1	233.738
Mo 202.032	-0.3826	ppb	0.0826	21.6	3.3647
Na 330.237	1473.55	ppb	256.734	17.4	96.5907
Ni 231.604	-0.4721	ppb	1.3800	292.3	-2.9235
Pb 220.353	-1.5545	ppb	2.0539	132.1	5.7663
Sb 206.834	-7.9072	ppb	0.8118	10.3	8.0763
Se 196.026	75.8285	ppb	8.6244	11.4	16.4723
Si 288.158	1331.61	ppb	2.5568	0.2	6673.60
Sn 189.925	2.8065	ppb	3.3245	118.5	0.6487
Sr 216.596	70.1443	ppb	0.4130	0.6	306.104
Ti 334.941	-0.0276	ppb	0.0758	274.5	-29.0746
Tl 190.794	1.3294	ppb	3.9135	294.4	-9.7166
V 292.401	0.2666	ppb	0.2032	76.2	1.3566
Zn 206.200	1.7753	ppb	4.1014	231.0	0.3753

680-162184-B-3-Apds (Samp) **12/18/2018, 8:35:03 PM** **Rack 2, Tube 8**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.0366	49.7751	49.3762
Al 308.215	4983.04	4965.06	4960.90
As 188.980	105.159	95.6001	93.5075
B 249.678	286.120	282.693	284.968
Ba 389.178	213.631	212.237	211.152
Be 313.042	52.0722	51.9660	51.8957
Ca 370.602	55276	55106	55122
Cd 226.502	51.7737	52.3047	51.6810
Co 228.615	50.4696	51.0024	51.1313
Cr 267.716	102.769	102.524	102.384
Cu 324.754	98.8835	98.2512	98.1404
Fe 271.441	5103.59	5068.54	5060.75
K 766.491	12827.8	12775.2	12787.4
Mg 279.078	18327.4	18247.9	18242.4
Mn 257.610	515.726	514.732	514.062
Mo 202.032	102.481	102.816	101.461
Na 330.237	12864.0	13024.2	12712.5
Ni 231.604	99.7135	98.6707	99.6704
Pb 220.353	504.705	500.642	493.024
Sb 206.834	50.9002	46.4022	48.4736
Se 196.026	485.064	486.560	486.175
Si 288.158	6548.44	6527.70	6522.52
Sn 189.925	100.325	93.0220	102.932
Sr 216.596	445.941	442.393	442.469
Ti 334.941	101.634	100.982	100.803
Tl 190.794	38.9385	36.3665	30.8839
V 292.401	100.821	101.374	100.542
Zn 206.200	107.854	104.901	103.204

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.7293	ppb	0.3326	0.7	1812.39
Al 308.215	4969.67	ppb	11.7653	0.2	12625.0
As 188.980	98.0888	ppb	6.2116	6.3	27.1121
B 249.678	284.594	ppb	1.7440	0.6	1812.76

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	212.340	ppb	1.2428	0.6	2312.87
Be 313.042	51.9780	ppb	0.0889	0.2	43024.4
Ca 370.602	55168	ppb	93.55	0.2	125792
Cd 226.502	51.9198	ppb	0.3365	0.6	863.877
Co 228.615	50.8677	ppb	0.3508	0.7	243.896
Cr 267.716	102.559	ppb	0.1950	0.2	2406.03
Cu 324.754	98.4250	ppb	0.4009	0.4	4088.11
Fe 271.441	5077.63	ppb	22.8210	0.4	4213.28
K 766.491	12796.8	ppb	27.5475	0.2	349035
Mg 279.078	18272.6	ppb	47.5635	0.3	26347.6
Mn 257.610	514.840	ppb	0.8373	0.2	56406.4
Mo 202.032	102.253	ppb	0.7060	0.7	234.491
Na 330.237	12866.9	ppb	155.867	1.2	396.019
Ni 231.604	99.3515	ppb	0.5900	0.6	135.756
Pb 220.353	499.457	ppb	5.9298	1.2	299.402
Sb 206.834	48.5920	ppb	2.2513	4.6	32.8162
Se 196.026	485.933	ppb	0.7767	0.2	94.6340
Si 288.158	6532.89	ppb	13.7164	0.2	31662.8
Sn 189.925	98.7598	ppb	5.1372	5.2	31.7462
Sr 216.596	443.601	ppb	2.0265	0.5	1882.89
Ti 334.941	101.139	ppb	0.4372	0.4	12141.7
Tl 190.794	35.3963	ppb	4.1140	11.6	4.5361
V 292.401	100.912	ppb	0.4236	0.4	1455.10
Zn 206.200	105.320	ppb	2.3530	2.2	37.6090

680-162184-B-3-B MS (Samp) **12/18/2018, 8:39:27 PM** **Rack 2, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.2689	49.2756	50.1937
Al 308.215	4802.81	4793.94	4801.63
As 188.980	95.4962	92.9471	92.8757
B 249.678	275.841	277.252	276.311
Ba 389.178	200.928	201.944	202.281
Be 313.042	50.3997	50.3079	50.3210
Ca 370.602	52730	52665	52586
Cd 226.502	50.6105	50.6990	50.2368
Co 228.615	49.8266	49.9911	49.2059
Cr 267.716	99.1619	99.3301	99.4127
Cu 324.754	96.1204	95.5455	95.4834
Fe 271.441	4928.37	4938.43	4920.50
K 766.491	12282.3	12276.7	12259.8
Mg 279.078	17170.4	17119.0	17093.4
Mn 257.610	499.592	499.132	499.218
Mo 202.032	99.8679	101.368	102.238
Na 330.237	11975.8	12262.0	12385.9
Ni 231.604	98.2720	97.3671	95.4754
Pb 220.353	494.416	488.373	500.286
Sb 206.834	48.5168	47.6436	45.9872
Se 196.026	477.591	461.105	484.150
Si 288.158	6069.16	6060.47	6070.77
Sn 189.925	97.6430	100.936	99.6886
Sr 216.596	414.265	415.864	415.914
Ti 334.941	98.3898	97.8435	98.0208

Label	Replicates Concentration		
Tl 190.794	35.8496	39.9518	39.4535
V 292.401	98.2761	98.1797	97.8605
Zn 206.200	97.2251	101.412	98.4005

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.9127	ppb	0.5530	1.1	1819.30
Al 308.215	4799.46	ppb	4.8198	0.1	12198.2
As 188.980	93.7730	ppb	1.4927	1.6	25.9736
B 249.678	276.468	ppb	0.7186	0.3	1758.20
Ba 389.178	201.718	ppb	0.7046	0.3	2193.78
Be 313.042	50.3429	ppb	0.0497	0.1	41665.7
Ca 370.602	52660	ppb	72.08	0.1	120075
Cd 226.502	50.5154	ppb	0.2453	0.5	840.827
Co 228.615	49.6745	ppb	0.4141	0.8	237.869
Cr 267.716	99.3016	ppb	0.1278	0.1	2330.36
Cu 324.754	95.7164	ppb	0.3512	0.4	3981.21
Fe 271.441	4929.10	ppb	8.9848	0.2	4090.86
K 766.491	12272.9	ppb	11.7064	0.1	334758
Mg 279.078	17127.6	ppb	39.2298	0.2	24698.4
Mn 257.610	499.314	ppb	0.2445	0.0	54703.1
Mo 202.032	101.158	ppb	1.1988	1.2	232.028
Na 330.237	12207.9	ppb	210.308	1.7	378.672
Ni 231.604	97.0382	ppb	1.4270	1.5	132.543
Pb 220.353	494.358	ppb	5.9570	1.2	296.415
Sb 206.834	47.3825	ppb	1.2848	2.7	32.2725
Se 196.026	474.282	ppb	11.8735	2.5	92.4135
Si 288.158	6066.80	ppb	5.5425	0.1	29425.6
Sn 189.925	99.4225	ppb	1.6625	1.7	31.9609
Sr 216.596	415.347	ppb	0.9380	0.2	1763.53
Ti 334.941	98.0847	ppb	0.2787	0.3	11771.7
Tl 190.794	38.4183	ppb	2.2385	5.8	5.7921
V 292.401	98.1054	ppb	0.2175	0.2	1414.42
Zn 206.200	99.0124	ppb	2.1593	2.2	35.3401

680-162184-B-3-C MSD (Samp) **12/18/2018, 8:43:51 PM** **Rack 2, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.0806	51.0544	51.2391
Al 308.215	4853.83	4853.05	4831.08
As 188.980	94.1928	100.225	96.5110
B 249.678	279.271	278.736	279.729
Ba 389.178	201.950	200.927	199.564
Be 313.042	50.6629	50.6659	50.7208
Ca 370.602	54021	53982	53963
Cd 226.502	50.4560	50.7403	50.8775
Co 228.615	50.3078	51.0328	49.6539
Cr 267.716	100.106	100.472	100.808
Cu 324.754	96.3507	96.6677	96.9005
Fe 271.441	4978.45	4977.68	5007.39
K 766.491	12396.5	12380.4	12372.2
Mg 279.078	17274.8	17285.0	17292.3
Mn 257.610	503.516	503.022	502.645
Mo 202.032	100.052	102.226	99.9996

Label	Replicates Concentration		
Na 330.237	12450.2	12106.8	12334.0
Ni 231.604	95.6785	100.252	96.0457
Pb 220.353	491.435	500.995	495.277
Sb 206.834	50.7615	44.5924	47.7406
Se 196.026	493.212	466.317	504.159
Si 288.158	6128.57	6123.43	6136.34
Sn 189.925	99.2963	100.664	94.1637
Sr 216.596	420.496	420.779	420.518
Ti 334.941	98.9231	98.7618	99.3596
Tl 190.794	38.0174	34.3289	32.3923
V 292.401	98.9493	98.9477	99.4579
Zn 206.200	102.807	105.043	98.1383

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.1247	ppb	0.0999	0.2	1864.20
Al 308.215	4845.99	ppb	12.9189	0.3	12314.9
As 188.980	96.9762	ppb	3.0427	3.1	26.8188
B 249.678	279.245	ppb	0.4970	0.2	1776.85
Ba 389.178	200.814	ppb	1.1969	0.6	2183.90
Be 313.042	50.6832	ppb	0.0326	0.1	41948.7
Ca 370.602	53989	ppb	29.43	0.1	123104
Cd 226.502	50.6913	ppb	0.2150	0.4	843.737
Co 228.615	50.3315	ppb	0.6897	1.4	241.189
Cr 267.716	100.462	ppb	0.3512	0.3	2357.31
Cu 324.754	96.6396	ppb	0.2760	0.3	4017.63
Fe 271.441	4987.84	ppb	16.9371	0.3	4139.29
K 766.491	12383.0	ppb	12.3707	0.1	337759
Mg 279.078	17284.0	ppb	8.8135	0.1	24923.7
Mn 257.610	503.061	ppb	0.4369	0.1	55113.5
Mo 202.032	100.759	ppb	1.2705	1.3	231.129
Na 330.237	12297.0	ppb	174.677	1.4	381.018
Ni 231.604	97.3255	ppb	2.5414	2.6	132.941
Pb 220.353	495.903	ppb	4.8107	1.0	297.320
Sb 206.834	47.6982	ppb	3.0848	6.5	32.4200
Se 196.026	487.896	ppb	19.4733	4.0	95.0073
Si 288.158	6129.45	ppb	6.4977	0.1	29726.0
Sn 189.925	98.0415	ppb	3.4273	3.5	31.5133
Sr 216.596	420.598	ppb	0.1573	0.0	1785.72
Ti 334.941	99.0148	ppb	0.3093	0.3	11883.6
Tl 190.794	34.9129	ppb	2.8576	8.2	4.3333
V 292.401	99.1183	ppb	0.2941	0.3	1429.14
Zn 206.200	101.996	ppb	3.5229	3.5	36.4135

Cont Calib Verif (CCV) **12/18/2018, 8:48:16 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	489.126	492.092	492.771
Al 308.215	9736.11	9742.36	9749.33
As 188.980	491.641	493.761	503.576
B 249.678	493.647	494.740	494.865
Ba 389.178	488.902	490.673	490.946
Be 313.042	513.154	513.034	513.315
Ca 370.602	9982	9995	10003

Label	Replicates Concentration		
Cd 226.502	505.846	505.713	506.819
Co 228.615	501.970	501.998	503.209
Cr 267.716	499.596	499.351	500.904
Cu 324.754	484.984	481.186	484.195
Fe 271.441	9972.64	9984.78	9991.45
K 766.491	9677.75	9678.22	9695.78
Mg 279.078	10017.7	10012.6	10027.7
Mn 257.610	497.745	497.710	497.985
Mo 202.032	492.748	491.780	496.006
Na 330.237	9958.02	10005.1	10097.4
Ni 231.604	497.251	496.421	496.798
Pb 220.353	502.933	496.201	494.793
Sb 206.834	489.944	495.428	471.958
Se 196.026	486.493	475.836	476.912
Si 288.158	5034.36	5031.76	5038.99
Sn 189.925	498.928	494.783	492.812
Sr 216.596	502.157	501.706	503.698
Ti 334.941	500.910	501.120	501.622
Tl 190.794	504.638	495.612	492.097
V 292.401	493.161	494.339	493.557
Zn 206.200	1003.77	994.057	1004.18

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.330	ppb	1.9386	0.4	18178.9	98.26593
Al 308.215	9742.60	ppb	6.6117	0.1	24607.8	97.42596
As 188.980	496.326	ppb	6.3672	1.3	132.095	99.26519
B 249.678	494.417	ppb	0.6700	0.1	3220.17	98.88345
Ba 389.178	490.174	ppb	1.1099	0.2	5391.17	98.03477
Be 313.042	513.168	ppb	0.1410	0.0	426149	102.63354
Ca 370.602	9993	ppb	10.33	0.1	22821	99.93304
Cd 226.502	506.126	ppb	0.6036	0.1	8282.24	101.22520
Co 228.615	502.392	ppb	0.7074	0.1	2515.33	100.47847
Cr 267.716	499.950	ppb	0.8349	0.2	11631.2	99.99005
Cu 324.754	483.455	ppb	2.0041	0.4	19285.5	96.69103
Fe 271.441	9982.96	ppb	9.5335	0.1	8280.57	99.77967
K 766.491	9683.92	ppb	10.2771	0.1	264196	96.83919
Mg 279.078	10019.4	ppb	7.7035	0.1	14457.3	100.19356
Mn 257.610	497.814	ppb	0.1499	0.0	54517.0	99.56273
Mo 202.032	493.511	ppb	2.2140	0.4	1115.80	98.70229
Na 330.237	10020.1	ppb	70.8883	0.7	318.081	100.20145
Ni 231.604	496.824	ppb	0.4155	0.1	687.665	99.36470
Pb 220.353	497.975	ppb	4.3505	0.9	298.184	99.59508
Sb 206.834	485.777	ppb	12.2776	2.5	226.367	97.15532
Se 196.026	479.747	ppb	5.8669	1.2	93.4381	95.94943
Si 288.158	5035.04	ppb	3.6663	0.1	24582.7	100.70072
Sn 189.925	495.508	ppb	3.1219	0.6	160.322	99.10152
Sr 216.596	502.520	ppb	1.0443	0.2	2124.07	100.50407
Ti 334.941	501.218	ppb	0.3661	0.1	60023.0	100.24352
Tl 190.794	497.449	ppb	6.4694	1.3	197.291	99.48979
V 292.401	493.686	ppb	0.5990	0.1	7125.51	98.73718
Zn 206.200	1000.67	ppb	5.7289	0.6	359.691	100.06682

Cont Calib Blank (CCB) **12/18/2018, 8:52:41 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5771u	0.2926	-0.0243u
Al 308.215	-5.7263u	-1.6989u	-3.1233u
As 188.980	1.9580	-1.1486u	-2.8485u
B 249.678	4.3818	4.9619	4.0984
Ba 389.178	-0.2770u	-0.4584u	1.2275
Be 313.042	0.0243	0.0275	0.0368
Ca 370.602	0.3825	-4.632u	-1.376u
Cd 226.502	-0.1045u	-0.0707u	-0.0069u
Co 228.615	0.2221	0.3815	0.2508
Cr 267.716	-0.2157u	-0.0719u	-0.1050u
Cu 324.754	-0.5521u	0.0107	0.0458
Fe 271.441	5.0870	-3.7811u	5.6781
K 766.491	2.0527	1.9732	1.3802
Mg 279.078	-8.8476u	3.3843	-1.7537u
Mn 257.610	0.1167	0.1438	0.1613
Mo 202.032	-0.2804u	-0.5161u	0.2619
Na 330.237	-57.3507u	-271.165u	240.689
Ni 231.604	-1.6129u	0.5060	-0.4082u
Pb 220.353	-1.2757u	0.0212	-1.9478u
Sb 206.834	0.0133	-3.9127u	-9.7907u
Se 196.026	-10.1769u	-1.2884u	-13.4412u
Si 288.158	2.9587	-0.2037u	2.2893
Sn 189.925	4.1429	1.6860	-2.7493u
Sr 216.596	0.0837	-0.4587u	-0.7157u
Ti 334.941	0.1312	0.1979	0.2296
Tl 190.794	2.8785	-0.3600u	5.5794
V 292.401	-0.0271u	0.2133	0.9824
Zn 206.200	-2.5861u	-1.5528u	1.8881

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1030	ppb	0.4402	427.4	-32.8259	-0.10298
Al 308.215	-3.5162	ppb	2.0422	58.1	153.488	-3.51618
As 188.980	-0.6797	ppb	2.4373	358.6	1.0681	-0.67974
B 249.678	4.4807	ppb	0.4401	9.8	-67.6796	4.48069
Ba 389.178	0.1640	ppb	0.9254	564.2	-62.2438	0.16402
Be 313.042	0.0296	ppb	0.0065	22.0	-136.325	0.02955
Ca 370.602	-1.875	ppb	2.544	135.7	32.99	-1.87513
Cd 226.502	-0.0607	ppb	0.0496	81.6	11.0902	-0.06071
Co 228.615	0.2848	ppb	0.0850	29.8	-10.6064	0.28480
Cr 267.716	-0.1309	ppb	0.0753	57.6	20.4811	-0.13087
Cu 324.754	-0.1652	ppb	0.3356	203.1	195.745	-0.16518
Fe 271.441	2.3280	ppb	5.2989	227.6	29.5624	2.32800
K 766.491	1.8020	ppb	0.3675	20.4	317.336	1.80201
Mg 279.078	-2.4056	ppb	6.1420	255.3	27.6282	-2.40564
Mn 257.610	0.1406	ppb	0.0224	16.0	36.7109	0.14061
Mo 202.032	-0.1782	ppb	0.3989	223.9	3.8253	-0.17817
Na 330.237	-29.2753	ppb	257.079	878.1	56.9850	-29.27533
Ni 231.604	-0.5050	ppb	1.0627	210.4	-2.9693	-0.50503
Pb 220.353	-1.0674	ppb	1.0009	93.8	6.0517	-1.06741
Sb 206.834	-4.5634	ppb	4.9343	108.1	9.5768	-4.56336
Se 196.026	-8.3022	ppb	6.2896	75.8	0.4444	-8.30216
Si 288.158	1.6814uv	ppb	1.6665	99.1	291.490	1.68144

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	1.0265	ppb	3.4931	340.3	0.0716	1.02653
Sr 216.596	-0.3636	ppb	0.4081	112.2	8.2154	-0.36359
Ti 334.941	0.1862	ppb	0.0502	27.0	-13.2073	0.18621
Tl 190.794	2.6993	ppb	2.9737	110.2	-9.1467	2.69929
V 292.401	0.3895	ppb	0.5273	135.4	3.1334	0.38954
Zn 206.200	-0.7503	ppb	2.3426	312.2	-0.5337	-0.75026

680-162184-D-2-A (Samp) **12/18/2018, 8:57:04 PM** **Rack 2, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3085	-0.6675u	-0.2987u
Al 308.215	1.9077	1.0016	-1.3813u
As 188.980	3.2894	1.9716	-3.9067u
B 249.678	55.2392	55.2973	54.9799
Ba 389.178	14.7756	14.9253	15.1241
Be 313.042	-0.0400u	-0.0425u	-0.0380u
Ca 370.602	71610	71636	71710
Cd 226.502	-0.1447u	0.0217	-0.4811u
Co 228.615	0.2306	-0.3330u	-0.5195u
Cr 267.716	-0.0180u	-0.3572u	-0.0582u
Cu 324.754	0.6162	-0.6110u	0.0761
Fe 271.441	-2.6866u	2.2251	4.8834
K 766.491	216.790	216.138	215.849
Mg 279.078	19152.9	19179.4	19193.7
Mn 257.610	3.4309	3.4883	3.4597
Mo 202.032	-0.4774u	-0.0533u	-0.8995u
Na 330.237	36392.6	36076.5	35581.8
Ni 231.604	-1.3296u	1.0827	-2.1059u
Pb 220.353	-0.1140u	2.0791	3.0707
Sb 206.834	-7.2802u	-7.2709u	-2.1797u
Se 196.026	36.3424	21.9671	59.2121
Si 288.158	5693.25	5695.15	5702.93
Sn 189.925	1.3033	6.0985	-3.2997u
Sr 216.596	230.551	229.062	229.199
Ti 334.941	-0.1757	-0.2864	-0.2558
Tl 190.794	-4.2787u	-6.2232u	0.9986
V 292.401	0.6959	0.0769	0.1584
Zn 206.200	4.9538	3.5248	2.2355

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2192	ppb	0.4928	224.8	-38.2055
Al 308.215	0.5093	ppb	1.6988	333.5	163.582
As 188.980	0.4514	ppb	3.8313	848.7	1.3666
B 249.678	55.1721	ppb	0.1690	0.3	273.544
Ba 389.178	14.9417	ppb	0.1748	1.2	120.901
Be 313.042	-0.0402	ppb	0.0023	5.6	-184.954
Ca 370.602	71652	ppb	51.78	0.1	163363
Cd 226.502	-0.2014	ppb	0.2561	127.2	8.8220
Co 228.615	-0.2073	ppb	0.3906	188.4	-13.0806
Cr 267.716	-0.1445	ppb	0.1853	128.3	20.4601
Cu 324.754	0.0271	ppb	0.6151	2270.0	203.331
Fe 271.441	1.4739	ppb	3.8405	260.6	28.8463
K 766.491	216.259	ppb	0.4821	0.2	6162.21

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	19175.3	ppb	20.6915	0.1	27654.8
Mn 257.610	3.4596	ppb	0.0287	0.8	494.186
Mo 202.032	-0.4767	ppb	0.4231	88.7	3.1526
Na 330.237	36017.0	ppb	408.640	1.1	1006.94
Ni 231.604	-0.7842	ppb	1.6628	212.0	-3.3571
Pb 220.353	1.6786	ppb	1.6297	97.1	7.6618
Sb 206.834	-5.5770	ppb	2.9421	52.8	9.1225
Se 196.026	39.1739	ppb	18.7833	47.9	9.4894
Si 288.158	5697.11	ppb	5.1337	0.1	27623.9
Sn 189.925	1.3674	ppb	4.6994	343.7	0.1867
Sr 216.596	229.604	ppb	0.8231	0.4	979.813
Ti 334.941	-0.2393	ppb	0.0571	23.9	3.5370
Tl 190.794	-3.1677	ppb	3.7369	118.0	-11.5892
V 292.401	0.3104	ppb	0.3363	108.4	1.9668
Zn 206.200	3.5714	ppb	1.3598	38.1	1.0216

680-162184-D-4-A (Samp) **12/18/2018, 9:01:28 PM** **Rack 2, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5474u	-0.6451u	0.4772
Al 308.215	-1.7160u	2.8131	0.0545
As 188.980	-1.7345u	-4.2101u	-1.3497u
B 249.678	29.1138	26.9397	28.3504
Ba 389.178	94.5859	95.2271	94.7858
Be 313.042	-0.0650u	-0.0546u	-0.0554u
Ca 370.602	82454	82378	82349
Cd 226.502	-0.1662u	0.1236	-0.1946u
Co 228.615	0.0261	0.5493	0.2418
Cr 267.716	0.0815	-0.1199u	-0.6704u
Cu 324.754	-0.1543u	-0.3411u	-0.3667u
Fe 271.441	171.890	162.934	144.502
K 766.491	918.501	919.293	918.883
Mg 279.078	23933.4	23891.9	23904.0
Mn 257.610	87.9563	88.0950	88.0409
Mo 202.032	2.6665	1.5626	2.6101
Na 330.237	18649.6	18437.4	18303.7
Ni 231.604	1.4079	0.5366	-0.7671u
Pb 220.353	5.0292	-2.3096u	-2.5075u
Sb 206.834	-10.0126u	-9.9740u	-8.1588u
Se 196.026	-26.7181u	-15.8789u	-5.9916u
Si 288.158	7011.33	7004.24	6994.42
Sn 189.925	-3.7835u	5.6018	-4.3326u
Sr 216.596	226.799	225.280	225.006
Ti 334.941	-0.5054	-0.3856	-0.5090
Tl 190.794	-2.4440u	-6.1187u	3.8488
V 292.401	0.3641	0.4661	0.8021
Zn 206.200	3.1386	5.7775	5.5811

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2385	ppb	0.6217	260.7	-38.7868
Al 308.215	0.3839	ppb	2.2825	594.6	163.323
As 188.980	-2.4314	ppb	1.5523	63.8	0.6059
B 249.678	28.1347	ppb	1.1030	3.9	91.3927

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	94.8662	ppb	0.3281	0.3	1012.73
Be 313.042	-0.0583	ppb	0.0058	9.9	-197.796
Ca 370.602	82394	ppb	54.16	0.1	187849
Cd 226.502	-0.0790	ppb	0.1761	222.8	10.9997
Co 228.615	0.2724	ppb	0.2629	96.5	-10.6918
Cr 267.716	-0.2363	ppb	0.3892	164.7	18.3838
Cu 324.754	-0.2874	ppb	0.1160	40.4	191.009
Fe 271.441	159.775	ppb	13.9644	8.7	159.254
K 766.491	918.892	ppb	0.3961	0.0	25311.9
Mg 279.078	23909.8	ppb	21.3230	0.1	34474.2
Mn 257.610	88.0308	ppb	0.0699	0.1	9763.92
Mo 202.032	2.2797	ppb	0.6217	27.3	9.3603
Na 330.237	18463.6	ppb	174.455	0.9	544.322
Ni 231.604	0.3925	ppb	1.0946	278.9	-1.7221
Pb 220.353	0.0707	ppb	4.2953	6074.7	6.7257
Sb 206.834	-9.3818	ppb	1.0593	11.3	7.3956
Se 196.026	-16.1962	ppb	10.3669	64.0	-1.0515
Si 288.158	7003.33	ppb	8.4911	0.1	33893.0
Sn 189.925	-0.8381	ppb	5.5839	666.3	-0.5303
Sr 216.596	225.695	ppb	0.9656	0.4	963.290
Ti 334.941	-0.4666	ppb	0.0703	15.1	-6.2114
Tl 190.794	-1.5713	ppb	5.0407	320.8	-10.8981
V 292.401	0.5441	ppb	0.2292	42.1	5.3087
Zn 206.200	4.8324	ppb	1.4701	30.4	1.4757

680-162184-D-9-A (Samp) **12/18/2018, 9:05:52 PM** **Rack 2, Tube 13**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1453	0.4945	0.2231
Al 308.215	0.2552	-0.1658u	-0.8177u
As 188.980	3.4003	2.5265	-3.8726u
B 249.678	15.5517	16.1673	14.3308
Ba 389.178	34.9590	37.2603	37.1307
Be 313.042	-0.0569u	-0.0581u	-0.0434u
Ca 370.602	80875	80819	80874
Cd 226.502	-0.2412u	-0.1325u	-0.1865u
Co 228.615	0.2458	-0.9472u	0.2740
Cr 267.716	0.0048	-0.2804u	-0.2366u
Cu 324.754	0.4277	0.1923	0.1787
Fe 271.441	13.5479	15.9630	9.8307
K 766.491	548.859	549.924	549.799
Mg 279.078	23740.9	23743.1	23771.3
Mn 257.610	8.2732	8.2401	8.3268
Mo 202.032	3.1068	1.7492	2.5254
Na 330.237	15341.3	15429.5	15059.1
Ni 231.604	0.3220	1.0153	1.7140
Pb 220.353	-5.3529u	2.7843	0.0019
Sb 206.834	-7.4495u	-4.7062u	-8.3462u
Se 196.026	-17.0131u	1.9675	2.5223
Si 288.158	5831.32	5834.26	5842.42
Sn 189.925	-1.2211u	1.7970	-2.9104u
Sr 216.596	288.659	286.440	287.523
Ti 334.941	-0.4325	-0.4562	-0.4855

Label	Replicates Concentration		
Tl 190.794	-2.3948u	-0.5091u	0.1033
V 292.401	0.6117	0.5791	0.5934
Zn 206.200	6.3914	3.9865	4.0971

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2876	ppb	0.1833	63.7	-19.6657
Al 308.215	-0.2427	ppb	0.5406	222.7	161.748
As 188.980	0.6847	ppb	3.9708	579.9	1.4278
B 249.678	15.3499	ppb	0.9347	6.1	5.4764
Ba 389.178	36.4500	ppb	1.2929	3.5	364.184
Be 313.042	-0.0528	ppb	0.0081	15.4	-193.289
Ca 370.602	80856	ppb	31.75	0.0	184343
Cd 226.502	-0.1867	ppb	0.0544	29.1	9.1370
Co 228.615	-0.1425	ppb	0.6971	489.2	-12.7845
Cr 267.716	-0.1708	ppb	0.1536	89.9	19.6958
Cu 324.754	0.2662	ppb	0.1400	52.6	212.822
Fe 271.441	13.1139	ppb	3.0891	23.6	38.4301
K 766.491	549.527	ppb	0.5817	0.1	15245.2
Mg 279.078	23751.7	ppb	16.9444	0.1	34247.4
Mn 257.610	8.2800	ppb	0.0438	0.5	1043.78
Mo 202.032	2.4605	ppb	0.6811	27.7	9.7697
Na 330.237	15276.6	ppb	193.488	1.3	460.348
Ni 231.604	1.0171	ppb	0.6960	68.4	-0.8534
Pb 220.353	-0.8556	ppb	4.1358	483.4	6.1759
Sb 206.834	-6.8340	ppb	1.8965	27.8	8.5332
Se 196.026	-4.1744	ppb	11.1221	266.4	1.2316
Si 288.158	5836.00	ppb	5.7506	0.1	28290.6
Sn 189.925	-0.7782	ppb	2.3847	306.5	-0.5113
Sr 216.596	287.541	ppb	1.1099	0.4	1224.54
Ti 334.941	-0.4581	ppb	0.0265	5.8	-5.6308
Tl 190.794	-0.9335	ppb	1.3020	139.5	-10.6580
V 292.401	0.5947	ppb	0.0163	2.7	5.9996
Zn 206.200	4.8250	ppb	1.3577	28.1	1.4728

680-162184-B-10-A (Samp) **12/18/2018, 9:10:15 PM** **Rack 2, Tube 14**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2149u	0.0513	-0.0255u
Al 308.215	2.2108	3.1397	2.1700
As 188.980	-2.0591u	3.0977	2.4506
B 249.678	73.1516	73.9618	72.2842
Ba 389.178	87.4609	87.4108	88.2619
Be 313.042	-0.0596u	-0.0541u	-0.0577u
Ca 370.602	68148	68207	68189
Cd 226.502	-0.4292u	0.0128	0.0624
Co 228.615	-0.0983u	0.0544	-0.9649u
Cr 267.716	-0.1352u	-0.3819u	-0.4269u
Cu 324.754	-0.5895u	-0.3556u	-0.3928u
Fe 271.441	110.953	119.485	122.122
K 766.491	1774.48	1776.69	1775.89
Mg 279.078	13483.4	13490.4	13480.9
Mn 257.610	110.714	110.690	110.731
Mo 202.032	1.7205	1.5861	0.2653

Label	Replicates Concentration		
Na 330.237	6207.05	6324.42	6484.02
Ni 231.604	2.7700	-0.7421u	-0.4556u
Pb 220.353	-1.5026u	1.8268	-2.1979u
Sb 206.834	-13.2029u	-17.3166u	-3.8402u
Se 196.026	10.7141	-11.2170u	4.2375
Si 288.158	4258.83	4266.51	4257.27
Sn 189.925	-0.9277u	1.4909	3.4914
Sr 216.596	221.692	220.947	221.014
Ti 334.941	-0.2736	-0.1116	-0.1547
Tl 190.794	4.7976	4.5010	-2.6023u
V 292.401	0.5312	0.1340	0.7933
Zn 206.200	4.6732	3.4433	4.2046

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0630	ppb	0.1370	217.3	-32.1109
Al 308.215	2.5069	ppb	0.5484	21.9	168.625
As 188.980	1.1631	ppb	2.8092	241.5	1.5545
B 249.678	73.1325	ppb	0.8390	1.1	394.340
Ba 389.178	87.7112	ppb	0.4776	0.5	922.911
Be 313.042	-0.0571	ppb	0.0028	4.9	-198.267
Ca 370.602	68181	ppb	30.10	0.0	155454
Cd 226.502	-0.1180	ppb	0.2707	229.4	10.2995
Co 228.615	-0.3363	ppb	0.5497	163.5	-13.7440
Cr 267.716	-0.3146	ppb	0.1571	49.9	16.5119
Cu 324.754	-0.4460	ppb	0.1257	28.2	184.722
Fe 271.441	117.520	ppb	5.8383	5.0	124.419
K 766.491	1775.69	ppb	1.1198	0.1	48663.2
Mg 279.078	13484.9	ppb	4.9405	0.0	19456.1
Mn 257.610	110.711	ppb	0.0204	0.0	12192.4
Mo 202.032	1.1906	ppb	0.8042	67.5	6.9074
Na 330.237	6338.50	ppb	139.017	2.2	224.782
Ni 231.604	0.5241	ppb	1.9502	372.1	-1.5385
Pb 220.353	-0.6246	ppb	2.1513	344.4	6.3199
Sb 206.834	-11.4532	ppb	6.9065	60.3	6.4748
Se 196.026	1.2449	ppb	11.2677	905.1	2.2735
Si 288.158	4260.87	ppb	4.9459	0.1	20731.5
Sn 189.925	1.3516	ppb	2.2128	163.7	0.1778
Sr 216.596	221.218	ppb	0.4121	0.2	944.373
Ti 334.941	-0.1800	ppb	0.0839	46.6	-8.8699
Tl 190.794	2.2321	ppb	4.1894	187.7	-9.3043
V 292.401	0.4862	ppb	0.3319	68.3	4.5105
Zn 206.200	4.1071	ppb	0.6207	15.1	1.2146

680-162182-B-1-A (Samp) **12/18/2018, 9:14:38 PM** **Rack 2, Tube 15**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1098u	0.1556	-0.0317u
Al 308.215	3.8692	5.7706	0.6610
As 188.980	3.6355	1.8064	-1.9927u
B 249.678	26.1994	25.4090	24.7055
Ba 389.178	43.5890	42.8422	42.6237
Be 313.042	-0.0319u	-0.0385u	-0.0400u
Ca 370.602	86274	86291	86285

Label	Replicates Concentration		
Cd 226.502	0.0089	-0.1078	-0.0861
Co 228.615	4.6893	5.0183	4.8160
Cr 267.716	-0.0392	0.2480	-0.2056u
Cu 324.754	0.3491	1.2713	1.3368
Fe 271.441	2198.19	2209.70	2207.55
K 766.491	3261.92	3266.97	3262.02
Mg 279.078	51943.0	52010.2	51998.6
Mn 257.610	297.471	298.455	298.174
Mo 202.032	-0.7862u	-0.3763u	-2.1635u
Na 330.237	28077.3	28593.9	28289.6
Ni 231.604	13.6722	16.5955	15.6069
Pb 220.353	3.9631	-1.8678u	-1.7080u
Sb 206.834	0.2721	-12.8816u	-3.7201u
Se 196.026	1.5426	-6.6309u	2.4788
Si 288.158	6712.13	6724.12	6708.34
Sn 189.925	2.9449	0.3900	1.8038
Sr 216.596	210.033	208.168	208.268
Ti 334.941	-1.2525	-1.1703	-1.3158
Tl 190.794	-0.4346u	-4.4240u	-8.1224u
V 292.401	0.4073	0.6840	0.7448
Zn 206.200	80.1213	80.8724	82.2616

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0047	ppb	0.1364	2907.6	-29.8979
Al 308.215	3.4336	ppb	2.5825	75.2	170.991
As 188.980	1.1497	ppb	2.8710	249.7	1.5556
B 249.678	25.4380	ppb	0.7474	2.9	71.1665
Ba 389.178	43.0183	ppb	0.5062	1.2	465.921
Be 313.042	-0.0368	ppb	0.0043	11.7	-180.074
Ca 370.602	86284	ppb	8.587	0.0	196716
Cd 226.502	-0.0616	ppb	0.0621	100.7	13.0150
Co 228.615	4.8412	ppb	0.1659	3.4	12.3932
Cr 267.716	0.0011	ppb	0.2295	21380.0	24.6537
Cu 324.754	0.9857	ppb	0.5523	56.0	241.653
Fe 271.441	2205.15	ppb	6.1182	0.3	1844.16
K 766.491	3263.64	ppb	2.8859	0.1	89216.2
Mg 279.078	51984.0	ppb	35.9129	0.1	74915.2
Mn 257.610	298.033	ppb	0.5067	0.2	32863.5
Mo 202.032	-1.1086	ppb	0.9362	84.4	1.6943
Na 330.237	28320.3	ppb	259.667	0.9	803.736
Ni 231.604	15.2916	ppb	1.4869	9.7	18.9797
Pb 220.353	0.1291	ppb	3.3213	2573.0	6.7865
Sb 206.834	-5.4432	ppb	6.7440	123.9	9.2365
Se 196.026	-0.8698	ppb	5.0111	576.1	1.8820
Si 288.158	6714.86	ppb	8.2365	0.1	32508.3
Sn 189.925	1.7129	ppb	1.2799	74.7	0.2977
Sr 216.596	208.823	ppb	1.0493	0.5	892.438
Ti 334.941	-1.2462	ppb	0.0730	5.9	0.8043
Tl 190.794	-4.3270	ppb	3.8448	88.9	-12.0365
V 292.401	0.6120	ppb	0.1799	29.4	7.1444
Zn 206.200	81.0851	ppb	1.0859	1.3	28.9203

MB 680-551774/1-A (Samp) **12/18/2018, 9:19:01 PM** **Rack 2, Tube 16**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	0.2170	0.2676	-0.0590u
Al 308.215	-4.1684u	0.9691	-2.7709u
As 188.980	-1.0912u	-1.4186u	-2.9777u
B 249.678	1.9752	2.3495	2.2860
Ba 389.178	-0.0582u	-0.2786u	0.8130
Be 313.042	-0.0342u	-0.0438u	-0.0300u
Ca 370.602	9.508	9.920	9.464
Cd 226.502	0.1232	-0.2022u	-0.0630u
Co 228.615	-0.4829u	-0.2253u	0.2240
Cr 267.716	-0.4365u	-0.2602u	-0.2282u
Cu 324.754	-0.2928u	-0.4062u	0.6053
Fe 271.441	9.7864	2.7791	3.7031
K 766.491	0.1538	0.7844	1.0825
Mg 279.078	3.6272	-0.7289u	-3.4245u
Mn 257.610	0.0304	0.1026	0.1023
Mo 202.032	-2.1466u	-1.0381u	-0.9021u
Na 330.237	73.6469	59.9716	-397.347u
Ni 231.604	2.2964	-0.7416u	1.8723
Pb 220.353	-0.0487u	-4.2350u	-4.9067u
Sb 206.834	-10.4116u	-5.9649u	-7.3474u
Se 196.026	-8.3364u	-10.9336u	4.1151
Si 288.158	0.1963	-0.3723u	1.6257
Sn 189.925	4.1097	2.1158	-2.5127u
Sr 216.596	-1.1271u	-0.6650u	-0.3008u
Ti 334.941	-0.0803u	-0.0155u	-0.0261u
Tl 190.794	-1.0522u	4.3229	5.6421
V 292.401	-0.1800u	0.1180	-0.0637u
Zn 206.200	-2.0892u	-3.1533u	0.1433

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1418	ppb	0.1758	123.9	-23.7511
Al 308.215	-1.9900	ppb	2.6563	133.5	157.288
As 188.980	-1.8292	ppb	1.0081	55.1	0.7649
B 249.678	2.2036	ppb	0.2003	9.1	-83.0058
Ba 389.178	0.1587	ppb	0.5772	363.6	-62.3050
Be 313.042	-0.0360	ppb	0.0071	19.6	-190.730
Ca 370.602	9.631	ppb	0.2514	2.6	59.21
Cd 226.502	-0.0473	ppb	0.1632	344.9	11.3071
Co 228.615	-0.1614	ppb	0.3578	221.7	-12.8414
Cr 267.716	-0.3083	ppb	0.1122	36.4	16.3620
Cu 324.754	-0.0312	ppb	0.5541	1773.8	201.009
Fe 271.441	5.4228	ppb	3.8071	70.2	32.0843
K 766.491	0.6735	ppb	0.4741	70.4	286.580
Mg 279.078	-0.1754	ppb	3.5583	2028.5	30.8413
Mn 257.610	0.0784	ppb	0.0416	53.1	29.9097
Mo 202.032	-1.3623	ppb	0.6827	50.1	1.1577
Na 330.237	-87.9094	ppb	268.068	304.9	55.4384
Ni 231.604	1.1424	ppb	1.6453	144.0	-0.6792
Pb 220.353	-3.0634	ppb	2.6324	85.9	4.8821
Sb 206.834	-7.9080	ppb	2.2757	28.8	8.0868
Se 196.026	-5.0516	ppb	8.0442	159.2	1.0636
Si 288.158	0.4832uv	ppb	1.0294	213.0	285.403

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.2376	ppb	3.3974	274.5	0.1400
Sr 216.596	-0.6976	ppb	0.4141	59.4	6.7991
Ti 334.941	-0.0406	ppb	0.0347	85.6	-40.3680
Tl 190.794	2.9709	ppb	3.5460	119.4	-9.0337
V 292.401	-0.0419	ppb	0.1502	358.6	-3.0566
Zn 206.200	-1.6997	ppb	1.6824	99.0	-0.8753

LCS 680-551774/2-A (Samp) **12/18/2018, 9:23:24 PM** **Rack 2, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	48.1643	48.7702	48.7454
Al 308.215	4624.96	4634.30	4632.26
As 188.980	95.2452	89.7732	89.2107
B 249.678	186.768	186.484	186.718
Ba 389.178	95.2396	94.8347	94.1287
Be 313.042	48.9951	48.9587	48.9680
Ca 370.602	4750	4755	4744
Cd 226.502	49.7748	49.6893	48.8899
Co 228.615	49.2412	48.9566	49.0378
Cr 267.716	97.6723	97.9288	97.6682
Cu 324.754	93.0996	93.1697	93.8437
Fe 271.441	4837.30	4824.99	4826.29
K 766.491	7380.33	7385.07	7373.05
Mg 279.078	4766.08	4762.43	4757.88
Mn 257.610	479.718	479.960	480.043
Mo 202.032	92.8663	94.8448	95.3668
Na 330.237	4979.73	5108.81	4541.14
Ni 231.604	95.2645	95.0922	95.4612
Pb 220.353	480.176	482.944	474.890
Sb 206.834	49.1466	38.5967	47.1662
Se 196.026	91.4219	87.5339	86.9698
Si 288.158	-5.8973u	-3.5079	-5.1748
Sn 189.925	93.4944	101.139	91.6676
Sr 216.596	97.5246	95.7243	96.7993
Ti 334.941	96.1257	96.2018	96.2000
Tl 190.794	41.6994	35.8245	34.5119
V 292.401	95.4465	95.5963	94.3292
Zn 206.200	97.6291	100.085	98.6123

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.5600	ppb	0.3429	0.7	1770.48
Al 308.215	4630.51	ppb	4.9111	0.1	11774.5
As 188.980	91.4097	ppb	3.3335	3.6	25.3508
B 249.678	186.657	ppb	0.1514	0.1	1153.75
Ba 389.178	94.7343	ppb	0.5622	0.6	993.993
Be 313.042	48.9739	ppb	0.0189	0.0	40522.0
Ca 370.602	4750	ppb	5.451	0.1	10866
Cd 226.502	49.4513	ppb	0.4881	1.0	823.311
Co 228.615	49.0786	ppb	0.1466	0.3	234.919
Cr 267.716	97.7564	ppb	0.1493	0.2	2294.38
Cu 324.754	93.3710	ppb	0.4109	0.4	3888.53
Fe 271.441	4829.53	ppb	6.7662	0.1	4008.79
K 766.491	7379.48	ppb	6.0547	0.1	201390

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	4762.13	ppb	4.1088	0.1	6885.10
Mn 257.610	479.907	ppb	0.1691	0.0	52520.0
Mo 202.032	94.3593	ppb	1.3191	1.4	216.714
Na 330.237	4876.56	ppb	297.565	6.1	185.483
Ni 231.604	95.2726	ppb	0.1847	0.2	130.090
Pb 220.353	479.337	ppb	4.0922	0.9	287.612
Sb 206.834	44.9698	ppb	5.6074	12.5	31.2474
Se 196.026	88.6419	ppb	2.4240	2.7	18.9437
Si 288.158	-4.8600uv	ppb	1.2254	25.2	286.226
Sn 189.925	95.4337	ppb	5.0248	5.3	30.6673
Sr 216.596	96.6828	ppb	0.9058	0.9	417.273
Ti 334.941	96.1758	ppb	0.0434	0.0	11498.9
Tl 190.794	37.3453	ppb	3.8275	10.2	5.3426
V 292.401	95.1240	ppb	0.6924	0.7	1371.56
Zn 206.200	98.7754	ppb	1.2359	1.3	35.2552

680-162184-A-3-D (Samp) **12/18/2018, 9:27:47 PM** **Rack 2, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	0.1033	-0.1236u	0.5729
Al 308.215	58.6422	62.3234	61.0122
As 188.980	-3.0873u	3.7726	-2.1072u
B 249.678	78.2636	76.8573	77.7778
Ba 389.178	110.858	111.651	111.561
Be 313.042	-0.0569u	-0.0500u	-0.0527u
Ca 370.602	49609	49647	49600
Cd 226.502	-0.3798u	-0.1266u	-0.2290u
Co 228.615	0.6359	0.0897	-0.1930u
Cr 267.716	0.2042	0.8569	0.2159
Cu 324.754	-0.1757u	-0.1593u	-0.1618u
Fe 271.441	134.208	126.099	122.628
K 766.491	4370.06	4371.10	4362.50
Mg 279.078	12141.3	12152.6	12163.7
Mn 257.610	15.9675	15.9752	15.8420
Mo 202.032	1.1038	1.8102	2.4900
Na 330.237	6731.20	6918.24	6972.08
Ni 231.604	-1.9013u	0.8012	-1.6988u
Pb 220.353	-0.3535u	0.9917	-3.3875u
Sb 206.834	-1.6766u	-4.6987u	-17.5803u
Se 196.026	337.021	314.878	328.026
Si 288.158	6047.10	6053.42	6050.61
Sn 189.925	2.4854	-0.2060u	-3.3050u
Sr 216.596	321.214	321.947	322.526
Ti 334.941	0.6596	0.6069	0.6491
Tl 190.794	-7.1485u	0.4861	-0.7898u
V 292.401	0.7054	0.6403	0.6972
Zn 206.200	1.2619	4.3764	3.2331

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1842	ppb	0.3553	192.9	-23.5247
Al 308.215	60.6593	ppb	1.8658	3.1	314.411
As 188.980	-0.4739	ppb	3.7101	782.8	1.1223
B 249.678	77.6329	ppb	0.7142	0.9	424.626

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	111.357	ppb	0.4340	0.4	1184.02
Be 313.042	-0.0532	ppb	0.0035	6.5	-198.044
Ca 370.602	49619	ppb	25.27	0.1	113140
Cd 226.502	-0.2451	ppb	0.1274	52.0	8.2269
Co 228.615	0.1775	ppb	0.4214	237.4	-11.1561
Cr 267.716	0.4257	ppb	0.3735	87.7	33.5042
Cu 324.754	-0.1656	ppb	0.0088	5.3	195.799
Fe 271.441	127.645	ppb	5.9432	4.7	132.788
K 766.491	4367.88	ppb	4.6936	0.1	119312
Mg 279.078	12152.5	ppb	11.2008	0.1	17537.7
Mn 257.610	15.9283	ppb	0.0748	0.5	1822.93
Mo 202.032	1.8014	ppb	0.6932	38.5	8.2830
Na 330.237	6873.84	ppb	126.428	1.8	238.891
Ni 231.604	-0.9330	ppb	1.5053	161.3	-3.5641
Pb 220.353	-0.9164	ppb	2.2432	244.8	6.1404
Sb 206.834	-7.9852	ppb	8.4458	105.8	8.0264
Se 196.026	326.642	ppb	11.1359	3.4	64.2557
Si 288.158	6050.38	ppb	3.1664	0.1	29319.4
Sn 189.925	-0.3419	ppb	2.8976	847.6	-0.3710
Sr 216.596	321.896	ppb	0.6575	0.2	1369.74
Ti 334.941	0.6386	ppb	0.0279	4.4	84.3537
Tl 190.794	-2.4841	ppb	4.0896	164.6	-11.3045
V 292.401	0.6810	ppb	0.0355	5.2	7.2698
Zn 206.200	2.9571	ppb	1.5755	53.3	0.8005

680-162184-A-3-Dsd (Samp) **12/18/2018, 9:32:10 PM** **Rack 2, Tube 19**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2330	-0.2050u	0.0710
Al 308.215	11.1538	7.7714	9.9996
As 188.980	-2.7273u	-4.0212u	-1.6305u
B 249.678	16.9521	16.1789	16.3478
Ba 389.178	22.8300	23.1541	22.6200
Be 313.042	-0.0394u	-0.0483u	-0.0399u
Ca 370.602	10198	10206	10204
Cd 226.502	-0.1479u	-0.0733u	-0.5078u
Co 228.615	1.1326	0.2469	-0.2524u
Cr 267.716	-0.1132u	-0.3837u	-0.4415u
Cu 324.754	-0.5241u	-0.4925u	-0.5353u
Fe 271.441	11.5227	21.9656	17.9753
K 766.491	911.773	912.329	911.606
Mg 279.078	2500.89	2494.73	2499.76
Mn 257.610	3.3836	3.3701	3.3973
Mo 202.032	-0.3204u	1.4216	-0.3843u
Na 330.237	1302.54	1268.94	1476.42
Ni 231.604	-1.4299u	-0.8818u	-1.0815u
Pb 220.353	-1.0380u	-3.8665u	-4.7107u
Sb 206.834	-11.6397u	2.5893	-6.9661u
Se 196.026	71.5244	55.2145	73.3859
Si 288.158	1238.51	1241.86	1240.49
Sn 189.925	3.4074	2.9309	-1.5223u
Sr 216.596	66.6137	65.6371	67.2342
Ti 334.941	0.2515	0.1124	0.1387

Label	Replicates Concentration		
Tl 190.794	4.0015	-1.8813u	-5.2690u
V 292.401	0.2293	0.0288	-0.5829u
Zn 206.200	1.0037	-3.7783u	-3.7031u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0330	ppb	0.2214	670.9	-28.0604
Al 308.215	9.6416	ppb	1.7194	17.8	186.465
As 188.980	-2.7930	ppb	1.1967	42.8	0.5105
B 249.678	16.4929	ppb	0.4065	2.5	13.1649
Ba 389.178	22.8680	ppb	0.2690	1.2	192.243
Be 313.042	-0.0426	ppb	0.0050	11.8	-194.793
Ca 370.602	10203	ppb	4.072	0.0	23293
Cd 226.502	-0.2430	ppb	0.2323	95.6	8.1382
Co 228.615	0.3757	ppb	0.7015	186.7	-10.1523
Cr 267.716	-0.3128	ppb	0.1753	56.0	16.2790
Cu 324.754	-0.5173	ppb	0.0222	4.3	181.868
Fe 271.441	17.1545	ppb	5.2696	30.7	41.7889
K 766.491	911.903	ppb	0.3782	0.0	25121.4
Mg 279.078	2498.46	ppb	3.2767	0.1	3630.30
Mn 257.610	3.3837	ppb	0.0136	0.4	403.647
Mo 202.032	0.2390	ppb	1.0247	428.8	4.7649
Na 330.237	1349.30	ppb	111.366	8.3	93.3133
Ni 231.604	-1.1311	ppb	0.2774	24.5	-3.8397
Pb 220.353	-3.2051	ppb	1.9236	60.0	4.7986
Sb 206.834	-5.3388	ppb	7.2528	135.8	9.2252
Se 196.026	66.7083	ppb	9.9973	15.0	14.7349
Si 288.158	1240.29	ppb	1.6821	0.1	6235.59
Sn 189.925	1.6053	ppb	2.7190	169.4	0.2594
Sr 216.596	66.4950	ppb	0.8051	1.2	290.684
Ti 334.941	0.1675	ppb	0.0739	44.1	-6.5141
Tl 190.794	-1.0496	ppb	4.6909	446.9	-10.7075
V 292.401	-0.1083	ppb	0.4231	390.8	-4.1152
Zn 206.200	-2.1592	ppb	2.7394	126.9	-1.0407

680-162184-A-3-Dpds (Samp) **12/18/2018, 9:36:33 PM** **Rack 2, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.9250	51.4072	51.7409
Al 308.215	5116.59	5126.15	5132.22
As 188.980	103.597	98.5869	105.983
B 249.678	281.469	281.301	281.925
Ba 389.178	212.749	212.255	211.896
Be 313.042	53.3908	53.2583	53.3552
Ca 370.602	54696	54608	54696
Cd 226.502	53.1310	53.0860	53.0034
Co 228.615	51.5425	52.5592	52.6820
Cr 267.716	106.215	105.553	105.057
Cu 324.754	101.377	101.731	101.447
Fe 271.441	5369.40	5336.30	5361.84
K 766.491	12667.8	12630.0	12651.4
Mg 279.078	17358.5	17331.5	17357.2
Mn 257.610	535.302	535.663	535.762
Mo 202.032	108.067	106.903	106.910

Label	Replicates Concentration		
Na 330.237	12482.7	11884.8	12172.2
Ni 231.604	101.979	103.928	102.824
Pb 220.353	502.046	519.581	515.894
Sb 206.834	47.1801	49.6742	51.9440
Se 196.026	438.029	432.879	444.107
Si 288.158	6088.46	6087.60	6085.98
Sn 189.925	101.006	107.173	100.425
Sr 216.596	426.660	425.309	426.377
Ti 334.941	105.121	104.815	104.944
Tl 190.794	35.6578	38.5456	38.7995
V 292.401	104.335	104.003	103.007
Zn 206.200	107.954	114.564	107.258

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.3577	ppb	0.4102	0.8	1872.80
Al 308.215	5124.99	ppb	7.8801	0.2	13014.5
As 188.980	102.722	ppb	3.7750	3.7	28.3342
B 249.678	281.565	ppb	0.3229	0.1	1792.10
Ba 389.178	212.300	ppb	0.4283	0.2	2311.57
Be 313.042	53.3348	ppb	0.0686	0.1	44151.4
Ca 370.602	54667	ppb	51.01	0.1	124649
Cd 226.502	53.0735	ppb	0.0647	0.1	882.923
Co 228.615	52.2613	ppb	0.6255	1.2	250.895
Cr 267.716	105.608	ppb	0.5812	0.6	2476.89
Cu 324.754	101.518	ppb	0.1876	0.2	4210.31
Fe 271.441	5355.84	ppb	17.3449	0.3	4442.53
K 766.491	12649.7	ppb	18.9584	0.1	345026
Mg 279.078	17349.1	ppb	15.2349	0.1	25016.9
Mn 257.610	535.576	ppb	0.2420	0.0	58669.1
Mo 202.032	107.293	ppb	0.6700	0.6	245.843
Na 330.237	12179.9	ppb	299.057	2.5	377.872
Ni 231.604	102.910	ppb	0.9771	0.9	140.701
Pb 220.353	512.507	ppb	9.2454	1.8	307.051
Sb 206.834	49.5994	ppb	2.3828	4.8	33.2327
Se 196.026	438.338	ppb	5.6203	1.3	85.5681
Si 288.158	6087.35	ppb	1.2597	0.0	29525.9
Sn 189.925	102.868	ppb	3.7398	3.6	33.0775
Sr 216.596	426.115	ppb	0.7124	0.2	1808.98
Ti 334.941	104.960	ppb	0.1536	0.1	12595.7
Tl 190.794	37.6676	ppb	1.7452	4.6	5.4811
V 292.401	103.782	ppb	0.6912	0.7	1496.39
Zn 206.200	109.925	ppb	4.0321	3.7	39.2658

Cont Calib Verif (CCV) **12/18/2018, 9:40:58 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	487.161	493.209	492.168
Al 308.215	9743.00	9750.62	9760.15
As 188.980	499.237	490.135	502.938
B 249.678	493.725	496.247	497.685
Ba 389.178	488.791	489.749	490.877
Be 313.042	513.590	514.828	514.978
Ca 370.602	10007	10007	10017

Label	Replicates Concentration		
Cd 226.502	506.600	506.920	507.010
Co 228.615	501.298	502.021	504.833
Cr 267.716	499.183	501.562	501.294
Cu 324.754	480.310	484.351	484.097
Fe 271.441	9977.87	9995.45	9995.07
K 766.491	9656.20	9682.26	9693.17
Mg 279.078	9996.92	10041.1	10018.9
Mn 257.610	497.425	497.718	497.969
Mo 202.032	492.720	497.507	494.259
Na 330.237	9951.67	9842.47	9712.01
Ni 231.604	491.593	502.915	497.246
Pb 220.353	490.123	495.131	497.980
Sb 206.834	476.135	488.835	483.570
Se 196.026	494.317	495.096	484.078
Si 288.158	5038.27	5044.83	5050.06
Sn 189.925	488.396	507.006	493.382
Sr 216.596	500.741	504.708	505.127
Ti 334.941	501.104	502.122	502.456
Tl 190.794	485.828	487.365	488.665
V 292.401	492.634	493.744	494.235
Zn 206.200	1011.04	1010.20	1008.55

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	490.846	ppb	3.2333	0.7	18161.0	98.16925
Al 308.215	9751.25	ppb	8.5905	0.1	24629.5	97.51255
As 188.980	497.437	ppb	6.5886	1.3	132.388	99.48740
B 249.678	495.885	ppb	2.0049	0.4	3230.06	99.17710
Ba 389.178	489.806	ppb	1.0438	0.2	5387.09	97.96115
Be 313.042	514.465	ppb	0.7615	0.1	427227	102.89309
Ca 370.602	10010	ppb	5.965	0.1	22860	100.10471
Cd 226.502	506.844	ppb	0.2154	0.0	8293.95	101.36870
Co 228.615	502.717	ppb	1.8678	0.4	2516.96	100.54343
Cr 267.716	500.680	ppb	1.3030	0.3	11648.2	100.13598
Cu 324.754	482.919	ppb	2.2635	0.5	19264.3	96.58382
Fe 271.441	9989.46	ppb	10.0420	0.1	8285.95	99.84470
K 766.491	9677.21	ppb	18.9945	0.2	264013	96.77208
Mg 279.078	10019.0	ppb	22.1090	0.2	14456.8	100.18993
Mn 257.610	497.704	ppb	0.2721	0.1	54505.1	99.54080
Mo 202.032	494.829	ppb	2.4438	0.5	1118.77	98.96574
Na 330.237	9835.38	ppb	119.987	1.2	313.211	98.35385
Ni 231.604	497.251	ppb	5.6608	1.1	688.260	99.45025
Pb 220.353	494.411	ppb	3.9775	0.8	296.095	98.88225
Sb 206.834	482.847	ppb	6.3808	1.3	225.051	96.56932
Se 196.026	491.164	ppb	6.1487	1.3	95.6131	98.23276
Si 288.158	5044.39	ppb	5.9043	0.1	24627.9	100.88772
Sn 189.925	496.261	ppb	9.6335	1.9	160.566	99.25228
Sr 216.596	503.525	ppb	2.4204	0.5	2128.30	100.70506
Ti 334.941	501.894	ppb	0.7042	0.1	60104.1	100.37885
Tl 190.794	487.286	ppb	1.4202	0.3	193.058	97.45713
V 292.401	493.538	ppb	0.8201	0.2	7123.31	98.70753
Zn 206.200	1009.93	ppb	1.2685	0.1	363.024	100.99309

Cont Calib Blank (CCB) **12/18/2018, 9:45:22 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0295	0.1134	0.0161
Al 308.215	-1.4474u	-4.1552u	-4.0307u
As 188.980	1.4882	4.9325	3.7657
B 249.678	3.7243	3.4464	4.1333
Ba 389.178	0.1706	1.6153	0.4425
Be 313.042	0.0467	0.0410	0.0407
Ca 370.602	0.3246	-3.289u	-1.749u
Cd 226.502	-0.1019u	-0.1163u	-0.2259u
Co 228.615	0.1676	-0.3591u	0.1222
Cr 267.716	-0.5343u	-0.1608u	0.0660
Cu 324.754	-0.5485u	-0.5479u	-0.9635u
Fe 271.441	1.6611	-4.8725u	0.6622
K 766.491	1.8558	1.5293	2.4285
Mg 279.078	-2.0020u	-5.6821u	-0.3081u
Mn 257.610	0.1417	0.1866	0.1175
Mo 202.032	-0.7792u	1.1591	-1.4332u
Na 330.237	92.4719	-126.811u	-176.736u
Ni 231.604	1.2600	-0.5851u	-1.8316u
Pb 220.353	2.0140	-3.8139u	-5.3258u
Sb 206.834	-8.7929u	-2.3805u	-8.8381u
Se 196.026	-10.2160u	-12.0445u	-0.5676u
Si 288.158	2.6988	-0.2426u	0.1555
Sn 189.925	3.7455	3.4047	6.0735
Sr 216.596	0.8300	-0.4199u	0.5540
Ti 334.941	0.1411	0.2334	0.3130
Tl 190.794	4.7423	0.7021	-2.7002u
V 292.401	0.0419	0.3343	-0.1467u
Zn 206.200	-2.4401u	-2.2916u	6.3707

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0530	ppb	0.0527	99.5	-27.0477	0.05300
Al 308.215	-3.2111	ppb	1.5287	47.6	154.246	-3.21107
As 188.980	3.3954	ppb	1.7518	51.6	2.1435	3.39545
B 249.678	3.7680	ppb	0.3456	9.2	-72.4747	3.76800
Ba 389.178	0.7428	ppb	0.7677	103.4	-55.8193	0.74277
Be 313.042	0.0428	ppb	0.0034	7.9	-125.339	0.04279
Ca 370.602	-1.571	ppb	1.814	115.4	33.69	-1.57141
Cd 226.502	-0.1480	ppb	0.0678	45.8	9.6629	-0.14803
Co 228.615	-0.0231	ppb	0.2919	1263.3	-12.1565	-0.02311
Cr 267.716	-0.2097	ppb	0.3031	144.5	18.6513	-0.20971
Cu 324.754	-0.6866	ppb	0.2398	34.9	175.175	-0.68661
Fe 271.441	-0.8498	ppb	3.5195	414.2	26.9419	-0.84976
K 766.491	1.9379	ppb	0.4552	23.5	321.040	1.93789
Mg 279.078	-2.6641	ppb	2.7475	103.1	27.2555	-2.66408
Mn 257.610	0.1486	ppb	0.0351	23.6	37.5915	0.14859
Mo 202.032	-0.3511	ppb	1.3481	384.0	3.4358	-0.35109
Na 330.237	-70.3584	ppb	143.208	203.5	55.9007	-70.35844
Ni 231.604	-0.3856	ppb	1.5555	403.4	-2.8033	-0.38557
Pb 220.353	-2.3752	ppb	3.8756	163.2	5.2850	-2.37522
Sb 206.834	-6.6705	ppb	3.7153	55.7	8.6311	-6.67050
Se 196.026	-7.6093	ppb	6.1665	81.0	0.5764	-7.60934
Si 288.158	0.8706uv	ppb	1.5958	183.3	287.747	0.87055

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	4.4079	ppb	1.4525	33.0	1.1675	4.40793
Sr 216.596	0.3214	ppb	0.6566	204.3	11.1059	0.32137
Ti 334.941	0.2292	ppb	0.0860	37.5	-8.0575	0.22916
Tl 190.794	0.9148	ppb	3.7258	407.3	-9.8901	0.91475
V 292.401	0.0765	ppb	0.2423	316.9	-1.4161	0.07648
Zn 206.200	0.5463	ppb	5.0446	923.3	-0.0670	0.54634

680-162184-A-3-E MS (Samp) **12/18/2018, 9:49:45 PM** **Rack 2, Tube 21**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	49.2145	49.6256	50.7399
Al 308.215	4842.08	4848.96	4842.97
As 188.980	91.3295	99.0023	103.649
B 249.678	272.497	271.971	273.160
Ba 389.178	215.453	215.600	215.098
Be 313.042	50.3284	50.4190	50.5022
Ca 370.602	61134	61152	61192
Cd 226.502	49.6096	50.0234	50.3200
Co 228.615	49.2806	49.2843	50.7007
Cr 267.716	99.6243	99.7336	99.6010
Cu 324.754	95.5548	96.9274	96.1522
Fe 271.441	5091.97	5112.76	5106.50
K 766.491	12321.4	12321.0	12303.9
Mg 279.078	17542.3	17549.2	17545.8
Mn 257.610	516.589	516.336	516.320
Mo 202.032	99.4321	99.5102	100.893
Na 330.237	12181.0	12078.6	12218.6
Ni 231.604	96.2321	98.0594	99.4933
Pb 220.353	477.636	490.273	481.111
Sb 206.834	52.6889	37.9075	47.5209
Se 196.026	443.741	454.040	452.974
Si 288.158	6281.36	6291.03	6299.66
Sn 189.925	97.5469	91.2616	98.6397
Sr 216.596	468.080	469.550	468.162
Ti 334.941	98.9437	99.0212	99.1835
Tl 190.794	37.6991	32.9019	39.2810
V 292.401	98.4433	97.8399	98.7186
Zn 206.200	111.823	110.056	107.788

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.8600	ppb	0.7892	1.6	1817.14
Al 308.215	4844.67	ppb	3.7386	0.1	12311.5
As 188.980	97.9937	ppb	6.2216	6.3	27.0878
B 249.678	272.543	ppb	0.5959	0.2	1731.62
Ba 389.178	215.383	ppb	0.2581	0.1	2345.88
Be 313.042	50.4165	ppb	0.0870	0.2	41728.3
Ca 370.602	61159	ppb	29.67	0.0	139448
Cd 226.502	49.9843	ppb	0.3568	0.7	832.289
Co 228.615	49.7552	ppb	0.8188	1.6	238.304
Cr 267.716	99.6530	ppb	0.0708	0.1	2338.57
Cu 324.754	96.2115	ppb	0.6882	0.7	4000.75
Fe 271.441	5103.75	ppb	10.6664	0.2	4234.70
K 766.491	12315.4	ppb	9.9997	0.1	335916

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	17545.8	ppb	3.4472	0.0	25300.6
Mn 257.610	516.415	ppb	0.1510	0.0	56574.9
Mo 202.032	99.9450	ppb	0.8216	0.8	229.293
Na 330.237	12159.4	ppb	72.4729	0.6	377.370
Ni 231.604	97.9283	ppb	1.6346	1.7	133.780
Pb 220.353	483.007	ppb	6.5280	1.4	289.762
Sb 206.834	46.0391	ppb	7.5013	16.3	31.6852
Se 196.026	450.252	ppb	5.6634	1.3	87.8367
Si 288.158	6290.69	ppb	9.1522	0.1	30499.5
Sn 189.925	95.8160	ppb	3.9819	4.2	30.7921
Sr 216.596	468.597	ppb	0.8256	0.2	1988.55
Ti 334.941	99.0495	ppb	0.1224	0.1	11888.6
Tl 190.794	36.6273	ppb	3.3219	9.1	5.0476
V 292.401	98.3339	ppb	0.4495	0.5	1417.86
Zn 206.200	109.889	ppb	2.0226	1.8	39.2544

680-162184-A-3-F MSD (Samp) **12/18/2018, 9:54:09 PM** **Rack 2, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	49.5860	51.0109	49.4274
Al 308.215	4866.66	4866.02	4872.58
As 188.980	97.4050	106.387	101.034
B 249.678	272.629	272.550	272.086
Ba 389.178	215.446	214.165	214.851
Be 313.042	50.2897	50.2316	50.1855
Ca 370.602	62197	62172	62142
Cd 226.502	50.0751	50.3077	49.9447
Co 228.615	48.5243	50.0489	50.6429
Cr 267.716	99.6089	99.9736	99.4097
Cu 324.754	95.4556	97.1536	95.8699
Fe 271.441	5143.11	5141.72	5130.44
K 766.491	12233.2	12236.4	12242.8
Mg 279.078	17540.4	17488.5	17509.3
Mn 257.610	516.519	516.712	516.377
Mo 202.032	101.281	100.212	100.818
Na 330.237	12030.9	12168.4	11897.4
Ni 231.604	96.4996	96.5848	97.8701
Pb 220.353	487.363	493.048	493.116
Sb 206.834	42.5958	49.7904	40.7075
Se 196.026	445.190	445.815	459.996
Si 288.158	6269.41	6269.37	6271.67
Sn 189.925	95.0535	90.7246	100.596
Sr 216.596	447.449	449.904	447.296
Ti 334.941	99.1530	99.1624	99.4285
Tl 190.794	36.1930	29.6650	36.9421
V 292.401	97.2650	97.7566	97.6010
Zn 206.200	101.720	93.1989	102.236

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.0081	ppb	0.8720	1.7	1822.69
Al 308.215	4868.42	ppb	3.6196	0.1	12371.1
As 188.980	101.609	ppb	4.5184	4.4	28.0416
B 249.678	272.421	ppb	0.2935	0.1	1730.77

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	214.820	ppb	0.6410	0.3	2339.61
Be 313.042	50.2356	ppb	0.0522	0.1	41578.1
Ca 370.602	62170	ppb	27.60	0.0	141753
Cd 226.502	50.1091	ppb	0.1839	0.4	834.354
Co 228.615	49.7387	ppb	1.0928	2.2	238.209
Cr 267.716	99.6640	ppb	0.2860	0.3	2338.84
Cu 324.754	96.1597	ppb	0.8853	0.9	3998.75
Fe 271.441	5138.42	ppb	6.9471	0.1	4263.27
K 766.491	12237.5	ppb	4.8655	0.0	333791
Mg 279.078	17512.8	ppb	26.1527	0.1	25253.0
Mn 257.610	516.536	ppb	0.1682	0.0	56587.9
Mo 202.032	100.771	ppb	0.5361	0.5	231.152
Na 330.237	12032.2	ppb	135.467	1.1	374.024
Ni 231.604	96.9848	ppb	0.7678	0.8	132.468
Pb 220.353	491.176	ppb	3.3021	0.7	294.551
Sb 206.834	44.3646	ppb	4.7928	10.8	30.9237
Se 196.026	450.334	ppb	8.3736	1.9	87.8522
Si 288.158	6270.15	ppb	1.3155	0.0	30401.5
Sn 189.925	95.4581	ppb	4.9483	5.2	30.6761
Sr 216.596	448.216	ppb	1.4635	0.3	1902.44
Ti 334.941	99.2480	ppb	0.1564	0.2	11912.3
Tl 190.794	34.2667	ppb	4.0027	11.7	4.0624
V 292.401	97.5408	ppb	0.2512	0.3	1406.26
Zn 206.200	99.0516	ppb	5.0752	5.1	35.3545

680-162184-C-2-B (Samp) **12/18/2018, 9:58:33 PM** **Rack 2, Tube 23**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4402u	-0.6223u	0.2881
Al 308.215	10.2870	9.2937	7.6490
As 188.980	-3.5801u	-1.9200u	0.4432
B 249.678	56.5380	57.1828	55.3108
Ba 389.178	17.1755	16.5601	16.9869
Be 313.042	-0.0509u	-0.0449u	-0.0444u
Ca 370.602	74695	74635	74633
Cd 226.502	-0.3165u	-0.1634u	-0.1047u
Co 228.615	0.9337	0.8910	-0.4619u
Cr 267.716	-0.6328u	-0.1280u	0.4611
Cu 324.754	0.4155	0.1123	-0.4585u
Fe 271.441	11.6034	26.8110	24.1798
K 766.491	220.809	220.978	220.666
Mg 279.078	19881.8	19847.8	19845.1
Mn 257.610	73.0570	73.1794	73.1460
Mo 202.032	-1.2319u	-0.1825u	-0.6553u
Na 330.237	36692.5	36859.8	37060.9
Ni 231.604	0.9203	-0.3907u	-0.7079u
Pb 220.353	-2.4080u	0.7371	3.9847
Sb 206.834	-0.7771u	-4.1067u	-9.6594u
Se 196.026	37.4580	24.7440	28.3094
Si 288.158	5880.22	5869.57	5872.49
Sn 189.925	0.4845	1.2997	-1.3706u
Sr 216.596	240.062	239.630	240.905
Ti 334.941	-0.2394	-0.1485	-0.2648

Label	Replicates	Concentration	
Tl 190.794	0.1965	0.3400	-3.0823u
V 292.401	0.4817	0.0858	0.6657
Zn 206.200	5.1454	3.3087	4.7299

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2581	ppb	0.4817	186.6	-39.5371
Al 308.215	9.0766	ppb	1.3323	14.7	185.058
As 188.980	-1.6856	ppb	2.0219	119.9	0.8027
B 249.678	56.3439	ppb	0.9510	1.7	281.421
Ba 389.178	16.9075	ppb	0.3153	1.9	143.399
Be 313.042	-0.0467	ppb	0.0036	7.8	-189.953
Ca 370.602	74654	ppb	35.35	0.0	170208
Cd 226.502	-0.1949	ppb	0.1093	56.1	8.9377
Co 228.615	0.4543	ppb	0.7937	174.7	-9.7491
Cr 267.716	-0.0999	ppb	0.5475	548.1	21.6504
Cu 324.754	0.0231	ppb	0.4438	1920.5	203.172
Fe 271.441	20.8648	ppb	8.1277	39.0	44.8436
K 766.491	220.818	ppb	0.1561	0.1	6286.44
Mg 279.078	19858.2	ppb	20.4573	0.1	28637.8
Mn 257.610	73.1274	ppb	0.0633	0.1	8114.44
Mo 202.032	-0.6899	ppb	0.5256	76.2	2.6722
Na 330.237	36871.1	ppb	184.458	0.5	1029.45
Ni 231.604	-0.0595	ppb	0.8632	1451.8	-2.3503
Pb 220.353	0.7713	ppb	3.1965	414.4	7.1351
Sb 206.834	-4.8477	ppb	4.4873	92.6	9.4513
Se 196.026	30.1705	ppb	6.5581	21.7	7.7808
Si 288.158	5874.10	ppb	5.5047	0.1	28473.2
Sn 189.925	0.1379	ppb	1.3685	992.6	-0.2117
Sr 216.596	240.199	ppb	0.6483	0.3	1024.57
Ti 334.941	-0.2176	ppb	0.0611	28.1	8.5416
Tl 190.794	-0.8486	ppb	1.9358	228.1	-10.5967
V 292.401	0.4111	ppb	0.2964	72.1	3.4430
Zn 206.200	4.3947	ppb	0.9631	21.9	1.3179

680-162184-C-4-B (Samp) **12/18/2018, 10:02:57 PM** **Rack 2, Tube 24**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	0.5231	-0.2025u	-0.7071u
Al 308.215	37.3182	34.7875	35.7230
As 188.980	2.6191	-1.6197u	-2.4797u
B 249.678	27.2372	27.8777	25.8283
Ba 389.178	97.5998	97.4959	95.8436
Be 313.042	-0.0442u	-0.0647u	-0.0561u
Ca 370.602	84141	84076	84035
Cd 226.502	-0.0405u	0.1902	-0.2018u
Co 228.615	-0.8613u	0.4141	0.0056
Cr 267.716	-0.0867u	0.0379	-0.0126
Cu 324.754	0.2744	0.5320	0.3403
Fe 271.441	263.246	269.822	263.013
K 766.491	925.267	926.568	926.245
Mg 279.078	24138.5	24125.5	24132.0
Mn 257.610	149.134	149.102	148.992
Mo 202.032	1.6844	2.6450	2.1661

Label	Replicates Concentration		
Na 330.237	18665.7	18501.6	18557.6
Ni 231.604	-0.6496u	-0.8516u	1.6566
Pb 220.353	1.2750	-0.6653u	8.2887
Sb 206.834	-5.1587u	-11.0703u	-12.8244u
Se 196.026	7.9212	6.8207	13.9660
Si 288.158	7085.36	7083.32	7076.84
Sn 189.925	7.5180	-4.5904u	-1.5586u
Sr 216.596	229.858	229.009	228.178
Ti 334.941	-0.1536	-0.0057	-0.1387
Tl 190.794	-2.0553u	-5.6394u	0.7944
V 292.401	0.4006	-0.0244u	0.2697
Zn 206.200	8.5104	5.6769	9.6216

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1288	ppb	0.6184	480.0	-34.6212
Al 308.215	35.9429	ppb	1.2796	3.6	252.458
As 188.980	-0.4934	ppb	2.7296	553.2	1.1175
B 249.678	26.9810	ppb	1.0484	3.9	83.5132
Ba 389.178	96.9798	ppb	0.9853	1.0	1036.43
Be 313.042	-0.0550	ppb	0.0103	18.8	-194.795
Ca 370.602	84084	ppb	53.80	0.1	191704
Cd 226.502	-0.0173	ppb	0.1970	1136.5	12.0972
Co 228.615	-0.1472	ppb	0.6513	442.4	-12.7980
Cr 267.716	-0.0205	ppb	0.0627	306.2	23.5385
Cu 324.754	0.3822	ppb	0.1338	35.0	217.460
Fe 271.441	265.360	ppb	3.8654	1.5	246.199
K 766.491	926.027	ppb	0.6771	0.1	25506.4
Mg 279.078	24132.0	ppb	6.5186	0.0	34793.7
Mn 257.610	149.076	ppb	0.0745	0.0	16439.2
Mo 202.032	2.1652	ppb	0.4803	22.2	9.1004
Na 330.237	18575.0	ppb	83.3995	0.4	547.239
Ni 231.604	0.0518	ppb	1.3935	2689.3	-2.1952
Pb 220.353	2.9661	ppb	4.7105	158.8	8.4277
Sb 206.834	-9.6845	ppb	4.0164	41.5	7.2615
Se 196.026	9.5693	ppb	3.8472	40.2	3.8626
Si 288.158	7081.84	ppb	4.4476	0.1	34269.8
Sn 189.925	0.4563	ppb	6.3007	1380.8	-0.1108
Sr 216.596	229.015	ppb	0.8404	0.4	977.344
Ti 334.941	-0.0993	ppb	0.0814	81.9	38.5243
Tl 190.794	-2.3001	ppb	3.2239	140.2	-11.1834
V 292.401	0.2153	ppb	0.2176	101.1	0.5394
Zn 206.200	7.9363	ppb	2.0341	25.6	2.5928

680-162184-C-9-B (Samp) **12/18/2018, 10:07:21 PM** **Rack 2, Tube 25**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1054u	-0.1058u	0.3163
Al 308.215	16.1567	9.6127	11.2644
As 188.980	-1.0423u	-0.4035u	0.1832
B 249.678	16.0280	16.8578	17.7106
Ba 389.178	41.7438	39.5592	40.1971
Be 313.042	-0.0428u	-0.0647u	-0.0685u
Ca 370.602	86061	86109	86117

Label	Replicates Concentration		
Cd 226.502	-0.1701u	-0.1510u	-0.1875u
Co 228.615	1.1113	0.4690	-0.1493u
Cr 267.716	-0.0041	-0.1322u	0.2042
Cu 324.754	0.0706	-0.1383u	-0.2360u
Fe 271.441	97.4505	83.6094	97.5686
K 766.491	574.947	576.298	576.975
Mg 279.078	25165.3	25144.9	25142.0
Mn 257.610	18.9218	18.8756	19.0874
Mo 202.032	1.7864	0.9072	1.0995
Na 330.237	15925.6	15684.8	15866.7
Ni 231.604	0.3675	-0.6135u	-1.3854u
Pb 220.353	2.7266	-4.6077u	2.6223
Sb 206.834	-8.0145u	-10.4571u	-11.9833u
Se 196.026	-7.9507u	-14.6753u	12.6642
Si 288.158	6169.99	6177.37	6172.27
Sn 189.925	-2.3741u	0.1577	6.8159
Sr 216.596	306.169	303.186	304.275
Ti 334.941	-0.3503	-0.4051	-0.3745
Tl 190.794	-1.1364u	-6.2634u	0.4574
V 292.401	0.0436	0.6292	0.8276
Zn 206.200	5.0016	2.3714	4.4483

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0350	ppb	0.2436	694.9	-29.1069
Al 308.215	12.3446	ppb	3.4031	27.6	193.284
As 188.980	-0.4209	ppb	0.6129	145.6	1.1364
B 249.678	16.8655	ppb	0.8413	5.0	15.5919
Ba 389.178	40.5000	ppb	1.1234	2.8	410.534
Be 313.042	-0.0587	ppb	0.0139	23.7	-197.300
Ca 370.602	86096	ppb	29.94	0.0	196287
Cd 226.502	-0.1695	ppb	0.0182	10.7	9.4908
Co 228.615	0.4770	ppb	0.6303	132.1	-9.6537
Cr 267.716	0.0227	ppb	0.1698	749.5	24.2239
Cu 324.754	-0.1012	ppb	0.1566	154.7	198.326
Fe 271.441	92.8762	ppb	8.0255	8.6	104.170
K 766.491	576.073	ppb	1.0326	0.2	15968.7
Mg 279.078	25150.7	ppb	12.6986	0.1	36262.7
Mn 257.610	18.9616	ppb	0.1114	0.6	2218.49
Mo 202.032	1.2644	ppb	0.4622	36.6	7.0737
Na 330.237	15825.7	ppb	125.538	0.8	474.807
Ni 231.604	-0.5438	ppb	0.8785	161.5	-3.0237
Pb 220.353	0.2471	ppb	4.2046	1701.9	6.8234
Sb 206.834	-10.1516	ppb	2.0020	19.7	7.0574
Se 196.026	-3.3206	ppb	14.2457	429.0	1.3950
Si 288.158	6173.21	ppb	3.7770	0.1	29908.9
Sn 189.925	1.5332	ppb	4.7469	309.6	0.2378
Sr 216.596	304.543	ppb	1.5092	0.5	1296.42
Ti 334.941	-0.3766	ppb	0.0274	7.3	9.0507
Tl 190.794	-2.3141	ppb	3.5117	151.8	-11.2310
V 292.401	0.5001	ppb	0.4076	81.5	4.7197
Zn 206.200	3.9404	ppb	1.3867	35.2	1.1545

680-162184-A-10-B (Samp) **12/18/2018, 10:11:45 PM** **Rack 2, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3739	0.1853	-0.4859u
Al 308.215	152.388	148.305	149.572
As 188.980	-3.7280u	7.8390	1.9893
B 249.678	70.6381	71.5639	71.5789
Ba 389.178	87.2294	89.0232	86.5735
Be 313.042	-0.0326u	-0.0376u	-0.0451u
Ca 370.602	68149	68159	68039
Cd 226.502	-0.0671u	-0.0601u	0.0352
Co 228.615	0.3443	0.3078	0.3696
Cr 267.716	0.1711	-0.0070	-0.0572u
Cu 324.754	-0.3724u	0.5660	-0.2810u
Fe 271.441	829.070	825.244	815.577
K 766.491	1805.91	1803.48	1800.80
Mg 279.078	13417.4	13410.7	13419.6
Mn 257.610	137.441	137.632	137.312
Mo 202.032	1.1718	1.0357	1.4782
Na 330.237	6573.68	6589.31	6571.17
Ni 231.604	0.4800	-1.6971u	-1.9370u
Pb 220.353	0.5574	-4.6054u	-0.3794u
Sb 206.834	-8.2334u	-4.5152u	-9.8305u
Se 196.026	1.5766	7.4657	-2.2549u
Si 288.158	4529.14	4534.19	4528.13
Sn 189.925	-5.9792u	0.9477	-2.6285u
Sr 216.596	220.696	219.611	220.421
Ti 334.941	1.3666	1.6108	1.8540
Tl 190.794	-1.7844u	-8.0278u	2.5046
V 292.401	0.2156	1.2261	0.7451
Zn 206.200	3.4315	6.4729	6.0891

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0244	ppb	0.4519	1849.2	-28.9682
Al 308.215	150.088	ppb	2.0901	1.4	538.607
As 188.980	2.0334	ppb	5.7836	284.4	1.7856
B 249.678	71.2603	ppb	0.5389	0.8	381.014
Ba 389.178	87.6087	ppb	1.2681	1.4	921.917
Be 313.042	-0.0384	ppb	0.0063	16.3	-182.737
Ca 370.602	68116	ppb	66.70	0.1	155303
Cd 226.502	-0.0307	ppb	0.0572	186.4	12.2885
Co 228.615	0.3406	ppb	0.0311	9.1	-10.2995
Cr 267.716	0.0356	ppb	0.1200	336.6	24.7864
Cu 324.754	-0.0291	ppb	0.5174	1775.3	201.335
Fe 271.441	823.297	ppb	6.9542	0.8	705.775
K 766.491	1803.40	ppb	2.5555	0.1	49418.5
Mg 279.078	13415.9	ppb	4.6608	0.0	19356.3
Mn 257.610	137.462	ppb	0.1610	0.1	15117.3
Mo 202.032	1.2286	ppb	0.2267	18.4	6.9816
Na 330.237	6578.05	ppb	9.8275	0.1	231.029
Ni 231.604	-1.0513	ppb	1.3316	126.7	-3.7290
Pb 220.353	-1.4758	ppb	2.7505	186.4	5.8242
Sb 206.834	-7.5264	ppb	2.7273	36.2	8.2514
Se 196.026	2.2625	ppb	4.8964	216.4	2.4676
Si 288.158	4530.48	ppb	3.2473	0.1	22025.3

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.5533	ppb	3.4641	135.7	-1.0877
Sr 216.596	220.243	ppb	0.5637	0.3	940.445
Ti 334.941	1.6105	ppb	0.2437	15.1	205.234
Tl 190.794	-2.4358	ppb	5.2963	217.4	-11.2641
V 292.401	0.7289	ppb	0.5055	69.3	8.2003
Zn 206.200	5.3312	ppb	1.6563	31.1	1.6560

680-162184-C-12-B (Samp) **12/18/2018, 10:16:09 PM** **Rack 2, Tube 27**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2289u	-0.2926u	-0.5684u
Al 308.215	43.8113	43.7993	43.6516
As 188.980	2.6748	1.6942	-0.7352u
B 249.678	15.3285	15.7212	15.1051
Ba 389.178	25.7517	23.4867	26.5319
Be 313.042	-0.0578u	-0.0548u	-0.0515u
Ca 370.602	57524	57585	57610
Cd 226.502	-0.1175u	-0.4564u	0.1388
Co 228.615	-0.2602u	0.4455	-0.2526u
Cr 267.716	0.0947	0.5478	0.1822
Cu 324.754	0.2484	-0.0316u	-0.4584u
Fe 271.441	56.3075	48.5731	49.9767
K 766.491	501.352	501.566	501.831
Mg 279.078	21269.0	21295.5	21289.6
Mn 257.610	68.8090	68.8224	69.0047
Mo 202.032	-0.0639u	0.7929	-0.0933u
Na 330.237	24146.1	24052.9	23638.3
Ni 231.604	-0.4214u	0.0374	-1.0889u
Pb 220.353	2.4069	-0.0241u	-2.3025u
Sb 206.834	-8.5852u	-8.1298u	-5.4261u
Se 196.026	0.7640	19.1350	16.1164
Si 288.158	4471.45	4465.42	4466.31
Sn 189.925	4.7922	-1.4775u	-1.3407u
Sr 216.596	235.926	238.333	234.488
Ti 334.941	0.0208	0.0800	0.0716
Tl 190.794	6.4271	-6.9380u	-0.5686u
V 292.401	0.4522	0.6869	0.6638
Zn 206.200	4.1870	3.3702	7.2004

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3633	ppb	0.1805	49.7	-43.4314
Al 308.215	43.7540	ppb	0.0890	0.2	272.000
As 188.980	1.2113	ppb	1.7555	144.9	1.5671
B 249.678	15.3849	ppb	0.3119	2.0	5.6673
Ba 389.178	25.2568	ppb	1.5818	6.3	237.485
Be 313.042	-0.0547	ppb	0.0032	5.8	-198.737
Ca 370.602	57573	ppb	43.84	0.1	131272
Cd 226.502	-0.1450	ppb	0.2986	205.8	9.8203
Co 228.615	-0.0224	ppb	0.4052	1807.5	-12.1479
Cr 267.716	0.2749	ppb	0.2404	87.4	30.2441
Cu 324.754	-0.0805	ppb	0.3559	442.0	199.099
Fe 271.441	51.6191	ppb	4.1205	8.0	70.1563
K 766.491	501.583	ppb	0.2396	0.0	13938.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	21284.7	ppb	13.8737	0.1	30692.8
Mn 257.610	68.8787	ppb	0.1093	0.2	7656.81
Mo 202.032	0.2119	ppb	0.5034	237.6	4.7031
Na 330.237	23945.7	ppb	270.348	1.1	688.809
Ni 231.604	-0.4909	ppb	0.5664	115.4	-2.9496
Pb 220.353	0.0268	ppb	2.3551	8796.2	6.6981
Sb 206.834	-7.3804	ppb	1.7077	23.1	8.3140
Se 196.026	12.0051	ppb	9.8514	82.1	4.3196
Si 288.158	4467.73	ppb	3.2530	0.1	21724.3
Sn 189.925	0.6580	ppb	3.5810	544.3	-0.0448
Sr 216.596	236.249	ppb	1.9425	0.8	1007.89
Ti 334.941	0.0575	ppb	0.0321	55.8	46.9343
Tl 190.794	-0.3598	ppb	6.6850	1857.9	-10.3966
V 292.401	0.6009	ppb	0.1294	21.5	6.2383
Zn 206.200	4.9192	ppb	2.0174	41.0	1.5066

680-162184-A-13-B (Samp) **12/18/2018, 10:20:32 PM** **Rack 2, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2773u	-0.1348u	0.3455
Al 308.215	16.5415	16.3732	16.2563
As 188.980	20.8990	29.3966	26.1077
B 249.678	22.6219	22.8592	23.0176
Ba 389.178	48.8903	47.5681	47.8296
Be 313.042	-0.0493u	-0.0519u	-0.0546u
Ca 370.602	44143	44175	44106
Cd 226.502	0.0466	0.1844	-0.1467u
Co 228.615	-0.2585u	-0.1457u	0.3127
Cr 267.716	0.2410	0.3390	0.1202
Cu 324.754	-0.5701u	0.5441	0.0427
Fe 271.441	123.797	124.623	117.171
K 766.491	654.087	654.048	653.629
Mg 279.078	7239.34	7243.19	7228.71
Mn 257.610	22.2581	22.0223	22.1130
Mo 202.032	3.5588	2.9132	1.7631
Na 330.237	9684.61	9639.37	9739.52
Ni 231.604	-1.2057u	-1.1982u	-1.8380u
Pb 220.353	-2.6497u	-2.4555u	2.2192
Sb 206.834	-7.8825u	-4.2611u	-10.9953u
Se 196.026	1.2776	8.8802	16.6929
Si 288.158	5943.22	5941.00	5930.24
Sn 189.925	0.3604	2.5413	-0.4020u
Sr 216.596	197.066	195.508	195.944
Ti 334.941	0.1483	0.1981	0.2914
Tl 190.794	2.4381	1.4610	1.4909
V 292.401	0.0373	-0.1625u	0.2455
Zn 206.200	4.0239	5.0464	0.1911

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0222	ppb	0.3264	1469.4	-30.6489
Al 308.215	16.3903	ppb	0.1434	0.9	203.437
As 188.980	25.4678	ppb	4.2848	16.8	7.9678
B 249.678	22.8329	ppb	0.1992	0.9	55.7350

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	48.0960	ppb	0.7002	1.5	477.000
Be 313.042	-0.0520	ppb	0.0027	5.1	-197.881
Ca 370.602	44141	ppb	34.69	0.1	100654
Cd 226.502	0.0281	ppb	0.1663	591.8	12.6537
Co 228.615	-0.0305	ppb	0.3025	991.7	-12.2218
Cr 267.716	0.2334	ppb	0.1096	47.0	29.0772
Cu 324.754	0.0056	ppb	0.5580	9999.9	202.579
Fe 271.441	121.863	ppb	4.0847	3.4	128.010
K 766.491	653.921	ppb	0.2540	0.0	18090.4
Mg 279.078	7237.08	ppb	7.4965	0.1	10456.5
Mn 257.610	22.1311	ppb	0.1189	0.5	2476.87
Mo 202.032	2.7450	ppb	0.9096	33.1	10.4092
Na 330.237	9687.83	ppb	50.1520	0.5	313.047
Ni 231.604	-1.4140	ppb	0.3672	26.0	-4.2324
Pb 220.353	-0.9620	ppb	2.7567	286.6	6.1147
Sb 206.834	-7.7130	ppb	3.3703	43.7	8.1382
Se 196.026	8.9502	ppb	7.7079	86.1	3.7329
Si 288.158	5938.15	ppb	6.9466	0.1	28781.2
Sn 189.925	0.8332	ppb	1.5276	183.3	0.0102
Sr 216.596	196.173	ppb	0.8039	0.4	838.551
Ti 334.941	0.2126	ppb	0.0727	34.2	15.5961
Tl 190.794	1.7967	ppb	0.5557	30.9	-9.5203
V 292.401	0.0401	ppb	0.2040	508.9	-2.1598
Zn 206.200	3.0872	ppb	2.5596	82.9	0.8474

680-162184-A-14-B (Samp) **12/18/2018, 10:24:55 PM** **Rack 2, Tube 29**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4262	0.0145u	-0.3870u
Al 308.215	-1.1785u	-3.7684u	-2.2932u
As 188.980	3.6732	-4.0423u	-3.8754u
B 249.678	75.7535	75.5300	76.4666
Ba 389.178	95.2480	97.8020	97.4271
Be 313.042	-0.0586u	-0.0493u	-0.0531u
Ca 370.602	45304	45254	45321
Cd 226.502	-0.2005u	-0.2328u	-0.0265u
Co 228.615	1.2155	0.4401	0.3623
Cr 267.716	0.4562	-0.2272u	0.2928
Cu 324.754	1.5118	1.6634	1.6199
Fe 271.441	18.1313	8.1037	14.5867
K 766.491	3948.50	3950.57	3954.04
Mg 279.078	11530.6	11502.3	11529.1
Mn 257.610	7.5251	7.5669	7.5262
Mo 202.032	1.6887	1.4334	2.0348
Na 330.237	7084.63	6926.65	6799.27
Ni 231.604	-0.6207u	1.3492	-1.4160u
Pb 220.353	-0.0413u	5.5466	-4.6763u
Sb 206.834	-8.3946u	-5.3887u	-4.3793u
Se 196.026	353.533	362.463	354.414
Si 288.158	5672.08	5689.08	5696.82
Sn 189.925	-1.9866u	1.4418	3.2210
Sr 216.596	299.794	300.249	299.831
Ti 334.941	-0.1162	-0.1291	-0.1914

Label	Replicates Concentration		
Tl 190.794	-1.8709u	-9.4888u	-0.6337u
V 292.401	0.2425	0.2583	0.2660
Zn 206.200	1.6638	-2.2076u	5.0126

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0179	ppb	0.4066	2273.5	-29.5934
Al 308.215	-2.4134	ppb	1.2991	53.8	156.282
As 188.980	-1.4149	ppb	4.4071	311.5	0.8739
B 249.678	75.9167	ppb	0.4891	0.6	413.187
Ba 389.178	96.8257	ppb	1.3791	1.4	1022.07
Be 313.042	-0.0537	ppb	0.0046	8.6	-199.077
Ca 370.602	45293	ppb	34.95	0.1	103280
Cd 226.502	-0.1532	ppb	0.1110	72.4	9.6334
Co 228.615	0.6726	ppb	0.4718	70.1	-8.6743
Cr 267.716	0.1739	ppb	0.3569	205.2	27.6290
Cu 324.754	1.5984	ppb	0.0781	4.9	265.364
Fe 271.441	13.6073	ppb	5.0850	37.4	38.8948
K 766.491	3951.04	ppb	2.8002	0.1	107951
Mg 279.078	11520.7	ppb	15.9091	0.1	16627.5
Mn 257.610	7.5394	ppb	0.0238	0.3	902.456
Mo 202.032	1.7189	ppb	0.3018	17.6	8.0992
Na 330.237	6936.85	ppb	142.957	2.1	240.569
Ni 231.604	-0.2292	ppb	1.4236	621.1	-2.5868
Pb 220.353	0.2764	ppb	5.1189	1852.3	6.8393
Sb 206.834	-6.0542	ppb	2.0887	34.5	8.8912
Se 196.026	356.804	ppb	4.9213	1.4	70.0014
Si 288.158	5685.99	ppb	12.6540	0.2	27570.8
Sn 189.925	0.8921	ppb	2.6470	296.7	0.0289
Sr 216.596	299.958	ppb	0.2530	0.1	1277.02
Ti 334.941	-0.1456	ppb	0.0402	27.6	-11.8627
Tl 190.794	-3.9978	ppb	4.7954	120.0	-11.9333
V 292.401	0.2556	ppb	0.0120	4.7	1.0823
Zn 206.200	1.4896	ppb	3.6132	242.6	0.2723

680-162184-A-18-B (Samp) **12/18/2018, 10:29:19 PM** **Rack 2, Tube 30**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1059	0.9520	-0.3633u
Al 308.215	123.293	120.917	119.734
As 188.980	1.5702	0.2586	3.2528
B 249.678	13.3786	12.2121	12.9653
Ba 389.178	33.0903	32.4362	32.2391
Be 313.042	-0.0529u	-0.0565u	-0.0382u
Ca 370.602	43372	43316	43319
Cd 226.502	-0.1199u	-0.2662u	-0.3682u
Co 228.615	-0.1075u	-0.1342u	-0.1479u
Cr 267.716	0.0376	0.2409	0.0043
Cu 324.754	22.1412	22.0112	21.6937
Fe 271.441	381.752	368.662	387.257
K 766.491	867.838	867.505	865.883
Mg 279.078	5013.91	5016.87	5011.92
Mn 257.610	76.8564	76.7551	76.7519
Mo 202.032	0.2982	0.0028	-1.7535u

Label	Replicates Concentration		
Na 330.237	13990.6	13840.4	14115.1
Ni 231.604	-1.2388u	0.5777	1.1808
Pb 220.353	-5.9662u	2.1103	-2.9440u
Sb 206.834	-1.3373u	-8.9837u	-3.8357u
Se 196.026	-8.3217u	-3.3238u	-0.3773u
Si 288.158	3904.05	3899.97	3898.99
Sn 189.925	1.5322	3.5538	0.5211
Sr 216.596	119.263	119.758	119.067
Ti 334.941	1.1402	0.9701	1.1099
Tl 190.794	3.0676	-0.9279u	-6.0852u
V 292.401	0.4945	0.7703	0.4512
Zn 206.200	9.3170	12.1958	7.1671

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2316	ppb	0.6666	287.9	-20.8621
Al 308.215	121.315	ppb	1.8128	1.5	466.425
As 188.980	1.6938	ppb	1.5009	88.6	1.6952
B 249.678	12.8520	ppb	0.5914	4.6	-11.7087
Ba 389.178	32.5885	ppb	0.4456	1.4	302.740
Be 313.042	-0.0492	ppb	0.0097	19.8	-195.648
Ca 370.602	43336	ppb	31.48	0.1	98819
Cd 226.502	-0.2514	ppb	0.1248	49.6	8.2728
Co 228.615	-0.1299	ppb	0.0205	15.8	-12.6657
Cr 267.716	0.0943	ppb	0.1280	135.8	26.0258
Cu 324.754	21.9487	ppb	0.2302	1.0	1068.29
Fe 271.441	379.224	ppb	9.5518	2.5	339.986
K 766.491	867.075	ppb	1.0458	0.1	23899.7
Mg 279.078	5014.23	ppb	2.4906	0.0	7253.66
Mn 257.610	76.7878	ppb	0.0594	0.1	8441.85
Mo 202.032	-0.4842	ppb	1.1092	229.1	3.1299
Na 330.237	13982.0	ppb	137.580	1.0	426.181
Ni 231.604	0.1732	ppb	1.2595	727.0	-2.0265
Pb 220.353	-2.2666	ppb	4.0807	180.0	5.3549
Sb 206.834	-4.7189	ppb	3.8990	82.6	9.5194
Se 196.026	-4.0076	ppb	4.0161	100.2	1.2687
Si 288.158	3901.00	ppb	2.6850	0.1	19004.1
Sn 189.925	1.8690	ppb	1.5442	82.6	0.3465
Sr 216.596	119.363	ppb	0.3561	0.3	514.139
Ti 334.941	1.0734	ppb	0.0907	8.5	110.563
Tl 190.794	-1.3152	ppb	4.5887	348.9	-10.8035
V 292.401	0.5720	ppb	0.1731	30.3	5.8750
Zn 206.200	9.5600	ppb	2.5232	26.4	3.1772

Cont Calib Verif (CCV) **12/18/2018, 10:33:44 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	491.980	489.840	491.193
Al 308.215	9734.03	9714.82	9712.45
As 188.980	512.255	485.365	496.327
B 249.678	494.744	492.957	497.953
Ba 389.178	487.978	487.247	486.775
Be 313.042	516.446	516.160	515.905
Ca 370.602	10021	9995	9997

Label	Replicates Concentration		
Cd 226.502	507.993	507.453	508.460
Co 228.615	502.048	500.640	501.051
Cr 267.716	501.354	501.937	500.978
Cu 324.754	480.776	480.708	480.602
Fe 271.441	10026.1	10008.3	10021.7
K 766.491	9653.39	9634.61	9614.77
Mg 279.078	10054.0	10036.0	10043.7
Mn 257.610	497.102	496.058	496.664
Mo 202.032	494.026	492.472	491.265
Na 330.237	10089.3	10195.4	10041.5
Ni 231.604	498.558	498.482	494.446
Pb 220.353	494.480	501.942	489.761
Sb 206.834	475.795	482.693	482.381
Se 196.026	477.960	489.343	477.742
Si 288.158	5049.14	5050.27	5047.28
Sn 189.925	504.188	495.535	500.014
Sr 216.596	506.543	504.738	503.904
Ti 334.941	502.421	502.267	501.543
Tl 190.794	483.899	492.335	492.792
V 292.401	491.966	492.939	492.243
Zn 206.200	1003.71	1005.36	999.880

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.004	ppb	1.0828	0.2	18166.8	98.20088
Al 308.215	9720.43	ppb	11.8332	0.1	24552.1	97.20434
As 188.980	497.982	ppb	13.5210	2.7	132.532	99.59646
B 249.678	495.218	ppb	2.5313	0.5	3225.56	99.04364
Ba 389.178	487.333	ppb	0.6063	0.1	5359.64	97.46663
Be 313.042	516.170	ppb	0.2706	0.1	428643	103.23399
Ca 370.602	10004	ppb	14.58	0.1	22845	100.04022
Cd 226.502	507.969	ppb	0.5040	0.1	8312.32	101.59370
Co 228.615	501.246	ppb	0.7240	0.1	2509.59	100.24928
Cr 267.716	501.423	ppb	0.4836	0.1	11665.4	100.28460
Cu 324.754	480.695	ppb	0.0876	0.0	19176.6	96.13905
Fe 271.441	10018.7	ppb	9.2839	0.1	8309.94	100.13678
K 766.491	9634.26	ppb	19.3115	0.2	262843	96.34257
Mg 279.078	10044.6	ppb	9.0343	0.1	14493.7	100.44574
Mn 257.610	496.608	ppb	0.5243	0.1	54385.2	99.32159
Mo 202.032	492.588	ppb	1.3841	0.3	1113.72	98.51762
Na 330.237	10108.7	ppb	78.7997	0.8	320.415	101.08733
Ni 231.604	497.162	ppb	2.3525	0.5	688.137	99.43245
Pb 220.353	495.394	ppb	6.1420	1.2	296.672	99.07887
Sb 206.834	480.290	ppb	3.8959	0.8	223.930	96.05797
Se 196.026	481.682	ppb	6.6359	1.4	93.8066	96.33631
Si 288.158	5048.90	ppb	1.5127	0.0	24649.4	100.97790
Sn 189.925	499.912	ppb	4.3275	0.9	161.749	99.98247
Sr 216.596	505.061	ppb	1.3490	0.3	2134.83	101.01230
Ti 334.941	502.077	ppb	0.4688	0.1	60125.9	100.41536
Tl 190.794	489.675	ppb	5.0074	1.0	194.052	97.93504
V 292.401	492.383	ppb	0.5010	0.1	7106.68	98.47650
Zn 206.200	1002.99	ppb	2.8138	0.3	360.524	100.29860

Cont Calib Blank (CCB) **12/18/2018, 10:38:08 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1068	0.7139	0.4432
Al 308.215	-2.7735u	-1.4170u	-3.5739u
As 188.980	0.4790	3.5260	0.8078
B 249.678	3.6613	3.0236	3.1144
Ba 389.178	-0.5033u	0.6536	0.9407
Be 313.042	0.0308	0.0397	0.0330
Ca 370.602	3.485	-1.747u	-0.3331u
Cd 226.502	0.0340	-0.4464u	-0.1241u
Co 228.615	-0.8788u	0.8146	0.2823
Cr 267.716	-0.2196u	-0.3144u	-0.1722u
Cu 324.754	-0.3918u	0.2766	-0.2715u
Fe 271.441	-0.9274u	6.1291	-2.1206u
K 766.491	1.9888	1.7129	1.2895
Mg 279.078	-3.2800u	2.2351	-0.4553u
Mn 257.610	0.1468	0.1320	0.1923
Mo 202.032	-0.5126u	-1.1304u	-0.7372u
Na 330.237	-45.3432u	-190.961u	-147.736u
Ni 231.604	1.6748	0.6568	-1.3900u
Pb 220.353	-5.6626u	-2.5923u	-3.1304u
Sb 206.834	-4.6601u	-10.2625u	-7.4683u
Se 196.026	1.7349	1.2630	-2.9134u
Si 288.158	0.7217	1.1801	-0.1770u
Sn 189.925	-0.8542u	-3.1123u	2.0562
Sr 216.596	1.1838	0.4589	0.0051
Ti 334.941	0.2064	0.2198	0.2019
Tl 190.794	-0.8954u	2.5121	5.1781
V 292.401	0.4107	-0.0005	0.1789
Zn 206.200	-1.8101u	-1.0028u	-1.0090u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.4213	ppb	0.3041	72.2	-13.3948	0.42130
Al 308.215	-2.5881	ppb	1.0903	42.1	155.803	-2.58811
As 188.980	1.6043	ppb	1.6724	104.2	1.6709	1.60427
B 249.678	3.2665	ppb	0.3449	10.6	-75.8507	3.26645
Ba 389.178	0.3636	ppb	0.7644	210.2	-60.0276	0.36364
Be 313.042	0.0345	ppb	0.0046	13.4	-132.161	0.03454
Ca 370.602	0.4683	ppb	2.707	577.9	38.34	0.46835
Cd 226.502	-0.1788	ppb	0.2448	136.9	9.1599	-0.17882
Co 228.615	0.0727	ppb	0.8660	1191.1	-11.6686	0.07271
Cr 267.716	-0.2354	ppb	0.0724	30.7	18.0553	-0.23541
Cu 324.754	-0.1289	ppb	0.3563	276.4	197.166	-0.12893
Fe 271.441	1.0270	ppb	4.4586	434.1	28.4843	1.02701
K 766.491	1.6637	ppb	0.3522	21.2	313.568	1.66374
Mg 279.078	-0.5001	ppb	2.7578	551.5	30.3731	-0.50008
Mn 257.610	0.1570	ppb	0.0315	20.0	38.5168	0.15703
Mo 202.032	-0.7934	ppb	0.3127	39.4	2.4393	-0.79339
Na 330.237	-128.013	ppb	74.7857	58.4	54.3830	-128.01341
Ni 231.604	0.3138	ppb	1.5609	497.4	-1.8311	0.31385
Pb 220.353	-3.7951	ppb	1.6395	43.2	4.4529	-3.79508
Sb 206.834	-7.4636	ppb	2.8012	37.5	8.2805	-7.46361
Se 196.026	0.0282	ppb	2.5583	9081.8	2.0314	0.02817
Si 288.158	0.5749uv	ppb	0.6903	120.1	286.143	0.57491

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	-0.6367	ppb	2.5911	406.9	-0.4674	-0.63674
Sr 216.596	0.5493	ppb	0.5945	108.2	12.0609	0.54925
Ti 334.941	0.2094	ppb	0.0093	4.4	-10.4278	0.20936
Tl 190.794	2.2649	ppb	3.0443	134.4	-9.3275	2.26494
V 292.401	0.1964	ppb	0.2062	105.0	0.3630	0.19637
Zn 206.200	-1.2740	ppb	0.4643	36.4	-0.7221	-1.27400

680-162176-A-29-B (Samp) **12/18/2018, 10:42:31 PM** **Rack 2, Tube 31**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7552	-0.1119u	0.1625
Al 308.215	214.045	213.011	212.661
As 188.980	-2.4174u	7.1488	1.4822
B 249.678	48.8661	47.3267	48.7668
Ba 389.178	106.563	107.623	108.015
Be 313.042	-0.0415u	-0.0348u	-0.0465u
Ca 370.602	102672	102315	102521
Cd 226.502	-0.2485u	-0.2352u	-0.1096u
Co 228.615	-0.7861u	-0.2059u	0.7721
Cr 267.716	1.1394	1.3316	1.3667
Cu 324.754	1.5410	1.6641	0.7365
Fe 271.441	430.010	439.875	430.971
K 766.491	1623.68	1618.04	1621.83
Mg 279.078	28543.9	28426.4	28482.1
Mn 257.610	18.6229	18.5657	18.6536
Mo 202.032	1.9964	2.0792	1.0623
Na 330.237	55649.6	55565.9	55306.1
Ni 231.604	3.7339	2.5881	0.6963
Pb 220.353	5.1430	1.3921	-2.2019u
Sb 206.834	-3.5692u	-10.1051u	-10.2132u
Se 196.026	-1.2782u	4.0673	-2.0711u
Si 288.158	4493.38	4481.61	4478.29
Sn 189.925	2.5118	-0.4617u	3.5557
Sr 216.596	124.853	126.045	125.401
Ti 334.941	3.4422	3.5452	3.5639
Tl 190.794	-6.0747u	-1.6551u	3.3139
V 292.401	1.9132	1.5214	1.3905
Zn 206.200	14.6122	8.9926	12.1297

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2686	ppb	0.4432	165.0	-19.8862
Al 308.215	213.239	ppb	0.7197	0.3	696.934
As 188.980	2.0712	ppb	4.8102	232.2	1.7944
B 249.678	48.3199	ppb	0.8615	1.8	226.987
Ba 389.178	107.400	ppb	0.7509	0.7	1156.47
Be 313.042	-0.0409	ppb	0.0059	14.4	-181.913
Ca 370.602	102503	ppb	178.9	0.2	233684
Cd 226.502	-0.1977	ppb	0.0766	38.8	9.2313
Co 228.615	-0.0733	ppb	0.7875	1074.5	-12.3762
Cr 267.716	1.2792	ppb	0.1224	9.6	53.7481
Cu 324.754	1.3139	ppb	0.5038	38.3	254.234
Fe 271.441	433.619	ppb	5.4391	1.3	384.794
K 766.491	1621.19	ppb	2.8744	0.2	44452.4

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	28484.1	ppb	58.7691	0.2	41064.7
Mn 257.610	18.6141	ppb	0.0446	0.2	2197.20
Mo 202.032	1.7126	ppb	0.5647	33.0	8.0780
Na 330.237	55507.2	ppb	179.106	0.3	1520.52
Ni 231.604	2.3394	ppb	1.5340	65.6	0.9842
Pb 220.353	1.4444	ppb	3.6727	254.3	7.5237
Sb 206.834	-7.9625	ppb	3.8051	47.8	8.0457
Se 196.026	0.2393	ppb	3.3387	1394.9	2.0721
Si 288.158	4484.43	ppb	7.9284	0.2	21804.5
Sn 189.925	1.8686	ppb	2.0845	111.6	0.3516
Sr 216.596	125.433	ppb	0.5965	0.5	539.751
Ti 334.941	3.5171	ppb	0.0656	1.9	486.042
Tl 190.794	-1.4720	ppb	4.6970	319.1	-10.8931
V 292.401	1.6084	ppb	0.2720	16.9	20.7381
Zn 206.200	11.9115	ppb	2.8162	23.6	4.0231

680-162176-A-34-B (Samp) **12/18/2018, 10:46:54 PM** **Rack 2, Tube 32**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3332u	-0.5825u	0.1318
Al 308.215	3133.78	3128.42	3132.95
As 188.980	10.7254	11.2901	-2.3365u
B 249.678	326.106	326.577	327.465
Ba 389.178	244.929	243.864	244.171
Be 313.042	0.9562	0.9532	0.9577
Ca 370.602	194907	194952	195067
Cd 226.502	0.0241	0.0580	-0.1232
Co 228.615	4.3273	5.1644	5.1888
Cr 267.716	7.8559	7.7526	8.1808
Cu 324.754	97.1210	97.2044	97.3924
Fe 271.441	11660.6	11696.7	11678.9
K 766.491	8440.26	8456.73	8452.17
Mg 279.078	58197.0	58293.2	58364.7
Mn 257.610	462.447	462.671	462.306
Mo 202.032	5.7211	4.0671	4.1289
Na 330.237	57572.5	57328.1	57596.0
Ni 231.604	9.3452	9.4565	12.9756
Pb 220.353	11.1657	15.9713	13.4974
Sb 206.834	-0.2726	-2.6644u	-9.1313u
Se 196.026	-1.9945u	-3.5040u	22.4990
Si 288.158	13910.7	13910.4	13929.7
Sn 189.925	-6.2833u	8.6801	8.6216
Sr 216.596	340.619	337.079	340.182
Ti 334.941	56.4122	56.0716	56.3097
Tl 190.794	-7.3974u	-0.9000u	0.1025u
V 292.401	10.1783	10.4251	10.6017
Zn 206.200	82.1023	81.0645	76.9953

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2613	ppb	0.3625	138.7	-42.1733
Al 308.215	3131.72	ppb	2.8852	0.1	8013.58
As 188.980	6.5597	ppb	7.7095	117.5	3.0011
B 249.678	326.716	ppb	0.6900	0.2	2089.64

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	244.322	ppb	0.5482	0.2	2709.36
Be 313.042	0.9557	ppb	0.0023	0.2	659.931
Ca 370.602	194975	ppb	82.29	0.0	444455
Cd 226.502	-0.0137	ppb	0.0963	703.3	21.2870
Co 228.615	4.8935	ppb	0.4905	10.0	13.4428
Cr 267.716	7.9298	ppb	0.2234	2.8	210.433
Cu 324.754	97.2393	ppb	0.1390	0.1	4041.45
Fe 271.441	11678.7	ppb	18.0624	0.2	9647.15
K 766.491	8449.72	ppb	8.5079	0.1	230559
Mg 279.078	58285.0	ppb	84.1434	0.1	83989.9
Mn 257.610	462.475	ppb	0.1841	0.0	50882.7
Mo 202.032	4.6390	ppb	0.9376	20.2	14.4925
Na 330.237	57498.9	ppb	148.359	0.3	1571.73
Ni 231.604	10.5924	ppb	2.0646	19.5	12.4490
Pb 220.353	13.5448	ppb	2.4032	17.7	14.6591
Sb 206.834	-4.0228	ppb	4.5829	113.9	10.0488
Se 196.026	5.6668	ppb	14.5966	257.6	3.1127
Si 288.158	13916.9	ppb	11.0419	0.1	67074.5
Sn 189.925	3.6728	ppb	8.6223	234.8	0.9365
Sr 216.596	339.293	ppb	1.9301	0.6	1446.03
Ti 334.941	56.2645	ppb	0.1748	0.3	6909.31
Tl 190.794	-2.7316	ppb	4.0716	149.1	-11.6595
V 292.401	10.4017	ppb	0.2127	2.0	151.249
Zn 206.200	80.0540	ppb	2.6993	3.4	28.5599

680-162176-A-32-B (Samp) **12/18/2018, 10:51:18 PM** **Rack 2, Tube 33**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3841u	0.8552	0.5301
Al 308.215	42.2294	44.4904	45.4721
As 188.980	-0.0672u	0.0546	2.8887
B 249.678	71.6778	71.7312	71.8733
Ba 389.178	62.1950	61.7430	60.6623
Be 313.042	0.1103	0.1203	0.1240
Ca 370.602	44403	44406	44396
Cd 226.502	0.0852	0.2098	0.0527
Co 228.615	-0.3840u	-0.4599u	0.1772
Cr 267.716	0.5317	0.6994	0.5058
Cu 324.754	2.0275	2.4596	2.8854
Fe 271.441	614.998	620.192	622.089
K 766.491	2803.40	2762.63	2821.89
Mg 279.078	31204.6	31199.6	31208.9
Mn 257.610	35.3455	35.1877	35.3455
Mo 202.032	-0.0386u	2.4648	1.9104
Na 330.237	33698.1	32975.4	33615.3
Ni 231.604	1.5282	1.5954	0.4427
Pb 220.353	4.6982	-2.3655u	3.1372
Sb 206.834	-7.1162u	-7.0059u	-7.9578u
Se 196.026	6.3347	5.4223	0.1471
Si 288.158	5449.03	5454.35	5450.08
Sn 189.925	2.6924	2.2951	5.5216
Sr 216.596	441.948	440.968	441.052
Ti 334.941	-0.1697	0.0131	-0.1681

Label	Replicates Concentration		
Tl 190.794	-2.1507u	1.2742	-8.9110u
V 292.401	0.7963	0.2811	0.4378
Zn 206.200	94.8851	101.520	106.151

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3337	ppb	0.6425	192.5	-18.6439
Al 308.215	44.0640	ppb	1.6629	3.8	272.815
As 188.980	0.9587	ppb	1.6726	174.5	1.5015
B 249.678	71.7608	ppb	0.1010	0.1	384.589
Ba 389.178	61.5334	ppb	0.7875	1.3	650.141
Be 313.042	0.1182	ppb	0.0071	6.0	-57.9076
Ca 370.602	44402	ppb	5.229	0.0	101247
Cd 226.502	0.1159	ppb	0.0829	71.5	14.5543
Co 228.615	-0.2222	ppb	0.3480	156.6	-13.1472
Cr 267.716	0.5790	ppb	0.1051	18.1	37.3732
Cu 324.754	2.4575	ppb	0.4290	17.5	299.392
Fe 271.441	619.093	ppb	3.6712	0.6	537.545
K 766.491	2795.97	ppb	30.3199	1.1	76470.3
Mg 279.078	31204.4	ppb	4.6344	0.0	44983.3
Mn 257.610	35.2929	ppb	0.0911	0.3	4033.70
Mo 202.032	1.4455	ppb	1.3148	91.0	7.4735
Na 330.237	33429.6	ppb	395.530	1.2	938.478
Ni 231.604	1.1888	ppb	0.6470	54.4	-0.6148
Pb 220.353	1.8233	ppb	3.7106	203.5	7.7513
Sb 206.834	-7.3600	ppb	0.5207	7.1	8.3256
Se 196.026	3.9680	ppb	3.3404	84.2	2.7835
Si 288.158	5451.15	ppb	2.8208	0.1	26444.0
Sn 189.925	3.5030	ppb	1.7594	50.2	0.8785
Sr 216.596	441.323	ppb	0.5428	0.1	1874.42
Ti 334.941	-0.1082	ppb	0.1051	97.1	62.2176
Tl 190.794	-3.2625	ppb	5.1828	158.9	-11.6399
V 292.401	0.5051	ppb	0.2641	52.3	4.8983
Zn 206.200	100.852	ppb	5.6625	5.6	36.0315

MB 680-551775/1-A (Samp) **12/18/2018, 10:55:42 PM** **Rack 2, Tube 34**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2605	-0.0323u	-0.0442u
Al 308.215	-2.1545u	-2.5565u	-4.5561u
As 188.980	-2.1768u	-1.2521u	-0.4284u
B 249.678	1.7927	2.0276	1.9167
Ba 389.178	-0.2823u	-1.2542u	-0.0349u
Be 313.042	-0.0457u	-0.0527u	-0.0442u
Ca 370.602	9.051	7.797	6.713
Cd 226.502	0.0582	-0.3611u	-0.2456u
Co 228.615	1.1579	0.1547	1.1324
Cr 267.716	-0.0932u	-0.2943u	-0.0163u
Cu 324.754	-0.1111u	-0.5229u	0.0779
Fe 271.441	3.5584	0.0086	8.1150
K 766.491	2.5350	1.9672	2.8326
Mg 279.078	0.2577	-2.6533u	-0.4214u
Mn 257.610	0.0755	0.0687	0.0976
Mo 202.032	-1.2034u	-0.3154u	0.1469

Label	Replicates Concentration		
Na 330.237	-92.0266u	61.3855	-63.2044u
Ni 231.604	-0.3838u	0.6164	-0.4949u
Pb 220.353	-4.4106u	0.1042	-2.2127u
Sb 206.834	-8.2238u	-8.5039u	-10.2013u
Se 196.026	8.6570	3.1291	2.7848
Si 288.158	-1.0224u	0.0741	0.9586
Sn 189.925	3.2780	-3.1069u	2.4397
Sr 216.596	-1.0587u	0.0062	-0.0291u
Ti 334.941	-0.0244u	0.0555	-0.0033u
Tl 190.794	-5.1351u	-4.5511u	-3.0720u
V 292.401	0.1961	0.0754	0.1791
Zn 206.200	-3.3116u	0.0222	-2.1439u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0613	ppb	0.1725	281.3	-26.7367
Al 308.215	-3.0890	ppb	1.2863	41.6	154.550
As 188.980	-1.2858	ppb	0.8747	68.0	0.9082
B 249.678	1.9123	ppb	0.1175	6.1	-84.9667
Ba 389.178	-0.5238	ppb	0.6445	123.0	-69.8755
Be 313.042	-0.0476	ppb	0.0045	9.5	-200.411
Ca 370.602	7.853	ppb	1.170	14.9	55.16
Cd 226.502	-0.1829	ppb	0.2166	118.4	9.0947
Co 228.615	0.8150	ppb	0.5720	70.2	-7.9408
Cr 267.716	-0.1346	ppb	0.1435	106.6	20.3945
Cu 324.754	-0.1854	ppb	0.3072	165.7	194.949
Fe 271.441	3.8940	ppb	4.0636	104.4	30.8900
K 766.491	2.4450	ppb	0.4397	18.0	334.859
Mg 279.078	-0.9390	ppb	1.5230	162.2	29.7417
Mn 257.610	0.0806	ppb	0.0151	18.8	30.1576
Mo 202.032	-0.4573	ppb	0.6862	150.1	3.1966
Na 330.237	-31.2819	ppb	81.5359	260.6	56.9299
Ni 231.604	-0.0874	ppb	0.6121	700.2	-2.3897
Pb 220.353	-2.1730	ppb	2.2577	103.9	5.4034
Sb 206.834	-8.9764	ppb	1.0701	11.9	7.5987
Se 196.026	4.8570	ppb	3.2955	67.9	2.9513
Si 288.158	0.0034uv	ppb	0.9924	28794.2	283.447
Sn 189.925	0.8703	ppb	3.4697	398.7	0.0210
Sr 216.596	-0.3606	ppb	0.6049	167.8	8.2216
Ti 334.941	0.0093	ppb	0.0414	446.1	-34.3847
Tl 190.794	-4.2527	ppb	1.0634	25.0	-12.0415
V 292.401	0.1502	ppb	0.0654	43.5	-0.3532
Zn 206.200	-1.8111	ppb	1.6917	93.4	-0.9155

LCS 680-551775/2-A (Samp) **12/18/2018, 11:00:06 PM** **Rack 2, Tube 35**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.2576	51.0416	51.8936
Al 308.215	4808.28	4816.84	4814.86
As 188.980	98.9201	96.8483	96.8972
B 249.678	197.291	195.679	197.380
Ba 389.178	97.4585	97.9529	99.2300
Be 313.042	51.0668	51.1185	51.1482
Ca 370.602	4938	4947	4947

Label	Replicates Concentration		
Cd 226.502	51.1754	51.3503	51.1976
Co 228.615	50.9346	50.1663	48.8328
Cr 267.716	101.093	100.715	101.343
Cu 324.754	97.0994	96.9666	96.5714
Fe 271.441	5032.56	5022.24	5006.71
K 766.491	7623.48	7626.81	7632.66
Mg 279.078	4959.34	4974.82	4957.63
Mn 257.610	497.699	497.527	498.081
Mo 202.032	98.8602	99.6994	100.934
Na 330.237	4819.26	5143.76	4671.92
Ni 231.604	100.153	98.7300	98.8450
Pb 220.353	488.655	497.325	499.969
Sb 206.834	41.9383	45.9779	40.8633
Se 196.026	94.8056	97.5615	86.8488
Si 288.158	1.7920	3.8148	1.1477
Sn 189.925	97.0473	100.218	92.9572
Sr 216.596	100.318	100.101	100.878
Ti 334.941	99.7232	99.9072	100.251
Tl 190.794	34.0608	40.0285	39.1259
V 292.401	98.5238	98.6456	98.6720
Zn 206.200	101.652	103.806	101.386

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.3976	ppb	0.4429	0.9	1875.64
Al 308.215	4813.32	ppb	4.4833	0.1	12233.0
As 188.980	97.5552	ppb	1.1823	1.2	26.9716
B 249.678	196.783	ppb	0.9575	0.5	1221.73
Ba 389.178	98.2138	ppb	0.9141	0.9	1032.88
Be 313.042	51.1112	ppb	0.0412	0.1	42297.3
Ca 370.602	4944	ppb	5.457	0.1	11309
Cd 226.502	51.2411	ppb	0.0952	0.2	852.680
Co 228.615	49.9779	ppb	1.0635	2.1	239.425
Cr 267.716	101.050	ppb	0.3162	0.3	2370.90
Cu 324.754	96.8791	ppb	0.2747	0.3	4027.07
Fe 271.441	5020.50	ppb	13.0163	0.3	4166.16
K 766.491	7627.65	ppb	4.6453	0.1	208154
Mg 279.078	4963.93	ppb	9.4687	0.2	7175.57
Mn 257.610	497.769	ppb	0.2839	0.1	54474.1
Mo 202.032	99.8311	ppb	1.0430	1.0	229.038
Na 330.237	4878.31	ppb	241.400	4.9	185.500
Ni 231.604	99.2427	ppb	0.7905	0.8	135.606
Pb 220.353	495.316	ppb	5.9182	1.2	296.977
Sb 206.834	42.9265	ppb	2.6967	6.3	30.2921
Se 196.026	93.0720	ppb	5.5628	6.0	19.7888
Si 288.158	2.2515	ppb	1.3917	61.8	321.595
Sn 189.925	96.7408	ppb	3.6400	3.8	31.0909
Sr 216.596	100.432	ppb	0.4007	0.4	433.036
Ti 334.941	99.9604	ppb	0.2678	0.3	11952.8
Tl 190.794	37.7384	ppb	3.2167	8.5	5.5068
V 292.401	98.6138	ppb	0.0791	0.1	1421.82
Zn 206.200	102.281	ppb	1.3267	1.3	36.5159

680-162182-C-1-A (Samp) **12/18/2018, 11:04:30 PM** **Rack 2, Tube 36**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0597	0.2815	-0.1004u
Al 308.215	81.3866	76.9748	77.1606
As 188.980	1.9625	-2.5611u	-2.5108u
B 249.678	24.7764	26.5145	25.5344
Ba 389.178	43.9805	45.0179	43.1752
Be 313.042	-0.0351u	-0.0358u	-0.0276u
Ca 370.602	87926	87780	87708
Cd 226.502	-0.1803u	0.0807	-0.2927u
Co 228.615	6.3870	5.8143	5.3707
Cr 267.716	0.2461	-0.0415	0.3553
Cu 324.754	2.2200	1.9757	2.8246
Fe 271.441	2754.96	2738.87	2753.03
K 766.491	3302.44	3292.81	3294.32
Mg 279.078	53251.6	53175.0	53086.1
Mn 257.610	359.144	358.709	358.256
Mo 202.032	-0.8539u	-1.8317u	-0.6318u
Na 330.237	29564.1	29865.5	29662.3
Ni 231.604	17.3051	18.1672	16.2434
Pb 220.353	-1.0675u	-2.1811u	-1.0961u
Sb 206.834	-5.5633u	-8.6400u	0.7321
Se 196.026	13.7305	10.3312	29.4382
Si 288.158	6945.16	6927.97	6925.03
Sn 189.925	6.7179	3.0956	-4.9879u
Sr 216.596	219.074	218.464	217.282
Ti 334.941	0.1203	0.0627	-0.0090
Tl 190.794	-0.4123u	-4.5535u	2.6201
V 292.401	1.6231	1.2619	0.7891
Zn 206.200	96.2950	90.0037	96.6085

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0803	ppb	0.1918	238.9	-27.1209
Al 308.215	78.5073	ppb	2.4952	3.2	359.220
As 188.980	-1.0365	ppb	2.5973	250.6	0.9798
B 249.678	25.6085	ppb	0.8714	3.4	71.7641
Ba 389.178	44.0579	ppb	0.9238	2.1	478.732
Be 313.042	-0.0328	ppb	0.0045	13.7	-176.640
Ca 370.602	87805	ppb	110.9	0.1	200184
Cd 226.502	-0.1308	ppb	0.1916	146.5	12.3166
Co 228.615	5.8573	ppb	0.5095	8.7	17.5349
Cr 267.716	0.1866	ppb	0.2050	109.8	29.1634
Cu 324.754	2.3401	ppb	0.4370	18.7	295.211
Fe 271.441	2748.95	ppb	8.7885	0.3	2292.13
K 766.491	3296.52	ppb	5.1786	0.2	90112.5
Mg 279.078	53170.9	ppb	82.8194	0.2	76624.4
Mn 257.610	358.703	ppb	0.4442	0.1	39502.5
Mo 202.032	-1.1058	ppb	0.6384	57.7	1.6921
Na 330.237	29697.3	ppb	153.721	0.5	839.938
Ni 231.604	17.2386	ppb	0.9636	5.6	21.6844
Pb 220.353	-1.4482	ppb	0.6348	43.8	5.8678
Sb 206.834	-4.4904	ppb	4.7773	106.4	9.6754
Se 196.026	17.8333	ppb	10.1928	57.2	5.4492
Si 288.158	6932.72	ppb	10.8734	0.2	33553.8

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.6085	ppb	5.9929	372.6	0.2640
Sr 216.596	218.273	ppb	0.9112	0.4	932.491
Ti 334.941	0.0580	ppb	0.0648	111.6	160.903
Tl 190.794	-0.7819	ppb	3.6010	460.6	-10.5558
V 292.401	1.2247	ppb	0.4182	34.1	16.1768
Zn 206.200	94.3024	ppb	3.7261	4.0	33.6777

680-162182-C-1-Asd (Samp) **12/18/2018, 11:08:54 PM** **Rack 2, Tube 37**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0364	0.7014	0.5742
Al 308.215	14.1082	16.5881	13.3251
As 188.980	6.4384	8.0096	-3.0510u
B 249.678	5.5879	6.1644	5.8697
Ba 389.178	9.5115	10.3581	7.6239
Be 313.042	-0.0344u	-0.0261u	-0.0481u
Ca 370.602	17942	17932	17951
Cd 226.502	-0.0947u	-0.1735u	0.0489
Co 228.615	1.0249	0.9001	1.1767
Cr 267.716	-0.0117u	-0.0221u	-0.2341u
Cu 324.754	0.5727	0.7461	0.1832
Fe 271.441	559.259	571.334	578.110
K 766.491	672.955	673.110	672.899
Mg 279.078	10769.9	10767.2	10799.8
Mn 257.610	74.0522	74.0936	73.9721
Mo 202.032	-0.3595u	-1.2057u	-0.9818u
Na 330.237	5606.60	5779.47	5722.64
Ni 231.604	3.9151	3.6853	1.8457
Pb 220.353	1.3018	1.1870	4.8446
Sb 206.834	-4.5138u	-9.8486u	-9.1819u
Se 196.026	3.8457	-7.6825u	1.2605
Si 288.158	1413.19	1410.31	1414.44
Sn 189.925	2.4397	0.2199	4.0666
Sr 216.596	45.1003	45.2004	44.0686
Ti 334.941	0.0332	0.0230	0.1231
Tl 190.794	-1.6007u	4.1602	6.3474
V 292.401	0.6692	0.2920	0.6591
Zn 206.200	20.1425	17.5849	19.1186

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4373	ppb	0.3530	80.7	-13.0216
Al 308.215	14.6738	ppb	1.7035	11.6	199.105
As 188.980	3.7990	ppb	5.9841	157.5	2.2512
B 249.678	5.8740	ppb	0.2883	4.9	-58.8651
Ba 389.178	9.1645	ppb	1.3997	15.3	48.5527
Be 313.042	-0.0362	ppb	0.0111	30.6	-188.543
Ca 370.602	17941	ppb	9.538	0.1	40934
Cd 226.502	-0.0731	ppb	0.1128	154.3	11.3702
Co 228.615	1.0339	ppb	0.1386	13.4	-6.8132
Cr 267.716	-0.0893	ppb	0.1255	140.5	21.7128
Cu 324.754	0.5007	ppb	0.2883	57.6	222.136
Fe 271.441	569.568	ppb	9.5491	1.7	496.823
K 766.491	672.988	ppb	0.1095	0.0	18610.0

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	10779.0	ppb	18.1095	0.2	15558.3
Mn 257.610	74.0393	ppb	0.0618	0.1	8169.59
Mo 202.032	-0.8490	ppb	0.4385	51.6	2.3051
Na 330.237	5702.91	ppb	88.1108	1.5	207.953
Ni 231.604	3.1487	ppb	1.1343	36.0	2.1075
Pb 220.353	2.4445	ppb	2.0794	85.1	8.1186
Sb 206.834	-7.8481	ppb	2.9068	37.0	8.1198
Se 196.026	-0.8588	ppb	6.0492	704.4	1.8677
Si 288.158	1412.64	ppb	2.1189	0.1	7062.52
Sn 189.925	2.2421	ppb	1.9310	86.1	0.4663
Sr 216.596	44.7898	ppb	0.6266	1.4	199.092
Ti 334.941	0.0598	ppb	0.0551	92.2	10.0483
Tl 190.794	2.9690	ppb	4.1058	138.3	-9.0258
V 292.401	0.5401	ppb	0.2149	39.8	5.5350
Zn 206.200	18.9487	ppb	1.2872	6.8	6.5564

680-162182-C-1-Apds (Samp) **12/18/2018, 11:13:18 PM** **Rack 2, Tube 38**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.0825	51.0300	51.3998
Al 308.215	5178.06	5180.21	5186.60
As 188.980	99.8285	105.946	104.877
B 249.678	228.218	227.661	228.416
Ba 389.178	145.671	145.479	146.553
Be 313.042	52.6986	52.7454	52.7596
Ca 370.602	91944	91933	92045
Cd 226.502	53.1544	52.7766	53.2099
Co 228.615	57.8390	57.9498	56.7732
Cr 267.716	104.436	104.766	104.389
Cu 324.754	103.668	103.467	104.742
Fe 271.441	7884.30	7890.85	7880.76
K 766.491	11854.8	11887.8	11888.1
Mg 279.078	57833.2	57892.3	57883.4
Mn 257.610	863.065	863.792	864.529
Mo 202.032	101.821	104.487	103.912
Na 330.237	34873.2	34565.1	34381.1
Ni 231.604	119.782	120.299	120.414
Pb 220.353	513.552	515.017	510.848
Sb 206.834	46.7365	40.5265	51.1542
Se 196.026	106.699	111.309	103.660
Si 288.158	6916.50	6913.58	6918.37
Sn 189.925	96.4895	105.163	96.8036
Sr 216.596	320.265	321.558	322.113
Ti 334.941	103.722	103.877	104.042
Tl 190.794	40.4165	35.9258	38.5056
V 292.401	103.186	103.474	103.531
Zn 206.200	194.471	188.918	200.667

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.1708	ppb	0.2001	0.4	1866.12
Al 308.215	5181.62	ppb	4.4407	0.1	13156.5
As 188.980	103.551	ppb	3.2675	3.2	28.5588
B 249.678	228.099	ppb	0.3915	0.2	1429.63

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	145.901	ppb	0.5728	0.4	1615.62
Be 313.042	52.7345	ppb	0.0320	0.1	43657.2
Ca 370.602	91974	ppb	62.12	0.1	209689
Cd 226.502	53.0470	ppb	0.2358	0.4	884.637
Co 228.615	57.5207	ppb	0.6497	1.1	277.482
Cr 267.716	104.530	ppb	0.2057	0.2	2453.03
Cu 324.754	103.959	ppb	0.6854	0.7	4307.09
Fe 271.441	7885.31	ppb	5.1187	0.1	6526.18
K 766.491	11876.9	ppb	19.1557	0.2	323964
Mg 279.078	57869.6	ppb	31.8969	0.1	83386.7
Mn 257.610	863.796	ppb	0.7318	0.1	94754.3
Mo 202.032	103.407	ppb	1.4031	1.4	237.047
Na 330.237	34606.5	ppb	248.639	0.7	968.474
Ni 231.604	120.165	ppb	0.3367	0.3	164.676
Pb 220.353	513.139	ppb	2.1150	0.4	307.459
Sb 206.834	46.1390	ppb	5.3390	11.6	31.7736
Se 196.026	107.223	ppb	3.8514	3.6	22.5109
Si 288.158	6916.15	ppb	2.4114	0.0	33502.4
Sn 189.925	99.4855	ppb	4.9197	4.9	31.9841
Sr 216.596	321.312	ppb	0.9480	0.3	1366.75
Ti 334.941	103.880	ppb	0.1603	0.2	12610.3
Tl 190.794	38.2826	ppb	2.2537	5.9	5.7748
V 292.401	103.397	ppb	0.1851	0.2	1491.92
Zn 206.200	194.685	ppb	5.8774	3.0	69.7731

680-162182-C-1-B MS (Samp) **12/18/2018, 11:17:42 PM** **Rack 2, Tube 39**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.7589	50.8312	50.1081
Al 308.215	4841.55	4838.89	4839.88
As 188.980	104.149	84.8431	94.3600
B 249.678	214.967	216.928	216.931
Ba 389.178	139.479	137.314	137.568
Be 313.042	49.3008	49.3040	49.2528
Ca 370.602	90110	90003	90062
Cd 226.502	49.5102	49.3687	49.4129
Co 228.615	54.0559	53.1901	53.2430
Cr 267.716	97.5306	97.5707	97.4505
Cu 324.754	96.6497	97.3436	96.6812
Fe 271.441	7507.95	7524.95	7518.18
K 766.491	11258.9	11255.6	11248.0
Mg 279.078	56616.2	56636.0	56572.1
Mn 257.610	824.091	822.903	823.552
Mo 202.032	97.4161	94.7032	95.8474
Na 330.237	33816.8	34140.7	34113.0
Ni 231.604	110.158	110.589	113.926
Pb 220.353	476.184	478.421	467.211
Sb 206.834	52.9713	45.2225	44.6540
Se 196.026	89.4593	100.415	106.999
Si 288.158	6820.87	6817.09	6807.52
Sn 189.925	93.6022	96.6211	104.121
Sr 216.596	311.800	309.356	310.393
Ti 334.941	96.6058	96.4462	96.4011

Label	Replicates Concentration		
Tl 190.794	27.5202	29.2461	35.6042
V 292.401	95.9688	96.0135	95.9790
Zn 206.200	187.762	181.708	194.337

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.5661	ppb	0.3982	0.8	1843.75
Al 308.215	4840.11	ppb	1.3481	0.0	12300.1
As 188.980	94.4507	ppb	9.6533	10.2	26.1587
B 249.678	216.276	ppb	1.1330	0.5	1350.42
Ba 389.178	138.121	ppb	1.1835	0.9	1527.92
Be 313.042	49.2859	ppb	0.0287	0.1	40792.2
Ca 370.602	90058	ppb	53.74	0.1	205322
Cd 226.502	49.4306	ppb	0.0724	0.1	825.290
Co 228.615	53.4963	ppb	0.4853	0.9	257.230
Cr 267.716	97.5173	ppb	0.0612	0.1	2290.10
Cu 324.754	96.8915	ppb	0.3918	0.4	4028.08
Fe 271.441	7517.03	ppb	8.5557	0.1	6222.58
K 766.491	11254.1	ppb	5.5966	0.0	306991
Mg 279.078	56608.1	ppb	32.7257	0.1	81569.9
Mn 257.610	823.515	ppb	0.5949	0.1	90343.9
Mo 202.032	95.9889	ppb	1.3620	1.4	220.343
Na 330.237	34023.5	ppb	179.534	0.5	953.178
Ni 231.604	111.557	ppb	2.0626	1.8	152.718
Pb 220.353	473.938	ppb	5.9328	1.3	284.483
Sb 206.834	47.6159	ppb	4.6466	9.8	32.4788
Se 196.026	98.9580	ppb	8.8603	9.0	20.9338
Si 288.158	6815.16	ppb	6.8806	0.1	33016.0
Sn 189.925	98.1148	ppb	5.4162	5.5	31.5398
Sr 216.596	310.516	ppb	1.2265	0.4	1321.22
Ti 334.941	96.4844	ppb	0.1076	0.1	11720.3
Tl 190.794	30.7902	ppb	4.2575	13.8	2.6486
V 292.401	95.9871	ppb	0.0234	0.0	1384.84
Zn 206.200	187.936	ppb	6.3166	3.4	67.3460

680-162182-C-1-C MSD (Samp) **12/18/2018, 11:22:06 PM** **Rack 2, Tube 40**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.0360	50.8433	51.6080
Al 308.215	5039.65	5030.16	5037.77
As 188.980	98.2259	98.5643	101.630
B 249.678	222.578	222.810	224.454
Ba 389.178	141.019	142.320	141.901
Be 313.042	51.3209	51.2491	51.2768
Ca 370.602	91535	91299	91402
Cd 226.502	51.3316	51.0108	50.7197
Co 228.615	56.8774	55.6399	55.6596
Cr 267.716	101.622	101.810	101.116
Cu 324.754	100.689	101.213	100.770
Fe 271.441	7741.84	7717.27	7731.91
K 766.491	11641.8	11635.0	11641.1
Mg 279.078	57471.0	57332.4	57393.3
Mn 257.610	848.461	847.199	846.771
Mo 202.032	99.9698	99.0067	99.3875

Label	Replicates Concentration		
Na 330.237	34012.8	34207.7	34289.5
Ni 231.604	119.718	113.981	116.092
Pb 220.353	493.254	497.644	501.767
Sb 206.834	44.7367	44.9960	38.7692
Se 196.026	112.333	109.903	104.411
Si 288.158	6909.14	6904.45	6904.90
Sn 189.925	101.194	102.474	96.0981
Sr 216.596	315.243	317.040	317.623
Ti 334.941	100.719	100.790	100.481
Tl 190.794	34.8029	35.2568	42.8987
V 292.401	99.8193	99.8351	100.226
Zn 206.200	187.169	186.084	188.216

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.4958	ppb	0.6043	1.2	1878.19
Al 308.215	5035.86	ppb	5.0253	0.1	12791.0
As 188.980	99.4733	ppb	1.8751	1.9	27.4834
B 249.678	223.281	ppb	1.0227	0.5	1397.35
Ba 389.178	141.746	ppb	0.6640	0.5	1569.06
Be 313.042	51.2823	ppb	0.0362	0.1	42450.7
Ca 370.602	91412	ppb	118.1	0.1	208408
Cd 226.502	51.0207	ppb	0.3061	0.6	851.430
Co 228.615	56.0590	ppb	0.7089	1.3	270.129
Cr 267.716	101.516	ppb	0.3589	0.4	2383.01
Cu 324.754	100.891	ppb	0.2819	0.3	4185.96
Fe 271.441	7730.34	ppb	12.3579	0.2	6398.45
K 766.491	11639.3	ppb	3.7433	0.0	317490
Mg 279.078	57398.9	ppb	69.5054	0.1	82708.8
Mn 257.610	847.477	ppb	0.8789	0.1	92968.0
Mo 202.032	99.4547	ppb	0.4850	0.5	228.147
Na 330.237	34170.0	ppb	142.137	0.4	957.001
Ni 231.604	116.597	ppb	2.9014	2.5	159.719
Pb 220.353	497.555	ppb	4.2573	0.9	298.325
Sb 206.834	42.8340	ppb	3.5226	8.2	30.3125
Se 196.026	108.882	ppb	4.0581	3.7	22.8259
Si 288.158	6906.16	ppb	2.5856	0.0	33453.5
Sn 189.925	99.9220	ppb	3.3729	3.4	32.1256
Sr 216.596	316.635	ppb	1.2408	0.4	1347.03
Ti 334.941	100.663	ppb	0.1620	0.2	12223.7
Tl 190.794	37.6528	ppb	4.5487	12.1	5.5103
V 292.401	99.9603	ppb	0.2306	0.2	1442.25
Zn 206.200	187.156	ppb	1.0663	0.6	67.0644

Cont Calib Verif (CCV) **12/18/2018, 11:26:31 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	491.705	487.642	491.048
Al 308.215	9733.15	9720.25	9741.54
As 188.980	495.682	499.601	496.350
B 249.678	495.457	495.876	497.038
Ba 389.178	488.191	486.763	488.268
Be 313.042	517.101	516.131	517.197
Ca 370.602	10019	9997	10013

Label	Replicates Concentration		
Cd 226.502	509.001	508.753	508.415
Co 228.615	502.915	503.363	503.904
Cr 267.716	500.440	501.061	502.176
Cu 324.754	481.511	479.479	482.864
Fe 271.441	10012.2	10002.5	9996.06
K 766.491	9622.79	9599.09	9620.14
Mg 279.078	10074.1	10070.2	10076.9
Mn 257.610	497.205	497.203	497.799
Mo 202.032	495.426	494.247	492.773
Na 330.237	10029.1	10025.1	9824.34
Ni 231.604	501.699	500.268	499.701
Pb 220.353	491.937	494.131	495.389
Sb 206.834	482.890	485.634	488.828
Se 196.026	472.720	497.298	466.540
Si 288.158	5046.24	5043.06	5050.36
Sn 189.925	496.611	501.732	501.535
Sr 216.596	505.081	505.326	503.228
Ti 334.941	501.306	500.660	501.359
Tl 190.794	486.273	484.164	488.193
V 292.401	493.507	492.210	492.731
Zn 206.200	1013.61	1011.05	1005.60

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	490.132	ppb	2.1813	0.4	18134.5	98.02631
Al 308.215	9731.65	ppb	10.7222	0.1	24580.3	97.31647
As 188.980	497.211	ppb	2.0970	0.4	132.328	99.44219
B 249.678	496.124	ppb	0.8193	0.2	3231.67	99.22478
Ba 389.178	487.741	ppb	0.8475	0.2	5364.18	97.54819
Be 313.042	516.810	ppb	0.5895	0.1	429175	103.36190
Ca 370.602	10010	ppb	11.05	0.1	22859	100.09845
Cd 226.502	508.723	ppb	0.2941	0.1	8324.63	101.74464
Co 228.615	503.394	ppb	0.4953	0.1	2520.37	100.67886
Cr 267.716	501.226	ppb	0.8795	0.2	11660.9	100.24517
Cu 324.754	481.284	ppb	1.7040	0.4	19199.8	96.25690
Fe 271.441	10003.6	ppb	8.1372	0.1	8297.61	99.98598
K 766.491	9614.01	ppb	12.9828	0.1	262291	96.14007
Mg 279.078	10073.8	ppb	3.3372	0.0	14535.7	100.73753
Mn 257.610	497.402	ppb	0.3435	0.1	54472.2	99.48048
Mo 202.032	494.149	ppb	1.3290	0.3	1117.24	98.82973
Na 330.237	9959.49	ppb	117.058	1.2	316.468	99.59490
Ni 231.604	500.556	ppb	1.0295	0.2	692.852	100.11124
Pb 220.353	493.819	ppb	1.7472	0.4	295.748	98.76382
Sb 206.834	485.784	ppb	2.9717	0.6	226.378	97.15678
Se 196.026	478.853	ppb	16.2705	3.4	93.2678	95.77055
Si 288.158	5046.55	ppb	3.6578	0.1	24638.4	100.93105
Sn 189.925	499.959	ppb	2.9011	0.6	161.765	99.99182
Sr 216.596	504.545	ppb	1.1473	0.2	2132.59	100.90901
Ti 334.941	501.108	ppb	0.3892	0.1	60009.9	100.22160
Tl 190.794	486.210	ppb	2.0152	0.4	192.611	97.24208
V 292.401	492.816	ppb	0.6525	0.1	7112.86	98.56319
Zn 206.200	1010.09	ppb	4.0931	0.4	363.079	101.00850

Cont Calib Blank (CCB) **12/18/2018, 11:30:56 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5132	-0.1047u	0.4534
Al 308.215	0.3643	-4.3159u	1.2139
As 188.980	-0.3998u	-2.6080u	-3.9441u
B 249.678	3.8333	4.0525	2.9192
Ba 389.178	0.0982	0.1605	0.3527
Be 313.042	0.0327	0.0341	0.0304
Ca 370.602	-1.796u	-2.539u	2.251
Cd 226.502	0.0618	-0.1348u	-0.1386u
Co 228.615	0.8116	0.0546	0.2265
Cr 267.716	-0.4707u	-0.2458u	-0.1728u
Cu 324.754	-0.6697u	-0.5317u	-0.3623u
Fe 271.441	12.0885	-4.6693u	4.0106
K 766.491	2.4440	2.1638	2.4199
Mg 279.078	-1.1003u	3.8607	-0.6689u
Mn 257.610	0.0568	0.1067	0.1826
Mo 202.032	0.3845	0.3569	-0.5995u
Na 330.237	-186.386u	-95.0979u	102.869
Ni 231.604	-0.3504u	0.8914	-0.0989u
Pb 220.353	4.0467	-4.3956u	-2.5036u
Sb 206.834	-8.8117u	-2.7642u	1.5827
Se 196.026	-6.0403u	-1.6011u	0.7119
Si 288.158	0.3241	2.6484	1.6654
Sn 189.925	-0.6395u	-2.1940u	10.8497
Sr 216.596	-0.1668u	0.1606	0.2910
Ti 334.941	0.2030	0.2211	0.1946
Tl 190.794	3.5635	0.8555	-5.5857u
V 292.401	0.1509	0.4274	0.2370
Zn 206.200	2.2739	0.5023	4.5293

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2873	ppb	0.3408	118.6	-18.3646	0.28731
Al 308.215	-0.9126	ppb	2.9778	326.3	160.018	-0.91258
As 188.980	-2.3173	ppb	1.7900	77.2	0.6360	-2.31731
B 249.678	3.6017	ppb	0.6011	16.7	-73.5992	3.60168
Ba 389.178	0.2038	ppb	0.1327	65.1	-61.7980	0.20381
Be 313.042	0.0324	ppb	0.0019	5.9	-133.971	0.03243
Ca 370.602	-0.6945	ppb	2.577	371.1	35.68	-0.69446
Cd 226.502	-0.0705	ppb	0.1146	162.5	10.9318	-0.07053
Co 228.615	0.3642	ppb	0.3968	108.9	-10.2108	0.36422
Cr 267.716	-0.2964	ppb	0.1553	52.4	16.6394	-0.29641
Cu 324.754	-0.5212	ppb	0.1539	29.5	181.708	-0.52120
Fe 271.441	3.8100	ppb	8.3807	220.0	30.7908	3.80997
K 766.491	2.3426	ppb	0.1553	6.6	332.068	2.34256
Mg 279.078	0.6972	ppb	2.7482	394.2	32.0978	0.69719
Mn 257.610	0.1154	ppb	0.0634	54.9	33.9648	0.11536
Mo 202.032	0.0473	ppb	0.5603	1184.6	4.3332	0.04730
Na 330.237	-59.5383	ppb	147.870	248.4	56.1861	-59.53830
Ni 231.604	0.1474	ppb	0.6565	445.5	-2.0628	0.14738
Pb 220.353	-0.9508	ppb	4.4301	465.9	6.1199	-0.95080
Sb 206.834	-3.3311	ppb	5.2203	156.7	10.1248	-3.33106
Se 196.026	-2.3098	ppb	3.4315	148.6	1.5859	-2.30984
Si 288.158	1.5460	ppb	1.1667	75.5	290.760	1.54597

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	2.6721	ppb	7.1246	266.6	0.6049	2.67209
Sr 216.596	0.0949	ppb	0.2358	248.4	10.1377	0.09494
Ti 334.941	0.2062	ppb	0.0136	6.6	-10.8024	0.20624
Tl 190.794	-0.3889	ppb	4.6998	1208.5	-10.4331	-0.38889
V 292.401	0.2718	ppb	0.1415	52.1	1.3966	0.27176
Zn 206.200	2.4352	ppb	2.0183	82.9	0.6128	2.43517

680-162182-B-2-A (Samp) **12/18/2018, 11:35:18 PM** **Rack 2, Tube 41**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0326	-0.0184u	0.0622
Al 308.215	-1.3924u	-0.8717u	-1.9207u
As 188.980	-0.3995u	0.2716	-2.6870u
B 249.678	1.6526	2.4885	1.8068
Ba 389.178	0.8154	-0.9245u	0.4340
Be 313.042	-0.0396u	-0.0413u	-0.0393u
Ca 370.602	22.20	26.74	27.97
Cd 226.502	0.0540	0.0471	-0.2073u
Co 228.615	-0.3147u	-0.3359u	-0.6914u
Cr 267.716	0.1046	-0.4723u	-0.1741u
Cu 324.754	0.1669	0.3311	0.3880
Fe 271.441	19.6937	4.0168	-0.3677u
K 766.491	21.1082	21.0987	21.6472
Mg 279.078	1.5622	-4.4082u	0.2143
Mn 257.610	0.4435	0.4268	0.3935
Mo 202.032	0.0253	-0.2746u	-2.2929u
Na 330.237	169.173	-37.3513u	17.4391
Ni 231.604	-0.8815u	-1.7188u	-0.1229u
Pb 220.353	-3.8515u	-2.9725u	-0.1203u
Sb 206.834	0.0184	-7.3259u	-12.7905u
Se 196.026	-1.0518u	2.2019	-2.4585u
Si 288.158	0.4336	0.4692	0.9652
Sn 189.925	1.6789	-0.9215u	4.6032
Sr 216.596	-0.3596u	-0.3752u	0.3954
Ti 334.941	0.2361	0.0544	-0.0115u
Tl 190.794	4.8072	-3.7793u	4.7557
V 292.401	0.5541	-0.4418u	-0.4952u
Zn 206.200	2.8312	0.5953	3.7402

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0255	ppb	0.0407	159.9	-28.0663
Al 308.215	-1.3949	ppb	0.5245	37.6	158.785
As 188.980	-0.9383	ppb	1.5511	165.3	1.0000
B 249.678	1.9826	ppb	0.4448	22.4	-84.4997
Ba 389.178	0.1083	ppb	0.9146	844.4	-62.8621
Be 313.042	-0.0401	ppb	0.0010	2.6	-194.141
Ca 370.602	25.64	ppb	3.037	11.8	95.70
Cd 226.502	-0.0354	ppb	0.1489	420.6	11.5067
Co 228.615	-0.4473	ppb	0.2116	47.3	-14.2852
Cr 267.716	-0.1806	ppb	0.2885	159.7	19.3295
Cu 324.754	0.2953	ppb	0.1148	38.9	213.907
Fe 271.441	7.7810	ppb	10.5471	135.6	34.0196
K 766.491	21.2847	ppb	0.3140	1.5	848.322

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	-0.8772	ppb	3.1313	357.0	29.8263
Mn 257.610	0.4212	ppb	0.0255	6.0	67.3946
Mo 202.032	-0.8474	ppb	1.2608	148.8	2.3176
Na 330.237	49.7537	ppb	106.987	215.0	59.0646
Ni 231.604	-0.9077	ppb	0.7983	87.9	-3.5283
Pb 220.353	-2.3148	ppb	1.9507	84.3	5.3209
Sb 206.834	-6.6993	ppb	6.4274	95.9	8.6240
Se 196.026	-0.4361	ppb	2.3904	548.1	1.9429
Si 288.158	0.6227	ppb	0.2972	47.7	286.328
Sn 189.925	1.7869	ppb	2.7639	154.7	0.3180
Sr 216.596	-0.1131	ppb	0.4405	389.4	9.2846
Ti 334.941	0.0930	ppb	0.1283	137.9	-24.3733
Tl 190.794	1.9279	ppb	4.9426	256.4	-9.4687
V 292.401	-0.1277	ppb	0.5910	463.0	-4.3455
Zn 206.200	2.3889	ppb	1.6184	67.7	0.5961

680-162182-C-4-A (Samp) **12/18/2018, 11:39:42 PM** **Rack 2, Tube 42**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5059u	-0.8322u	-1.1148u
Al 308.215	91543.1	91637.0	91841.1
As 188.980	34.3692	38.3748	33.6281
B 249.678	132.812	133.206	134.973
Ba 389.178	527.495	528.744	528.078
Be 313.042	7.3955	7.3919	7.4098
Ca 370.602	79435	79658	79636
Cd 226.502	-0.1618	0.3904	-0.1091
Co 228.615	163.883	165.524	166.686
Cr 267.716	426.120	425.729	426.491
Cu 324.754	166.818	167.499	167.343
Fe 271.441	192232	192247	192361
K 766.491	23994.5	24014.8	24039.3
Mg 279.078	85983.4	86065.0	86172.2
Mn 257.610	6420.40	6439.49	6435.84
Mo 202.032	14.0624	11.9427	10.7238
Na 330.237	64152.8	64083.1	63795.7
Ni 231.604	426.191	429.196	427.602
Pb 220.353	92.1077	86.3800	92.1194
Sb 206.834	-11.3661	-17.3037u	-18.9063u
Se 196.026	1.0381	6.2686	11.7762
Si 288.158	85390.7x	85364.4x	85558.7x
Sn 189.925	12.4613	6.3501	6.2541
Sr 216.596	361.999	365.780	368.157
Ti 334.941	461.657	461.502	462.266
Tl 190.794	3.8725u	8.2583u	-5.9094u
V 292.401	180.910	180.480	180.480
Zn 206.200	477.096	478.917	491.273

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8176b	ppb	0.3048	37.3	-89.4385
Al 308.215	91673.7b	ppb	152.340	0.2	229978
As 188.980	35.4574b	ppb	2.5536	7.2	10.9378
B 249.678	133.664b	ppb	1.1508	0.9	607.804

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	528.106b	ppb	0.6252	0.1	5944.40
Be 313.042	7.3991b	ppb	0.0095	0.1	5998.27
Ca 370.602	79577b	ppb	122.8	0.2	181137
Cd 226.502	0.0398b	ppb	0.3047	765.3	167.111
Co 228.615	165.365b	ppb	1.4082	0.9	830.456
Cr 267.716	426.113b	ppb	0.3811	0.1	9952.21
Cu 324.754	167.220b	ppb	0.3564	0.2	6843.67
Fe 271.441	192280b	ppb	70.5209	0.0	158409
K 766.491	24016.2b	ppb	22.4170	0.1	654812
Mg 279.078	86073.5b	ppb	94.6841	0.1	123937
Mn 257.610	6431.91b	ppb	10.1372	0.2	703830
Mo 202.032	12.2430b	ppb	1.6894	13.8	28.7559
Na 330.237	64010.5b	ppb	189.239	0.3	1724.92
Ni 231.604	427.663b	ppb	1.5032	0.4	591.933
Pb 220.353	90.2024b	ppb	3.3103	3.7	59.7402
Sb 206.834	-15.8587b	ppb	3.9723	25.0	9.7095
Se 196.026	6.3610b	ppb	5.3696	84.4	3.2387
Si 288.158	85437.9xb	ppb	105.373	0.1	410326
Sn 189.925	8.3552b	ppb	3.5563	42.6	2.4547
Sr 216.596	365.312b	ppb	3.1057	0.9	1597.82
Ti 334.941	461.808b	ppb	0.4034	0.1	55575.2
Tl 190.794	2.0738b	ppb	7.2531	349.7	-13.8672
V 292.401	180.623b	ppb	0.2482	0.1	2658.26
Zn 206.200	482.429b	ppb	7.7133	1.6	173.473

680-162176-A-27-A (Samp) **12/18/2018, 11:44:06 PM** **Rack 2, Tube 43**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1893u	-0.0736u	-0.7165u
Al 308.215	57.7306	59.7024	59.6815
As 188.980	-2.3834u	1.8573	0.7024
B 249.678	162.802	164.307	162.900
Ba 389.178	131.053	132.265	131.278
Be 313.042	0.4307	0.4331	0.4348
Ca 370.602	106809	106827	106886
Cd 226.502	0.0281	-0.3413u	-0.0614u
Co 228.615	-0.6602u	1.3303	0.2610
Cr 267.716	0.2180	0.3782	0.1895
Cu 324.754	23.3898	24.0576	23.9242
Fe 271.441	675.636	667.155	681.490
K 766.491	2531.75	2536.76	2538.76
Mg 279.078	29757.5	29774.6	29832.9
Mn 257.610	58.5103	58.4574	58.4701
Mo 202.032	2.0601	3.2182	1.3658
Na 330.237	37819.4	37985.9	37861.4
Ni 231.604	2.5103	-0.2689u	-0.9297u
Pb 220.353	4.6465	5.5490	1.3869
Sb 206.834	-7.8518u	-9.0340u	-13.2214u
Se 196.026	-0.9711u	3.2914	-2.3789u
Si 288.158	7266.42	7278.12	7293.86
Sn 189.925	2.7806	-2.7279u	-2.8470u
Sr 216.596	259.421	258.460	258.013
Ti 334.941	0.2731	0.4092	0.3225

Label	Replicates Concentration		
Tl 190.794	0.1395	-0.2717u	3.7801
V 292.401	1.4281	0.9800	0.8521
Zn 206.200	35.9533	28.9013	32.5171

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3264	ppb	0.3427	105.0	-42.4176
Al 308.215	59.0382	ppb	1.1324	1.9	310.389
As 188.980	0.0588	ppb	2.1924	3731.4	1.2640
B 249.678	163.336	ppb	0.8423	0.5	1000.98
Ba 389.178	131.532	ppb	0.6446	0.5	1425.61
Be 313.042	0.4329	ppb	0.0020	0.5	213.154
Ca 370.602	106841	ppb	40.48	0.0	243573
Cd 226.502	-0.1249	ppb	0.1927	154.3	10.6472
Co 228.615	0.3104	ppb	0.9962	321.0	-10.4724
Cr 267.716	0.2619	ppb	0.1017	38.8	30.1009
Cu 324.754	23.7906	ppb	0.3534	1.5	1141.08
Fe 271.441	674.760	ppb	7.2074	1.1	583.434
K 766.491	2535.76	ppb	3.6119	0.1	69378.3
Mg 279.078	29788.3	ppb	39.5142	0.1	42943.1
Mn 257.610	58.4793	ppb	0.0276	0.0	6562.00
Mo 202.032	2.2147	ppb	0.9358	42.3	9.2055
Na 330.237	37888.9	ppb	86.6087	0.2	1056.15
Ni 231.604	0.4372	ppb	1.8255	417.5	-1.6601
Pb 220.353	3.8608	ppb	2.1895	56.7	8.9469
Sb 206.834	-10.0357	ppb	2.8215	28.1	7.1164
Se 196.026	-0.0196	ppb	2.9525	15093.1	2.0258
Si 288.158	7279.46	ppb	13.7698	0.2	35217.8
Sn 189.925	-0.9314	ppb	3.2153	345.2	-0.5581
Sr 216.596	258.631	ppb	0.7191	0.3	1102.57
Ti 334.941	0.3349	ppb	0.0689	20.6	109.930
Tl 190.794	1.2160	ppb	2.2301	183.4	-9.7672
V 292.401	1.0867	ppb	0.3024	27.8	13.2682
Zn 206.200	32.4572	ppb	3.5264	10.9	11.4178

680-162176-A-38-A (Samp) **12/18/2018, 11:48:29 PM** **Rack 2, Tube 44**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0843	0.5472	-0.9314u
Al 308.215	38.9733	38.4921	43.8910
As 188.980	-4.1113u	1.1692	-3.2305u
B 249.678	68.0651	68.6110	66.1777
Ba 389.178	59.3514	59.7679	60.3119
Be 313.042	0.1255	0.1168	0.1227
Ca 370.602	42541	42577	42657
Cd 226.502	-0.1185u	-0.0340	-0.2087u
Co 228.615	-0.1943u	0.1105	0.2073
Cr 267.716	0.6472	0.3319	0.0142
Cu 324.754	3.1863	2.6653	3.0548
Fe 271.441	595.332	597.826	613.763
K 766.491	2743.27	2740.20	2747.06
Mg 279.078	30378.8	30343.0	30439.5
Mn 257.610	33.3086	33.5479	33.5361
Mo 202.032	-0.0125u	0.7047	0.4498

Label	Replicates Concentration		
Na 330.237	32852.5	32720.3	33110.6
Ni 231.604	0.7342	0.0621	2.0908
Pb 220.353	-0.7950u	-0.1483u	-0.9965u
Sb 206.834	-3.0115u	-10.3753u	-5.2193u
Se 196.026	8.5608	-0.7664u	17.7097
Si 288.158	5305.29	5305.89	5316.45
Sn 189.925	9.4926	-2.0566u	3.6987
Sr 216.596	424.516	424.791	424.204
Ti 334.941	-0.0249	0.0686	0.0476
Tl 190.794	-4.2432u	-6.8349u	0.8516
V 292.401	1.1017	0.3107	0.3751
Zn 206.200	105.419	102.600	112.011

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1000	ppb	0.7563	756.4	-34.6464
Al 308.215	40.4521	ppb	2.9879	7.4	263.754
As 188.980	-2.0575	ppb	2.8289	137.5	0.7056
B 249.678	67.6179	ppb	1.2768	1.9	356.726
Ba 389.178	59.8104	ppb	0.4817	0.8	630.125
Be 313.042	0.1217	ppb	0.0044	3.6	-55.2213
Ca 370.602	42592	ppb	58.89	0.1	97122
Cd 226.502	-0.1204	ppb	0.0874	72.6	10.6749
Co 228.615	0.0412	ppb	0.2096	509.1	-11.8167
Cr 267.716	0.3311	ppb	0.3165	95.6	31.6087
Cu 324.754	2.9688	ppb	0.2709	9.1	319.547
Fe 271.441	602.307	ppb	9.9991	1.7	523.728
K 766.491	2743.51	ppb	3.4408	0.1	75040.5
Mg 279.078	30387.1	ppb	48.7549	0.2	43806.0
Mn 257.610	33.4642	ppb	0.1349	0.4	3829.39
Mo 202.032	0.3807	ppb	0.3635	95.5	5.0749
Na 330.237	32894.4	ppb	198.504	0.6	924.361
Ni 231.604	0.9623	ppb	1.0334	107.4	-0.9297
Pb 220.353	-0.6466	ppb	0.4431	68.5	6.3033
Sb 206.834	-6.2020	ppb	3.7790	60.9	8.8483
Se 196.026	8.5014	ppb	9.2382	108.7	3.6470
Si 288.158	5309.21	ppb	6.2775	0.1	25762.8
Sn 189.925	3.7116	ppb	5.7746	155.6	0.9460
Sr 216.596	424.504	ppb	0.2936	0.1	1803.37
Ti 334.941	0.0305	ppb	0.0490	161.0	75.6611
Tl 190.794	-3.4088	ppb	3.9106	114.7	-11.7003
V 292.401	0.5958	ppb	0.4393	73.7	6.2533
Zn 206.200	106.677	ppb	4.8300	4.5	38.1279

680-162176-A-33-A (Samp) **12/18/2018, 11:52:53 PM** **Rack 2, Tube 45**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0736u	-0.2956u	-0.1165u
Al 308.215	1268.14	1268.13	1268.20
As 188.980	18.3033	13.5557	11.4194
B 249.678	331.135	332.741	332.689
Ba 389.178	515.854	517.178	516.749
Be 313.042	0.6609	0.6604	0.6623
Ca 370.602	217389	217251	217206

Label	Replicates Concentration		
Cd 226.502	0.0723	-0.0410	-0.3368
Co 228.615	2.4205	2.5661	2.9449
Cr 267.716	5.7220	4.9519	5.2909
Cu 324.754	32.1071	31.9874	32.7393
Fe 271.441	8784.32	8719.89	8764.47
K 766.491	20055.0	20031.7	20033.6
Mg 279.078	80231.8	80232.1	80305.1
Mn 257.610	317.458	317.230	317.519
Mo 202.032	4.5960	6.8047	5.4288
Na 330.237	43702.4	43627.5	43683.4
Ni 231.604	7.4025	6.2134	7.3349
Pb 220.353	4.5280	-5.0180u	2.1097
Sb 206.834	-8.3847u	-7.8358u	-7.6493u
Se 196.026	11.3171	17.7557	5.0052
Si 288.158	13559.2	13546.1	13537.1
Sn 189.925	2.9898	4.1249	6.5532
Sr 216.596	551.126	553.296	555.116
Ti 334.941	31.5064	31.6259	31.5599
Tl 190.794	2.4178	-4.4289u	-4.2654u
V 292.401	4.8260	4.7353	4.7941
Zn 206.200	40.2408	37.2294	43.0046

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1619	ppb	0.1178	72.7	-39.1557
Al 308.215	1268.16	ppb	0.0385	0.0	3341.84
As 188.980	14.4261	ppb	3.5235	24.4	5.0710
B 249.678	332.188	ppb	0.9126	0.3	2129.46
Ba 389.178	516.594	ppb	0.6756	0.1	5751.94
Be 313.042	0.6612	ppb	0.0010	0.2	418.616
Ca 370.602	217282	ppb	95.18	0.0	495304
Cd 226.502	-0.1018	ppb	0.2112	207.4	17.6259
Co 228.615	2.6439	ppb	0.2707	10.2	1.7919
Cr 267.716	5.3216	ppb	0.3859	7.3	149.117
Cu 324.754	32.2779	ppb	0.4040	1.3	1477.88
Fe 271.441	8756.23	ppb	32.9938	0.4	7239.87
K 766.491	20040.1	ppb	12.9605	0.1	546445
Mg 279.078	80256.3	ppb	42.1986	0.1	115644
Mn 257.610	317.402	ppb	0.1520	0.0	35125.3
Mo 202.032	5.6098	ppb	1.1154	19.9	16.7269
Na 330.237	43671.1	ppb	38.9114	0.1	1207.71
Ni 231.604	6.9836	ppb	0.6679	9.6	7.4356
Pb 220.353	0.5399	ppb	4.9628	919.2	7.0385
Sb 206.834	-7.9566	ppb	0.3823	4.8	8.2019
Se 196.026	11.3593	ppb	6.3753	56.1	4.1928
Si 288.158	13547.5	ppb	11.1145	0.1	65300.5
Sn 189.925	4.5560	ppb	1.8204	40.0	1.2210
Sr 216.596	553.179	ppb	1.9975	0.4	2348.96
Ti 334.941	31.5641	ppb	0.0599	0.2	4029.54
Tl 190.794	-2.0922	ppb	3.9066	186.7	-11.3438
V 292.401	4.7851	ppb	0.0460	1.0	68.9589
Zn 206.200	40.1583	ppb	2.8885	7.2	14.1989

680-162176-A-28-A (Samp) **12/18/2018, 11:57:17 PM** **Rack 2, Tube 46**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2375	0.3143	0.0899
Al 308.215	26.2577	25.1392	22.4742
As 188.980	2.9090	-1.3949u	-4.6591u
B 249.678	104.625	103.872	104.262
Ba 389.178	103.062	103.301	102.612
Be 313.042	0.0656	0.0615	0.0713
Ca 370.602	98508	98510	98504
Cd 226.502	-0.1052u	-0.0906u	-0.3218u
Co 228.615	0.9982	0.7186	1.0186
Cr 267.716	0.8979	1.0076	1.0881
Cu 324.754	4.4792	4.8123	4.8200
Fe 271.441	641.187	642.679	633.213
K 766.491	1299.46	1299.20	1298.80
Mg 279.078	29858.0	29861.1	29819.7
Mn 257.610	74.1557	74.2508	74.2492
Mo 202.032	2.2049	0.7312	1.3166
Na 330.237	19493.8	19545.9	19577.5
Ni 231.604	-0.8468u	0.8222	1.7380
Pb 220.353	0.5817	2.5190	2.1555
Sb 206.834	-14.8157u	-14.1332u	-1.6083u
Se 196.026	13.9594	-2.6087u	10.8822
Si 288.158	5380.12	5375.11	5372.06
Sn 189.925	0.2944	-4.0777u	4.2610
Sr 216.596	302.282	302.819	301.708
Ti 334.941	-0.1250	-0.2342	-0.1084
Tl 190.794	2.5494	4.5589	-1.7012u
V 292.401	0.6230	0.8797	0.8341
Zn 206.200	17.0572	18.7839	12.0407

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2139	ppb	0.1140	53.3	-22.5062
Al 308.215	24.6237	ppb	1.9437	7.9	224.098
As 188.980	-1.0484	ppb	3.7959	362.1	0.9718
B 249.678	104.253	ppb	0.3770	0.4	603.295
Ba 389.178	102.991	ppb	0.3500	0.3	1108.86
Be 313.042	0.0661	ppb	0.0049	7.4	-91.9271
Ca 370.602	98507	ppb	3.199	0.0	224578
Cd 226.502	-0.1725	ppb	0.1295	75.0	9.8800
Co 228.615	0.9118	ppb	0.1676	18.4	-7.4449
Cr 267.716	0.9979	ppb	0.0955	9.6	47.0700
Cu 324.754	4.7038	ppb	0.1945	4.1	388.026
Fe 271.441	639.026	ppb	5.0892	0.8	554.032
K 766.491	1299.15	ppb	0.3343	0.0	35675.6
Mg 279.078	29846.3	ppb	23.0704	0.1	43026.4
Mn 257.610	74.2186	ppb	0.0544	0.1	8282.91
Mo 202.032	1.4176	ppb	0.7420	52.3	7.4103
Na 330.237	19539.1	ppb	42.2591	0.2	572.593
Ni 231.604	0.5711	ppb	1.3106	229.5	-1.4747
Pb 220.353	1.7521	ppb	1.0297	58.8	7.7124
Sb 206.834	-10.1857	ppb	7.4361	73.0	7.0559
Se 196.026	7.4110	ppb	8.8127	118.9	3.4431
Si 288.158	5375.76	ppb	4.0701	0.1	26081.8

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	0.1593	ppb	4.1710	2619.1	-0.2070
Sr 216.596	302.269	ppb	0.5556	0.2	1286.94
Ti 334.941	-0.1559	ppb	0.0683	43.8	51.8325
Tl 190.794	1.8024	ppb	3.1962	177.3	-9.5149
V 292.401	0.7789	ppb	0.1370	17.6	8.8927
Zn 206.200	15.9606	ppb	3.5028	21.9	5.4807

680-162182-B-3-A (Samp) **12/19/2018, 12:01:40 AM** **Rack 2, Tube 47**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates		Concentration
Ag 328.068	-0.0502u	0.4072	-0.4558u
Al 308.215	-5.5851u	-1.2958u	-0.7808u
As 188.980	2.6481	-1.0910u	-0.3366u
B 249.678	1.3350	1.3493	1.6567
Ba 389.178	1.2168	-0.3817u	0.8796
Be 313.042	-0.0462u	-0.0327u	-0.0406u
Ca 370.602	8.619	12.77	9.186
Cd 226.502	-0.2150u	-0.3493u	-0.2407u
Co 228.615	0.3313	-0.2155u	-0.1413u
Cr 267.716	-0.2942u	-0.3063u	0.1977
Cu 324.754	0.0813	-0.4615u	-0.7845u
Fe 271.441	-3.5853u	9.7955	7.4980
K 766.491	20.2900	21.0408	21.1777
Mg 279.078	-0.7403u	1.2368	3.0494
Mn 257.610	0.1006	0.1115	0.0069
Mo 202.032	-0.6009u	-1.2420u	-1.7873u
Na 330.237	-58.8701u	173.453	-213.257u
Ni 231.604	0.3003	-0.6547u	-1.7657u
Pb 220.353	-1.0208u	0.4955	0.8769
Sb 206.834	-6.0448u	-6.6183u	4.1988
Se 196.026	-10.9628u	-0.4542u	-5.9936u
Si 288.158	4.4450	1.9291	2.8289
Sn 189.925	2.1771	-0.5644u	6.2595
Sr 216.596	0.0273	-0.5403u	0.5093
Ti 334.941	0.1566	0.1747	0.0508
Tl 190.794	1.7192	-6.6929u	3.0994
V 292.401	0.0321	-0.0261u	0.0807
Zn 206.200	-0.7540u	0.8323	-4.1491u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0329	ppb	0.4318	1311.7	-30.2286
Al 308.215	-2.5539	ppb	2.6377	103.3	155.879
As 188.980	0.4068	ppb	1.9773	486.0	1.3549
B 249.678	1.4470	ppb	0.1818	12.6	-88.0968
Ba 389.178	0.5716	ppb	0.8426	147.4	-57.7194
Be 313.042	-0.0398	ppb	0.0068	17.1	-193.922
Ca 370.602	10.19	ppb	2.253	22.1	60.50
Cd 226.502	-0.2683	ppb	0.0713	26.6	7.6978
Co 228.615	-0.0085	ppb	0.2966	3490.7	-12.0742
Cr 267.716	-0.1342	ppb	0.2875	214.2	20.4034
Cu 324.754	-0.3882	ppb	0.4375	112.7	186.931
Fe 271.441	4.5694	ppb	7.1550	156.6	31.3977
K 766.491	20.8362	ppb	0.4779	2.3	836.097

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1.1820	ppb	1.8954	160.4	32.7967
Mn 257.610	0.0730	ppb	0.0575	78.8	29.3319
Mo 202.032	-1.2101	ppb	0.5939	49.1	1.5006
Na 330.237	-32.8913	ppb	194.659	591.8	56.8849
Ni 231.604	-0.7067	ppb	1.0340	146.3	-3.2494
Pb 220.353	0.1172	ppb	1.0038	856.3	6.7464
Sb 206.834	-2.8214	ppb	6.0865	215.7	10.3647
Se 196.026	-5.8035	ppb	5.2569	90.6	0.9204
Si 288.158	3.0676	ppb	1.2748	41.6	297.934
Sn 189.925	2.6241	ppb	3.4338	130.9	0.5894
Sr 216.596	-0.0012	ppb	0.5253	42409.4	9.7546
Ti 334.941	0.1274	ppb	0.0669	52.6	-20.2423
Tl 190.794	-0.6248	ppb	5.3003	848.4	-10.5311
V 292.401	0.0289	ppb	0.0535	185.2	-2.0571
Zn 206.200	-1.3569	ppb	2.5449	187.5	-0.7520

680-162184-C-16-A (Samp) **12/19/2018, 12:06:05 AM** **Rack 2, Tube 48**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3827u	0.3026	0.1183
Al 308.215	7.0763	8.0389	7.0184
As 188.980	-2.2744u	2.8708	0.8134
B 249.678	1.5922	1.0463	1.6083
Ba 389.178	-0.2936u	-0.0284u	1.5699
Be 313.042	-0.0463u	-0.0471u	-0.0364u
Ca 370.602	122.5	123.6	126.8
Cd 226.502	-0.1918u	-0.1401u	-0.1903u
Co 228.615	0.2990	-0.0882u	-0.1432u
Cr 267.716	-0.4377u	-0.1236u	0.1100
Cu 324.754	0.1232	-0.3264u	0.0826
Fe 271.441	5.7225	5.3062	7.9080
K 766.491	16.9961	16.9813	16.3275
Mg 279.078	4.6477	6.3771	7.0155
Mn 257.610	0.3035	0.1496	0.1727
Mo 202.032	-0.6624u	-1.4690u	-0.6155u
Na 330.237	427.526	491.214	181.126
Ni 231.604	-0.3700u	-0.2759u	-1.4181u
Pb 220.353	-0.5913u	2.4566	-5.8793u
Sb 206.834	-8.9825u	-1.6338u	-2.2540u
Se 196.026	-3.8793u	-0.7252u	18.6332
Si 288.158	447.823	447.611	448.493
Sn 189.925	-3.3849u	2.9401	5.4893
Sr 216.596	-0.3499u	0.2200	-0.5522u
Ti 334.941	0.0379	0.0589	0.1120
Tl 190.794	-2.4914u	1.7978	-2.7291u
V 292.401	-0.2047u	0.1520	-0.4011u
Zn 206.200	6.0361	0.1205	-0.3417u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0127	ppb	0.3546	2787.4	-28.5371
Al 308.215	7.3779	ppb	0.5732	7.8	180.771
As 188.980	0.4699	ppb	2.5897	551.1	1.3716
B 249.678	1.4156	ppb	0.3199	22.6	-88.3146

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.4160	ppb	1.0081	242.3	-59.4390
Be 313.042	-0.0433	ppb	0.0060	13.8	-196.803
Ca 370.602	124.3	ppb	2.246	1.8	320.6
Cd 226.502	-0.1741	ppb	0.0295	16.9	9.2413
Co 228.615	0.0225	ppb	0.2410	1069.2	-11.9201
Cr 267.716	-0.1504	ppb	0.2748	182.7	20.0322
Cu 324.754	-0.0402	ppb	0.2487	618.0	200.665
Fe 271.441	6.3123	ppb	1.3976	22.1	32.8354
K 766.491	16.7683	ppb	0.3818	2.3	725.231
Mg 279.078	6.0134	ppb	1.2250	20.4	39.7535
Mn 257.610	0.2086	ppb	0.0830	39.8	44.1920
Mo 202.032	-0.9156	ppb	0.4798	52.4	2.1639
Na 330.237	366.622	ppb	163.770	44.7	67.4181
Ni 231.604	-0.6880	ppb	0.6340	92.2	-3.2235
Pb 220.353	-1.3380	ppb	4.2178	315.2	5.8933
Sb 206.834	-4.2901	ppb	4.0755	95.0	9.7056
Se 196.026	4.6762	ppb	12.1895	260.7	2.9169
Si 288.158	447.976	ppb	0.4608	0.1	2433.30
Sn 189.925	1.6815	ppb	4.5690	271.7	0.2839
Sr 216.596	-0.2274	ppb	0.4004	176.1	8.7957
Ti 334.941	0.0696	ppb	0.0382	55.0	-27.1541
Tl 190.794	-1.1409	ppb	2.5477	223.3	-10.7463
V 292.401	-0.1513	ppb	0.2804	185.4	-4.6755
Zn 206.200	1.9383	ppb	3.5563	183.5	0.4339

x (Samp) **12/19/2018, 12:10:29 AM** **Rack 2, Tube 49**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.6150	11.0887	9.8967
Al 308.215	206.769	207.636	206.775
As 188.980	15.2704	28.0234	17.6127
B 249.678	109.323	108.265	108.212
Ba 389.178	9.6751	12.1877	12.3742
Be 313.042	4.4587	4.4707	4.4605
Ca 370.602	555.5	554.8	556.6
Cd 226.502	5.4750	5.8435	5.1609
Co 228.615	10.5386	11.0988	10.5557
Cr 267.716	10.7390	10.9380	10.7689
Cu 324.754	21.1315	21.8203	21.3452
Fe 271.441	55.9177	60.7359	66.1633
K 766.491	1043.80	1042.26	1039.71
Mg 279.078	551.559	551.454	552.337
Mn 257.610	11.3070	11.1901	11.1920
Mo 202.032	10.0339	8.1811	9.5507
Na 330.237	1182.17	1050.06	1029.77
Ni 231.604	44.3571	43.6792	43.2594
Pb 220.353	7.3007	9.9673	6.5474
Sb 206.834	15.2949	21.6889	14.2675
Se 196.026	24.1043	19.2173	14.0092
Si 288.158	114.507	116.302	115.303
Sn 189.925	52.2071	57.2413	60.1868
Sr 216.596	10.9620	11.5047	11.1976
Ti 334.941	10.7938	11.0469	10.9547

Label	Replicates Concentration		
Tl 190.794	29.7399	32.7653	20.7422
V 292.401	10.5817	10.2870	10.9216
Zn 206.200	22.6375	21.5003	22.5737

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.8668	ppb	0.8803	8.1	373.731
Al 308.215	207.060	ppb	0.4992	0.2	681.814
As 188.980	20.3022	ppb	6.7886	33.4	6.6019
B 249.678	108.600	ppb	0.6268	0.6	633.147
Ba 389.178	11.4123	ppb	1.5074	13.2	63.2013
Be 313.042	4.4633	ppb	0.0065	0.1	3546.74
Ca 370.602	555.6	ppb	0.8648	0.2	1304
Cd 226.502	5.4931	ppb	0.3416	6.2	101.798
Co 228.615	10.7310	ppb	0.3186	3.0	41.9386
Cr 267.716	10.8153	ppb	0.1073	1.0	274.617
Cu 324.754	21.4323	ppb	0.3526	1.6	1047.98
Fe 271.441	60.9390	ppb	5.1258	8.4	78.4850
K 766.491	1041.92	ppb	2.0673	0.2	28665.0
Mg 279.078	551.783	ppb	0.4821	0.1	825.819
Mn 257.610	11.2297	ppb	0.0670	0.6	1252.10
Mo 202.032	9.2552	ppb	0.9611	10.4	25.0749
Na 330.237	1087.33	ppb	82.7558	7.6	86.3462
Ni 231.604	43.7652	ppb	0.5539	1.3	58.5459
Pb 220.353	7.9385	ppb	1.7969	22.6	11.3218
Sb 206.834	17.0837	ppb	4.0211	23.5	19.2253
Se 196.026	19.1103	ppb	5.0484	26.4	5.6676
Si 288.158	115.370	ppb	0.8992	0.8	843.830
Sn 189.925	56.5450	ppb	4.0351	7.1	18.0640
Sr 216.596	11.2214	ppb	0.2722	2.4	56.6564
Ti 334.941	10.9318	ppb	0.1281	1.2	1275.57
Tl 190.794	27.7491	ppb	6.2539	22.5	1.3010
V 292.401	10.5968	ppb	0.3175	3.0	150.509
Zn 206.200	22.2372	ppb	0.6390	2.9	7.7351

Cont Calib Verif (CCV) **12/19/2018, 12:14:54 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	495.468	488.988	487.199
Al 308.215	9707.81	9701.00	9705.28
As 188.980	493.461	499.040	498.974
B 249.678	493.678	495.588	496.593
Ba 389.178	485.874	485.219	486.058
Be 313.042	517.912	517.713	516.814
Ca 370.602	9998	9975	9981
Cd 226.502	510.280	508.785	508.852
Co 228.615	502.457	503.071	502.079
Cr 267.716	502.021	502.289	502.405
Cu 324.754	489.975	481.388	482.779
Fe 271.441	10042.0	10042.6	10029.6
K 766.491	9590.70	9582.00	9574.84
Mg 279.078	10074.8	10063.5	10053.1
Mn 257.610	496.003	495.982	496.624
Mo 202.032	494.179	493.351	494.777

Label	Replicates Concentration		
Na 330.237	9874.74	9992.89	9702.74
Ni 231.604	500.378	494.916	500.372
Pb 220.353	496.268	499.539	502.854
Sb 206.834	485.742	478.235	480.326
Se 196.026	496.844	482.064	494.933
Si 288.158	5066.91	5053.84	5046.60
Sn 189.925	498.545	494.741	492.247
Sr 216.596	502.248	506.854	504.056
Ti 334.941	501.268	499.666	499.632
Tl 190.794	494.607	479.020	487.213
V 292.401	492.156	491.384	491.364
Zn 206.200	999.991	990.899	996.735

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	490.551	ppb	4.3505	0.9	18150.0	98.11028
Al 308.215	9704.70	ppb	3.4415	0.0	24512.7	97.04697
As 188.980	497.158	ppb	3.2024	0.6	132.314	99.43166
B 249.678	495.286	ppb	1.4806	0.3	3226.02	99.05720
Ba 389.178	485.717	ppb	0.4409	0.1	5341.70	97.14341
Be 313.042	517.479	ppb	0.5853	0.1	429731	103.49590
Ca 370.602	9984	ppb	11.73	0.1	22801	99.84490
Cd 226.502	509.306	ppb	0.8444	0.2	8334.14	101.86116
Co 228.615	502.536	ppb	0.5009	0.1	2516.05	100.50715
Cr 267.716	502.238	ppb	0.1968	0.0	11684.4	100.44765
Cu 324.754	484.714	ppb	4.6091	1.0	19335.2	96.94279
Fe 271.441	10038.1	ppb	7.3609	0.1	8325.97	100.33054
K 766.491	9582.51	ppb	7.9432	0.1	261432	95.82515
Mg 279.078	10063.8	ppb	10.8196	0.1	14521.3	100.63788
Mn 257.610	496.203	ppb	0.3646	0.1	54340.9	99.24061
Mo 202.032	494.103	ppb	0.7161	0.1	1117.13	98.82053
Na 330.237	9856.79	ppb	145.904	1.5	313.758	98.56790
Ni 231.604	498.555	ppb	3.1519	0.6	690.072	99.71104
Pb 220.353	499.554	ppb	3.2929	0.7	299.110	99.91076
Sb 206.834	481.435	ppb	3.8740	0.8	224.432	96.28692
Se 196.026	491.280	ppb	8.0390	1.6	95.6354	98.25609
Si 288.158	5055.78	ppb	10.2942	0.2	24682.0	101.11561
Sn 189.925	495.178	ppb	3.1719	0.6	160.215	99.03559
Sr 216.596	504.386	ppb	2.3205	0.5	2131.95	100.87724
Ti 334.941	500.188	ppb	0.9347	0.2	59899.8	100.03770
Tl 190.794	486.947	ppb	7.7970	1.6	192.916	97.38939
V 292.401	491.634	ppb	0.4518	0.1	7095.67	98.32689
Zn 206.200	995.875	ppb	4.6067	0.5	357.965	99.58751

Cont Calib Blank (CCB) **12/19/2018, 12:19:19 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0898u	-0.0008u	-0.2032u
Al 308.215	-0.6694u	0.8861	-1.2844u
As 188.980	6.4367	-1.2355u	-0.7478u
B 249.678	4.5147	4.6169	3.6543
Ba 389.178	0.6145	0.1706	0.0988
Be 313.042	0.0415	0.0277	0.0325
Ca 370.602	5.692	4.630	-2.496u

Label	Replicates Concentration		
Cd 226.502	-0.1374u	0.0837	0.1227
Co 228.615	0.2928	0.4674	0.5856
Cr 267.716	-0.0550u	-0.0573u	-0.0889u
Cu 324.754	-0.8886u	0.4822	-0.2331u
Fe 271.441	4.1593	11.9031	10.5471
K 766.491	1.8789	1.8888	2.2050
Mg 279.078	3.0081	-2.6727u	-2.4038u
Mn 257.610	0.1924	0.0327	0.1195
Mo 202.032	-0.7445u	-0.1315u	-0.6110u
Na 330.237	-106.345u	147.457	9.2559
Ni 231.604	0.8005	0.0548	1.1905
Pb 220.353	-0.5393u	-0.3427u	-3.7106u
Sb 206.834	-6.8819u	-13.0739u	-5.3667u
Se 196.026	0.6165	-1.6280u	5.7014
Si 288.158	1.7725	2.6824	1.6797
Sn 189.925	6.3059	4.4704	-3.4211u
Sr 216.596	0.0422	0.3219	0.4073
Ti 334.941	0.1751	0.0866	0.1368
Tl 190.794	-0.3530u	9.2515	-2.3716u
V 292.401	0.2895	-0.1527u	-0.1960u
Zn 206.200	-2.4249u	-1.4832u	-2.3270u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0980	ppb	0.1015	103.6	-32.6429	-0.09797
Al 308.215	-0.3559	ppb	1.1187	314.4	161.395	-0.35587
As 188.980	1.4845	ppb	4.2957	289.4	1.6392	1.48447
B 249.678	4.2620	ppb	0.5287	12.4	-69.1594	4.26197
Ba 389.178	0.2946	ppb	0.2793	94.8	-60.7911	0.29463
Be 313.042	0.0339	ppb	0.0070	20.7	-132.729	0.03389
Ca 370.602	2.609	ppb	4.453	170.7	43.19	2.60858
Cd 226.502	0.0230	ppb	0.1403	609.8	12.4625	0.02301
Co 228.615	0.4486	ppb	0.1473	32.8	-9.7811	0.44858
Cr 267.716	-0.0671	ppb	0.0189	28.2	21.9644	-0.06709
Cu 324.754	-0.2132	ppb	0.6857	321.7	193.853	-0.21316
Fe 271.441	8.8698	ppb	4.1354	46.6	34.9662	8.86984
K 766.491	1.9909	ppb	0.1855	9.3	322.484	1.99089
Mg 279.078	-0.6895	ppb	3.2050	464.9	30.0999	-0.68946
Mn 257.610	0.1149	ppb	0.0800	69.6	33.9089	0.11488
Mo 202.032	-0.4957	ppb	0.3224	65.0	3.1100	-0.49566
Na 330.237	16.7892	ppb	127.069	756.9	58.1953	16.78916
Ni 231.604	0.6819	ppb	0.5771	84.6	-1.3201	0.68190
Pb 220.353	-1.5309	ppb	1.8902	123.5	5.7800	-1.53086
Sb 206.834	-8.4408	ppb	4.0833	48.4	7.8400	-8.44083
Se 196.026	1.5633	ppb	3.7553	240.2	2.3238	1.56331
Si 288.158	2.0449	ppb	0.5540	27.1	293.215	2.04486
Sn 189.925	2.4517	ppb	5.1682	210.8	0.5335	2.45170
Sr 216.596	0.2572	ppb	0.1910	74.3	10.8257	0.25715
Ti 334.941	0.1328	ppb	0.0444	33.4	-19.5981	0.13284
Tl 190.794	2.1756	ppb	6.2104	285.5	-9.3649	2.17562
V 292.401	-0.0197	ppb	0.2687	1361.9	-2.8018	-0.01973
Zn 206.200	-2.0784	ppb	0.5177	24.9	-1.0116	-2.07838

MB 680-551782/1-A (Samp) **12/19/2018, 12:23:42 AM** **Rack 3, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1976	0.3620	0.1751
Al 308.215	-0.8896u	-2.3714u	-1.9367u
As 188.980	-0.0392u	-2.7788u	3.3356
B 249.678	1.9414	2.5002	1.7086
Ba 389.178	0.6208	1.4017	1.5523
Be 313.042	-0.0471u	-0.0335u	-0.0386u
Ca 370.602	0.9612	5.141	5.242
Cd 226.502	-0.1500u	0.0668	0.1023
Co 228.615	0.2257	-0.3836u	0.1152
Cr 267.716	-0.4174u	-0.3515u	-0.3510u
Cu 324.754	-0.1636u	-0.1581u	-0.1183u
Fe 271.441	8.3805	0.1116	3.0481
K 766.491	2.5505	2.5156	1.8525
Mg 279.078	-0.1972u	-6.1608u	-4.0997u
Mn 257.610	0.4145	0.3763	0.4899
Mo 202.032	-0.0159u	-0.7463u	0.1242
Na 330.237	-90.2994u	16.6274	171.589
Ni 231.604	0.4970	0.9251	2.2379
Pb 220.353	-5.5348u	-0.5145u	2.2680
Sb 206.834	-5.2177u	-5.2013u	-6.2941u
Se 196.026	0.4273	1.9825	-4.5233u
Si 288.158	0.1549	0.3563	-0.9132u
Sn 189.925	4.6618	1.7094	-0.7177u
Sr 216.596	-0.2137u	-1.2041u	-0.4847u
Ti 334.941	0.0206	0.1149	0.0694
Tl 190.794	-4.7326u	-4.3479u	-2.4693u
V 292.401	0.3504	-0.2824u	0.1045
Zn 206.200	2.3506	3.4524	7.4090

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2449	ppb	0.1020	41.7	-19.9290
Al 308.215	-1.7326	ppb	0.7617	44.0	157.949
As 188.980	0.1725	ppb	3.0627	1775.0	1.2931
B 249.678	2.0501	ppb	0.4068	19.8	-84.0425
Ba 389.178	1.1916	ppb	0.5000	42.0	-50.8410
Be 313.042	-0.0397	ppb	0.0069	17.3	-193.899
Ca 370.602	3.781	ppb	2.443	64.6	45.88
Cd 226.502	0.0064	ppb	0.1366	2144.9	12.1856
Co 228.615	-0.0142	ppb	0.3246	2284.1	-12.1118
Cr 267.716	-0.3733	ppb	0.0382	10.2	14.8562
Cu 324.754	-0.1467	ppb	0.0247	16.9	196.476
Fe 271.441	3.8467	ppb	4.1919	109.0	30.8007
K 766.491	2.3062	ppb	0.3933	17.1	331.077
Mg 279.078	-3.4859	ppb	3.0288	86.9	26.0687
Mn 257.610	0.4269	ppb	0.0578	13.5	67.9988
Mo 202.032	-0.2127	ppb	0.4674	219.7	3.7475
Na 330.237	32.6390	ppb	131.677	403.4	58.6095
Ni 231.604	1.2200	ppb	0.9071	74.4	-0.5716
Pb 220.353	-1.2605	ppb	3.9545	313.7	5.9387
Sb 206.834	-5.5710	ppb	0.6263	11.2	9.1252
Se 196.026	-0.7045	ppb	3.3974	482.2	1.8918
Si 288.158	-0.1340uv	ppb	0.6822	509.1	282.852

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.8845	ppb	2.6941	143.0	0.3497
Sr 216.596	-0.6342	ppb	0.5119	80.7	7.0595
Ti 334.941	0.0683	ppb	0.0472	69.1	-27.3427
Tl 190.794	-3.8499	ppb	1.2111	31.5	-11.8747
V 292.401	0.0575	ppb	0.3190	554.6	-1.6846
Zn 206.200	4.4040	ppb	2.6601	60.4	1.3213

LCS 680-551782/2-A (Samp) **12/19/2018, 12:28:07 AM** **Rack 3, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.5133	51.3784	50.9947
Al 308.215	4858.04	4863.63	4853.67
As 188.980	100.622	97.9132	98.8115
B 249.678	198.939	200.266	199.650
Ba 389.178	97.9648	99.0560	97.0544
Be 313.042	51.8470	51.9185	51.9320
Ca 370.602	4968	4969	4966
Cd 226.502	51.7745	52.5401	52.3199
Co 228.615	51.1113	51.4671	51.3165
Cr 267.716	101.981	102.360	102.059
Cu 324.754	98.4309	98.2922	96.8681
Fe 271.441	5047.96	5080.59	5074.01
K 766.491	7706.63	7695.82	7703.37
Mg 279.078	5030.12	5049.34	5055.82
Mn 257.610	500.923	500.299	501.020
Mo 202.032	100.610	99.9083	100.262
Na 330.237	5000.68	4714.68	5298.62
Ni 231.604	99.6383	100.730	99.9187
Pb 220.353	507.812	508.451	494.510
Sb 206.834	42.1531	43.5128	45.6069
Se 196.026	87.4837	96.8628	99.6686
Si 288.158	-8.3880u	-6.8553u	-4.3129
Sn 189.925	99.7713	99.0368	98.5363
Sr 216.596	100.290	100.963	101.198
Ti 334.941	100.480	100.835	100.515
Tl 190.794	39.7115	45.7378	43.1203
V 292.401	98.9901	99.6242	99.5532
Zn 206.200	98.1470	93.4339	102.336

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9621	ppb	0.4335	0.9	1859.50
Al 308.215	4858.45	ppb	4.9883	0.1	12346.1
As 188.980	99.1156	ppb	1.3798	1.4	27.3833
B 249.678	199.618	ppb	0.6639	0.3	1240.79
Ba 389.178	98.0250	ppb	1.0022	1.0	1030.86
Be 313.042	51.8992	ppb	0.0457	0.1	42952.0
Ca 370.602	4968	ppb	1.365	0.0	11363
Cd 226.502	52.2115	ppb	0.3942	0.8	868.546
Co 228.615	51.2983	ppb	0.1786	0.3	246.078
Cr 267.716	102.134	ppb	0.2003	0.2	2396.07
Cu 324.754	97.8637	ppb	0.8650	0.9	4065.92
Fe 271.441	5067.52	ppb	17.2567	0.3	4204.97
K 766.491	7701.94	ppb	5.5444	0.1	210179

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5045.09	ppb	13.3637	0.3	7292.43
Mn 257.610	500.747	ppb	0.3913	0.1	54800.1
Mo 202.032	100.260	ppb	0.3511	0.4	230.004
Na 330.237	5004.66	ppb	291.991	5.8	188.826
Ni 231.604	100.096	ppb	0.5669	0.6	136.790
Pb 220.353	503.591	ppb	7.8707	1.6	301.826
Sb 206.834	43.7576	ppb	1.7399	4.0	30.6709
Se 196.026	94.6717	ppb	6.3811	6.7	20.0939
Si 288.158	-6.5188uv	ppb	2.0583	31.6	279.848
Sn 189.925	99.1148	ppb	0.6212	0.6	31.8603
Sr 216.596	100.817	ppb	0.4713	0.5	434.669
Ti 334.941	100.610	ppb	0.1959	0.2	12030.9
Tl 190.794	42.8565	ppb	3.0218	7.1	7.6412
V 292.401	99.3892	ppb	0.3474	0.3	1433.09
Zn 206.200	97.9722	ppb	4.4534	4.5	34.9649

680-162184-D-16-A (Samp) **12/19/2018, 12:32:31 AM** **Rack 3, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.6133	0.4002	-0.5186u
Al 308.215	6.7685	5.8768	5.3248
As 188.980	0.0493	0.5333	-0.1808u
B 249.678	1.1414	2.5303	1.9270
Ba 389.178	1.9866	1.0756	0.3405
Be 313.042	-0.0373u	-0.0321u	-0.0486u
Ca 370.602	119.7	120.5	118.4
Cd 226.502	-0.2776u	-0.2301u	-0.0670u
Co 228.615	0.3070	0.1469	-0.1425u
Cr 267.716	0.1997	-0.0926u	-0.0925u
Cu 324.754	-0.3033u	0.6360	0.0452
Fe 271.441	1.5510	10.3822	-2.5674u
K 766.491	16.2860	16.6154	16.8099
Mg 279.078	3.6925	5.1157	6.6409
Mn 257.610	0.1741	0.1734	0.1333
Mo 202.032	-0.2810u	0.2327	-1.8907u
Na 330.237	373.931	357.488	315.103
Ni 231.604	1.3359	0.2219	0.8067
Pb 220.353	-1.5925u	-1.1576u	6.1890
Sb 206.834	-6.0733u	-1.0555u	-4.3321u
Se 196.026	-19.1269u	-5.9791u	3.7329
Si 288.158	430.566	429.003	426.292
Sn 189.925	6.0680	2.3669	3.4909
Sr 216.596	-0.3038u	0.2010	0.5041
Ti 334.941	0.0765	-0.0127u	0.1765
Tl 190.794	2.7725	-2.0908u	-1.8500u
V 292.401	0.3760	0.0296	-0.2165u
Zn 206.200	0.7187	2.6683	5.2994

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1650	ppb	0.6015	364.6	-22.8944
Al 308.215	5.9901	ppb	0.7285	12.2	177.305
As 188.980	0.1339	ppb	0.3645	272.1	1.2829
B 249.678	1.8663	ppb	0.6964	37.3	-85.2815

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1.1343	ppb	0.8246	72.7	-51.4683
Be 313.042	-0.0393	ppb	0.0084	21.4	-193.547
Ca 370.602	119.5	ppb	1.063	0.9	309.7
Cd 226.502	-0.1916	ppb	0.1105	57.7	8.9560
Co 228.615	0.1038	ppb	0.2278	219.5	-11.5161
Cr 267.716	0.0048	ppb	0.1687	3488.7	23.6358
Cu 324.754	0.1260	ppb	0.4748	377.0	207.229
Fe 271.441	3.1219	ppb	6.6162	211.9	30.2085
K 766.491	16.5705	ppb	0.2648	1.6	719.839
Mg 279.078	5.1497	ppb	1.4745	28.6	38.5096
Mn 257.610	0.1602	ppb	0.0234	14.6	38.8918
Mo 202.032	-0.6463	ppb	1.1078	171.4	2.7706
Na 330.237	348.841	ppb	30.3521	8.7	66.9465
Ni 231.604	0.7882	ppb	0.5572	70.7	-1.1719
Pb 220.353	1.1463	ppb	4.3726	381.4	7.3494
Sb 206.834	-3.8203	ppb	2.5478	66.7	9.9124
Se 196.026	-7.1244	ppb	11.4728	161.0	0.6687
Si 288.158	428.620	ppb	2.1621	0.5	2340.49
Sn 189.925	3.9753	ppb	1.8975	47.7	1.0273
Sr 216.596	0.1338	ppb	0.4081	305.1	10.3030
Ti 334.941	0.0801	ppb	0.0947	118.1	-25.8978
Tl 190.794	-0.3894	ppb	2.7409	703.8	-10.4334
V 292.401	0.0630	ppb	0.2977	472.3	-1.5973
Zn 206.200	2.8955	ppb	2.2988	79.4	0.7783

680-162184-D-16-Asd (Samp) **12/19/2018, 12:36:56 AM** **Rack 3, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4011u	0.7262	0.1411
Al 308.215	-0.4658u	-0.1796u	-0.3576u
As 188.980	-3.5943u	3.6166	0.1210
B 249.678	1.2673	0.9209	-0.2634u
Ba 389.178	1.3691	2.0228	-0.3540u
Be 313.042	-0.0369u	-0.0372u	-0.0331u
Ca 370.602	20.51	20.61	20.29
Cd 226.502	-0.2076u	-0.0455u	0.0333
Co 228.615	-0.3728u	0.2987	0.1745
Cr 267.716	-0.4215u	-0.2516u	-0.4898u
Cu 324.754	0.1145	0.0121	-0.2942u
Fe 271.441	3.9245	4.8730	1.5909
K 766.491	3.7715	3.8482	3.2155
Mg 279.078	4.8687	-0.8858u	2.4151
Mn 257.610	0.1668	0.2042	0.2163
Mo 202.032	-1.0017u	-0.9559u	0.1405
Na 330.237	-175.162u	129.587	124.415
Ni 231.604	2.0739	-0.3022u	-0.3785u
Pb 220.353	-5.5390u	2.0593	1.6247
Sb 206.834	-2.1702u	-3.9815u	-7.6654u
Se 196.026	-3.0652u	-9.2101u	-1.6931u
Si 288.158	87.6322	86.3302	87.1593
Sn 189.925	-2.7388u	-3.5584u	-1.0279u
Sr 216.596	0.3836	0.0560	0.2639
Ti 334.941	-0.0384u	0.0293	-0.0423u

Label	Replicates Concentration		
Tl 190.794	-1.7420u	6.1168	-6.5766u
V 292.401	-0.2452u	0.2099	-0.0371u
Zn 206.200	-1.3363u	-0.1822u	1.2203

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1554	ppb	0.5638	362.8	-23.2472
Al 308.215	-0.3343	ppb	0.1445	43.2	161.445
As 188.980	0.0478	ppb	3.6060	7549.2	1.2602
B 249.678	0.6416	ppb	0.8027	125.1	-93.5212
Ba 389.178	1.0126	ppb	1.2278	121.3	-52.8235
Be 313.042	-0.0357	ppb	0.0023	6.5	-190.548
Ca 370.602	20.47	ppb	0.1619	0.8	83.93
Cd 226.502	-0.0733	ppb	0.1228	167.6	10.8842
Co 228.615	0.0335	ppb	0.3573	1068.0	-11.8677
Cr 267.716	-0.3876	ppb	0.1227	31.6	14.5228
Cu 324.754	-0.0559	ppb	0.2127	380.5	200.051
Fe 271.441	3.4628	ppb	1.6890	48.8	30.4933
K 766.491	3.6118	ppb	0.3453	9.6	366.659
Mg 279.078	2.1327	ppb	2.8876	135.4	34.1646
Mn 257.610	0.1958	ppb	0.0258	13.2	42.7533
Mo 202.032	-0.6057	ppb	0.6467	106.8	2.8622
Na 330.237	26.2801	ppb	174.473	663.9	58.4497
Ni 231.604	0.4644	ppb	1.3944	300.3	-1.6220
Pb 220.353	-0.6183	ppb	4.2669	690.1	6.3151
Sb 206.834	-4.6057	ppb	2.8003	60.8	9.5605
Se 196.026	-4.6561	ppb	4.0031	86.0	1.1390
Si 288.158	87.0406	ppb	0.6591	0.8	700.770
Sn 189.925	-2.4417	ppb	1.2911	52.9	-1.0523
Sr 216.596	0.2345	ppb	0.1657	70.7	10.7321
Ti 334.941	-0.0171	ppb	0.0402	234.8	-37.5494
Tl 190.794	-0.7340	ppb	6.4065	872.9	-10.5766
V 292.401	-0.0242	ppb	0.2278	942.9	-2.8407
Zn 206.200	-0.0994	ppb	1.2803	1288.1	-0.2993

680-162184-D-16-Apds (Samp) **12/19/2018, 12:41:20 AM** **Rack 3, Tube 5**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.2368	50.8399	50.6906
Al 308.215	5011.78	5015.10	5011.35
As 188.980	96.0431	99.6424	101.771
B 249.678	202.738	205.479	205.565
Ba 389.178	102.797	102.033	102.105
Be 313.042	53.3531	53.3593	53.4271
Ca 370.602	5235	5233	5244
Cd 226.502	53.1292	53.4312	53.7067
Co 228.615	52.2267	53.1924	53.0186
Cr 267.716	105.406	105.065	104.955
Cu 324.754	100.675	100.334	101.215
Fe 271.441	5230.76	5223.51	5224.37
K 766.491	7966.46	7961.37	7957.82
Mg 279.078	5174.98	5150.56	5169.12
Mn 257.610	516.492	515.588	515.291
Mo 202.032	104.191	102.916	102.227

Label	Replicates Concentration		
Na 330.237	5478.01	5325.53	5123.86
Ni 231.604	103.844	107.926	105.717
Pb 220.353	518.110	520.021	512.606
Sb 206.834	44.9757	42.0399	41.1834
Se 196.026	89.9240	97.4754	100.292
Si 288.158	432.160	430.089	432.477
Sn 189.925	100.298	105.800	98.5963
Sr 216.596	106.236	103.938	105.548
Ti 334.941	103.466	103.495	103.735
Tl 190.794	44.2665	32.3136	36.9738
V 292.401	101.816	102.092	102.228
Zn 206.200	104.241	105.727	102.818

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9224	ppb	0.2823	0.6	1858.01
Al 308.215	5012.74	ppb	2.0552	0.0	12733.0
As 188.980	99.1522	ppb	2.8953	2.9	27.3925
B 249.678	204.594	ppb	1.6080	0.8	1274.12
Ba 389.178	102.312	ppb	0.4216	0.4	1078.62
Be 313.042	53.3798	ppb	0.0411	0.1	44181.9
Ca 370.602	5237	ppb	5.713	0.1	11977
Cd 226.502	53.4224	ppb	0.2889	0.5	888.444
Co 228.615	52.8126	ppb	0.5148	1.0	253.698
Cr 267.716	105.142	ppb	0.2352	0.2	2465.96
Cu 324.754	100.741	ppb	0.4442	0.4	4179.53
Fe 271.441	5226.21	ppb	3.9605	0.1	4335.78
K 766.491	7961.88	ppb	4.3429	0.1	217263
Mg 279.078	5164.89	ppb	12.7507	0.2	7464.81
Mn 257.610	515.790	ppb	0.6255	0.1	56445.5
Mo 202.032	103.111	ppb	0.9968	1.0	236.424
Na 330.237	5309.13	ppb	177.644	3.3	196.820
Ni 231.604	105.829	ppb	2.0434	1.9	144.757
Pb 220.353	516.912	ppb	3.8498	0.7	309.634
Sb 206.834	42.7330	ppb	1.9889	4.7	30.1944
Se 196.026	95.8970	ppb	5.3610	5.6	20.3282
Si 288.158	431.575	ppb	1.2966	0.3	2382.98
Sn 189.925	101.565	ppb	3.7653	3.7	32.6543
Sr 216.596	105.241	ppb	1.1798	1.1	453.315
Ti 334.941	103.565	ppb	0.1476	0.1	12385.2
Tl 190.794	37.8513	ppb	6.0246	15.9	5.5578
V 292.401	102.046	ppb	0.2097	0.2	1471.45
Zn 206.200	104.262	ppb	1.4543	1.4	37.2276

680-162184-D-16-B MS (Samp) **12/19/2018, 12:45:45 AM** **Rack 3, Tube 6**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	49.0747	50.2013	49.1152
Al 308.215	4748.25	4761.96	4755.38
As 188.980	92.1941	95.4761	92.7650
B 249.678	196.013	195.459	195.454
Ba 389.178	95.3758	95.6692	95.6888
Be 313.042	50.6358	50.7345	50.6935
Ca 370.602	4976	4991	4972

Label	Replicates Concentration		
Cd 226.502	50.6120	50.7983	50.4606
Co 228.615	49.0806	49.4936	49.2758
Cr 267.716	99.7243	99.8643	99.9098
Cu 324.754	95.1791	96.1400	95.6773
Fe 271.441	4951.34	4968.97	4970.80
K 766.491	7551.31	7571.31	7565.18
Mg 279.078	4941.59	4956.81	4935.21
Mn 257.610	489.863	490.353	489.208
Mo 202.032	97.6656	98.2682	96.3760
Na 330.237	5310.90	4860.60	5285.08
Ni 231.604	96.7114	99.9874	98.0074
Pb 220.353	486.511	482.967	487.469
Sb 206.834	50.9236	52.2940	35.4606
Se 196.026	94.2685	100.677	100.127
Si 288.158	432.978	431.732	434.929
Sn 189.925	95.1536	97.3431	93.7279
Sr 216.596	99.4353	99.9743	99.1636
Ti 334.941	98.1327	98.4381	98.2611
Tl 190.794	47.5944	33.5857	40.6663
V 292.401	97.1131	96.9798	96.0996
Zn 206.200	96.8568	101.642	103.641

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.4637	ppb	0.6391	1.3	1803.96
Al 308.215	4755.20	ppb	6.8525	0.1	12087.2
As 188.980	93.4784	ppb	1.7534	1.9	25.8963
B 249.678	195.642	ppb	0.3215	0.2	1214.12
Ba 389.178	95.5779	ppb	0.1753	0.2	1003.56
Be 313.042	50.6879	ppb	0.0496	0.1	41945.8
Ca 370.602	4980	ppb	9.976	0.2	11391
Cd 226.502	50.6236	ppb	0.1692	0.3	842.540
Co 228.615	49.2833	ppb	0.2066	0.4	235.946
Cr 267.716	99.8328	ppb	0.0967	0.1	2342.62
Cu 324.754	95.6655	ppb	0.4806	0.5	3979.13
Fe 271.441	4963.70	ppb	10.7481	0.2	4119.33
K 766.491	7562.60	ppb	10.2466	0.1	206381
Mg 279.078	4944.53	ppb	11.0967	0.2	7147.71
Mn 257.610	489.808	ppb	0.5748	0.1	53603.5
Mo 202.032	97.4366	ppb	0.9666	1.0	223.645
Na 330.237	5152.19	ppb	252.857	4.9	192.723
Ni 231.604	98.2354	ppb	1.6499	1.7	134.207
Pb 220.353	485.649	ppb	2.3714	0.5	291.311
Sb 206.834	46.2261	ppb	9.3484	20.2	31.7934
Se 196.026	98.3573	ppb	3.5517	3.6	20.7954
Si 288.158	433.213	ppb	1.6115	0.4	2388.86
Sn 189.925	95.4082	ppb	1.8210	1.9	30.6591
Sr 216.596	99.5244	ppb	0.4127	0.4	429.238
Ti 334.941	98.2773	ppb	0.1533	0.2	11751.2
Tl 190.794	40.6155	ppb	7.0045	17.2	6.7051
V 292.401	96.7309	ppb	0.5507	0.6	1394.69
Zn 206.200	100.713	ppb	3.4863	3.5	35.9521

680-162184-D-16-C MS (Samp) **12/19/2018, 12:50:09 AM** **Rack 3, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.5006	50.8904	50.9560
Al 308.215	4804.80	4792.61	4814.21
As 188.980	100.398	91.1384	92.8948
B 249.678	196.358	197.357	197.032
Ba 389.178	96.8650	97.7570	97.4696
Be 313.042	51.3716	51.3618	51.3226
Ca 370.602	5045	5035	5031
Cd 226.502	51.9241	51.3585	51.3247
Co 228.615	50.2079	49.4475	51.6981
Cr 267.716	101.040	101.434	101.013
Cu 324.754	98.1431	96.5487	98.0531
Fe 271.441	5047.82	5034.08	5019.81
K 766.491	7649.06	7641.24	7654.66
Mg 279.078	5012.30	4994.25	4993.03
Mn 257.610	495.158	494.981	495.693
Mo 202.032	99.3320	100.361	102.232
Na 330.237	5470.32	5328.67	5170.88
Ni 231.604	99.3445	99.7521	100.727
Pb 220.353	492.489	499.453	494.929
Sb 206.834	38.7574	37.4108	47.4765
Se 196.026	80.6910	87.9962	107.854
Si 288.158	434.279	434.457	433.449
Sn 189.925	103.435	93.6434	95.6182
Sr 216.596	99.2724	100.074	101.885
Ti 334.941	99.4635	99.5683	99.4687
Tl 190.794	41.7085	32.6677	38.4006
V 292.401	98.5327	98.4011	98.1273
Zn 206.200	102.476	97.5823	97.0935

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.1156	ppb	0.3350	0.7	1865.18
Al 308.215	4803.87	ppb	10.8295	0.2	12209.3
As 188.980	94.8103	ppb	4.9180	5.2	26.2473
B 249.678	196.916	ppb	0.5096	0.3	1222.63
Ba 389.178	97.3639	ppb	0.4553	0.5	1023.47
Be 313.042	51.3520	ppb	0.0259	0.1	42497.3
Ca 370.602	5037	ppb	7.188	0.1	11521
Cd 226.502	51.5358	ppb	0.3367	0.7	857.483
Co 228.615	50.4512	ppb	1.1449	2.3	241.800
Cr 267.716	101.162	ppb	0.2355	0.2	2373.50
Cu 324.754	97.5816	ppb	0.8957	0.9	4054.79
Fe 271.441	5033.90	ppb	14.0058	0.3	4177.23
K 766.491	7648.32	ppb	6.7408	0.1	208717
Mg 279.078	4999.86	ppb	10.7878	0.2	7227.34
Mn 257.610	495.278	ppb	0.3707	0.1	54201.8
Mo 202.032	100.642	ppb	1.4702	1.5	230.864
Na 330.237	5323.29	ppb	149.796	2.8	197.229
Ni 231.604	99.9411	ppb	0.7102	0.7	136.576
Pb 220.353	495.624	ppb	3.5336	0.7	297.157
Sb 206.834	41.2149	ppb	5.4644	13.3	29.5230
Se 196.026	92.1805	ppb	14.0567	15.2	19.6190
Si 288.158	434.062	ppb	0.5376	0.1	2393.84

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	97.5656	ppb	5.1782	5.3	31.3582
Sr 216.596	100.410	ppb	1.3384	1.3	432.935
Ti 334.941	99.5002	ppb	0.0591	0.1	11897.8
Tl 190.794	37.5923	ppb	4.5743	12.2	5.4466
V 292.401	98.3537	ppb	0.2068	0.2	1418.02
Zn 206.200	99.0504	ppb	2.9763	3.0	35.3532

680-162183-A-10-A (Samp) **12/19/2018, 12:54:34 AM** **Rack 3, Tube 8**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3756u	-0.2688u	-0.0784u
Al 308.215	10.8824	12.3521	7.5704
As 188.980	5.6251	2.6503	-2.0551u
B 249.678	309.910	308.757	310.099
Ba 389.178	957.691	955.260	956.587
Be 313.042	-0.0211	-0.0378	-0.0221
Ca 370.602	248382	244913	249631
Cd 226.502	-0.5757	-0.6273	-0.4886
Co 228.615	-0.1854	-0.2063u	-0.5607u
Cr 267.716	0.8585	1.2278	0.7491
Cu 324.754	-0.6987u	-0.5144u	-0.4465u
Fe 271.441	31036.2	30983.4	30983.6
K 766.491	23083.6	23059.1	23066.1
Mg 279.078	35573.2	35506.8	35495.4
Mn 257.610	2058.47	2052.36	2057.02
Mo 202.032	-0.1532u	0.9615	-0.1619u
Na 330.237	79746.4	80165.5	80101.0
Ni 231.604	1.4460	-0.6330u	2.0105
Pb 220.353	3.9904	-5.9153u	-2.0731u
Sb 206.834	-2.7844u	-8.8380u	-6.9740u
Se 196.026	-0.8518u	-9.2411u	-3.7169u
Si 288.158	29041.3	28980.0	29034.9
Sn 189.925	1.2757	-1.0179u	-1.2284u
Sr 216.596	657.904	655.096	655.323
Ti 334.941	-0.0628	0.0117	-0.1603
Tl 190.794	4.1479	1.5154	-4.3114u
V 292.401	1.8435	2.2409	1.7622
Zn 206.200	5.7808	6.2122	5.1012

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2409	ppb	0.1506	62.5	-43.0562
Al 308.215	10.2683	ppb	2.4493	23.9	189.351
As 188.980	2.0734	ppb	3.8725	186.8	1.8592
B 249.678	309.588	ppb	0.7263	0.2	1954.97
Ba 389.178	956.513	ppb	1.2174	0.1	10597.2
Be 313.042	-0.0270	ppb	0.0094	34.7	-149.600
Ca 370.602	247642	ppb	2444	1.0	564492
Cd 226.502	-0.5639	ppb	0.0701	12.4	26.9475
Co 228.615	-0.3175	ppb	0.2109	66.4	-12.6931
Cr 267.716	0.9451	ppb	0.2508	26.5	54.0018
Cu 324.754	-0.5532	ppb	0.1305	23.6	187.685
Fe 271.441	31001.1	ppb	30.4451	0.1	25561.6
K 766.491	23069.6	ppb	12.6265	0.1	629013

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	35525.1	ppb	42.0362	0.1	51185.4
Mn 257.610	2055.95	ppb	3.1909	0.2	225004
Mo 202.032	0.2155	ppb	0.6461	299.9	4.2274
Na 330.237	80004.3	ppb	225.703	0.3	2163.27
Ni 231.604	0.9412	ppb	1.3922	147.9	-0.9593
Pb 220.353	-1.3327	ppb	4.9942	374.8	6.2167
Sb 206.834	-6.1988	ppb	3.1004	50.0	9.5088
Se 196.026	-4.6033	ppb	4.2643	92.6	1.2480
Si 288.158	29018.7	ppb	33.6705	0.1	139545
Sn 189.925	-0.3235	ppb	1.3890	429.3	-0.3557
Sr 216.596	656.108	ppb	1.5597	0.2	2789.53
Ti 334.941	-0.0704	ppb	0.0862	122.4	80.4885
Tl 190.794	0.4506	ppb	4.3290	960.7	-10.4522
V 292.401	1.9489	ppb	0.2562	13.1	32.8236
Zn 206.200	5.6981	ppb	0.5601	9.8	1.8306

680-162183-B-12-A (Samp) **12/19/2018, 12:58:58 AM** **Rack 3, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1519u	-0.7105u	-0.3855u
Al 308.215	29.7809	28.6716	24.5960
As 188.980	5.8885	2.4072	3.6223
B 249.678	248.006	248.923	248.979
Ba 389.178	202.710	200.719	202.656
Be 313.042	-0.0524	-0.0431	-0.0481
Ca 370.602	345848	345966	345092
Cd 226.502	-0.1077	-0.3759	-0.2200
Co 228.615	4.0181	4.1645	4.0585
Cr 267.716	0.3956	0.7265	0.1201
Cu 324.754	0.8578	0.4292	0.6194
Fe 271.441	39188.9	39178.3	39165.2
K 766.491	29897.3	29939.2	29924.6
Mg 279.078	78678.1	78740.3	78670.5
Mn 257.610	3605.98	3605.61	3609.70
Mo 202.032	2.4031	2.3887	3.4016
Na 330.237	44912.8	44572.3	44416.8
Ni 231.604	149.390	151.421	147.681
Pb 220.353	3.9787	-1.4258u	-1.9536u
Sb 206.834	-15.5600u	2.6455	-9.1804u
Se 196.026	-13.1437u	5.2590	-2.8994u
Si 288.158	23314.7	23290.2	23299.9
Sn 189.925	3.9995	5.4883	4.1824
Sr 216.596	634.614	632.450	636.383
Ti 334.941	-1.1063	-1.0084	-1.1428
Tl 190.794	-1.5685u	-6.1651u	1.2561
V 292.401	7.5111	7.5555	7.1796
Zn 206.200	14.1856	22.5096	16.1147

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4159	ppb	0.2805	67.4	-48.1070
Al 308.215	27.6828	ppb	2.7302	9.9	233.544
As 188.980	3.9726	ppb	1.7669	44.5	2.3772
B 249.678	248.636	ppb	0.5464	0.2	1536.44

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	202.029	ppb	1.1340	0.6	2268.81
Be 313.042	-0.0478	ppb	0.0046	9.7	-150.762
Ca 370.602	345635	ppb	474.5	0.1	787874
Cd 226.502	-0.2345	ppb	0.1347	57.4	38.9832
Co 228.615	4.0804	ppb	0.0756	1.9	9.6530
Cr 267.716	0.4140	ppb	0.3036	73.3	45.6116
Cu 324.754	0.6355	ppb	0.2148	33.8	236.505
Fe 271.441	39177.4	ppb	11.8716	0.0	32296.3
K 766.491	29920.4	ppb	21.2469	0.1	815726
Mg 279.078	78696.3	ppb	38.2803	0.0	113360
Mn 257.610	3607.10	ppb	2.2579	0.1	394812
Mo 202.032	2.7312	ppb	0.5807	21.3	9.7661
Na 330.237	44633.9	ppb	253.683	0.6	1230.32
Ni 231.604	149.497	ppb	1.8724	1.3	205.500
Pb 220.353	0.1998	ppb	3.2833	1643.5	7.2754
Sb 206.834	-7.3650	ppb	9.2375	125.4	9.1366
Se 196.026	-3.5947	ppb	9.2210	256.5	1.5639
Si 288.158	23301.6	ppb	12.3127	0.1	112109
Sn 189.925	4.5568	ppb	0.8119	17.8	1.2213
Sr 216.596	634.482	ppb	1.9701	0.3	2698.93
Ti 334.941	-1.0858	ppb	0.0695	6.4	114.038
Tl 190.794	-2.1591	ppb	3.7457	173.5	-11.2458
V 292.401	7.4154	ppb	0.2054	2.8	114.375
Zn 206.200	17.6033	ppb	4.3571	24.8	6.1268

680-162183-A-13-A (Samp) **12/19/2018, 1:03:23 AM** **Rack 3, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0488u	0.2363	-0.1423u
Al 308.215	38.8198	35.2196	37.0335
As 188.980	-0.4589u	14.7114	3.9184
B 249.678	248.437	249.230	252.086
Ba 389.178	205.566	203.897	203.379
Be 313.042	-0.0629u	-0.0513	-0.0551
Ca 370.602	354532	355432	356938
Cd 226.502	-0.0684	-0.1970	-0.3927
Co 228.615	5.1260	5.4149	4.5581
Cr 267.716	-0.2344	-0.3316	-0.3002
Cu 324.754	-1.1393u	-0.1261	-0.8201u
Fe 271.441	39682.9	39688.6	39776.7
K 766.491	30573.7	30526.6	30548.7
Mg 279.078	80219.8	80331.2	80356.8
Mn 257.610	3676.54	3672.97	3677.99
Mo 202.032	5.2394	3.3125	5.8921
Na 330.237	46308.3	46755.6	46252.8
Ni 231.604	195.378	196.523	192.236
Pb 220.353	-2.4849u	-2.7520u	-0.9232u
Sb 206.834	-12.8341u	-8.2365u	-17.4965u
Se 196.026	-0.9542	-7.2977u	-2.8252u
Si 288.158	23040.3	23030.7	23062.0
Sn 189.925	-2.8926u	1.7045	4.2590
Sr 216.596	656.146	655.874	652.107
Ti 334.941	-1.7610	-1.5514	-1.4810

Label	Replicates Concentration		
Tl 190.794	-12.0655u	-4.9585u	4.5791
V 292.401	6.5432	6.1686	6.6720
Zn 206.200	13.6613	6.7755	12.8376

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0476	ppb	0.1893	397.4	-30.9736
Al 308.215	37.0243	ppb	1.8001	4.9	256.984
As 188.980	6.0570	ppb	7.8080	128.9	2.9282
B 249.678	249.918	ppb	1.9190	0.8	1544.53
Ba 389.178	204.281	ppb	1.1429	0.6	2295.58
Be 313.042	-0.0564	ppb	0.0059	10.5	-156.655
Ca 370.602	355634	ppb	1216	0.3	810666
Cd 226.502	-0.2193	ppb	0.1633	74.5	39.6535
Co 228.615	5.0330	ppb	0.4359	8.7	14.4349
Cr 267.716	-0.2887	ppb	0.0496	17.2	29.5231
Cu 324.754	-0.6952	ppb	0.5180	74.5	184.186
Fe 271.441	39716.1	ppb	52.6105	0.1	32740.0
K 766.491	30549.7	ppb	23.5437	0.1	832876
Mg 279.078	80302.6	ppb	72.8284	0.1	115673
Mn 257.610	3675.83	ppb	2.5877	0.1	402335
Mo 202.032	4.8146	ppb	1.3412	27.9	14.4518
Na 330.237	46438.9	ppb	275.683	0.6	1277.85
Ni 231.604	194.712	ppb	2.2200	1.1	268.339
Pb 220.353	-2.0534	ppb	0.9879	48.1	5.9617
Sb 206.834	-12.8557	ppb	4.6300	36.0	6.6629
Se 196.026	-3.6924	ppb	3.2595	88.3	1.5503
Si 288.158	23044.3	ppb	16.0280	0.1	110874
Sn 189.925	1.0236	ppb	3.6241	354.0	0.0766
Sr 216.596	654.709	ppb	2.2575	0.3	2784.10
Ti 334.941	-1.5978	ppb	0.1457	9.1	58.4084
Tl 190.794	-4.1483	ppb	8.3518	201.3	-12.0680
V 292.401	6.4613	ppb	0.2615	4.0	100.475
Zn 206.200	11.0915	ppb	3.7604	33.9	3.7843

Cont Calib Verif (CCV) **12/19/2018, 1:07:49 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	493.049	491.519	489.589
Al 308.215	9737.46	9726.40	9731.45
As 188.980	494.741	508.042	491.549
B 249.678	497.564	500.207	499.801
Ba 389.178	483.580	482.871	483.712
Be 313.042	520.210	519.961	519.489
Ca 370.602	10009	9988	9993
Cd 226.502	509.676	508.425	509.106
Co 228.615	504.313	504.752	500.361
Cr 267.716	503.192	502.032	502.478
Cu 324.754	488.855	483.977	482.384
Fe 271.441	10022.6	10045.1	10024.0
K 766.491	9593.56	9581.69	9574.06
Mg 279.078	10089.8	10091.9	10092.5
Mn 257.610	496.405	496.725	495.618
Mo 202.032	493.653	496.592	497.385

Label	Replicates Concentration		
Na 330.237	9853.87	9958.51	9971.64
Ni 231.604	501.933	496.846	500.939
Pb 220.353	493.093	494.148	493.580
Sb 206.834	482.299	489.003	475.850
Se 196.026	480.150	486.031	493.540
Si 288.158	5071.21	5070.85	5057.59
Sn 189.925	496.101	492.808	493.391
Sr 216.596	506.289	506.112	507.464
Ti 334.941	500.784	500.294	501.286
Tl 190.794	483.808	486.641	492.471
V 292.401	492.523	492.049	491.632
Zn 206.200	1012.77	999.813	993.974

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	491.386	ppb	1.7342	0.4	18181.0	98.27718
Al 308.215	9731.77	ppb	5.5373	0.1	24580.6	97.31770
As 188.980	498.111	ppb	8.7477	1.8	132.565	99.62215
B 249.678	499.191	ppb	1.4235	0.3	3252.32	99.83812
Ba 389.178	483.388	ppb	0.4527	0.1	5315.88	96.67757
Be 313.042	519.887	ppb	0.3664	0.1	431731	103.97737
Ca 370.602	9996	ppb	10.90	0.1	22828	99.96489
Cd 226.502	509.069	ppb	0.6263	0.1	8330.27	101.81382
Co 228.615	503.142	ppb	2.4184	0.5	2519.09	100.62837
Cr 267.716	502.568	ppb	0.5851	0.1	11692.0	100.51352
Cu 324.754	485.072	ppb	3.3715	0.7	19349.3	97.01447
Fe 271.441	10030.6	ppb	12.5849	0.1	8319.84	100.25578
K 766.491	9583.10	ppb	9.8288	0.1	261449	95.83102
Mg 279.078	10091.4	ppb	1.3793	0.0	14561.1	100.91406
Mn 257.610	496.249	ppb	0.5696	0.1	54346.1	99.24987
Mo 202.032	495.876	ppb	1.9664	0.4	1121.13	99.17529
Na 330.237	9928.01	ppb	64.5394	0.7	315.631	99.28007
Ni 231.604	499.906	ppb	2.6964	0.5	691.949	99.98118
Pb 220.353	493.607	ppb	0.5277	0.1	295.623	98.72141
Sb 206.834	482.384	ppb	6.5768	1.4	224.843	96.47678
Se 196.026	486.573	ppb	6.7113	1.4	94.7387	97.31467
Si 288.158	5066.55	ppb	7.7608	0.2	24733.9	101.33098
Sn 189.925	494.100	ppb	1.7572	0.4	159.866	98.82000
Sr 216.596	506.622	ppb	0.7348	0.1	2141.35	101.32442
Ti 334.941	500.788	ppb	0.4963	0.1	59971.7	100.15759
Tl 190.794	487.640	ppb	4.4168	0.9	193.206	97.52801
V 292.401	492.068	ppb	0.4459	0.1	7101.86	98.41359
Zn 206.200	1002.19	ppb	9.6192	1.0	360.236	100.21852

Cont Calib Blank (CCB) **12/19/2018, 1:12:13 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3065	-0.1640u	-0.4300u
Al 308.215	-5.8146u	-1.9430u	-3.0090u
As 188.980	-2.0484u	4.6649	3.4982
B 249.678	4.9713	4.1529	4.5484
Ba 389.178	0.4624	0.6921	0.6815
Be 313.042	0.0324	0.0434	0.0472
Ca 370.602	-1.765u	4.481	0.4185

Label	Replicates Concentration		
Cd 226.502	-0.3631u	-0.2083u	0.0863
Co 228.615	0.0129	-0.4029u	-0.1178u
Cr 267.716	-0.0780u	-0.1837u	-0.0196u
Cu 324.754	0.3576	0.3369	-0.1368u
Fe 271.441	6.3485	5.1353	0.3284
K 766.491	3.1076	2.4219	2.8634
Mg 279.078	-2.6060u	-2.1877u	-1.5685u
Mn 257.610	0.1837	0.1748	0.2147
Mo 202.032	0.5151	0.4716	-0.7694u
Na 330.237	86.5986	41.4207	186.331
Ni 231.604	0.3463	-1.3381u	-0.0723u
Pb 220.353	0.2798	3.1386	-1.4601u
Sb 206.834	-1.7700u	-3.7306u	2.2236
Se 196.026	10.2511	-1.8985u	11.0442
Si 288.158	3.9727	2.7171	3.5356
Sn 189.925	1.7889	1.1402	2.4723
Sr 216.596	0.2266	0.1374	-0.2717u
Ti 334.941	0.1420	0.2088	0.2035
Tl 190.794	0.7961	-0.9148u	9.1205
V 292.401	-0.0972u	-0.0134u	0.1849
Zn 206.200	3.1570	-0.3185u	1.1917

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0959	ppb	0.3730	389.0	-32.5638	-0.09587
Al 308.215	-3.5888	ppb	1.9998	55.7	153.303	-3.58884
As 188.980	2.0382	ppb	3.5869	176.0	1.7853	2.03822
B 249.678	4.5575	ppb	0.4093	9.0	-67.1665	4.55752
Ba 389.178	0.6120	ppb	0.1297	21.2	-57.2683	0.61203
Be 313.042	0.0410	ppb	0.0077	18.8	-126.884	0.04097
Ca 370.602	1.045	ppb	3.170	303.4	39.64	1.04482
Cd 226.502	-0.1617	ppb	0.2283	141.2	9.4443	-0.16169
Co 228.615	-0.1693	ppb	0.2126	125.6	-12.8957	-0.16927
Cr 267.716	-0.0938	ppb	0.0832	88.7	21.3460	-0.09376
Cu 324.754	0.1859	ppb	0.2796	150.4	209.608	0.18591
Fe 271.441	3.9374	ppb	3.1838	80.9	30.8767	3.93738
K 766.491	2.7976	ppb	0.3476	12.4	344.471	2.79762
Mg 279.078	-2.1208	ppb	0.5220	24.6	28.0382	-2.12075
Mn 257.610	0.1911	ppb	0.0209	11.0	42.2364	0.19107
Mo 202.032	0.0724	ppb	0.7294	1007.2	4.3899	0.07241
Na 330.237	104.783	ppb	74.1470	70.8	60.5169	104.78342
Ni 231.604	-0.3547	ppb	0.8770	247.2	-2.7602	-0.35469
Pb 220.353	0.6528	ppb	2.3219	355.7	7.0601	0.65275
Sb 206.834	-1.0923	ppb	3.0344	277.8	11.1297	-1.09231
Se 196.026	6.4656	ppb	7.2544	112.2	3.2578	6.46562
Si 288.158	3.4085	ppb	0.6374	18.7	299.978	3.40845
Sn 189.925	1.8004	ppb	0.6661	37.0	0.3225	1.80044
Sr 216.596	0.0308	ppb	0.2657	863.1	9.8720	0.03078
Ti 334.941	0.1848	ppb	0.0371	20.1	-13.3858	0.18475
Tl 190.794	3.0006	ppb	5.3686	178.9	-9.0219	3.00060
V 292.401	0.0248	ppb	0.1449	584.9	-2.2016	0.02476
Zn 206.200	1.3434	ppb	1.7427	129.7	0.2198	1.34339

680-162183-A-8-A (Samp) **12/19/2018, 1:16:36 AM** **Rack 3, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4839u	-0.3106u	-0.0797u
Al 308.215	0.7896	0.0189	1.0500
As 188.980	7.4733	-3.4870u	4.1170
B 249.678	277.048	276.303	278.229
Ba 389.178	348.300	347.032	349.361
Be 313.042	-0.0761u	-0.0547u	-0.0694u
Ca 370.602	155174	155384	155184
Cd 226.502	-0.5683u	0.0153	-0.5874u
Co 228.615	0.5980	-0.9238u	-0.4170u
Cr 267.716	0.2761	0.4120	0.4205
Cu 324.754	-0.4715u	-0.8412u	0.0129
Fe 271.441	9344.00	9333.44	9371.60
K 766.491	46201.5x	46278.2x	46171.9x
Mg 279.078	46137.9	46128.8	46186.4
Mn 257.610	621.431	621.267	620.375
Mo 202.032	0.2119	-2.4033u	-0.8388u
Na 330.237	43480.9	43822.5	43877.5
Ni 231.604	-0.1819u	1.7604	-0.8230u
Pb 220.353	4.4339	0.1100	5.1880
Sb 206.834	1.1220	-15.5744u	-6.1230u
Se 196.026	-8.9310u	16.8839	-0.4105u
Si 288.158	21538.2	21562.4	21570.3
Sn 189.925	6.9637	-0.0216u	4.6030
Sr 216.596	871.699	869.195	872.978
Ti 334.941	-0.8934	-0.9975	-0.8821
Tl 190.794	-7.3791u	0.5985	-0.1438u
V 292.401	0.6322	1.0938	1.5499
Zn 206.200	-1.4527u	7.5291	4.9018

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2914b	ppb	0.2028	69.6	-44.2462
Al 308.215	0.6195b	ppb	0.5362	86.6	164.252
As 188.980	2.7011b	ppb	5.6157	207.9	1.9798
B 249.678	277.193b	ppb	0.9710	0.4	1758.72
Ba 389.178	348.231b	ppb	1.1660	0.3	3849.67
Be 313.042	-0.0667b	ppb	0.0109	16.4	-195.722
Ca 370.602	155248b	ppb	118.5	0.1	353905
Cd 226.502	-0.3801b	ppb	0.3426	90.1	13.2854
Co 228.615	-0.2476b	ppb	0.7749	313.0	-12.9798
Cr 267.716	0.3695b	ppb	0.0810	21.9	34.8360
Cu 324.754	-0.4333b	ppb	0.4283	98.9	187.336
Fe 271.441	9349.68b	ppb	19.7046	0.2	7728.48
K 766.491	46217.2xb	ppb	54.8369	0.1	1259883
Mg 279.078	46151.0b	ppb	30.9718	0.1	66508.7
Mn 257.610	621.024b	ppb	0.5685	0.1	68153.6
Mo 202.032	-1.0101b	ppb	1.3160	130.3	1.8048
Na 330.237	43726.9b	ppb	214.876	0.5	1209.25
Ni 231.604	0.2519b	ppb	1.3452	534.1	-1.9173
Pb 220.353	3.2440b	ppb	2.7402	84.5	8.6762
Sb 206.834	-6.8584b	ppb	8.3725	122.1	8.7570
Se 196.026	2.5141b	ppb	13.1536	523.2	2.5350
Si 288.158	21557.0b	ppb	16.7205	0.1	103736

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	3.8484b	ppb	3.5533	92.3	0.9917
Sr 216.596	871.290b	ppb	1.9244	0.2	3693.24
Ti 334.941	-0.9243b	ppb	0.0636	6.9	17.2797
Tl 190.794	-2.3081b	ppb	4.4072	190.9	-11.3422
V 292.401	1.0919b	ppb	0.4589	42.0	15.6563
Zn 206.200	3.6594b	ppb	4.6180	126.2	1.0663

680-162183-B-4-A (Samp) **12/19/2018, 1:21:01 AM** **Rack 3, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4843u	-0.1937u	-0.1937u
Al 308.215	10.2180	12.5602	13.1075
As 188.980	11.6461	-3.8813u	3.9252
B 249.678	247.313	246.808	246.353
Ba 389.178	144.140	141.331	139.909
Be 313.042	-0.0998u	-0.0915u	-0.0943u
Ca 370.602	439993	441692	442612
Cd 226.502	-0.2223	0.0866	-0.1127
Co 228.615	4.4531	5.0483	2.4600
Cr 267.716	7.2365	7.2913	7.0263
Cu 324.754	10.0238	10.2470	9.8269
Fe 271.441	43360.2	43403.6	43438.3
K 766.491	22296.8	22358.5	22312.6
Mg 279.078	52847.6	52876.2	52928.6
Mn 257.610	3746.30	3753.77	3750.12
Mo 202.032	15.6116	17.0952	14.8348
Na 330.237	156966x	156290x	156668x
Ni 231.604	483.035	486.223	486.596
Pb 220.353	-0.2817	2.9027	-0.4615
Sb 206.834	-6.1133u	-8.1558u	-6.0953u
Se 196.026	8.5151	1.4935	-2.7742u
Si 288.158	18302.1	18326.0	18305.6
Sn 189.925	-7.5855u	3.3178	6.1858
Sr 216.596	865.238	866.483	871.599
Ti 334.941	-0.4876	-0.5977	-0.4704
Tl 190.794	-6.3377u	-4.5836u	0.1250u
V 292.401	1.7618	1.8815	1.8200
Zn 206.200	39.2951	52.2870	51.7030

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2906b	ppb	0.1678	57.7	-44.8366
Al 308.215	11.9619b	ppb	1.5349	12.8	194.347
As 188.980	3.8967b	ppb	7.7638	199.2	2.3631
B 249.678	246.825b	ppb	0.4803	0.2	1519.99
Ba 389.178	141.793b	ppb	2.1528	1.5	1576.03
Be 313.042	-0.0952b	ppb	0.0042	4.4	-180.744
Ca 370.602	441432b	ppb	1329	0.3	1006231
Cd 226.502	-0.0828b	ppb	0.1566	189.2	44.3426
Co 228.615	3.9871b	ppb	1.3556	34.0	9.1584
Cr 267.716	7.1847b	ppb	0.1399	1.9	204.472
Cu 324.754	10.0325b	ppb	0.2102	2.1	608.577
Fe 271.441	43400.7b	ppb	39.1565	0.1	35774.7
K 766.491	22322.6b	ppb	32.0036	0.1	608655

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	52884.2b	ppb	41.1105	0.1	76173.7
Mn 257.610	3750.06b	ppb	3.7344	0.1	410320
Mo 202.032	15.8472b	ppb	1.1485	7.2	39.2508
Na 330.237	156641xb	ppb	338.838	0.2	4181.69
Ni 231.604	485.285b	ppb	1.9572	0.4	672.180
Pb 220.353	0.7198b	ppb	1.8925	262.9	7.6098
Sb 206.834	-6.7881b	ppb	1.1845	17.4	9.3714
Se 196.026	2.4115b	ppb	5.7004	236.4	2.7083
Si 288.158	18311.2b	ppb	12.8965	0.1	88161.8
Sn 189.925	0.6394b	ppb	7.2659	1136.4	-0.0339
Sr 216.596	867.773b	ppb	3.3707	0.4	3682.59
Ti 334.941	-0.5186b	ppb	0.0691	13.3	86.4001
Tl 190.794	-3.5988b	ppb	3.3420	92.9	-11.9568
V 292.401	1.8211b	ppb	0.0598	3.3	32.2037
Zn 206.200	47.7617b	ppb	7.3381	15.4	16.9837

680-162183-B-9-A (Samp) **12/19/2018, 1:25:25 AM** **Rack 3, Tube 13**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1463u	-0.2375u	-0.0051u
Al 308.215	20.5342	22.3934	19.4466
As 188.980	2.6092	-2.6733u	3.7814
B 249.678	316.274	315.085	316.716
Ba 389.178	954.054	949.687	952.503
Be 313.042	-0.0229	-0.0213	-0.0219
Ca 370.602	252303	253314	251162
Cd 226.502	-0.1203	-0.3185	-0.3925
Co 228.615	0.0461	0.5174	0.6630
Cr 267.716	2.7328	2.6165	2.3096
Cu 324.754	0.4183	0.0202	0.3699
Fe 271.441	30198.7	30152.6	30131.9
K 766.491	22823.7	22730.5	22752.1
Mg 279.078	36605.5	36556.8	36526.5
Mn 257.610	2127.36	2124.75	2124.85
Mo 202.032	-0.8983u	0.4176	0.9568
Na 330.237	79410.4	79859.8	79190.0
Ni 231.604	2.0410	-0.7392u	0.1085
Pb 220.353	1.9790	-4.8580u	-2.1359u
Sb 206.834	-12.2297u	-9.9163u	-8.7674u
Se 196.026	4.6822	22.8909	-3.9387u
Si 288.158	29931.9	29885.5	29873.4
Sn 189.925	3.3505	6.9428	2.3975
Sr 216.596	657.319	660.628	661.092
Ti 334.941	0.3899	0.3308	0.3082
Tl 190.794	-0.2497u	-2.6339u	2.5658
V 292.401	2.0274	2.3207	1.9817
Zn 206.200	11.8080	13.2602	7.3630

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1296	ppb	0.1171	90.3	-38.6152
Al 308.215	20.7914	ppb	1.4902	7.2	215.701
As 188.980	1.2391	ppb	3.4385	277.5	1.6371
B 249.678	316.025	ppb	0.8433	0.3	1999.10

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	952.081	ppb	2.2137	0.2	10548.8
Be 313.042	-0.0220	ppb	0.0008	3.6	-144.777
Ca 370.602	252260	ppb	1077	0.4	575022
Cd 226.502	-0.2771	ppb	0.1407	50.8	31.0168
Co 228.615	0.4088	ppb	0.3225	78.9	-9.0581
Cr 267.716	2.5530	ppb	0.2186	8.6	91.3808
Cu 324.754	0.2695	ppb	0.2172	80.6	219.956
Fe 271.441	30161.1	ppb	34.1923	0.1	24869.8
K 766.491	22768.8	ppb	48.8098	0.2	620814
Mg 279.078	36562.9	ppb	39.8915	0.1	52679.6
Mn 257.610	2125.65	ppb	1.4790	0.1	232629
Mo 202.032	0.1587	ppb	0.9542	601.3	4.1119
Na 330.237	79486.8	ppb	341.365	0.4	2149.68
Ni 231.604	0.4701	ppb	1.4249	303.1	-1.6148
Pb 220.353	-1.6716	ppb	3.4421	205.9	6.0188
Sb 206.834	-10.3045	ppb	1.7635	17.1	7.6555
Se 196.026	7.8782	ppb	13.6973	173.9	3.6351
Si 288.158	29896.9	ppb	30.8541	0.1	143759
Sn 189.925	4.2303	ppb	2.3970	56.7	1.1200
Sr 216.596	659.680	ppb	2.0577	0.3	2804.42
Ti 334.941	0.3430	ppb	0.0422	12.3	133.667
Tl 190.794	-0.1059	ppb	2.6028	2456.8	-10.6271
V 292.401	2.1099	ppb	0.1839	8.7	34.9377
Zn 206.200	10.8104	ppb	3.0726	28.4	3.6686

680-162183-A-15-A (Samp) **12/19/2018, 1:29:49 AM** **Rack 3, Tube 14**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4155	-0.2009u	-0.1141u
Al 308.215	26.6896	26.8586	28.5499
As 188.980	-3.9714u	-3.1643u	-2.9659u
B 249.678	263.743	261.352	264.868
Ba 389.178	805.527	802.212	801.829
Be 313.042	-0.0623u	-0.0622u	-0.0721u
Ca 370.602	129288	129117	129124
Cd 226.502	-0.5202u	-0.3748u	-0.1235
Co 228.615	0.6928	1.5484	0.6816
Cr 267.716	0.1873	0.4865	0.5162
Cu 324.754	2.1210	1.9195	1.9448
Fe 271.441	5711.99	5718.72	5729.88
K 766.491	83457.9x	83467.8x	83362.2x
Mg 279.078	37590.9	37561.4	37527.4
Mn 257.610	349.609	349.404	349.184
Mo 202.032	-0.2965u	-1.0769u	-1.5358u
Na 330.237	44962.5	44452.2	45054.3
Ni 231.604	2.5141	0.6627	2.4477
Pb 220.353	0.3630	3.3349	6.4090
Sb 206.834	-12.8422u	-6.2651u	-8.2482u
Se 196.026	12.1030	-7.2765u	1.6951
Si 288.158	17738.4	17727.8	17725.4
Sn 189.925	3.6030	0.7585	5.5485
Sr 216.596	916.078	911.376	909.079
Ti 334.941	-0.6876	-0.7076	-0.6067

Label	Replicates Concentration		
Tl 190.794	0.0631u	1.6357	-2.1866u
V 292.401	1.2333	0.1589	0.5663
Zn 206.200	16.0725	9.6927	13.9347

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0335b	ppb	0.3336	995.7	-32.0889
Al 308.215	27.3660b	ppb	1.0287	3.8	231.129
As 188.980	-3.3672b	ppb	0.5326	15.8	0.3709
B 249.678	263.321b	ppb	1.7957	0.7	1669.04
Ba 389.178	803.189b	ppb	2.0335	0.3	8889.45
Be 313.042	-0.0655b	ppb	0.0057	8.7	-199.592
Ca 370.602	129176b	ppb	96.74	0.1	294480
Cd 226.502	-0.3395b	ppb	0.2007	59.1	11.0840
Co 228.615	0.9742b	ppb	0.4973	51.0	-6.9275
Cr 267.716	0.3967b	ppb	0.1819	45.9	34.4798
Cu 324.754	1.9951b	ppb	0.1097	5.5	282.292
Fe 271.441	5720.20b	ppb	9.0350	0.2	4739.12
K 766.491	83429.3xb	ppb	58.3208	0.1	2274071
Mg 279.078	37559.9b	ppb	31.7665	0.1	54135.5
Mn 257.610	349.399b	ppb	0.2123	0.1	38411.1
Mo 202.032	-0.9697b	ppb	0.6265	64.6	1.9525
Na 330.237	44823.0b	ppb	324.370	0.7	1238.45
Ni 231.604	1.8748b	ppb	1.0502	56.0	0.3371
Pb 220.353	3.3690b	ppb	3.0231	89.7	8.7088
Sb 206.834	-9.1185b	ppb	3.3738	37.0	7.6676
Se 196.026	2.1739b	ppb	9.6986	446.1	2.4556
Si 288.158	17730.5b	ppb	6.8901	0.0	85372.6
Sn 189.925	3.3033b	ppb	2.4090	72.9	0.8152
Sr 216.596	912.177b	ppb	3.5678	0.4	3865.07
Ti 334.941	-0.6673b	ppb	0.0534	8.0	17.4096
Tl 190.794	-0.1626b	ppb	1.9211	1181.2	-10.4163
V 292.401	0.6529b	ppb	0.5424	83.1	8.3991
Zn 206.200	13.2333b	ppb	3.2472	24.5	4.5066

680-162183-B-14-A (Samp) **12/19/2018, 1:34:14 AM** **Rack 3, Tube 15**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.8537	0.2797	-0.3356u
Al 308.215	0.4018	7.0853	6.0469
As 188.980	-0.1649u	-2.8443u	-3.1798u
B 249.678	258.144	260.346	260.217
Ba 389.178	814.427	809.889	810.637
Be 313.042	-0.0693u	-0.0699u	-0.0624u
Ca 370.602	127354	127426	127321
Cd 226.502	-0.0785	-0.3869u	-0.4171u
Co 228.615	0.8250	0.6445	0.2330
Cr 267.716	0.6859	0.6654	0.9526
Cu 324.754	0.3173	0.0285	0.1362
Fe 271.441	5818.57	5835.81	5814.86
K 766.491	86452.9x	86560.8x	86477.5x
Mg 279.078	37043.1	37030.7	36983.4
Mn 257.610	344.879	344.581	344.470
Mo 202.032	0.0206u	0.2451	1.1208

Label	Replicates Concentration		
Na 330.237	44359.1	44468.3	44072.1
Ni 231.604	0.7559	1.6030	2.7314
Pb 220.353	-3.2308u	-1.6293u	-0.4528u
Sb 206.834	3.9986	-16.9936u	-8.6007u
Se 196.026	13.1330	-1.8283u	8.7755
Si 288.158	17720.7	17712.0	17675.9
Sn 189.925	-1.5021u	-0.4557u	-6.3751u
Sr 216.596	901.044	905.630	903.505
Ti 334.941	-0.5381	-0.5186	-0.5458
Tl 190.794	0.0474u	2.6454	-8.0588u
V 292.401	0.9141	1.6823	0.5265
Zn 206.200	1.7888	0.3879	4.4964

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2659b	ppb	0.5947	223.6	-23.4762
Al 308.215	4.5113b	ppb	3.5966	79.7	173.879
As 188.980	-2.0630b	ppb	1.6523	80.1	0.7151
B 249.678	259.569b	ppb	1.2357	0.5	1643.67
Ba 389.178	811.651b	ppb	2.4329	0.3	8982.86
Be 313.042	-0.0672b	ppb	0.0041	6.2	-201.406
Ca 370.602	127367b	ppb	53.37	0.0	290356
Cd 226.502	-0.2942b	ppb	0.1874	63.7	11.9079
Co 228.615	0.5675b	ppb	0.3034	53.5	-8.9836
Cr 267.716	0.7680b	ppb	0.1602	20.9	43.0991
Cu 324.754	0.1607b	ppb	0.1460	90.9	209.970
Fe 271.441	5823.08b	ppb	11.1779	0.2	4823.85
K 766.491	86497.1xb	ppb	56.5312	0.1	2357682
Mg 279.078	37019.1b	ppb	31.5020	0.1	53356.5
Mn 257.610	344.643b	ppb	0.2116	0.1	37888.6
Mo 202.032	0.4622b	ppb	0.5813	125.8	5.1766
Na 330.237	44299.8b	ppb	204.626	0.5	1224.68
Ni 231.604	1.6968b	ppb	0.9911	58.4	0.0901
Pb 220.353	-1.7710b	ppb	1.3944	78.7	5.6960
Sb 206.834	-7.1986b	ppb	10.5661	146.8	8.5184
Se 196.026	6.6934b	ppb	7.6949	115.0	3.3158
Si 288.158	17702.9b	ppb	23.7241	0.1	85240.1
Sn 189.925	-2.7776b	ppb	3.1591	113.7	-1.1556
Sr 216.596	903.393b	ppb	2.2955	0.3	3827.96
Ti 334.941	-0.5342b	ppb	0.0140	2.6	31.3900
Tl 190.794	-1.7886b	ppb	5.5833	312.2	-11.1003
V 292.401	1.0409b	ppb	0.5882	56.5	13.9486
Zn 206.200	2.2244b	ppb	2.0886	93.9	0.5448

MB 680-551781/1-A (Samp) **12/19/2018, 1:38:39 AM** **Rack 3, Tube 16**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2243u	0.2972	-0.2842u
Al 308.215	-3.9820u	0.4225	-7.5963u
As 188.980	-3.2023u	8.2453	-4.2811u
B 249.678	2.8821	3.1048	2.5871
Ba 389.178	0.9527	-0.0004u	-0.7769u
Be 313.042	-0.0423u	-0.0434u	-0.0481u
Ca 370.602	28.90	24.23	21.08

Label	Replicates Concentration		
Cd 226.502	-0.2632u	0.0507	-0.2575u
Co 228.615	0.0714	0.0453	-0.4934u
Cr 267.716	0.0738	-0.1722u	-0.1652u
Cu 324.754	-0.0669u	-0.1737u	0.1973
Fe 271.441	2.5785	5.8871	4.3602
K 766.491	18.6383	17.6006	17.0022
Mg 279.078	0.4471	-1.4451u	0.2582
Mn 257.610	1.1954	1.1582	1.1761
Mo 202.032	-0.4068u	-0.3639u	0.5205
Na 330.237	86.6377	-200.409u	7.2486
Ni 231.604	1.2693	0.1327	-1.7308u
Pb 220.353	-1.8135u	-0.8370u	1.5278
Sb 206.834	-0.1003u	-6.5966u	-20.9517u
Se 196.026	-2.4401u	-5.9581u	-4.5909u
Si 288.158	4.8629	3.4069	4.7223
Sn 189.925	2.7964	2.4457	-3.7601u
Sr 216.596	-0.0582u	-1.0900u	0.1158
Ti 334.941	-0.0157u	-0.0608u	0.0562
Tl 190.794	-1.8244u	1.1457	0.8100
V 292.401	0.0102	-0.1000u	-0.3032u
Zn 206.200	2.6876	2.0485	0.4658

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0705	ppb	0.3198	453.8	-31.6190
Al 308.215	-3.7186	ppb	4.0159	108.0	152.963
As 188.980	0.2540	ppb	6.9417	2733.4	1.3145
B 249.678	2.8580	ppb	0.2597	9.1	-78.6029
Ba 389.178	0.0585	ppb	0.8663	1481.5	-63.4129
Be 313.042	-0.0446	ppb	0.0031	6.9	-197.914
Ca 370.602	24.73	ppb	3.935	15.9	93.66
Cd 226.502	-0.1567	ppb	0.1796	114.6	9.5237
Co 228.615	-0.1256	ppb	0.3188	253.8	-12.6709
Cr 267.716	-0.0879	ppb	0.1401	159.4	21.4826
Cu 324.754	-0.0144	ppb	0.1910	1325.6	201.693
Fe 271.441	4.2753	ppb	1.6559	38.7	31.1543
K 766.491	17.7470	ppb	0.8279	4.7	751.905
Mg 279.078	-0.2466	ppb	1.0422	422.7	30.7269
Mn 257.610	1.1766	ppb	0.0186	1.6	149.985
Mo 202.032	-0.0834	ppb	0.5234	627.5	4.0389
Na 330.237	-35.5077	ppb	148.223	417.4	56.8200
Ni 231.604	-0.1096	ppb	1.5146	1382.1	-2.4195
Pb 220.353	-0.3742	ppb	1.7180	459.1	6.4583
Sb 206.834	-9.2162	ppb	10.6696	115.8	7.4929
Se 196.026	-4.3297	ppb	1.7735	41.0	1.2012
Si 288.158	4.3307	ppb	0.8031	18.5	304.206
Sn 189.925	0.4940	ppb	3.6883	746.7	-0.1010
Sr 216.596	-0.3441	ppb	0.6518	189.4	8.2925
Ti 334.941	-0.0068	ppb	0.0590	873.8	-36.3054
Tl 190.794	0.0438	ppb	1.6265	3715.5	-10.2527
V 292.401	-0.1310	ppb	0.1590	121.4	-4.4181
Zn 206.200	1.7339	ppb	1.1438	66.0	0.3603

LCS 680-551781/2-A (Samp) **12/19/2018, 1:43:03 AM** **Rack 3, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.5835	50.4462	50.7385
Al 308.215	4854.44	4846.05	4845.05
As 188.980	101.882	100.814	99.2840
B 249.678	196.165	198.494	199.586
Ba 389.178	97.9979	98.6189	97.2194
Be 313.042	51.6905	51.6484	51.6391
Ca 370.602	4966	4980	4963
Cd 226.502	52.0793	52.1513	51.8262
Co 228.615	51.7325	50.4202	49.6512
Cr 267.716	101.955	101.818	101.514
Cu 324.754	97.5239	98.6568	99.0169
Fe 271.441	5075.50	5065.48	5066.66
K 766.491	7654.34	7641.65	7630.95
Mg 279.078	5020.64	4993.76	4992.55
Mn 257.610	500.535	499.943	499.579
Mo 202.032	99.6596	101.221	100.347
Na 330.237	4780.85	5158.50	5364.99
Ni 231.604	101.708	100.403	101.461
Pb 220.353	506.466	497.937	492.210
Sb 206.834	43.2275	40.3606	43.8432
Se 196.026	88.0466	89.4635	97.8189
Si 288.158	-3.8684	-2.1939	-2.4043
Sn 189.925	102.798	110.303	102.474
Sr 216.596	100.928	100.147	99.9621
Ti 334.941	100.325	100.290	100.251
Tl 190.794	41.5190	47.6214	29.8690
V 292.401	98.7801	98.2929	99.0188
Zn 206.200	105.554	99.2545	103.524

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9227	ppb	0.5906	1.2	1858.04
Al 308.215	4848.51	ppb	5.1549	0.1	12321.2
As 188.980	100.660	ppb	1.3058	1.3	27.7910
B 249.678	198.082	ppb	1.7471	0.9	1230.45
Ba 389.178	97.9454	ppb	0.7012	0.7	1029.94
Be 313.042	51.6593	ppb	0.0273	0.1	42752.7
Ca 370.602	4970	ppb	9.498	0.2	11367
Cd 226.502	52.0189	ppb	0.1707	0.3	865.398
Co 228.615	50.6013	ppb	1.0524	2.1	242.570
Cr 267.716	101.762	ppb	0.2260	0.2	2387.44
Cu 324.754	98.3992	ppb	0.7791	0.8	4087.04
Fe 271.441	5069.21	ppb	5.4758	0.1	4206.32
K 766.491	7642.31	ppb	11.7079	0.2	208554
Mg 279.078	5002.32	ppb	15.8823	0.3	7230.83
Mn 257.610	500.019	ppb	0.4822	0.1	54720.3
Mo 202.032	100.409	ppb	0.7827	0.8	230.340
Na 330.237	5101.45	ppb	296.219	5.8	191.372
Ni 231.604	101.191	ppb	0.6934	0.7	138.313
Pb 220.353	498.871	ppb	7.1736	1.4	299.060
Sb 206.834	42.4771	ppb	1.8586	4.4	30.0961
Se 196.026	91.7763	ppb	5.2808	5.8	19.5422
Si 288.158	-2.8222	ppb	0.9121	32.3	297.415

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	105.192	ppb	4.4292	4.2	33.8296
Sr 216.596	100.346	ppb	0.5129	0.5	432.671
Ti 334.941	100.289	ppb	0.0369	0.0	11992.2
Tl 190.794	39.6698	ppb	9.0195	22.7	6.3124
V 292.401	98.6973	ppb	0.3700	0.4	1423.05
Zn 206.200	102.777	ppb	3.2153	3.1	36.6943

490-164831-A-1-D (Samp) **12/19/2018, 1:47:28 AM** **Rack 3, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0474u	-0.0770u	0.0245
Al 308.215	177.783	178.231	179.109
As 188.980	-3.0494u	1.0725	8.3731
B 249.678	1639.93	1649.57	1646.17
Ba 389.178	14.6884	14.4108	14.0563
Be 313.042	-0.0460u	-0.0363u	-0.0399u
Ca 370.602	76042	76111	76002
Cd 226.502	0.0593	0.0074u	-0.1537u
Co 228.615	2.9688	4.7803	4.6204
Cr 267.716	3.8185	3.8360	3.4340
Cu 324.754	42.2783	42.5729	42.2841
Fe 271.441	238.476	251.479	249.887
K 766.491	52300.3x	52365.1x	52253.5x
Mg 279.078	6203.11	6202.47	6202.03
Mn 257.610	9.7094	9.7243	9.7313
Mo 202.032	5.9015	6.8530	6.1439
Na 330.237	159138x	159100x	158634x
Ni 231.604	0.8753	1.7630	3.4854
Pb 220.353	-0.2242u	-1.6296u	4.2952
Sb 206.834	-7.5859u	-6.5238u	-9.6450u
Se 196.026	0.6945	-3.9976u	7.9959
Si 288.158	1112.34	1115.36	1112.48
Sn 189.925	-2.0959u	0.8592	-3.5480u
Sr 216.596	166.948	166.237	168.345
Ti 334.941	1.1970	1.1117	1.1594
Tl 190.794	-7.8524u	-2.5498u	2.9156
V 292.401	1.7107	1.5530	1.4493
Zn 206.200	284.301	279.304	288.877

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0333b	ppb	0.0522	156.7	-31.0245
Al 308.215	178.375b	ppb	0.6747	0.4	609.594
As 188.980	2.1321b	ppb	5.7845	271.3	1.8091
B 249.678	1645.22b	ppb	4.8885	0.3	10976.8
Ba 389.178	14.3852b	ppb	0.3169	2.2	101.852
Be 313.042	-0.0407b	ppb	0.0049	12.1	-191.803
Ca 370.602	76051b	ppb	55.41	0.1	173391
Cd 226.502	-0.0290b	ppb	0.1111	383.1	11.4762
Co 228.615	4.1232b	ppb	1.0029	24.3	8.6652
Cr 267.716	3.6962b	ppb	0.2272	6.1	110.630
Cu 324.754	42.3784b	ppb	0.1684	0.4	1874.43
Fe 271.441	246.614b	ppb	7.0927	2.9	231.000
K 766.491	52306.3xb	ppb	56.0392	0.1	1425837

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6202.54b	ppb	0.5430	0.0	8966.24
Mn 257.610	9.7217b	ppb	0.0112	0.1	1114.93
Mo 202.032	6.2995b	ppb	0.4944	7.8	18.4150
Na 330.237	158957xb	ppb	280.448	0.2	4246.26
Ni 231.604	2.0412b	ppb	1.3271	65.0	0.5652
Pb 220.353	0.8138b	ppb	3.0958	380.4	7.1508
Sb 206.834	-7.9183b	ppb	1.5869	20.0	8.0219
Se 196.026	1.5643b	ppb	6.0439	386.4	2.3242
Si 288.158	1113.39b	ppb	1.7021	0.2	5627.66
Sn 189.925	-1.5949b	ppb	2.2459	140.8	-0.7576
Sr 216.596	167.177b	ppb	1.0723	0.6	715.998
Ti 334.941	1.1560b	ppb	0.0428	3.7	120.231
Tl 190.794	-2.4955b	ppb	5.3842	215.8	-11.3133
V 292.401	1.5710b	ppb	0.1316	8.4	19.1618
Zn 206.200	284.161b	ppb	4.7883	1.7	101.999

490-164831-A-1-D (Samp) **12/19/2018, 1:51:52 AM** **Rack 3, Tube 19**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1930	0.3234	-0.3473u
Al 308.215	32.2467	34.6801	30.0214
As 188.980	3.5582	-4.1647u	-3.0520u
B 249.678	344.007	344.359	343.945
Ba 389.178	2.7232	1.6218	1.7488
Be 313.042	-0.0478u	-0.0384u	-0.0382u
Ca 370.602	15487	15454	15473
Cd 226.502	-0.2245u	-0.3888u	-0.4749u
Co 228.615	0.7745	0.2288	0.7571
Cr 267.716	0.3106	0.7222	0.8817
Cu 324.754	8.2206	8.5675	8.4020
Fe 271.441	49.3484	53.0159	51.2667
K 766.491	10760.9	10777.1	10756.9
Mg 279.078	1278.61	1285.02	1287.52
Mn 257.610	2.2228	2.2946	2.2983
Mo 202.032	-0.1972u	1.4356	-0.3339u
Na 330.237	29744.5	29871.4	29885.6
Ni 231.604	0.0959	0.0051	0.4395
Pb 220.353	1.5702	0.1684	1.8467
Sb 206.834	-10.3561u	-7.3006u	-9.3300u
Se 196.026	-4.7414u	-6.0993u	2.1905
Si 288.158	224.704	224.599	225.353
Sn 189.925	-0.4213u	6.3543	1.5082
Sr 216.596	34.1716	34.5692	33.0252
Ti 334.941	0.3526	0.4301	0.4428
Tl 190.794	-2.3301u	-1.3460u	-0.7322u
V 292.401	0.5153	0.2249	0.3564
Zn 206.200	63.2935	60.8138	65.7784

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0563	ppb	0.3556	631.2	-27.0790
Al 308.215	32.3160	ppb	2.3302	7.2	243.321
As 188.980	-1.2195	ppb	4.1748	342.3	0.9256
B 249.678	344.104	ppb	0.2235	0.1	2218.45

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	2.0313	ppb	0.6025	29.7	-40.2258
Be 313.042	-0.0415	ppb	0.0055	13.3	-194.575
Ca 370.602	15471	ppb	16.41	0.1	35303
Cd 226.502	-0.3627	ppb	0.1272	35.1	6.1362
Co 228.615	0.5868	ppb	0.3102	52.9	-9.0867
Cr 267.716	0.6382	ppb	0.2947	46.2	38.5810
Cu 324.754	8.3967	ppb	0.1735	2.1	533.564
Fe 271.441	51.2103	ppb	1.8344	3.6	69.8535
K 766.491	10765.0	ppb	10.6845	0.1	293660
Mg 279.078	1283.71	ppb	4.5975	0.4	1880.37
Mn 257.610	2.2719	ppb	0.0426	1.9	276.095
Mo 202.032	0.3015	ppb	0.9845	326.5	4.9053
Na 330.237	29833.8	ppb	77.7026	0.3	843.861
Ni 231.604	0.1802	ppb	0.2291	127.2	-2.0175
Pb 220.353	1.1951	ppb	0.8999	75.3	7.3776
Sb 206.834	-8.9956	ppb	1.5550	17.3	7.5873
Se 196.026	-2.8834	ppb	4.4463	154.2	1.4767
Si 288.158	224.885	ppb	0.4089	0.2	1362.94
Sn 189.925	2.4804	ppb	3.4908	140.7	0.5466
Sr 216.596	33.9220	ppb	0.8017	2.4	153.065
Ti 334.941	0.4085	ppb	0.0488	11.9	17.0911
Tl 190.794	-1.4694	ppb	0.8061	54.9	-10.8835
V 292.401	0.3655	ppb	0.1454	39.8	2.6217
Zn 206.200	63.2952	ppb	2.4823	3.9	22.5148

490-164831-A-1-D (Samp) **12/19/2018, 1:56:17 AM** **Rack 3, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.2833	51.4334	51.5029
Al 308.215	5331.42	5335.75	5337.69
As 188.980	97.4875	105.193	92.2694
B 249.678	1823.65	1822.51	1829.18
Ba 389.178	114.554	114.722	113.685
Be 313.042	54.0147	53.8562	53.9382
Ca 370.602	79868	79777	79863
Cd 226.502	53.0986	53.3020	53.6623
Co 228.615	55.9781	56.4491	56.3552
Cr 267.716	109.231	108.962	109.120
Cu 324.754	144.965	144.970	143.715
Fe 271.441	5455.65	5460.95	5465.99
K 766.491	59323.1x	59290.5x	59251.6x
Mg 279.078	11265.4	11240.5	11244.8
Mn 257.610	524.833	524.424	524.825
Mo 202.032	113.319	109.250	112.081
Na 330.237	163022x	162526x	162616x
Ni 231.604	103.676	100.724	107.190
Pb 220.353	513.357	506.498	509.194
Sb 206.834	53.2613	54.8572	50.0792
Se 196.026	111.267	113.665	106.735
Si 288.158	1111.40	1109.30	1104.02
Sn 189.925	99.0503	107.669	97.9508
Sr 216.596	269.130	268.788	268.130
Ti 334.941	104.985	105.096	104.622

Label	Replicates Concentration		
Tl 190.794	36.6989	43.7538	44.3272
V 292.401	105.027	104.637	104.751
Zn 206.200	383.864	382.540	382.617

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.4065b	ppb	0.1122	0.2	1875.19
Al 308.215	5334.96b	ppb	3.2114	0.1	13541.0
As 188.980	98.3168b	ppb	6.5018	6.6	27.1707
B 249.678	1825.11b	ppb	3.5661	0.2	12182.4
Ba 389.178	114.321b	ppb	0.5566	0.5	1218.05
Be 313.042	53.9364b	ppb	0.0792	0.1	44647.0
Ca 370.602	79836b	ppb	50.97	0.1	182020
Cd 226.502	53.3543b	ppb	0.2855	0.5	887.204
Co 228.615	56.2608b	ppb	0.2493	0.4	270.992
Cr 267.716	109.105b	ppb	0.1351	0.1	2559.23
Cu 324.754	144.550b	ppb	0.7231	0.5	5908.16
Fe 271.441	5460.86b	ppb	5.1680	0.1	4529.25
K 766.491	59288.4xb	ppb	35.7921	0.1	1616129
Mg 279.078	11250.3b	ppb	13.3119	0.1	16231.1
Mn 257.610	524.694b	ppb	0.2340	0.0	57449.1
Mo 202.032	111.550b	ppb	2.0858	1.9	255.431
Na 330.237	162722xb	ppb	264.249	0.2	4344.63
Ni 231.604	103.863b	ppb	3.2369	3.1	142.021
Pb 220.353	509.683b	ppb	3.4557	0.7	305.390
Sb 206.834	52.7326b	ppb	2.4325	4.6	34.6105
Se 196.026	110.556b	ppb	3.5194	3.2	23.1211
Si 288.158	1108.24b	ppb	3.8027	0.3	5631.29
Sn 189.925	101.557b	ppb	5.3216	5.2	32.6717
Sr 216.596	268.682b	ppb	0.5080	0.2	1143.79
Ti 334.941	104.901b	ppb	0.2478	0.2	12562.1
Tl 190.794	41.5933b	ppb	4.2484	10.2	7.1128
V 292.401	104.805b	ppb	0.2007	0.2	1510.27
Zn 206.200	383.007b	ppb	0.7431	0.2	137.541

Cont Calib Verif (CCV) **12/19/2018, 2:00:43 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	499.100	491.305	492.175
Al 308.215	9746.23	9743.01	9738.68
As 188.980	494.712	502.831	507.367
B 249.678	508.136	507.840	507.916
Ba 389.178	483.136	484.781	484.471
Be 313.042	520.556	520.754	519.698
Ca 370.602	10008	10007	10000
Cd 226.502	509.591	511.789	510.994
Co 228.615	503.024	504.808	504.676
Cr 267.716	503.209	503.087	501.741
Cu 324.754	487.664	484.906	488.496
Fe 271.441	10057.2	10059.6	10064.8
K 766.491	9592.11	9582.04	9571.74
Mg 279.078	10095.2	10120.4	10107.3
Mn 257.610	497.376	496.743	496.854
Mo 202.032	496.155	495.226	495.403

Label	Replicates Concentration		
Na 330.237	9954.40	10071.5	10396.2
Ni 231.604	496.169	497.398	500.249
Pb 220.353	505.757	490.186	499.932
Sb 206.834	491.184	481.913	478.994
Se 196.026	500.520	479.644	472.364
Si 288.158	5075.02	5071.88	5066.15
Sn 189.925	497.518	496.646	489.735
Sr 216.596	507.116	505.754	507.112
Ti 334.941	501.542	501.574	500.459
Tl 190.794	485.863	498.480	479.231
V 292.401	492.321	492.999	491.748
Zn 206.200	1001.68	1001.18	997.990

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	494.193	ppb	4.2718	0.9	18285.0	98.83870
Al 308.215	9742.64	ppb	3.7925	0.0	24607.9	97.42641
As 188.980	501.637	ppb	6.4116	1.3	133.496	100.32734
B 249.678	507.964	ppb	0.1538	0.0	3311.35	101.59274
Ba 389.178	484.129	ppb	0.8744	0.2	5324.14	96.82583
Be 313.042	520.336	ppb	0.5615	0.1	432104	104.06718
Ca 370.602	10005	ppb	4.108	0.0	22848	100.05013
Cd 226.502	510.791	ppb	1.1129	0.2	8358.40	102.15828
Co 228.615	504.170	ppb	0.9939	0.2	2524.27	100.83392
Cr 267.716	502.679	ppb	0.8145	0.2	11694.6	100.53583
Cu 324.754	487.022	ppb	1.8789	0.4	19426.2	97.40443
Fe 271.441	10060.5	ppb	3.8873	0.0	8344.55	100.55495
K 766.491	9581.96	ppb	10.1887	0.1	261417	95.81962
Mg 279.078	10107.6	ppb	12.6038	0.1	14584.4	101.07604
Mn 257.610	496.991	ppb	0.3381	0.1	54427.3	99.39816
Mo 202.032	495.595	ppb	0.4932	0.1	1120.50	99.11893
Na 330.237	10140.7	ppb	228.863	2.3	321.227	101.40685
Ni 231.604	497.939	ppb	2.0928	0.4	689.214	99.58775
Pb 220.353	498.625	ppb	7.8675	1.6	298.564	99.72499
Sb 206.834	484.030	ppb	6.3649	1.3	225.587	96.80605
Se 196.026	484.176	ppb	14.6149	3.0	94.2820	96.83521
Si 288.158	5071.02	ppb	4.4963	0.1	24755.5	101.42034
Sn 189.925	494.633	ppb	4.2641	0.9	160.039	98.92658
Sr 216.596	506.660	ppb	0.7851	0.2	2141.54	101.33210
Ti 334.941	501.192	ppb	0.6343	0.1	60020.1	100.23833
Tl 190.794	487.858	ppb	9.7783	2.0	193.297	97.57158
V 292.401	492.356	ppb	0.6260	0.1	7106.08	98.47117
Zn 206.200	1000.28	ppb	2.0009	0.2	359.551	100.02825

Cont Calib Blank (CCB) **12/19/2018, 2:05:07 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2269	-0.1206u	0.6998
Al 308.215	0.7131	-3.1649u	-3.6693u
As 188.980	-3.9645u	-0.4156u	5.8624
B 249.678	8.5269	9.0004	7.3465
Ba 389.178	0.7914	0.3935	1.4589
Be 313.042	0.0411	0.0426	0.0383
Ca 370.602	2.948	1.157	1.792

Label	Replicates Concentration		
Cd 226.502	-0.1848u	-0.0003u	-0.2007u
Co 228.615	0.1614	-0.2376u	0.4327
Cr 267.716	-0.0838u	-0.3813u	-0.2147u
Cu 324.754	-0.2389u	-0.2657u	0.4496
Fe 271.441	11.1868	0.4814	5.7312
K 766.491	5.0599	4.1300	4.2231
Mg 279.078	-0.7250u	5.3380	-1.5283u
Mn 257.610	0.2178	0.1917	0.1760
Mo 202.032	0.6218	-1.4138u	-0.9967u
Na 330.237	-1.8968u	-77.6126u	44.1279
Ni 231.604	0.2500	-0.5885u	-0.4957u
Pb 220.353	1.2108	-3.9910u	-1.1583u
Sb 206.834	-11.4672u	-10.6719u	-9.8930u
Se 196.026	-12.6640u	13.6087	2.5178
Si 288.158	2.2768	1.5964	2.5429
Sn 189.925	1.2187	0.0667	-1.0382u
Sr 216.596	-0.0779u	-0.3064u	-0.9070u
Ti 334.941	0.2286	0.1612	0.1688
Tl 190.794	2.1176	-7.7301u	4.6658
V 292.401	0.4810	0.4850	0.1534
Zn 206.200	2.3163	3.1877	0.9138

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2687	ppb	0.4118	153.2	-19.0496	0.26869
Al 308.215	-2.0404	ppb	2.3979	117.5	157.181	-2.04037
As 188.980	0.4941	ppb	4.9762	1007.1	1.3780	0.49409
B 249.678	8.2913	ppb	0.8518	10.3	-42.0290	8.29128
Ba 389.178	0.8813	ppb	0.5384	61.1	-54.2806	0.88129
Be 313.042	0.0407	ppb	0.0022	5.3	-127.057	0.04067
Ca 370.602	1.966	ppb	0.9080	46.2	41.75	1.96574
Cd 226.502	-0.1286	ppb	0.1114	86.6	9.9825	-0.12857
Co 228.615	0.1188	ppb	0.3372	283.7	-11.4365	0.11883
Cr 267.716	-0.2266	ppb	0.1491	65.8	18.2596	-0.22661
Cu 324.754	-0.0184	ppb	0.4055	2209.3	201.527	-0.01835
Fe 271.441	5.7998	ppb	5.3530	92.3	32.4170	5.79978
K 766.491	4.4710	ppb	0.5121	11.5	390.078	4.47102
Mg 279.078	1.0282	ppb	3.7539	365.1	32.5738	1.02822
Mn 257.610	0.1952	ppb	0.0211	10.8	42.6920	0.19516
Mo 202.032	-0.5962	ppb	1.0753	180.3	2.8834	-0.59625
Na 330.237	-11.7939	ppb	61.4707	521.2	57.4458	-11.79385
Ni 231.604	-0.2781	ppb	0.4597	165.3	-2.6538	-0.27806
Pb 220.353	-1.3128	ppb	2.6043	198.4	5.9080	-1.31285
Sb 206.834	-10.6774	ppb	0.7871	7.4	6.8401	-10.67737Z
Se 196.026	1.1542	ppb	13.1893	1142.7	2.2459	1.15420
Si 288.158	2.1387	ppb	0.4881	22.8	293.774	2.13873
Sn 189.925	0.0824	ppb	1.1285	1369.1	-0.2343	0.08243
Sr 216.596	-0.4304	ppb	0.4283	99.5	7.9336	-0.43043
Ti 334.941	0.1862	ppb	0.0369	19.8	-13.2031	0.18617
Tl 190.794	-0.3156	ppb	6.5464	2074.4	-10.4023	-0.31558
V 292.401	0.3731	ppb	0.1903	51.0	2.9402	0.37314
Zn 206.200	2.1393	ppb	1.1472	53.6	0.5063	2.13928

490-164831-A-1-E MS (Samp) **12/19/2018, 2:09:30 AM** **Rack 3, Tube 21**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.2796	52.3052	51.9782
Al 308.215	5228.35	5227.91	5229.99
As 188.980	103.284	97.0695	98.2478
B 249.678	1947.60	1955.60	1956.47
Ba 389.178	114.787	112.005	112.478
Be 313.042	52.7062	52.7423	52.6636
Ca 370.602	85697	85753	85735
Cd 226.502	52.0841	52.1943	52.1782
Co 228.615	53.9796	54.5703	53.7977
Cr 267.716	107.379	106.715	106.809
Cu 324.754	146.716	147.485	148.906
Fe 271.441	5375.04	5375.48	5381.86
K 766.491	63197.5x	63196.8x	63212.6x
Mg 279.078	11624.0	11609.2	11584.7
Mn 257.610	512.112	512.202	512.268
Mo 202.032	107.082	108.937	108.746
Na 330.237	176640x	176177x	176098x
Ni 231.604	100.725	105.322	101.021
Pb 220.353	490.616	508.947	506.249
Sb 206.834	50.1187	46.1496	47.2499
Se 196.026	89.0284	111.712	103.846
Si 288.158	1188.15	1185.01	1189.86
Sn 189.925	99.7692	98.5001	96.4330
Sr 216.596	279.204	281.264	280.777
Ti 334.941	102.387	102.787	102.864
Tl 190.794	30.2593	32.2776	41.0488
V 292.401	101.627	102.693	102.127
Zn 206.200	412.367	404.386	397.004

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.1877b	ppb	0.1818	0.3	1904.08
Al 308.215	5228.75b	ppb	1.0975	0.0	13274.6
As 188.980	99.5337b	ppb	3.3006	3.3	27.4925
B 249.678	1953.22b	ppb	4.8894	0.3	13044.9
Ba 389.178	113.090b	ppb	1.4889	1.3	1204.71
Be 313.042	52.7040b	ppb	0.0394	0.1	43623.6
Ca 370.602	85728b	ppb	28.82	0.0	195451
Cd 226.502	52.1522b	ppb	0.0595	0.1	867.486
Co 228.615	54.1158b	ppb	0.4039	0.7	260.216
Cr 267.716	106.968b	ppb	0.3595	0.3	2509.70
Cu 324.754	147.702b	ppb	1.1111	0.8	6032.43
Fe 271.441	5377.46b	ppb	3.8181	0.1	4460.44
K 766.491	63202.3xb	ppb	8.9453	0.0	1722800
Mg 279.078	11606.0b	ppb	19.8551	0.2	16743.8
Mn 257.610	512.194b	ppb	0.0786	0.0	56084.1
Mo 202.032	108.255b	ppb	1.0204	0.9	248.010
Na 330.237	176305xb	ppb	293.069	0.2	4702.57
Ni 231.604	102.356b	ppb	2.5727	2.5	139.928
Pb 220.353	501.937b	ppb	9.8970	2.0	300.851
Sb 206.834	47.8394b	ppb	2.0492	4.3	32.4411
Se 196.026	101.529b	ppb	11.5179	11.3	21.4004
Si 288.158	1187.67b	ppb	2.4609	0.2	6011.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	98.2341b	ppb	1.6839	1.7	31.5967
Sr 216.596	280.415b	ppb	1.0768	0.4	1193.40
Ti 334.941	102.679b	ppb	0.2560	0.2	12296.9
Tl 190.794	34.5286b	ppb	5.7362	16.6	4.1669
V 292.401	102.149b	ppb	0.5336	0.5	1471.91
Zn 206.200	404.586b	ppb	7.6835	1.9	145.308

490-164831-A-1-F MSD (Samp) **12/19/2018, 2:13:57 AM** **Rack 3, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.9995	51.0336	50.9551
Al 308.215	5093.88	5098.21	5075.23
As 188.980	100.654	93.0728	101.971
B 249.678	1856.58	1860.23	1857.53
Ba 389.178	110.683	109.416	110.611
Be 313.042	51.4022	51.4010	51.3361
Ca 370.602	81295	81378	81148
Cd 226.502	50.9800	50.9335	51.2384
Co 228.615	52.6919	53.5910	53.0808
Cr 267.716	103.993	104.312	104.354
Cu 324.754	143.239	140.919	141.593
Fe 271.441	5226.80	5229.86	5217.80
K 766.491	60079.5x	60025.5x	59806.0x
Mg 279.078	11129.8	11155.0	11135.2
Mn 257.610	499.387	498.959	498.929
Mo 202.032	105.949	106.953	103.886
Na 330.237	166353x	166968x	166352x
Ni 231.604	99.5413	97.1634	101.005
Pb 220.353	485.173	478.507	479.457
Sb 206.834	49.1326	41.3789	43.0394
Se 196.026	107.533	99.4059	111.035
Si 288.158	1130.80	1131.18	1125.68
Sn 189.925	100.975	103.813	91.3486
Sr 216.596	266.856	266.044	268.524
Ti 334.941	100.497	100.253	100.034
Tl 190.794	38.5778	34.2058	35.8028
V 292.401	98.8638	99.3731	99.3317
Zn 206.200	384.926	384.039	383.686

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9961b	ppb	0.0394	0.1	1859.97
Al 308.215	5089.11b	ppb	12.2107	0.2	12924.4
As 188.980	98.5658b	ppb	4.8024	4.9	27.2375
B 249.678	1858.11b	ppb	1.8920	0.1	12404.8
Ba 389.178	110.237b	ppb	0.7116	0.6	1172.52
Be 313.042	51.3798b	ppb	0.0378	0.1	42523.4
Ca 370.602	81274b	ppb	116.3	0.1	185297
Cd 226.502	51.0506b	ppb	0.1643	0.3	849.394
Co 228.615	53.1212b	ppb	0.4509	0.8	255.212
Cr 267.716	104.220b	ppb	0.1971	0.2	2445.79
Cu 324.754	141.917b	ppb	1.1935	0.8	5804.12
Fe 271.441	5224.82b	ppb	6.2673	0.1	4334.63
K 766.491	59970.4xb	ppb	144.830	0.2	1634715

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	11140.0b	ppb	13.2995	0.1	16072.7
Mn 257.610	499.091b	ppb	0.2562	0.1	54649.1
Mo 202.032	105.596b	ppb	1.5639	1.5	242.022
Na 330.237	166558xb	ppb	355.562	0.2	4445.75
Ni 231.604	99.2367b	ppb	1.9390	2.0	135.595
Pb 220.353	481.046b	ppb	3.6056	0.7	288.606
Sb 206.834	44.5169b	ppb	4.0826	9.2	30.9681
Se 196.026	105.991b	ppb	5.9660	5.6	22.2499
Si 288.158	1129.22b	ppb	3.0707	0.3	5730.61
Sn 189.925	98.7123b	ppb	6.5331	6.6	31.7504
Sr 216.596	267.141b	ppb	1.2644	0.5	1137.35
Ti 334.941	100.261b	ppb	0.2320	0.2	12006.0
Tl 190.794	36.1955b	ppb	2.2123	6.1	4.8605
V 292.401	99.1895b	ppb	0.2828	0.3	1429.18
Zn 206.200	384.217b	ppb	0.6388	0.2	137.978

490-164847-A-2-B (Samp) **12/19/2018, 2:18:22 AM** **Rack 3, Tube 23**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5402u	-0.3787u	-0.1245u
Al 308.215	55.3737	58.4614	56.4017
As 188.980	2.6307	3.5731	2.3576
B 249.678	568.978	569.367	565.063
Ba 389.178	42.1343	42.2089	42.2120
Be 313.042	-0.0163u	-0.0211u	-0.0019u
Ca 370.602	59030	58963	59000
Cd 226.502	-0.2941u	-0.4741u	-0.2741u
Co 228.615	-0.1714u	0.1768u	0.1499u
Cr 267.716	0.7248	0.6966	0.6783
Cu 324.754	86.7502	87.0979	86.3979
Fe 271.441	1029.43	1029.56	1032.00
K 766.491	9567.57	9532.91	9565.73
Mg 279.078	9434.67	9407.11	9393.48
Mn 257.610	28.1712	28.0435	28.1613
Mo 202.032	129.616	129.992	129.331
Na 330.237	815906x	816240x	815106x
Ni 231.604	2.1478	3.3685	3.9508
Pb 220.353	2.7560	-1.1013u	-0.6350u
Sb 206.834	-8.1151u	-8.0511u	-8.1973u
Se 196.026	9.6193	15.5251	-8.1264u
Si 288.158	3388.44	3381.98	3379.25
Sn 189.925	3.7917	3.0106	4.9672
Sr 216.596	215.950	219.207	220.084
Ti 334.941	1.2879	1.2521	1.0851
Tl 190.794	1.3995	-5.1359u	4.4671
V 292.401	1.0492	1.0397	0.8750u
Zn 206.200	258.298	256.275	250.793

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3478b	ppb	0.2096	60.3	-43.0167
Al 308.215	56.7456b	ppb	1.5724	2.8	306.730
As 188.980	2.8538b	ppb	0.6377	22.3	1.9854
B 249.678	567.803b	ppb	2.3802	0.4	3723.28

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	42.1850b	ppb	0.0440	0.1	414.134
Be 313.042	-0.0131b	ppb	0.0099	76.0	-210.080
Ca 370.602	58998b	ppb	33.91	0.1	134516
Cd 226.502	-0.3474b	ppb	0.1101	31.7	5.4203
Co 228.615	0.0518b	ppb	0.1938	374.4	-13.2355
Cr 267.716	0.6999b	ppb	0.0234	3.3	46.4344
Cu 324.754	86.7487b	ppb	0.3500	0.4	3627.85
Fe 271.441	1030.33b	ppb	1.4519	0.1	876.345
K 766.491	9555.40b	ppb	19.5011	0.2	260694
Mg 279.078	9411.75b	ppb	20.9828	0.2	13589.2
Mn 257.610	28.1253b	ppb	0.0710	0.3	3141.76
Mo 202.032	129.646b	ppb	0.3315	0.3	296.294
Na 330.237	815751xb	ppb	583.121	0.1	21555.3
Ni 231.604	3.1557b	ppb	0.9201	29.2	2.1187
Pb 220.353	0.3399b	ppb	2.1054	619.4	6.8422
Sb 206.834	-8.1212b	ppb	0.0733	0.9	6.7260
Se 196.026	5.6727b	ppb	12.3097	217.0	3.1061
Si 288.158	3383.22b	ppb	4.7205	0.1	16537.6
Sn 189.925	3.9232b	ppb	0.9849	25.1	1.1147
Sr 216.596	218.414b	ppb	2.1778	1.0	930.893
Ti 334.941	1.2084b	ppb	0.1082	9.0	117.739
Tl 190.794	0.2436b	ppb	4.9048	2013.6	-10.2513
V 292.401	0.9880b	ppb	0.0980	9.9	-1.4256
Zn 206.200	255.122b	ppb	3.8831	1.5	91.5507

680-162196-F-1-B (Samp) **12/19/2018, 2:22:46 AM** **Rack 3, Tube 24**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0054u	-0.3550u	-0.1320u
Al 308.215	443.794	446.296	446.785
As 188.980	-4.0093u	-0.4120u	2.9799
B 249.678	85.4212	85.6723	85.3839
Ba 389.178	14.3182	14.2483	15.3116
Be 313.042	-0.0414	-0.0333	-0.0450
Ca 370.602	343266	342222	342499
Cd 226.502	0.0488	-0.1187u	-0.3342u
Co 228.615	-0.7940u	0.0102	0.0918
Cr 267.716	8.9629	9.9206	9.3249
Cu 324.754	45.7729	45.4506	45.4561
Fe 271.441	1110.11	1107.96	1098.86
K 766.491	69383.7x	69405.6x	69438.2x
Mg 279.078	13904.1	13907.2	13878.8
Mn 257.610	30.1489	30.1356	30.0846
Mo 202.032	1.6195	1.6540	0.2050
Na 330.237	122859x	123156x	122648x
Ni 231.604	4.1809	6.0340	5.4709
Pb 220.353	5.1644	-1.1907u	-1.6518u
Sb 206.834	-7.5090u	-6.1375u	1.4865
Se 196.026	15.7231	-0.7995u	-15.4211u
Si 288.158	7717.37	7716.47	7714.64
Sn 189.925	7.6069	2.0469	7.3587
Sr 216.596	336.802	338.456	337.260
Ti 334.941	14.0673	14.1789	14.1700

Label	Replicates Concentration		
Tl 190.794	6.0028	-10.1687u	-3.2435u
V 292.401	8.0292	7.5529	6.8262
Zn 206.200	187.008	179.972	183.436

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1641b	ppb	0.1770	107.9	-36.9651
Al 308.215	445.625b	ppb	1.6045	0.4	1279.68
As 188.980	-0.4805b	ppb	3.4951	727.4	1.1214
B 249.678	85.4925b	ppb	0.1569	0.2	476.619
Ba 389.178	14.6260b	ppb	0.5947	4.1	112.438
Be 313.042	-0.0399b	ppb	0.0060	15.1	-147.040
Ca 370.602	342662b	ppb	541.0	0.2	781111
Cd 226.502	-0.1347b	ppb	0.1920	142.5	10.5575
Co 228.615	-0.2307b	ppb	0.4895	212.2	-13.0127
Cr 267.716	9.4028b	ppb	0.4836	5.1	242.963
Cu 324.754	45.5599b	ppb	0.1845	0.4	1999.98
Fe 271.441	1105.65b	ppb	5.9709	0.5	938.352
K 766.491	69409.1xb	ppb	27.4106	0.0	1891962
Mg 279.078	13896.7b	ppb	15.5419	0.1	20050.1
Mn 257.610	30.1230b	ppb	0.0339	0.1	3385.94
Mo 202.032	1.1595b	ppb	0.8268	71.3	6.8200
Na 330.237	122888xb	ppb	255.283	0.2	3295.81
Ni 231.604	5.2286b	ppb	0.9500	18.2	4.9996
Pb 220.353	0.7740b	ppb	3.8092	492.2	7.1307
Sb 206.834	-4.0534b	ppb	4.8464	119.6	9.8433
Se 196.026	-0.1658b	ppb	15.5818	9396.7	1.9938
Si 288.158	7716.16b	ppb	1.3910	0.0	37314.4
Sn 189.925	5.6708b	ppb	3.1409	55.4	1.5924
Sr 216.596	337.506b	ppb	0.8543	0.3	1435.91
Ti 334.941	14.1387b	ppb	0.0621	0.4	1703.56
Tl 190.794	-2.4698b	ppb	8.1135	328.5	-11.3259
V 292.401	7.4694b	ppb	0.6059	8.1	105.653
Zn 206.200	183.472b	ppb	3.5183	1.9	65.7625

MB 680-551750/1-A (Samp) **12/19/2018, 2:27:11 AM** **Rack 3, Tube 25**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6959u	-0.5629u	0.0523
Al 308.215	1.9170	2.3263	0.8975
As 188.980	-3.0350u	0.5049	-0.6569u
B 249.678	6.2433	5.7196	6.3412
Ba 389.178	0.3950	1.2824	1.1290
Be 313.042	-0.0422u	-0.0479u	-0.0394u
Ca 370.602	55.48	67.42	60.75
Cd 226.502	-0.1922u	-0.2170u	-0.2727u
Co 228.615	-0.8304u	0.0010	1.0117
Cr 267.716	-0.1067u	-0.0399u	-0.2864u
Cu 324.754	0.5038	0.2400	-0.2492u
Fe 271.441	9.6844	-3.6222u	8.5999
K 766.491	15.9686	18.5333	16.2256
Mg 279.078	-1.1938u	-1.6678u	4.6400
Mn 257.610	0.0917	0.2467	0.1722
Mo 202.032	-1.0165u	-0.2701u	-0.4081u

Label	Replicates Concentration		
Na 330.237	153.763	46.7401	121.955
Ni 231.604	1.1052	-0.0576u	1.6849
Pb 220.353	-1.5539u	1.2037	-1.9994u
Sb 206.834	-5.7005u	-5.7735u	-5.6023u
Se 196.026	2.0800	5.2953	3.1785
Si 288.158	1.0695	1.4177	0.8973
Sn 189.925	-0.3918u	2.8665	2.1766
Sr 216.596	-0.0914u	0.2900	0.0381
Ti 334.941	0.1130	0.0403	-0.0013u
Tl 190.794	3.1422	0.0726	-5.1693u
V 292.401	-0.0491u	0.1918	-0.1307u
Zn 206.200	3.2842	-0.4826u	-2.7340u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4021	ppb	0.3992	99.3	-43.9128
Al 308.215	1.7136	ppb	0.7358	42.9	166.583
As 188.980	-1.0624	ppb	1.8044	169.9	0.9672
B 249.678	6.1014	ppb	0.3342	5.5	-56.7726
Ba 389.178	0.9354	ppb	0.4743	50.7	-53.6796
Be 313.042	-0.0432	ppb	0.0043	9.9	-196.734
Ca 370.602	61.22	ppb	5.981	9.8	176.8
Cd 226.502	-0.2273	ppb	0.0412	18.1	8.3728
Co 228.615	0.0607	ppb	0.9225	1518.6	-11.7330
Cr 267.716	-0.1443	ppb	0.1275	88.3	20.1705
Cu 324.754	0.1648	ppb	0.3821	231.8	208.763
Fe 271.441	4.8874	ppb	7.3894	151.2	31.6680
K 766.491	16.9091	ppb	1.4124	8.4	729.069
Mg 279.078	0.5928	ppb	3.5130	592.7	31.9461
Mn 257.610	0.1702	ppb	0.0775	45.5	39.9583
Mo 202.032	-0.5649	ppb	0.3972	70.3	2.9541
Na 330.237	107.486	ppb	54.9591	51.1	60.5833
Ni 231.604	0.9108	ppb	0.8874	97.4	-1.0015
Pb 220.353	-0.7832	ppb	1.7351	221.5	6.2184
Sb 206.834	-5.6921	ppb	0.0859	1.5	9.0728
Se 196.026	3.5179	ppb	1.6343	46.5	2.6962
Si 288.158	1.1282	ppb	0.2651	23.5	288.915
Sn 189.925	1.5504	ppb	1.7170	110.7	0.2414
Sr 216.596	0.0789	ppb	0.1939	245.8	10.0708
Ti 334.941	0.0507	ppb	0.0578	114.1	-29.4335
Tl 190.794	-0.6515	ppb	4.2028	645.1	-10.5425
V 292.401	0.0040	ppb	0.1677	4179.3	-2.4514
Zn 206.200	0.0225	ppb	3.0407	13493.3	-0.2555

LCS 680-551750/2-A (Samp) **12/19/2018, 2:31:36 AM** **Rack 3, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	50.4282	50.7708	50.6354
Al 308.215	4879.87	4871.61	4870.66
As 188.980	91.5911	89.7155	104.434
B 249.678	203.247	201.959	202.804
Ba 389.178	97.4231	98.6601	99.9022
Be 313.042	52.1995	52.0898	52.1029
Ca 370.602	4971	4977	4970

Label	Replicates Concentration		
Cd 226.502	52.2755	52.0616	52.3978
Co 228.615	51.8364	51.7164	51.4204
Cr 267.716	102.105	102.018	102.043
Cu 324.754	98.5985	98.3697	98.8774
Fe 271.441	5082.58	5070.75	5076.65
K 766.491	7684.87	7673.96	7669.37
Mg 279.078	5059.57	5039.13	5048.58
Mn 257.610	501.887	501.042	501.006
Mo 202.032	102.214	99.6631	99.9902
Na 330.237	5057.18	4775.14	4904.37
Ni 231.604	103.379	101.792	103.901
Pb 220.353	510.691	505.279	504.311
Sb 206.834	43.8399	47.9369	41.4479
Se 196.026	89.9098	85.6759	85.2907
Si 288.158	-6.0753u	-4.8337	-7.4319u
Sn 189.925	100.264	97.6727	95.2676
Sr 216.596	101.072	101.576	102.168
Ti 334.941	100.573	100.251	100.462
Tl 190.794	38.0720	41.0033	35.4914
V 292.401	99.8955	98.8557	98.6406
Zn 206.200	101.455	101.172	98.6296

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.6114	ppb	0.1726	0.3	1846.50
Al 308.215	4874.05	ppb	5.0658	0.1	12385.2
As 188.980	95.2470	ppb	8.0116	8.4	26.3625
B 249.678	202.670	ppb	0.6543	0.3	1261.32
Ba 389.178	98.6618	ppb	1.2395	1.3	1037.94
Be 313.042	52.1308	ppb	0.0599	0.1	43144.3
Ca 370.602	4972	ppb	3.690	0.1	11374
Cd 226.502	52.2450	ppb	0.1702	0.3	869.099
Co 228.615	51.6577	ppb	0.2141	0.4	247.883
Cr 267.716	102.055	ppb	0.0451	0.0	2394.25
Cu 324.754	98.6152	ppb	0.2542	0.3	4095.58
Fe 271.441	5076.66	ppb	5.9150	0.1	4212.50
K 766.491	7676.07	ppb	7.9604	0.1	209474
Mg 279.078	5049.09	ppb	10.2298	0.2	7298.18
Mn 257.610	501.312	ppb	0.4985	0.1	54861.8
Mo 202.032	100.622	ppb	1.3880	1.4	230.820
Na 330.237	4912.23	ppb	141.186	2.9	186.382
Ni 231.604	103.024	ppb	1.0981	1.1	140.860
Pb 220.353	506.761	ppb	3.4384	0.7	303.685
Sb 206.834	44.4082	ppb	3.2816	7.4	30.9574
Se 196.026	86.9588	ppb	2.5629	2.9	18.6246
Si 288.158	-6.1136uv	ppb	1.2995	21.3	281.305
Sn 189.925	97.7348	ppb	2.4989	2.6	31.4130
Sr 216.596	101.605	ppb	0.5489	0.5	437.975
Ti 334.941	100.429	ppb	0.1634	0.2	12009.2
Tl 190.794	38.1889	ppb	2.7578	7.2	5.6970
V 292.401	99.1306	ppb	0.6711	0.7	1429.32
Zn 206.200	100.419	ppb	1.5560	1.5	35.8456

660-91323-G-1-D (Samp) **12/19/2018, 2:36:01 AM** **Rack 3, Tube 27**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.0739u	-0.5676u	-1.0785u
Al 308.215	242465	242442	243144
As 188.980	12.9550	17.3317	17.4560
B 249.678	72.5461	72.4749	72.4612
Ba 389.178	619.034	619.174	620.351
Be 313.042	7.4072	7.4132	7.4156
Ca 370.602	20187	20174	20193
Cd 226.502	-0.8743	-0.6148	-0.5162
Co 228.615	10.7288	11.7682	12.9900
Cr 267.716	349.874	348.484	349.103
Cu 324.754	42.6183	43.4649	42.7409
Fe 271.441	37514.4	37601.7	37655.9
K 766.491	4192.31	4188.44	4198.46
Mg 279.078	13284.1	13287.3	13303.8
Mn 257.610	61.8707	61.8315	61.8822
Mo 202.032	20.3838	20.3140	19.9965
Na 330.237	10391.0	10509.5	10454.1
Ni 231.604	84.4095	83.0424	83.1099
Pb 220.353	137.008	131.967	131.171
Sb 206.834	-1.3114	-10.5908u	-3.0553
Se 196.026	17.2689	-8.5529u	10.2352
Si 288.158	79621.6x	79818.4x	80129.2x
Sn 189.925	5.2094	0.7838	8.1022
Sr 216.596	2244.43	2244.26	2249.43
Ti 334.941	168.935	168.517	169.021
Tl 190.794	0.4625u	-4.1419u	-0.2640u
V 292.401	287.798	288.856	287.969
Zn 206.200	43.5477	38.9630	42.3857

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9067b	ppb	0.2937	32.4	-78.6493
Al 308.215	242684b	ppb	398.660	0.2	608518
As 188.980	15.9143b	ppb	2.5635	16.1	5.4676
B 249.678	72.4941b	ppb	0.0456	0.1	352.294
Ba 389.178	619.519b	ppb	0.7232	0.1	6837.34
Be 313.042	7.4120b	ppb	0.0043	0.1	6015.07
Ca 370.602	20184b	ppb	9.711	0.0	45969
Cd 226.502	-0.6685b	ppb	0.1850	27.7	42.4021
Co 228.615	11.8290b	ppb	1.1318	9.6	50.3370
Cr 267.716	349.154b	ppb	0.6965	0.2	8134.13
Cu 324.754	42.9414b	ppb	0.4575	1.1	1903.42
Fe 271.441	37590.7b	ppb	71.3513	0.2	30991.8
K 766.491	4193.07b	ppb	5.0531	0.1	114547
Mg 279.078	13291.8b	ppb	10.5770	0.1	19128.0
Mn 257.610	61.8615b	ppb	0.0266	0.0	6886.04
Mo 202.032	20.2314b	ppb	0.2064	1.0	49.1542
Na 330.237	10451.6b	ppb	59.2756	0.6	329.356
Ni 231.604	83.5206b	ppb	0.7706	0.9	113.845
Pb 220.353	133.382b	ppb	3.1653	2.4	81.8740
Sb 206.834	-4.9858b	ppb	4.9317	98.9	10.9683
Se 196.026	6.3171b	ppb	13.3493	211.3	3.1148
Si 288.158	79856.4xb	ppb	255.930	0.3	383527

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	4.6985b	ppb	3.6858	78.4	1.2629
Sr 216.596	2246.04b	ppb	2.9366	0.1	9507.57
Ti 334.941	168.824b	ppb	0.2696	0.2	20234.2
Tl 190.794	-1.3144b	ppb	2.4754	188.3	-12.0422
V 292.401	288.208b	ppb	0.5681	0.2	4184.64
Zn 206.200	41.6322b	ppb	2.3834	5.7	14.6466

660-91323-G-1-Dsd (Samp) **12/19/2018, 2:40:26 AM** **Rack 3, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0999u	-0.2012u	-0.6117u
Al 308.215	50115.0	50219.2	50202.2
As 188.980	7.0286	9.0338	5.1582
B 249.678	17.7559	17.3335	17.7770
Ba 389.178	130.553	127.378	129.202
Be 313.042	1.4348	1.4335	1.4579
Ca 370.602	4167	4158	4179
Cd 226.502	-0.2873	-0.3646	-0.1570
Co 228.615	3.9369	3.0145	3.2029
Cr 267.716	72.8752	72.4694	72.4248
Cu 324.754	9.0155	8.6177	8.7857
Fe 271.441	7838.83	7863.09	7864.10
K 766.491	850.476	853.643	851.447
Mg 279.078	2780.76	2776.56	2774.37
Mn 257.610	13.0961	13.0862	12.9862
Mo 202.032	4.1544	3.0779	4.0516
Na 330.237	2031.99	2120.66	1691.23
Ni 231.604	20.5405	19.3584	16.3282
Pb 220.353	29.1452	30.5897	31.5684
Sb 206.834	-8.6795u	-3.3276u	1.2493
Se 196.026	-6.4432u	-8.6301u	-3.5862u
Si 288.158	16889.2	16930.9	16922.3
Sn 189.925	2.9638	1.7482	4.5787
Sr 216.596	468.983	470.235	469.340
Ti 334.941	35.5003	35.2477	35.1564
Tl 190.794	-0.5755u	-3.9762u	-2.5115u
V 292.401	60.1378	60.1905	59.2991
Zn 206.200	9.3192	8.9502	13.4405

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3043	ppb	0.2710	89.1	-43.6394
Al 308.215	50178.8	ppb	55.8857	0.1	125950
As 188.980	7.0735	ppb	1.9382	27.4	3.1184
B 249.678	17.6221	ppb	0.2502	1.4	12.8674
Ba 389.178	129.044	ppb	1.5933	1.2	1373.50
Be 313.042	1.4421	ppb	0.0137	1.0	1040.97
Ca 370.602	4168	ppb	10.75	0.3	9522
Cd 226.502	-0.2696	ppb	0.1049	38.9	16.2703
Co 228.615	3.3848	ppb	0.4874	14.4	5.5901
Cr 267.716	72.5898	ppb	0.2482	0.3	1709.74
Cu 324.754	8.8063	ppb	0.1997	2.3	551.159
Fe 271.441	7855.34	ppb	14.3061	0.2	6498.27
K 766.491	851.856	ppb	1.6226	0.2	23484.9

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2777.23	ppb	3.2459	0.1	4021.39
Mn 257.610	13.0561	ppb	0.0608	0.5	1469.95
Mo 202.032	3.7613	ppb	0.5941	15.8	12.5644
Na 330.237	1947.96	ppb	226.715	11.6	108.290
Ni 231.604	18.7423	ppb	2.1727	11.6	23.7872
Pb 220.353	30.4344	ppb	1.2190	4.0	23.9002
Sb 206.834	-3.5859	ppb	4.9694	138.6	10.3476
Se 196.026	-6.2199	ppb	2.5294	40.7	0.8171
Si 288.158	16914.1	ppb	22.0159	0.1	81456.9
Sn 189.925	3.0969	ppb	1.4200	45.9	0.7429
Sr 216.596	469.519	ppb	0.6449	0.1	1995.19
Ti 334.941	35.3015	ppb	0.1781	0.5	4202.90
Tl 190.794	-2.3544	ppb	1.7058	72.5	-11.5068
V 292.401	59.8758	ppb	0.5001	0.8	867.396
Zn 206.200	10.5700	ppb	2.4928	23.6	3.5252

660-91323-G-1-Dpds (Samp) **12/19/2018, 2:44:50 AM** **Rack 3, Tube 29**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.5625	51.0866	51.5645
Al 308.215	245246	244972	245561
As 188.980	108.131	119.534	118.311
B 249.678	270.365	272.223	273.260
Ba 389.178	708.424	708.659	711.673
Be 313.042	61.1032	60.9791	61.1004
Ca 370.602	24937	24909	24965
Cd 226.502	52.5141	52.3667	51.6171
Co 228.615	62.6815	63.9620	62.9762
Cr 267.716	449.122	447.328	448.867
Cu 324.754	145.987	144.632	142.814
Fe 271.441	42244.8	42164.2	42197.1
K 766.491	12704.2	12686.7	12702.0
Mg 279.078	18257.3	18242.9	18258.2
Mn 257.610	568.259	567.666	568.589
Mo 202.032	121.362	120.748	121.168
Na 330.237	15908.3	15810.6	16048.9
Ni 231.604	183.705	185.495	181.943
Pb 220.353	635.835	641.968	641.905
Sb 206.834	41.4950	40.3151	46.5915
Se 196.026	113.782	112.069	106.149
Si 288.158	80819.2x	80976.7x	81326.6x
Sn 189.925	104.484	108.568	106.087
Sr 216.596	2314.67	2310.23	2318.75
Ti 334.941	269.602	268.857	268.948
Tl 190.794	38.9868	39.4790	37.2363
V 292.401	385.101	385.364	385.723
Zn 206.200	141.143	142.921	147.197

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.4046b	ppb	0.2754	0.5	1860.08
Al 308.215	245260b	ppb	294.720	0.1	614980
As 188.980	115.325b	ppb	6.2602	5.4	31.6808
B 249.678	271.949b	ppb	1.4670	0.5	1690.28

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	709.585b	ppb	1.8118	0.3	7843.71
Be 313.042	61.0609b	ppb	0.0709	0.1	50581.3
Ca 370.602	24937b	ppb	28.13	0.1	56806
Cd 226.502	52.1660b	ppb	0.4810	0.9	908.582
Co 228.615	63.2066b	ppb	0.6706	1.1	308.829
Cr 267.716	448.439b	ppb	0.9706	0.2	10440.5
Cu 324.754	144.478b	ppb	1.5918	1.1	5911.90
Fe 271.441	42202.0b	ppb	40.5260	0.1	34793.3
K 766.491	12697.6b	ppb	9.5295	0.1	346332
Mg 279.078	18252.8b	ppb	8.6121	0.0	26268.6
Mn 257.610	568.171b	ppb	0.4680	0.1	62272.2
Mo 202.032	121.093b	ppb	0.3135	0.3	276.293
Na 330.237	15922.6b	ppb	119.799	0.8	472.753
Ni 231.604	183.714b	ppb	1.7763	1.0	253.038
Pb 220.353	639.902b	ppb	3.5230	0.6	378.766
Sb 206.834	42.8005b	ppb	3.3357	7.8	31.7980
Se 196.026	110.667b	ppb	4.0053	3.6	23.0286
Si 288.158	81040.8xb	ppb	259.701	0.3	389238
Sn 189.925	106.380b	ppb	2.0579	1.9	34.2160
Sr 216.596	2314.55b	ppb	4.2623	0.2	9795.88
Ti 334.941	269.136b	ppb	0.4062	0.2	32264.4
Tl 190.794	38.5674b	ppb	1.1787	3.1	4.6488
V 292.401	385.396b	ppb	0.3120	0.1	5588.20
Zn 206.200	143.754b	ppb	3.1113	2.2	51.3689

660-91323-G-1-E MS (Samp) **12/19/2018, 2:49:15 AM** **Rack 3, Tube 30**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	49.2684	50.1153	50.0411
Al 308.215	251575	251849	251361
As 188.980	102.946	112.563	116.272
B 249.678	247.098	247.246	247.460
Ba 389.178	698.174	700.292	699.088
Be 313.042	58.8142	58.9412	58.8008
Ca 370.602	24512	24527	24443
Cd 226.502	50.1690	50.2700	50.2671
Co 228.615	61.5269	61.2894	61.6960
Cr 267.716	447.548	448.781	447.943
Cu 324.754	140.917	139.267	140.091
Fe 271.441	42518.2	42604.5	42559.3
K 766.491	12349.1	12362.0	12305.4
Mg 279.078	18112.8	18145.8	18120.7
Mn 257.610	545.930	546.279	544.564
Mo 202.032	102.207	104.466	102.262
Na 330.237	15973.4	15397.0	15738.8
Ni 231.604	180.617	177.975	181.461
Pb 220.353	613.830	624.721	632.674
Sb 206.834	2.9803	2.5488	13.3594
Se 196.026	87.3032	70.5070	86.2431
Si 288.158	89687.8x	90024.2x	90041.3x
Sn 189.925	94.7529	108.637	95.1270
Sr 216.596	2283.76	2287.77	2289.69
Ti 334.941	227.154	227.628	227.041

Label	Replicates Concentration		
Tl 190.794	41.5121	38.2976	36.5675
V 292.401	382.158	382.126	382.367
Zn 206.200	140.329	142.326	139.350

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.8083b	ppb	0.4690	0.9	1800.95
Al 308.215	251595b	ppb	244.514	0.1	630861
As 188.980	110.594b	ppb	6.8778	6.2	30.4354
B 249.678	247.268b	ppb	0.1817	0.1	1523.78
Ba 389.178	699.185b	ppb	1.0621	0.2	7728.20
Be 313.042	58.8521b	ppb	0.0775	0.1	48747.7
Ca 370.602	24494b	ppb	44.85	0.2	55793
Cd 226.502	50.2354b	ppb	0.0575	0.1	877.687
Co 228.615	61.5041b	ppb	0.2043	0.3	300.085
Cr 267.716	448.091b	ppb	0.6299	0.1	10432.4
Cu 324.754	140.092b	ppb	0.8250	0.6	5738.56
Fe 271.441	42560.7b	ppb	43.1789	0.1	35088.6
K 766.491	12338.9b	ppb	29.6636	0.2	336555
Mg 279.078	18126.4b	ppb	17.2413	0.1	26085.4
Mn 257.610	545.591b	ppb	0.9064	0.2	59802.2
Mo 202.032	102.978b	ppb	1.2886	1.3	235.477
Na 330.237	15703.1b	ppb	289.827	1.8	466.992
Ni 231.604	180.018b	ppb	1.8188	1.0	247.904
Pb 220.353	623.742b	ppb	9.4599	1.5	369.220
Sb 206.834	6.2961b	ppb	6.1207	97.2	15.6185
Se 196.026	81.3511b	ppb	9.4063	11.6	17.4404
Si 288.158	89917.8xb	ppb	199.326	0.2	431834
Sn 189.925	99.5055b	ppb	7.9099	7.9	31.9882
Sr 216.596	2287.07b	ppb	3.0255	0.1	9680.17
Ti 334.941	227.274b	ppb	0.3115	0.1	27251.1
Tl 190.794	38.7924b	ppb	2.5092	6.5	4.7253
V 292.401	382.217b	ppb	0.1309	0.0	5543.27
Zn 206.200	140.668b	ppb	1.5171	1.1	50.2591

Cont Calib Verif (CCV) **12/19/2018, 2:53:40 AM** **Rack S, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	490.736	491.276	489.789
Al 308.215	9781.09	9782.53	9787.68
As 188.980	506.277	514.540	511.356
B 249.678	502.101	501.332	501.661
Ba 389.178	483.179	483.575	483.299
Be 313.042	522.518	522.282	522.133
Ca 370.602	10021	10001	10018
Cd 226.502	513.137	512.997	513.303
Co 228.615	504.243	503.805	508.604
Cr 267.716	505.161	504.490	504.643
Cu 324.754	485.227	485.102	486.896
Fe 271.441	10058.5	10071.3	10066.9
K 766.491	9586.82	9593.42	9590.64
Mg 279.078	10124.3	10113.3	10125.6
Mn 257.610	497.348	497.324	497.300
Mo 202.032	497.224	497.074	495.699

Label	Replicates Concentration		
Na 330.237	10044.6	10306.1	9889.81
Ni 231.604	500.899	497.523	502.753
Pb 220.353	496.706	498.315	496.883
Sb 206.834	476.982	491.573	479.923
Se 196.026	476.373	486.661	488.191
Si 288.158	5645.57	5618.72	5570.02
Sn 189.925	499.464	489.271	496.324
Sr 216.596	507.337	507.993	505.288
Ti 334.941	502.363	501.791	502.236
Tl 190.794	488.831	484.215	485.824
V 292.401	491.298	492.400	493.181
Zn 206.200	1002.73	1000.92	1003.87

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	490.600	ppb	0.7527	0.2	18151.8	98.11998
Al 308.215	9783.77	ppb	3.4625	0.0	24711.0	97.83765
As 188.980	510.724	ppb	4.1673	0.8	135.894	102.14484
B 249.678	501.698	ppb	0.3859	0.1	3269.16	100.33959
Ba 389.178	483.351	ppb	0.2032	0.0	5315.52	96.67021
Be 313.042	522.311	ppb	0.1942	0.0	433745	104.46222
Ca 370.602	10013	ppb	10.74	0.1	22866	100.13218
Cd 226.502	513.146	ppb	0.1536	0.0	8396.84	102.62915
Co 228.615	505.551	ppb	2.6534	0.5	2531.23	101.11012
Cr 267.716	504.765	ppb	0.3519	0.1	11743.0	100.95298
Cu 324.754	485.742	ppb	1.0017	0.2	19375.7	97.14837
Fe 271.441	10065.6	ppb	6.4942	0.1	8348.80	100.60568
K 766.491	9590.29	ppb	3.3116	0.0	261644	95.90292
Mg 279.078	10121.1	ppb	6.7461	0.1	14603.8	101.21079
Mn 257.610	497.324	ppb	0.0240	0.0	54463.9	99.46480
Mo 202.032	496.666	ppb	0.8405	0.2	1122.91	99.33321
Na 330.237	10080.2	ppb	210.406	2.1	319.619	100.80162
Ni 231.604	500.392	ppb	2.6514	0.5	692.621	100.07834
Pb 220.353	497.301	ppb	0.8825	0.2	297.788	99.46028
Sb 206.834	482.826	ppb	7.7166	1.6	225.051	96.56517
Se 196.026	483.742	ppb	6.4272	1.3	94.1993	96.74834
Si 288.158	5611.44	ppb	38.2990	0.7	27349.0	112.22878Q
Sn 189.925	495.020	ppb	5.2203	1.1	160.164	99.00401
Sr 216.596	506.873	ppb	1.4109	0.3	2142.42	101.37451
Ti 334.941	502.130	ppb	0.3002	0.1	60132.5	100.42596
Tl 190.794	486.290	ppb	2.3431	0.5	192.646	97.25803
V 292.401	492.293	ppb	0.9462	0.2	7105.12	98.45860
Zn 206.200	1002.51	ppb	1.4853	0.1	360.351	100.25063

Cont Calib Blank (CCB) **12/19/2018, 2:58:04 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0177	-0.0167u	0.2741
Al 308.215	-3.6011u	-2.4141u	-3.8752u
As 188.980	3.4661	-2.7754u	-0.5190u
B 249.678	5.6222	3.4208	4.0259
Ba 389.178	1.8193	0.8711	-0.3489u
Be 313.042	0.0333	0.0317	0.0379
Ca 370.602	2.564	-0.8070u	-1.087u

Label	Replicates Concentration		
Cd 226.502	-0.1470u	0.1095	-0.1586u
Co 228.615	0.6018	0.0995	0.2098
Cr 267.716	-0.6463u	-0.2755u	-0.3782u
Cu 324.754	0.2617	0.1590	0.2078
Fe 271.441	8.4770	9.3950	4.5733
K 766.491	4.0250	4.5415	3.9276
Mg 279.078	-2.5906u	0.2385	-0.3242u
Mn 257.610	0.1654	0.1620	0.2212
Mo 202.032	-0.1997u	1.2409	0.7909
Na 330.237	-41.2863u	-27.1780u	-132.274u
Ni 231.604	0.1201	0.5589	0.5929
Pb 220.353	4.7315	-0.1513u	-1.2142u
Sb 206.834	-0.3361u	-8.8642u	-2.8217u
Se 196.026	-1.5943u	4.0685	4.5159
Si 288.158	96.3822	94.7193	89.9518
Sn 189.925	1.2370	-0.7241u	-1.7164u
Sr 216.596	-0.7656u	-0.9289u	-1.2733u
Ti 334.941	0.2084	0.1728	0.2137
Tl 190.794	-0.4252u	-2.1365u	1.6858
V 292.401	0.1181	-0.4759u	-0.0540u
Zn 206.200	4.2066	0.4599	0.0278

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0917	ppb	0.1589	173.3	-25.6113	0.09171
Al 308.215	-3.2968	ppb	0.7766	23.6	154.039	-3.29682
As 188.980	0.0572	ppb	3.1604	5521.5	1.2625	0.05724
B 249.678	4.3563	ppb	1.1373	26.1	-68.5207	4.35630
Ba 389.178	0.7805	ppb	1.0869	139.3	-55.3953	0.78053
Be 313.042	0.0343	ppb	0.0032	9.4	-132.481	0.03428
Ca 370.602	0.2232	ppb	2.032	910.2	37.77	0.22323
Cd 226.502	-0.0654	ppb	0.1516	231.9	11.0171	-0.06536
Co 228.615	0.3037	ppb	0.2640	86.9	-10.5217	0.30368
Cr 267.716	-0.4333	ppb	0.1914	44.2	13.4617	-0.43335
Cu 324.754	0.2095	ppb	0.0514	24.5	210.553	0.20953
Fe 271.441	7.4818	ppb	2.5603	34.2	33.8079	7.48178
K 766.491	4.1647	ppb	0.3299	7.9	381.730	4.16472
Mg 279.078	-0.8921	ppb	1.4976	167.9	29.8079	-0.89208
Mn 257.610	0.1829	ppb	0.0333	18.2	41.3476	0.18286
Mo 202.032	0.6107	ppb	0.7370	120.7	5.6026	0.61070
Na 330.237	-66.9127	ppb	57.0421	85.2	55.9946	-66.91267
Ni 231.604	0.4240	ppb	0.2637	62.2	-1.6782	0.42397
Pb 220.353	1.1220	ppb	3.1707	282.6	7.3348	1.12201
Sb 206.834	-4.0074	ppb	4.3860	109.4	9.8163	-4.00736
Se 196.026	2.3301	ppb	3.4059	146.2	2.4699	2.33006
Si 288.158	93.6844	ppb	3.3378	3.6	733.004	93.68443Z
Sn 189.925	-0.4012	ppb	1.5029	374.6	-0.3911	-0.40119
Sr 216.596	-0.9893	ppb	0.2592	26.2	5.5459	-0.98929
Ti 334.941	0.1983	ppb	0.0222	11.2	-11.7520	0.19830
Tl 190.794	-0.2919	ppb	1.9147	655.8	-10.3933	-0.29195
V 292.401	-0.1373	ppb	0.3056	222.6	-4.5945	-0.13727
Zn 206.200	1.5648	ppb	2.2980	146.9	0.2995	1.56476

660-91323-G-1-F MSD (Samp) **12/19/2018, 3:02:28 AM** **Rack 3, Tube 31**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	49.9643	49.2119	50.0868
Al 308.215	259994	259380	259411
As 188.980	119.059	115.736	108.175
B 249.678	247.467	250.296	249.921
Ba 389.178	725.609	726.710	725.769
Be 313.042	59.9438	59.9815	60.0167
Ca 370.602	25021	24969	25013
Cd 226.502	50.3946	50.2970	50.7465
Co 228.615	61.7819	62.1460	61.6017
Cr 267.716	463.553	462.895	463.711
Cu 324.754	144.076	143.717	143.421
Fe 271.441	43416.8	43379.2	43443.1
K 766.491	12634.5	12614.2	12616.2
Mg 279.078	18485.7	18489.1	18498.2
Mn 257.610	554.364	553.763	553.990
Mo 202.032	103.090	99.6047	100.801
Na 330.237	15678.8	16122.1	15691.0
Ni 231.604	186.079	190.813	185.888
Pb 220.353	630.448	625.907	640.141
Sb 206.834	10.8814	15.2328	16.5237
Se 196.026	91.1636	89.6308	97.3251
Si 288.158	95282.8x	95342.1x	95601.7x
Sn 189.925	100.549	102.029	96.7806
Sr 216.596	2416.73	2407.60	2407.30
Ti 334.941	207.606	207.482	207.693
Tl 190.794	42.7032	32.6974	38.6126
V 292.401	392.237	392.948	393.755
Zn 206.200	142.998	143.388	143.721

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.7543b	ppb	0.4737	1.0	1798.36
Al 308.215	259595b	ppb	345.892	0.1	650916
As 188.980	114.323b	ppb	5.5777	4.9	31.4191
B 249.678	249.228b	ppb	1.5365	0.6	1536.11
Ba 389.178	726.029b	ppb	0.5949	0.1	8026.79
Be 313.042	59.9807b	ppb	0.0364	0.1	49686.1
Ca 370.602	25001b	ppb	27.97	0.1	56947
Cd 226.502	50.4794b	ppb	0.2364	0.5	882.737
Co 228.615	61.8432b	ppb	0.2773	0.4	301.665
Cr 267.716	463.386b	ppb	0.4328	0.1	10787.6
Cu 324.754	143.738b	ppb	0.3281	0.2	5882.51
Fe 271.441	43413.1b	ppb	32.1401	0.1	35790.8
K 766.491	12621.6b	ppb	11.1722	0.1	344261
Mg 279.078	18491.0b	ppb	6.4382	0.0	26608.9
Mn 257.610	554.039b	ppb	0.3038	0.1	60727.9
Mo 202.032	101.165b	ppb	1.7707	1.8	231.377
Na 330.237	15830.6b	ppb	252.494	1.6	470.302
Ni 231.604	187.593b	ppb	2.7902	1.5	258.434
Pb 220.353	632.165b	ppb	7.2706	1.2	374.065
Sb 206.834	14.2127b	ppb	2.9563	20.8	19.2475
Se 196.026	92.7065b	ppb	4.0726	4.4	19.6018
Si 288.158	95408.8xb	ppb	169.591	0.2	458185

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	99.7861b	ppb	2.7061	2.7	32.0792
Sr 216.596	2410.54b	ppb	5.3649	0.2	10202.0
Ti 334.941	207.594b	ppb	0.1060	0.1	24895.7
Tl 190.794	38.0044b	ppb	5.0306	13.2	4.3750
V 292.401	392.980b	ppb	0.7594	0.2	5699.54
Zn 206.200	143.369b	ppb	0.3617	0.3	51.2268

660-91323-G-2-B (Samp) **12/19/2018, 3:06:52 AM** **Rack 3, Tube 32**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3119	0.5177	0.0808
Al 308.215	5800.14	5787.74	5790.28
As 188.980	-3.8682u	1.6576	3.4334
B 249.678	20.9703	20.1338	21.0326
Ba 389.178	72.9591	72.6289	72.8088
Be 313.042	0.6384	0.6369	0.6403
Ca 370.602	6858	6847	6825
Cd 226.502	-0.1120	-0.0343	-0.0448
Co 228.615	0.5714	1.6473	1.2918
Cr 267.716	10.9636	10.7416	10.7726
Cu 324.754	1.8379	1.7719	1.5791
Fe 271.441	6101.90	6045.25	6086.14
K 766.491	921.005	917.471	917.658
Mg 279.078	3055.14	3061.61	3039.20
Mn 257.610	30.1569	30.1302	30.2186
Mo 202.032	1.7326	1.4897	-0.5804u
Na 330.237	6777.01	6741.34	6564.92
Ni 231.604	7.1232	5.2113	3.5832
Pb 220.353	5.2283	4.7508	3.6519
Sb 206.834	-4.1223u	-8.7824u	-11.0191u
Se 196.026	10.2285	-6.4921u	6.3544
Si 288.158	10600.1	10537.6	10517.7
Sn 189.925	9.2091	1.2982	-1.3384u
Sr 216.596	80.5952	81.5204	78.8898
Ti 334.941	15.1991	14.8318	15.1675
Tl 190.794	2.6160	1.4088	0.0386u
V 292.401	23.8114	23.3818	23.5412
Zn 206.200	7.1554	9.3113	3.7198

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3035	ppb	0.2186	72.0	-19.3424
Al 308.215	5792.72	ppb	6.5507	0.1	14684.2
As 188.980	0.4076	ppb	3.8079	934.3	1.3659
B 249.678	20.7122	ppb	0.5019	2.4	35.4661
Ba 389.178	72.7989	ppb	0.1653	0.2	748.911
Be 313.042	0.6385	ppb	0.0017	0.3	370.985
Ca 370.602	6843	ppb	16.75	0.2	15624
Cd 226.502	-0.0637	ppb	0.0422	66.2	16.0421
Co 228.615	1.1701	ppb	0.5482	46.8	-5.8262
Cr 267.716	10.8259	ppb	0.1202	1.1	275.642
Cu 324.754	1.7297	ppb	0.1345	7.8	271.761
Fe 271.441	6077.76	ppb	29.2409	0.5	5033.78
K 766.491	918.711	ppb	1.9883	0.2	25307.0

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	3051.98	ppb	11.5350	0.4	4426.20
Mn 257.610	30.1686	ppb	0.0453	0.2	3340.28
Mo 202.032	0.8806	ppb	1.2711	144.3	6.1105
Na 330.237	6694.42	ppb	113.562	1.7	233.576
Ni 231.604	5.3059	ppb	1.7719	33.4	5.1067
Pb 220.353	4.5437	ppb	0.8084	17.8	9.2963
Sb 206.834	-7.9746	ppb	3.5187	44.1	8.1998
Se 196.026	3.3636	ppb	8.7523	260.2	2.6502
Si 288.158	10551.8	ppb	43.0406	0.4	50922.6
Sn 189.925	3.0563	ppb	5.4891	179.6	0.7303
Sr 216.596	80.3351	ppb	1.3344	1.7	350.619
Ti 334.941	15.0661	ppb	0.2036	1.4	1779.55
Tl 190.794	1.3545	ppb	1.2896	95.2	-9.9086
V 292.401	23.5781	ppb	0.2172	0.9	341.242
Zn 206.200	6.7289	ppb	2.8201	41.9	2.1626

660-91323-G-3-B (Samp) **12/19/2018, 3:11:17 AM** **Rack 3, Tube 33**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0933u	0.3117	0.5247
Al 308.215	5426.31	5419.45	5429.07
As 188.980	-3.5570u	3.4321	-1.9557u
B 249.678	19.6201	20.3757	19.6498
Ba 389.178	40.4716	42.1155	40.6107
Be 313.042	0.7799	0.7649	0.7911
Ca 370.602	6838	6832	6826
Cd 226.502	-0.4149u	-0.2370	-0.2551
Co 228.615	0.3999	0.3379	-0.3645u
Cr 267.716	8.2802	8.2217	8.3478
Cu 324.754	0.4586	1.2793	0.5777
Fe 271.441	7087.55	7106.52	7077.09
K 766.491	278.265	277.802	277.344
Mg 279.078	3908.95	3902.98	3915.92
Mn 257.610	19.3907	19.3856	19.4160
Mo 202.032	-0.2645u	0.5075	1.3188
Na 330.237	7007.48	6966.01	7220.13
Ni 231.604	5.4541	2.3368	5.6451
Pb 220.353	5.3203	-2.6485u	5.1258
Sb 206.834	-6.8665u	-16.4547u	-12.0549u
Se 196.026	1.7069	0.5515	7.3807
Si 288.158	6252.58	6233.92	6221.51
Sn 189.925	4.6122	-1.7001u	0.6113
Sr 216.596	78.8707	77.7921	78.8243
Ti 334.941	10.6407	10.9513	10.7439
Tl 190.794	-3.3142u	-1.5302u	-4.1163u
V 292.401	50.2380	49.9553	49.4912
Zn 206.200	11.7259	8.9258	9.4204

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2477	ppb	0.3139	126.7	-21.6150
Al 308.215	5424.94	ppb	4.9581	0.1	13763.1
As 188.980	-0.6935	ppb	3.6615	528.0	1.0779
B 249.678	19.8819	ppb	0.4279	2.2	28.8562

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	41.0659	ppb	0.9116	2.2	397.914
Be 313.042	0.7786	ppb	0.0131	1.7	488.032
Ca 370.602	6832	ppb	6.026	0.1	15594
Cd 226.502	-0.3023	ppb	0.0979	32.4	12.9202
Co 228.615	0.1245	ppb	0.4246	341.1	-11.0948
Cr 267.716	8.2832	ppb	0.0631	0.8	216.644
Cu 324.754	0.7718	ppb	0.4434	57.5	233.991
Fe 271.441	7090.39	ppb	14.9157	0.2	5867.92
K 766.491	277.804	ppb	0.4605	0.2	7839.55
Mg 279.078	3909.28	ppb	6.4751	0.2	5661.41
Mn 257.610	19.3974	ppb	0.0163	0.1	2167.62
Mo 202.032	0.5206	ppb	0.7917	152.1	5.2776
Na 330.237	7064.54	ppb	136.333	1.9	243.237
Ni 231.604	4.4787	ppb	1.8574	41.5	3.9581
Pb 220.353	2.5992	ppb	4.5456	174.9	8.1667
Sb 206.834	-11.7920	ppb	4.7995	40.7	6.5075
Se 196.026	3.2130	ppb	3.6552	113.8	2.6173
Si 288.158	6236.00	ppb	15.6373	0.3	30210.7
Sn 189.925	1.1745	ppb	3.1936	271.9	0.1205
Sr 216.596	78.4957	ppb	0.6097	0.8	343.116
Ti 334.941	10.7786	ppb	0.1582	1.5	1269.15
Tl 190.794	-2.9869	ppb	1.3237	44.3	-11.7460
V 292.401	49.8948	ppb	0.3771	0.8	724.005
Zn 206.200	10.0241	ppb	1.4945	14.9	3.3509

660-91323-G-4-B (Samp) **12/19/2018, 3:15:42 AM** **Rack 3, Tube 34**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0639u	0.1421	0.0069u
Al 308.215	1364.05	1364.75	1357.70
As 188.980	-0.0376u	1.4231	3.5373
B 249.678	25.2518	25.3383	26.6480
Ba 389.178	35.6590	34.5738	33.7188
Be 313.042	0.1311	0.1397	0.1307
Ca 370.602	46556	46542	46545
Cd 226.502	-0.2759u	-0.3098u	-0.3596u
Co 228.615	0.0593	0.1630	0.9181
Cr 267.716	3.2174	2.9083	2.9925
Cu 324.754	0.3007	0.3694	0.2683
Fe 271.441	3141.09	3146.40	3131.30
K 766.491	401.618	402.829	402.053
Mg 279.078	2699.36	2690.53	2694.02
Mn 257.610	19.7752	19.7997	19.7888
Mo 202.032	0.6159	0.5539	0.4075
Na 330.237	13234.4	13309.0	13407.2
Ni 231.604	0.9545	2.0738	2.8035
Pb 220.353	-7.4818u	-1.9111u	0.0490
Sb 206.834	-6.0666u	-6.9446u	-14.0136u
Se 196.026	2.3113	-19.9118u	2.1816
Si 288.158	4372.79	4371.07	4372.66
Sn 189.925	3.8680	-0.8331u	4.2141
Sr 216.596	348.289	345.961	345.701
Ti 334.941	3.6909	3.5423	3.6216

Label	Replicates Concentration		
Tl 190.794	-5.8763u	6.0945	-0.3971u
V 292.401	6.4420	6.4211	6.5533
Zn 206.200	3.2404	0.7749	4.4574

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0283	ppb	0.1046	369.3	-29.9861
Al 308.215	1362.17	ppb	3.8870	0.3	3577.24
As 188.980	1.6409	ppb	1.7974	109.5	1.6864
B 249.678	25.7460	ppb	0.7823	3.0	72.3120
Ba 389.178	34.6505	ppb	0.9723	2.8	324.200
Be 313.042	0.1338	ppb	0.0051	3.8	-42.8729
Ca 370.602	46548	ppb	7.573	0.0	106133
Cd 226.502	-0.3151	ppb	0.0421	13.4	9.4221
Co 228.615	0.3801	ppb	0.4688	123.3	-10.0048
Cr 267.716	3.0394	ppb	0.1598	5.3	94.5806
Cu 324.754	0.3128	ppb	0.0516	16.5	215.305
Fe 271.441	3139.60	ppb	7.6566	0.2	2613.61
K 766.491	402.167	ppb	0.6138	0.2	11229.0
Mg 279.078	2694.64	ppb	4.4498	0.2	3912.45
Mn 257.610	19.7879	ppb	0.0123	0.1	2201.04
Mo 202.032	0.5258	ppb	0.1070	20.4	5.3609
Na 330.237	13316.9	ppb	86.6643	0.7	408.402
Ni 231.604	1.9439	ppb	0.9313	47.9	0.4343
Pb 220.353	-3.1147	ppb	3.9070	125.4	4.8508
Sb 206.834	-9.0083	ppb	4.3569	48.4	7.6525
Se 196.026	-5.1396	ppb	12.7932	248.9	1.0387
Si 288.158	4372.17	ppb	0.9597	0.0	21265.9
Sn 189.925	2.4163	ppb	2.8194	116.7	0.5237
Sr 216.596	346.650	ppb	1.4254	0.4	1475.07
Ti 334.941	3.6183	ppb	0.0743	2.1	407.055
Tl 190.794	-0.0596	ppb	5.9925	10051.3	-10.4017
V 292.401	6.4721	ppb	0.0711	1.1	92.0960
Zn 206.200	2.8242	ppb	1.8762	66.4	0.7560

660-91323-G-5-B (Samp) **12/19/2018, 3:20:07 AM** **Rack 3, Tube 35**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4777u	0.1452	-0.3068u
Al 308.215	9378.77	9359.25	9373.25
As 188.980	3.6227	7.5908	2.9217
B 249.678	27.3374	27.3214	27.4107
Ba 389.178	19.1794	18.0079	17.4878
Be 313.042	0.1832	0.1770	0.1730
Ca 370.602	2929	2931	2932
Cd 226.502	-0.2477u	0.0163	-0.4259u
Co 228.615	0.5676	0.7243	-0.1891u
Cr 267.716	11.9230	12.2448	12.2098
Cu 324.754	2.3635	2.4855	2.8555
Fe 271.441	2730.90	2735.86	2720.68
K 766.491	944.729	942.268	943.919
Mg 279.078	2192.87	2191.57	2187.56
Mn 257.610	13.1906	13.2373	13.2872
Mo 202.032	0.5964	1.2242	0.1540

Label	Replicates Concentration		
Na 330.237	12126.8	11990.8	11691.0
Ni 231.604	4.9950	5.1452	3.5569
Pb 220.353	0.8087	4.8768	1.4592
Sb 206.834	-4.2953u	-2.3672u	-10.0092u
Se 196.026	-4.0766u	-4.9587u	-6.4124u
Si 288.158	7407.67	7387.50	7392.88
Sn 189.925	-5.9667u	4.0543	1.4413
Sr 216.596	30.2267	31.3373	31.0685
Ti 334.941	18.6096	19.0750	18.9890
Tl 190.794	-1.0955u	-4.2020u	-1.0591u
V 292.401	14.1713	14.2330	15.0774
Zn 206.200	3.0327	2.6090	4.5230

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2131	ppb	0.3218	151.0	-37.5969
Al 308.215	9370.43	ppb	10.0632	0.1	23652.1
As 188.980	4.7117	ppb	2.5179	53.4	2.4945
B 249.678	27.3565	ppb	0.0476	0.2	83.5645
Ba 389.178	18.2250	ppb	0.8665	4.8	141.275
Be 313.042	0.1777	ppb	0.0051	2.9	-12.7118
Ca 370.602	2930	ppb	1.401	0.0	6712
Cd 226.502	-0.2191	ppb	0.2225	101.5	11.0656
Co 228.615	0.3676	ppb	0.4884	132.9	-9.9248
Cr 267.716	12.1259	ppb	0.1766	1.5	305.481
Cu 324.754	2.5682	ppb	0.2562	10.0	304.127
Fe 271.441	2729.15	ppb	7.7394	0.3	2275.61
K 766.491	943.639	ppb	1.2547	0.1	25986.4
Mg 279.078	2190.66	ppb	2.7697	0.1	3184.84
Mn 257.610	13.2384	ppb	0.0483	0.4	1482.20
Mo 202.032	0.6582	ppb	0.5378	81.7	5.6638
Na 330.237	11936.2	ppb	222.936	1.9	372.034
Ni 231.604	4.5657	ppb	0.8769	19.2	4.0795
Pb 220.353	2.3816	ppb	2.1853	91.8	7.9628
Sb 206.834	-5.5572	ppb	3.9742	71.5	9.2164
Se 196.026	-5.1492	ppb	1.1795	22.9	1.0375
Si 288.158	7396.01	ppb	10.4427	0.1	35778.0
Sn 189.925	-0.1570	ppb	5.1982	3310.7	-0.3104
Sr 216.596	30.8775	ppb	0.5794	1.9	140.830
Ti 334.941	18.8912	ppb	0.2476	1.3	2234.45
Tl 190.794	-2.1189	ppb	1.8041	85.1	-11.2425
V 292.401	14.4939	ppb	0.5063	3.5	208.418
Zn 206.200	3.3883	ppb	1.0053	29.7	0.9551

660-91323-G-6-B (Samp) **12/19/2018, 3:24:32 AM** **Rack 3, Tube 36**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3989u	-0.1976u	-0.2167u
Al 308.215	7053.39	7030.61	7003.70
As 188.980	3.4708	-1.4032u	-1.6836u
B 249.678	24.3343	24.0556	24.3078
Ba 389.178	54.3505	54.4094	54.2522
Be 313.042	0.8433	0.8516	0.8626
Ca 370.602	4761	4744	4734

Label	Replicates Concentration		
Cd 226.502	-0.3128	-0.5809u	-0.4572u
Co 228.615	1.0247	1.4126	1.4027
Cr 267.716	15.1363	15.4394	15.2890
Cu 324.754	1.9546	2.1878	1.8429
Fe 271.441	7319.50	7324.19	7291.35
K 766.491	409.276	406.994	406.862
Mg 279.078	3475.17	3481.82	3474.53
Mn 257.610	32.7353	32.5954	32.5880
Mo 202.032	1.4012	0.7023	0.8827
Na 330.237	11683.7	11323.4	11124.4
Ni 231.604	7.6750	5.2766	8.1187
Pb 220.353	6.0574	7.2497	0.8164
Sb 206.834	-13.2805u	-11.7346u	-12.1639u
Se 196.026	-7.2843u	-4.5431u	10.7305
Si 288.158	6822.65	6812.14	6791.44
Sn 189.925	4.1569	-4.3174u	-2.1151u
Sr 216.596	66.0787	66.4046	66.8170
Ti 334.941	11.1697	11.1553	11.2286
Tl 190.794	3.2944	5.1538	-1.2477u
V 292.401	60.6092	60.7794	60.6138
Zn 206.200	9.6990	7.7050	8.8943

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2710	ppb	0.1111	41.0	-40.7894
Al 308.215	7029.23	ppb	24.8701	0.4	17785.0
As 188.980	0.1280	ppb	2.8983	2263.8	1.2939
B 249.678	24.2325	ppb	0.1538	0.6	57.9239
Ba 389.178	54.3373	ppb	0.0794	0.1	544.866
Be 313.042	0.8525	ppb	0.0097	1.1	549.161
Ca 370.602	4746	ppb	13.56	0.3	10841
Cd 226.502	-0.4503	ppb	0.1342	29.8	10.7409
Co 228.615	1.2800	ppb	0.2211	17.3	-5.2704
Cr 267.716	15.2882	ppb	0.1516	1.0	379.330
Cu 324.754	1.9951	ppb	0.1760	8.8	282.234
Fe 271.441	7311.68	ppb	17.7631	0.2	6050.31
K 766.491	407.711	ppb	1.3574	0.3	11380.1
Mg 279.078	3477.17	ppb	4.0369	0.1	5038.44
Mn 257.610	32.6396	ppb	0.0830	0.3	3613.48
Mo 202.032	0.9954	ppb	0.3628	36.4	6.3416
Na 330.237	11377.2	ppb	283.480	2.5	356.868
Ni 231.604	7.0235	ppb	1.5290	21.8	7.4939
Pb 220.353	4.7078	ppb	3.4224	72.7	9.3838
Sb 206.834	-12.3930	ppb	0.7980	6.4	6.2557
Se 196.026	-0.3656	ppb	9.7068	2654.9	1.9361
Si 288.158	6808.74	ppb	15.8802	0.2	32959.1
Sn 189.925	-0.7585	ppb	4.3970	579.7	-0.5054
Sr 216.596	66.4334	ppb	0.3700	0.6	292.180
Ti 334.941	11.1845	ppb	0.0388	0.3	1316.12
Tl 190.794	2.4002	ppb	3.2931	137.2	-9.4991
V 292.401	60.6675	ppb	0.0969	0.2	880.358
Zn 206.200	8.7661	ppb	1.0032	11.4	2.8959

660-91323-G-7-B (Samp) **12/19/2018, 3:28:56 AM** **Rack 3, Tube 37**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2926u	-0.0920u	0.3337
Al 308.215	2155.48	2156.12	2154.22
As 188.980	0.5742	-0.2274u	-2.5269u
B 249.678	29.0557	27.5872	27.0900
Ba 389.178	29.6391	31.4751	28.6567
Be 313.042	0.4095	0.4204	0.4150
Ca 370.602	71689	71710	71711
Cd 226.502	-0.6046u	-0.2723	-0.4002
Co 228.615	0.8560	0.6475	0.6853
Cr 267.716	4.8561	4.8935	4.9795
Cu 324.754	-0.0578u	0.5658	0.5959
Fe 271.441	8676.42	8685.24	8716.32
K 766.491	417.172	417.792	418.425
Mg 279.078	3307.13	3314.77	3319.79
Mn 257.610	19.5467	19.5988	19.7038
Mo 202.032	0.6366	1.3634	0.8890
Na 330.237	14375.8	14555.7	14450.8
Ni 231.604	1.8519	0.9361	0.1015
Pb 220.353	-0.0009	-1.6467u	-2.3574u
Sb 206.834	-6.9528u	-3.9782u	-3.4530u
Se 196.026	6.4909	-10.1404u	-7.4017u
Si 288.158	8013.70	8016.21	8012.38
Sn 189.925	2.3941	4.0707	8.1296
Sr 216.596	416.906	417.869	417.861
Ti 334.941	7.9196	8.2217	7.4162
Tl 190.794	-4.4385u	-1.2933u	-5.1843u
V 292.401	21.0002	21.6736	20.2888
Zn 206.200	2.9645	1.2590	0.1825

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0170	ppb	0.3198	1882.0	-33.1672
Al 308.215	2155.27	ppb	0.9641	0.0	5566.05
As 188.980	-0.7267	ppb	1.6097	221.5	1.0730
B 249.678	27.9109	ppb	1.0221	3.7	81.2902
Ba 389.178	29.9237	ppb	1.4306	4.8	274.141
Be 313.042	0.4150	ppb	0.0055	1.3	194.932
Ca 370.602	71703	ppb	12.73	0.0	163461
Cd 226.502	-0.4257	ppb	0.1676	39.4	11.9687
Co 228.615	0.7296	ppb	0.1111	15.2	-8.0442
Cr 267.716	4.9097	ppb	0.0633	1.3	138.620
Cu 324.754	0.3680	ppb	0.3690	100.3	218.680
Fe 271.441	8692.66	ppb	20.9581	0.2	7187.49
K 766.491	417.796	ppb	0.6268	0.2	11655.0
Mg 279.078	3313.90	ppb	6.3749	0.2	4804.38
Mn 257.610	19.6164	ppb	0.0800	0.4	2190.39
Mo 202.032	0.9630	ppb	0.3690	38.3	6.2557
Na 330.237	14460.8	ppb	90.3304	0.6	438.023
Ni 231.604	0.9632	ppb	0.8755	90.9	-0.9292
Pb 220.353	-1.3350	ppb	1.2088	90.5	5.9116
Sb 206.834	-4.7947	ppb	1.8874	39.4	9.6604
Se 196.026	-3.6837	ppb	8.9173	242.1	1.2982
Si 288.158	8014.10	ppb	1.9458	0.0	38744.0

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	4.8648	ppb	2.9491	60.6	1.3174
Sr 216.596	417.545	ppb	0.5539	0.1	1776.00
Ti 334.941	7.8525	ppb	0.4069	5.2	916.316
Tl 190.794	-3.6387	ppb	2.0651	56.8	-12.0910
V 292.401	20.9876	ppb	0.6925	3.3	304.259
Zn 206.200	1.4687	ppb	1.4028	95.5	0.2755

660-91323-G-8-B (Samp) **12/19/2018, 3:33:21 AM** **Rack 3, Tube 38**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3572u	-0.5470u	-0.7075u
Al 308.215	4101.80	4097.78	4094.01
As 188.980	0.1794	6.2734	-3.1249u
B 249.678	29.0818	26.1415	27.8777
Ba 389.178	39.5553	40.6876	40.9946
Be 313.042	2.2144	2.2103	2.2012
Ca 370.602	23450	23435	23370
Cd 226.502	-0.1811	-0.0068	-0.3107u
Co 228.615	5.6808	6.2630	4.7828
Cr 267.716	16.0052	15.7116	15.7497
Cu 324.754	1.4686	1.1853	0.8549
Fe 271.441	4674.80	4679.32	4669.31
K 766.491	563.679	565.170	564.752
Mg 279.078	4470.03	4473.39	4471.05
Mn 257.610	15.5019	15.7225	15.6175
Mo 202.032	1.0649	2.4156	-0.4080u
Na 330.237	13705.8	13890.9	14205.8
Ni 231.604	10.4497	8.4144	9.8779
Pb 220.353	-0.0815u	8.6524	10.0270
Sb 206.834	-5.7162u	-8.3991u	-10.4479u
Se 196.026	-9.5972u	-2.6332u	-5.2581u
Si 288.158	10812.0	10789.9	10776.4
Sn 189.925	4.0176	3.2898	-4.9194u
Sr 216.596	182.219	184.561	183.804
Ti 334.941	16.7384	16.4879	16.5108
Tl 190.794	3.7566	3.1792	-0.1773u
V 292.401	49.3389	49.1696	49.3910
Zn 206.200	3.4716	6.6639	5.6094

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5372	ppb	0.1754	32.6	-50.6163
Al 308.215	4097.86	ppb	3.8998	0.1	10436.4
As 188.980	1.1093	ppb	4.7677	429.8	1.5473
B 249.678	27.7003	ppb	1.4782	5.3	83.9191
Ba 389.178	40.4125	ppb	0.7581	1.9	390.450
Be 313.042	2.2086	ppb	0.0067	0.3	1678.27
Ca 370.602	23418	ppb	42.39	0.2	53408
Cd 226.502	-0.1662	ppb	0.1525	91.7	13.1863
Co 228.615	5.5755	ppb	0.7457	13.4	16.3142
Cr 267.716	15.8221	ppb	0.1596	1.0	391.424
Cu 324.754	1.1696	ppb	0.3072	26.3	249.139
Fe 271.441	4674.48	ppb	5.0089	0.1	3878.35
K 766.491	564.534	ppb	0.7692	0.1	15654.2

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	4471.49	ppb	1.7208	0.0	6471.64
Mn 257.610	15.6139	ppb	0.1103	0.7	1754.84
Mo 202.032	1.0242	ppb	1.4122	137.9	6.4500
Na 330.237	13934.2	ppb	252.792	1.8	424.508
Ni 231.604	9.5807	ppb	1.0497	11.0	11.0427
Pb 220.353	6.1993	ppb	5.4826	88.4	10.2792
Sb 206.834	-8.1877	ppb	2.3729	29.0	8.0863
Se 196.026	-5.8295	ppb	3.5170	60.3	0.9019
Si 288.158	10792.8	ppb	17.9815	0.2	52079.0
Sn 189.925	0.7960	ppb	4.9630	623.5	-0.0013
Sr 216.596	183.528	ppb	1.1948	0.7	786.213
Ti 334.941	16.5790	ppb	0.1385	0.8	1965.53
Tl 190.794	2.2528	ppb	2.1243	94.3	-9.4705
V 292.401	49.2998	ppb	0.1158	0.2	714.574
Zn 206.200	5.2483	ppb	1.6265	31.0	1.6259

MB 680-551703/1-A (Samp) **12/19/2018, 3:37:47 AM** **Rack 3, Tube 39**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1464u	-0.1530u	-0.2434u
Al 308.215	-5.3100u	-4.4051u	-9.6445u
As 188.980	-3.9291u	-0.0242u	-0.4937u
B 249.678	1.9929	1.8839	1.8374
Ba 389.178	1.2363	1.2814	1.2105
Be 313.042	-0.0590u	-0.0459u	-0.0476u
Ca 370.602	1.684	-0.5255u	3.467
Cd 226.502	-0.2097u	-0.3220u	-0.2086u
Co 228.615	-0.6495u	1.4700	-0.5216u
Cr 267.716	-0.2716u	-0.1952u	-0.1100u
Cu 324.754	-0.3109u	-0.6331u	-0.1054u
Fe 271.441	2.2512	-5.4334u	-2.9456u
K 766.491	1.2397	1.0473	1.3285
Mg 279.078	-2.6071u	-1.4422u	-7.3793u
Mn 257.610	0.0402	-0.0802u	-0.1034u
Mo 202.032	-0.3657u	0.1891	-0.7955u
Na 330.237	-315.396u	130.190	-138.949u
Ni 231.604	2.1837	-0.8496u	1.0585
Pb 220.353	-0.0291u	-7.8350u	-0.1397u
Sb 206.834	-6.4766u	-6.7920u	-13.0777u
Se 196.026	-1.0243u	-12.7241u	-10.7135u
Si 288.158	36.7030	36.2314	36.0949
Sn 189.925	-2.3721u	-6.7978u	1.1201
Sr 216.596	0.0084	0.0362	0.0183
Ti 334.941	0.1148	0.1143	-0.0074u
Tl 190.794	0.0901	-0.6803u	-3.3917u
V 292.401	0.3088	-0.3048u	-0.2509u
Zn 206.200	0.7541	6.5802	2.4184

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1809	ppb	0.0542	30.0	-35.7167
Al 308.215	-6.4532	ppb	2.8005	43.4	146.110
As 188.980	-1.4823	ppb	2.1319	143.8	0.8563
B 249.678	1.9048	ppb	0.0798	4.2	-85.0157

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1.2428	ppb	0.0359	2.9	-50.2752
Be 313.042	-0.0508	ppb	0.0071	14.1	-203.105
Ca 370.602	1.542	ppb	2.000	129.7	40.78
Cd 226.502	-0.2468	ppb	0.0652	26.4	8.0501
Co 228.615	0.0996	ppb	1.1885	1192.9	-11.5369
Cr 267.716	-0.1923	ppb	0.0808	42.0	19.0559
Cu 324.754	-0.3498	ppb	0.2660	76.0	188.459
Fe 271.441	-2.0426	ppb	3.9211	192.0	25.9601
K 766.491	1.2051	ppb	0.1437	11.9	301.069
Mg 279.078	-3.8095	ppb	3.1459	82.6	25.6083
Mn 257.610	-0.0478	ppb	0.0771	161.3	16.0970
Mo 202.032	-0.3240	ppb	0.4937	152.4	3.4969
Na 330.237	-108.052	ppb	224.394	207.7	54.9055
Ni 231.604	0.7976	ppb	1.5334	192.3	-1.1590
Pb 220.353	-2.6679	ppb	4.4752	167.7	5.1136
Sb 206.834	-8.7821	ppb	3.7234	42.4	7.6870
Se 196.026	-8.1540	ppb	6.2558	76.7	0.4726
Si 288.158	36.3431	ppb	0.3191	0.9	457.695
Sn 189.925	-2.6832	ppb	3.9681	147.9	-1.1306
Sr 216.596	0.0210	ppb	0.0141	67.2	9.8306
Ti 334.941	0.0739	ppb	0.0704	95.2	-26.6640
Tl 190.794	-1.3273	ppb	1.8288	137.8	-10.8238
V 292.401	-0.0823	ppb	0.3397	412.9	-3.7118
Zn 206.200	3.2509	ppb	3.0009	92.3	0.9063

LCS 680-551703/2-A (Samp) **12/19/2018, 3:42:12 AM** **Rack 3, Tube 40**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.5388	50.4197	51.6524
Al 308.215	4915.26	4930.69	4922.95
As 188.980	103.229	102.566	95.9540
B 249.678	199.186	200.920	202.926
Ba 389.178	98.5389	99.2898	98.7452
Be 313.042	52.9118	52.9487	53.0050
Ca 370.602	5018	5021	5024
Cd 226.502	52.7453	52.5763	52.4907
Co 228.615	51.2350	51.0484	52.3192
Cr 267.716	103.145	103.010	103.194
Cu 324.754	99.8595	98.5229	99.5040
Fe 271.441	5164.26	5150.69	5151.75
K 766.491	7684.36	7712.85	7706.94
Mg 279.078	5104.94	5104.40	5109.18
Mn 257.610	505.714	506.142	506.189
Mo 202.032	100.935	101.508	102.771
Na 330.237	5044.08	4807.87	5158.54
Ni 231.604	103.622	103.597	102.466
Pb 220.353	498.292	502.009	515.783
Sb 206.834	42.9197	41.9430	39.7997
Se 196.026	105.984	82.5454	105.550
Si 288.158	28.0686	28.0145	28.3244
Sn 189.925	98.1374	105.173	102.851
Sr 216.596	102.447	101.598	102.229
Ti 334.941	101.216	101.543	101.537

Label	Replicates Concentration		
Tl 190.794	39.9238	41.4827	45.5948
V 292.401	99.6362	100.142	99.8893
Zn 206.200	111.514	103.482	103.320

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.2036	ppb	0.6813	1.3	1868.43
Al 308.215	4922.97	ppb	7.7168	0.2	12507.9
As 188.980	100.583	ppb	4.0225	4.0	27.7704
B 249.678	201.010	ppb	1.8719	0.9	1250.07
Ba 389.178	98.8580	ppb	0.3879	0.4	1040.20
Be 313.042	52.9552	ppb	0.0469	0.1	43829.2
Ca 370.602	5021	ppb	3.065	0.1	11485
Cd 226.502	52.6041	ppb	0.1296	0.2	875.025
Co 228.615	51.5342	ppb	0.6862	1.3	247.260
Cr 267.716	103.116	ppb	0.0954	0.1	2418.90
Cu 324.754	99.2955	ppb	0.6923	0.7	4122.45
Fe 271.441	5155.57	ppb	7.5440	0.1	4277.50
K 766.491	7701.38	ppb	15.0372	0.2	210164
Mg 279.078	5106.17	ppb	2.6179	0.1	7380.34
Mn 257.610	506.015	ppb	0.2617	0.1	55376.4
Mo 202.032	101.738	ppb	0.9390	0.9	233.331
Na 330.237	5003.50	ppb	178.824	3.6	188.774
Ni 231.604	103.228	ppb	0.6599	0.6	141.144
Pb 220.353	505.361	ppb	9.2149	1.8	302.864
Sb 206.834	41.5541	ppb	1.5959	3.8	29.6732
Se 196.026	98.0264	ppb	13.4088	13.7	20.7333
Si 288.158	28.1359	ppb	0.1655	0.6	446.528
Sn 189.925	102.054	ppb	3.5847	3.5	32.8126
Sr 216.596	102.091	ppb	0.4408	0.4	440.031
Ti 334.941	101.432	ppb	0.1869	0.2	12129.6
Tl 190.794	42.3338	ppb	2.9297	6.9	7.4223
V 292.401	99.8890	ppb	0.2527	0.3	1440.25
Zn 206.200	106.106	ppb	4.6849	4.4	37.8918

Cont Calib Verif (CCV) **12/19/2018, 3:46:38 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	491.160	495.622	494.101
Al 308.215	9770.66	9779.18	9796.53
As 188.980	496.308	496.037	495.953
B 249.678	501.194	499.355	502.142
Ba 389.178	481.939	483.470	480.984
Be 313.042	525.155	524.617	524.724
Ca 370.602	10024	10015	10018
Cd 226.502	514.376	513.757	514.735
Co 228.615	506.335	507.213	504.804
Cr 267.716	505.857	505.552	505.469
Cu 324.754	486.191	489.742	491.334
Fe 271.441	10094.8	10077.0	10072.6
K 766.491	9588.05	9593.18	9599.75
Mg 279.078	10141.1	10138.0	10129.2
Mn 257.610	497.855	498.226	498.000
Mo 202.032	499.571	498.673	498.485

Label	Replicates Concentration		
Na 330.237	10289.6	10273.6	10070.0
Ni 231.604	503.719	502.610	499.737
Pb 220.353	491.524	494.534	500.721
Sb 206.834	486.365	482.543	486.681
Se 196.026	471.092	498.460	504.032
Si 288.158	5344.94	5332.99	5324.65
Sn 189.925	498.083	489.792	493.543
Sr 216.596	508.816	507.349	509.628
Ti 334.941	502.966	502.375	502.369
Tl 190.794	475.384	486.784	477.656
V 292.401	493.020	492.991	492.255
Zn 206.200	999.878	1006.11	1011.47

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	493.628	ppb	2.2683	0.5	18264.0	98.72562
Al 308.215	9782.12	ppb	13.1820	0.1	24706.9	97.82123
As 188.980	496.099	ppb	0.1857	0.0	132.034	99.21984
B 249.678	500.897	ppb	1.4170	0.3	3263.76	100.17934
Ba 389.178	482.131	ppb	1.2543	0.3	5302.00	96.42619
Be 313.042	524.832	ppb	0.2849	0.1	435839	104.96641
Ca 370.602	10019	ppb	4.150	0.0	22880	100.19046
Cd 226.502	514.289	ppb	0.4949	0.1	8415.52	102.85783
Co 228.615	506.117	ppb	1.2192	0.2	2534.06	101.22348
Cr 267.716	505.626	ppb	0.2043	0.0	11763.0	101.12523
Cu 324.754	489.089	ppb	2.6331	0.5	19507.8	97.81776
Fe 271.441	10081.5	ppb	11.7217	0.1	8361.92	100.76430
K 766.491	9593.66	ppb	5.8619	0.1	261736	95.93661
Mg 279.078	10136.1	ppb	6.1755	0.1	14625.5	101.36106
Mn 257.610	498.027	ppb	0.1867	0.0	54540.8	99.60539
Mo 202.032	498.909	ppb	0.5802	0.1	1127.96	99.78189
Na 330.237	10211.1	ppb	122.420	1.2	323.058	102.11078
Ni 231.604	502.022	ppb	2.0553	0.4	694.886	100.40435
Pb 220.353	495.593	ppb	4.6889	0.9	296.785	99.11865
Sb 206.834	485.196	ppb	2.3030	0.5	226.094	97.03924
Se 196.026	491.195	ppb	17.6311	3.6	95.6192	98.23893
Si 288.158	5334.19	ppb	10.1983	0.2	26019.0	106.68388
Sn 189.925	493.806	ppb	4.1518	0.8	159.771	98.76118
Sr 216.596	508.598	ppb	1.1552	0.2	2149.66	101.71953
Ti 334.941	502.570	ppb	0.3428	0.1	60185.2	100.51395
Tl 190.794	479.941	ppb	6.0338	1.3	190.001	95.98825
V 292.401	492.755	ppb	0.4333	0.1	7111.62	98.55106
Zn 206.200	1005.82	ppb	5.8022	0.6	361.542	100.58185

Cont Calib Blank (CCB) **12/19/2018, 3:51:02 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0179u	0.3995	0.4426
Al 308.215	-0.4101u	-1.1458u	-0.6531u
As 188.980	-1.8712u	3.2981	-1.4613u
B 249.678	4.5026	2.9077	3.4675
Ba 389.178	-0.4809u	1.0402	1.8815
Be 313.042	0.0460	0.0371	0.0412
Ca 370.602	-2.953u	1.589	1.552

Label	Replicates Concentration		
Cd 226.502	0.0274	-0.3012u	-0.2118u
Co 228.615	0.5480	-0.5451u	0.9929
Cr 267.716	-0.1933u	0.0715	-0.3271u
Cu 324.754	0.0305	1.0859	0.1678
Fe 271.441	13.4811	2.8090	5.7900
K 766.491	2.6221	3.1200	3.1418
Mg 279.078	4.3322	2.7881	-2.0988u
Mn 257.610	0.2070	0.1038	0.1713
Mo 202.032	0.3522	-0.5859u	-0.2808u
Na 330.237	-122.130u	-281.084u	-178.445u
Ni 231.604	0.3515	1.1030	-1.2677u
Pb 220.353	2.2422	-2.4575u	0.9012
Sb 206.834	-9.2856u	-11.2335u	-4.8970u
Se 196.026	-6.8777u	-13.3474u	4.7476
Si 288.158	26.9088	24.3009	25.7890
Sn 189.925	4.0386	-0.0663u	7.3243
Sr 216.596	0.0280	0.7189	-0.0887u
Ti 334.941	0.1824	0.2013	0.1355
Tl 190.794	5.6349	4.9924	-1.8877u
V 292.401	0.9426	0.3784	-0.0125u
Zn 206.200	1.4867	-0.6511u	0.1449

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2747	ppb	0.2543	92.6	-18.8250	0.27474
Al 308.215	-0.7363	ppb	0.3748	50.9	160.462	-0.73633
As 188.980	-0.0115	ppb	2.8735	24991.3	1.2444	-0.01150
B 249.678	3.6259	ppb	0.8092	22.3	-73.4343	3.62592
Ba 389.178	0.8136	ppb	1.1974	147.2	-55.0305	0.81357
Be 313.042	0.0414	ppb	0.0044	10.7	-126.471	0.04143
Ca 370.602	0.0626	ppb	2.612	4175.0	37.41	0.06256
Cd 226.502	-0.1619	ppb	0.1699	105.0	9.4398	-0.16186
Co 228.615	0.3319	ppb	0.7915	238.4	-10.3721	0.33193
Cr 267.716	-0.1497	ppb	0.2029	135.5	20.0448	-0.14967
Cu 324.754	0.4281	ppb	0.5738	134.0	219.154	0.42807
Fe 271.441	7.3600	ppb	5.5065	74.8	33.7222	7.36003
K 766.491	2.9613	ppb	0.2939	9.9	348.931	2.96129
Mg 279.078	1.6739	ppb	3.3571	200.6	33.5037	1.67385
Mn 257.610	0.1607	ppb	0.0524	32.6	38.9211	0.16068
Mo 202.032	-0.1715	ppb	0.4785	279.0	3.8403	-0.17152
Na 330.237	-193.886	ppb	80.5940	41.6	52.6480	-193.88634
Ni 231.604	0.0623	ppb	1.2115	1945.6	-2.1812	0.06227
Pb 220.353	0.2287	ppb	2.4209	1058.8	6.8113	0.22866
Sb 206.834	-8.4720	ppb	3.2457	38.3	7.8226	-8.47202
Se 196.026	-5.1592	ppb	9.1691	177.7	1.0431	-5.15921
Si 288.158	25.6662	ppb	1.3083	5.1	406.737	25.66621
Sn 189.925	3.7655	ppb	3.7029	98.3	0.9593	3.76549
Sr 216.596	0.2194	ppb	0.4365	198.9	10.6635	0.21942
Ti 334.941	0.1731	ppb	0.0339	19.6	-14.7714	0.17305
Tl 190.794	2.9132	ppb	4.1701	143.1	-9.0574	2.91318
V 292.401	0.4362	ppb	0.4802	110.1	3.7968	0.43617
Zn 206.200	0.3268	ppb	1.0804	330.6	-0.1460	0.32683

680-162091-B-2-G (Samp) **12/19/2018, 3:55:26 AM** **Rack 3, Tube 41**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0376	-0.5295u	-0.1811u
Al 308.215	726.420	722.092	722.960
As 188.980	-2.6847u	2.2405	-0.5369u
B 249.678	170.417	171.589	170.211
Ba 389.178	17.9414	17.5585	17.7242
Be 313.042	1.3160	1.3221	1.3033
Ca 370.602	43442	43474	43467
Cd 226.502	0.2076	0.0500	-0.0546
Co 228.615	72.8100	74.1148	73.2426
Cr 267.716	-0.1797	-0.1439	-0.4341u
Cu 324.754	3.1122	3.3340	2.5339
Fe 271.441	18797.6	18820.3	18804.4
K 766.491	4777.56	4789.51	4785.56
Mg 279.078	58081.3	58241.3	58140.7
Mn 257.610	1740.11	1741.06	1738.86
Mo 202.032	0.2513	-0.7559u	-0.9137u
Na 330.237	59370.6	59262.8	59728.6
Ni 231.604	139.490	137.246	139.187
Pb 220.353	0.2305	1.4103	-3.8587u
Sb 206.834	-5.9751u	-4.1247u	-17.5857u
Se 196.026	9.1364	13.6128	3.7354
Si 288.158	16680.4	16692.5	16683.7
Sn 189.925	2.0540	1.7931	-2.5517u
Sr 216.596	98.6081	98.7605	99.1688
Ti 334.941	-1.5404	-1.6302	-1.5480
Tl 190.794	2.2268	8.1288	-6.6449u
V 292.401	0.8342	0.3405	0.3499
Zn 206.200	237.034	230.616	227.959

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2243	ppb	0.2860	127.5	-38.3385
Al 308.215	723.824	ppb	2.2894	0.3	1977.31
As 188.980	-0.3271	ppb	2.4693	755.0	1.2005
B 249.678	170.739	ppb	0.7433	0.4	1032.53
Ba 389.178	17.7414	ppb	0.1921	1.1	196.628
Be 313.042	1.3138	ppb	0.0096	0.7	933.288
Ca 370.602	43461	ppb	16.83	0.0	99097
Cd 226.502	0.0677	ppb	0.1320	195.1	28.0210
Co 228.615	73.3891	ppb	0.6646	0.9	357.770
Cr 267.716	-0.2526	ppb	0.1582	62.6	23.9794
Cu 324.754	2.9933	ppb	0.4131	13.8	324.763
Fe 271.441	18807.4	ppb	11.6419	0.1	15522.3
K 766.491	4784.21	ppb	6.0892	0.1	130658
Mg 279.078	58154.4	ppb	80.8776	0.1	83788.1
Mn 257.610	1740.01	ppb	1.1019	0.1	190560
Mo 202.032	-0.4728	ppb	0.6320	133.7	2.8673
Na 330.237	59454.0	ppb	243.821	0.4	1622.32
Ni 231.604	138.641	ppb	1.2178	0.9	190.335
Pb 220.353	-0.7393	ppb	2.7651	374.0	6.4461
Sb 206.834	-9.2285	ppb	7.2965	79.1	7.8913
Se 196.026	8.8282	ppb	4.9459	56.0	3.8157
Si 288.158	16685.5	ppb	6.2427	0.0	80357.4

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	0.4318	ppb	2.5870	599.1	-0.1136
Sr 216.596	98.8458	ppb	0.2899	0.3	430.925
Ti 334.941	-1.5729	ppb	0.0498	3.2	-17.8407
Tl 190.794	1.2369	ppb	7.4364	601.2	-9.7160
V 292.401	0.5082	ppb	0.2824	55.6	9.3473
Zn 206.200	231.870	ppb	4.6652	2.0	83.2082

680-162091-B-2-Gsd (Samp) **12/19/2018, 3:59:51 AM** **Rack 3, Tube 42**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1745u	0.1687	-0.7095u
Al 308.215	139.496	139.958	138.100
As 188.980	4.9054	3.2864	1.6685
B 249.678	36.2372	36.7895	36.3567
Ba 389.178	3.7102	4.8997	2.8727
Be 313.042	0.2214	0.2103	0.2329
Ca 370.602	8843	8840	8860
Cd 226.502	0.1272	0.2061	-0.1238
Co 228.615	15.2963	15.3053	15.5867
Cr 267.716	-0.2176u	-0.2772u	-0.3059u
Cu 324.754	0.8576	0.2509	0.7923
Fe 271.441	3856.07	3864.03	3861.67
K 766.491	947.978	947.176	947.528
Mg 279.078	11693.8	11691.7	11705.3
Mn 257.610	355.818	355.808	356.895
Mo 202.032	-1.3282u	-0.4304u	0.0573
Na 330.237	11435.1	11338.0	11363.1
Ni 231.604	29.6047	27.8492	30.6480
Pb 220.353	2.8104	0.5198	-9.7794u
Sb 206.834	-7.6896u	-7.2884u	-15.2584u
Se 196.026	5.6275	11.7899	-5.0852u
Si 288.158	3406.47	3401.44	3403.77
Sn 189.925	1.0455	0.3998	-2.3705u
Sr 216.596	20.8649	19.9008	19.5337
Ti 334.941	-0.3303	-0.3357	-0.3047
Tl 190.794	3.7337	-3.2000u	6.0738
V 292.401	-0.0886u	0.0171	0.2691
Zn 206.200	50.3901	46.3465	47.6250

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2385	ppb	0.4426	185.6	-38.0536
Al 308.215	139.185	ppb	0.9676	0.7	511.305
As 188.980	3.2868	ppb	1.6185	49.2	2.1229
B 249.678	36.4611	ppb	0.2906	0.8	143.713
Ba 389.178	3.8275	ppb	1.0186	26.6	-8.7324
Be 313.042	0.2215	ppb	0.0113	5.1	23.7626
Ca 370.602	8847	ppb	10.54	0.1	20203
Cd 226.502	0.0698	ppb	0.1723	246.7	16.2603
Co 228.615	15.3961	ppb	0.1651	1.1	65.5418
Cr 267.716	-0.2669	ppb	0.0451	16.9	18.6127
Cu 324.754	0.6336	ppb	0.3330	52.6	228.156
Fe 271.441	3860.59	ppb	4.0894	0.1	3208.23
K 766.491	947.561	ppb	0.4016	0.0	26093.3

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	11696.9	ppb	7.3307	0.1	16877.6
Mn 257.610	356.174	ppb	0.6244	0.2	39023.0
Mo 202.032	-0.5671	ppb	0.7028	123.9	2.8888
Na 330.237	11378.7	ppb	50.4354	0.4	357.160
Ni 231.604	29.3673	ppb	1.4144	4.8	38.5305
Pb 220.353	-2.1497	ppb	6.7060	311.9	5.4587
Sb 206.834	-10.0788	ppb	4.4902	44.6	7.1905
Se 196.026	4.1107	ppb	8.5392	207.7	2.8312
Si 288.158	3403.89	ppb	2.5186	0.1	16618.6
Sn 189.925	-0.3084	ppb	1.8147	588.5	-0.3595
Sr 216.596	20.0998	ppb	0.6875	3.4	95.3898
Ti 334.941	-0.3236	ppb	0.0166	5.1	-32.7985
Tl 190.794	2.2025	ppb	4.8228	219.0	-9.3452
V 292.401	0.0659	ppb	0.1838	279.0	-0.6200
Zn 206.200	48.1206	ppb	2.0669	4.3	17.0595

680-162091-B-2-Gpds (Samp) **12/19/2018, 4:04:17 AM** **Rack 3, Tube 43**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	53.2855	53.7214	52.9478
Al 308.215	5815.70	5822.39	5835.64
As 188.980	96.0495	107.720	101.858
B 249.678	373.917	372.042	375.902
Ba 389.178	115.457	116.548	116.466
Be 313.042	55.0105	55.0386	55.1190
Ca 370.602	47706	47731	47729
Cd 226.502	53.1156	53.5443	53.2473
Co 228.615	123.477	124.196	123.849
Cr 267.716	104.247	104.304	104.563
Cu 324.754	105.771	105.651	104.273
Fe 271.441	23618.5	23582.6	23596.1
K 766.491	13279.3	13282.1	13320.3
Mg 279.078	62225.6	62163.9	62266.0
Mn 257.610	2217.10	2214.47	2215.45
Mo 202.032	104.252	101.440	101.138
Na 330.237	63429.3	63373.6	63810.2
Ni 231.604	238.558	238.060	235.338
Pb 220.353	512.368	512.043	514.597
Sb 206.834	46.4699	48.0680	45.2210
Se 196.026	94.8643	99.7695	103.470
Si 288.158	16391.0	16394.0	16410.3
Sn 189.925	102.662	100.953	103.620
Sr 216.596	200.097	201.275	201.175
Ti 334.941	101.510	101.590	101.760
Tl 190.794	41.8081	37.9495	32.4729
V 292.401	102.304	101.849	102.329
Zn 206.200	333.925	337.258	330.396

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.3182	ppb	0.3879	0.7	1945.82
Al 308.215	5824.58	ppb	10.1479	0.2	14768.6
As 188.980	101.876	ppb	5.8352	5.7	28.1498
B 249.678	373.954	ppb	1.9305	0.5	2395.64

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	116.157	ppb	0.6076	0.5	1294.85
Be 313.042	55.0560	ppb	0.0563	0.1	45577.2
Ca 370.602	47722	ppb	13.92	0.0	108812
Cd 226.502	53.3024	ppb	0.2196	0.4	900.987
Co 228.615	123.840	ppb	0.3595	0.3	611.620
Cr 267.716	104.371	ppb	0.1684	0.2	2454.25
Cu 324.754	105.232	ppb	0.8326	0.8	4360.97
Fe 271.441	23599.1	ppb	18.1056	0.1	19472.3
K 766.491	13293.9	ppb	22.9359	0.2	362584
Mg 279.078	62218.5	ppb	51.4364	0.1	89636.4
Mn 257.610	2215.67	ppb	1.3273	0.1	242592
Mo 202.032	102.277	ppb	1.7174	1.7	234.256
Na 330.237	63537.7	ppb	237.600	0.4	1729.15
Ni 231.604	237.318	ppb	1.7332	0.7	327.423
Pb 220.353	513.002	ppb	1.3903	0.3	307.539
Sb 206.834	46.5863	ppb	1.4270	3.1	32.3241
Se 196.026	99.3680	ppb	4.3169	4.3	21.0950
Si 288.158	16398.5	ppb	10.3798	0.1	79008.0
Sn 189.925	102.412	ppb	1.3508	1.3	32.9361
Sr 216.596	200.849	ppb	0.6531	0.3	860.775
Ti 334.941	101.620	ppb	0.1277	0.1	12354.4
Tl 190.794	37.4102	ppb	4.6909	12.5	5.4126
V 292.401	102.161	ppb	0.2702	0.3	1477.58
Zn 206.200	333.860	ppb	3.4315	1.0	119.882

680-162091-B-2-H MS (Samp) **12/19/2018, 4:08:42 AM** **Rack 3, Tube 44**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.0806	52.5289	51.8113
Al 308.215	5869.35	5858.10	5864.33
As 188.980	111.782	100.721	103.890
B 249.678	378.169	381.259	380.833
Ba 389.178	115.144	115.464	117.791
Be 313.042	55.0726	54.8486	55.0325
Ca 370.602	49446	49329	49395
Cd 226.502	53.0605	53.2191	53.1750
Co 228.615	127.870	127.357	126.114
Cr 267.716	104.742	104.149	104.381
Cu 324.754	105.862	104.788	105.264
Fe 271.441	23836.7	23765.3	23773.2
K 766.491	13409.9	13398.1	13426.0
Mg 279.078	64835.8	64689.3	64762.7
Mn 257.610	2242.81	2238.31	2240.02
Mo 202.032	103.179	103.595	101.225
Na 330.237	66349.2	65358.0	66188.3
Ni 231.604	242.663	248.362	247.623
Pb 220.353	508.910	505.260	514.914
Sb 206.834	41.6750	54.0575	44.8413
Se 196.026	104.539	105.470	109.633
Si 288.158	17226.5	17223.7	17215.7
Sn 189.925	106.941	101.170	94.6995
Sr 216.596	202.689	204.693	204.454
Ti 334.941	101.602	101.278	101.422

Label	Replicates Concentration		
Tl 190.794	32.0856	32.0546	43.8842
V 292.401	102.485	101.624	101.042
Zn 206.200	338.846	342.856	339.619

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.1403	ppb	0.3625	0.7	1902.15
Al 308.215	5863.93	ppb	5.6372	0.1	14867.3
As 188.980	105.464	ppb	5.6962	5.4	29.0970
B 249.678	380.087	ppb	1.6749	0.4	2436.74
Ba 389.178	116.133	ppb	1.4444	1.2	1297.16
Be 313.042	54.9846	ppb	0.1195	0.2	45517.9
Ca 370.602	49390	ppb	58.95	0.1	112614
Cd 226.502	53.1515	ppb	0.0819	0.2	898.680
Co 228.615	127.114	ppb	0.9026	0.7	628.089
Cr 267.716	104.424	ppb	0.2984	0.3	2455.57
Cu 324.754	105.305	ppb	0.5379	0.5	4363.92
Fe 271.441	23791.8	ppb	39.1029	0.2	19631.2
K 766.491	13411.3	ppb	14.0109	0.1	365783
Mg 279.078	64762.6	ppb	73.2246	0.1	93301.2
Mn 257.610	2240.38	ppb	2.2725	0.1	245306
Mo 202.032	102.667	ppb	1.2654	1.2	235.132
Na 330.237	65965.2	ppb	531.954	0.8	1793.09
Ni 231.604	246.216	ppb	3.0991	1.3	339.785
Pb 220.353	509.695	ppb	4.8745	1.0	305.601
Sb 206.834	46.8580	ppb	6.4329	13.7	32.4449
Se 196.026	106.547	ppb	2.7127	2.5	22.4647
Si 288.158	17222.0	ppb	5.6221	0.0	82959.9
Sn 189.925	100.937	ppb	6.1241	6.1	32.4585
Sr 216.596	203.945	ppb	1.0947	0.5	873.823
Ti 334.941	101.434	ppb	0.1623	0.2	12341.1
Tl 190.794	36.0081	ppb	6.8209	18.9	4.8354
V 292.401	101.717	ppb	0.7259	0.7	1471.14
Zn 206.200	340.441	ppb	2.1272	0.6	122.250

680-162091-B-2-I MSD (Samp) **12/19/2018, 4:13:07 AM** **Rack 3, Tube 45**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.0616	52.6683	50.8386
Al 308.215	5826.25	5808.26	5810.36
As 188.980	96.6110	99.0986	100.781
B 249.678	354.884	356.611	359.431
Ba 389.178	112.339	111.884	111.835
Be 313.042	54.1543	54.1563	54.0991
Ca 370.602	49437	49363	49368
Cd 226.502	52.5662	52.5244	51.7320
Co 228.615	126.683	125.685	126.650
Cr 267.716	102.744	103.215	102.950
Cu 324.754	107.235	106.030	106.823
Fe 271.441	17456.9	17446.2	17444.8
K 766.491	13068.9	13052.0	13059.6
Mg 279.078	65726.7	65834.4	65879.7
Mn 257.610	2096.72	2094.46	2098.98
Mo 202.032	99.9344	100.262	101.695

Label	Replicates Concentration		
Na 330.237	65007.8	65313.5	65268.2
Ni 231.604	250.252	249.095	246.053
Pb 220.353	504.418	507.401	501.256
Sb 206.834	40.1160	40.0112	47.7299
Se 196.026	95.6757	93.7911	98.9295
Si 288.158	15524.1	15518.8	15546.5
Sn 189.925	104.687	98.0282	92.8281
Sr 216.596	202.277	201.617	201.430
Ti 334.941	99.9395	99.6452	99.8117
Tl 190.794	31.9961	35.6319	46.0312
V 292.401	99.3553	100.065	99.9686
Zn 206.200	314.486	301.730	309.503

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.5228	ppb	0.9983	1.9	1880.33
Al 308.215	5814.96	ppb	9.8363	0.2	14744.2
As 188.980	98.8303	ppb	2.0980	2.1	27.3338
B 249.678	356.975	ppb	2.2953	0.6	2287.55
Ba 389.178	112.020	ppb	0.2776	0.2	1250.51
Be 313.042	54.1366	ppb	0.0325	0.1	44813.6
Ca 370.602	49389	ppb	41.86	0.1	112624
Cd 226.502	52.2742	ppb	0.4700	0.9	879.435
Co 228.615	126.339	ppb	0.5667	0.4	624.013
Cr 267.716	102.970	ppb	0.2360	0.2	2420.77
Cu 324.754	106.696	ppb	0.6126	0.6	4417.29
Fe 271.441	17449.3	ppb	6.6096	0.0	14407.2
K 766.491	13060.2	ppb	8.4569	0.1	356213
Mg 279.078	65813.6	ppb	78.5979	0.1	94816.8
Mn 257.610	2096.72	ppb	2.2617	0.1	229598
Mo 202.032	100.631	ppb	0.9365	0.9	230.644
Na 330.237	65196.5	ppb	164.954	0.3	1773.49
Ni 231.604	248.467	ppb	2.1688	0.9	342.914
Pb 220.353	504.358	ppb	3.0728	0.6	302.431
Sb 206.834	42.6190	ppb	4.4264	10.4	30.4289
Se 196.026	96.1321	ppb	2.5994	2.7	20.4871
Si 288.158	15529.8	ppb	14.6791	0.1	74839.0
Sn 189.925	98.5146	ppb	5.9446	6.0	31.6734
Sr 216.596	201.775	ppb	0.4453	0.2	863.075
Ti 334.941	99.7988	ppb	0.1476	0.1	12149.1
Tl 190.794	37.8864	ppb	7.2841	19.2	5.7980
V 292.401	99.7963	ppb	0.3850	0.4	1441.99
Zn 206.200	308.573	ppb	6.4285	2.1	110.773

680-162078-A-1-A (Samp) **12/19/2018, 4:17:33 AM** **Rack 3, Tube 46**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1318u	0.2774	0.2494
Al 308.215	-1.3785u	-0.9334u	4.1836
As 188.980	-2.4658u	-3.0237u	6.0097
B 249.678	8.8839	9.0816	8.7492
Ba 389.178	89.8463	89.4379	90.6591
Be 313.042	0.0677	0.0775	0.0935
Ca 370.602	27487	27469	27486

Label	Replicates Concentration		
Cd 226.502	-0.3105u	-0.0941u	0.0243
Co 228.615	0.0981	-0.3445u	1.0797
Cr 267.716	6.9419	7.2555	6.9131
Cu 324.754	0.9738	0.6965	0.7663
Fe 271.441	10.2303	-0.1133u	-5.3767u
K 766.491	3736.39	3739.75	3743.21
Mg 279.078	36442.6	36427.3	36498.1
Mn 257.610	19.1640	19.2867	19.3627
Mo 202.032	-0.7160u	0.6976	-1.4258u
Na 330.237	102595x	101933x	101908x
Ni 231.604	0.6959	0.3664	2.0043
Pb 220.353	-0.4360u	0.6306	9.4979
Sb 206.834	-7.8376u	-7.9116u	-3.8268u
Se 196.026	17.7815	2.3189	2.7823
Si 288.158	6586.40	6576.75	6593.27
Sn 189.925	0.1287	-6.0620u	1.9575
Sr 216.596	216.387	216.148	214.666
Ti 334.941	-0.8396	-0.9454	-1.0138
Tl 190.794	1.1891	-3.6967u	-2.4460u
V 292.401	0.5748	0.6264	0.2387
Zn 206.200	7.0922	5.9516	3.6113

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1317b	ppb	0.2286	173.6	-25.2000
Al 308.215	0.6239b	ppb	3.0908	495.4	163.868
As 188.980	0.1734b	ppb	5.0621	2919.2	1.2922
B 249.678	8.9049b	ppb	0.1672	1.9	-37.8971
Ba 389.178	89.9811b	ppb	0.6217	0.7	970.862
Be 313.042	0.0796b	ppb	0.0130	16.3	-95.8802
Ca 370.602	27481b	ppb	10.15	0.0	62678
Cd 226.502	-0.1268b	ppb	0.1697	133.9	9.9832
Co 228.615	0.2778b	ppb	0.7289	262.4	-10.6309
Cr 267.716	7.0368b	ppb	0.1899	2.7	187.728
Cu 324.754	0.8122b	ppb	0.1443	17.8	234.301
Fe 271.441	1.5801b	ppb	7.9401	502.5	28.9619
K 766.491	3739.78b	ppb	3.4091	0.1	102193
Mg 279.078	36456.0b	ppb	37.2955	0.1	52548.9
Mn 257.610	19.2711b	ppb	0.1003	0.5	2306.76
Mo 202.032	-0.4814b	ppb	1.0809	224.5	3.1420
Na 330.237	102145xb	ppb	389.381	0.4	2749.67
Ni 231.604	1.0222b	ppb	0.8663	84.7	-0.8469
Pb 220.353	3.2308b	ppb	5.4536	168.8	8.5734
Sb 206.834	-6.5253b	ppb	2.3373	35.8	8.7192
Se 196.026	7.6276b	ppb	8.7966	115.3	3.4811
Si 288.158	6585.47b	ppb	8.2985	0.1	31887.1
Sn 189.925	-1.3253b	ppb	4.2028	317.1	-0.6775
Sr 216.596	215.734b	ppb	0.9326	0.4	921.196
Ti 334.941	-0.9329b	ppb	0.0878	9.4	-19.9863
Tl 190.794	-1.6512b	ppb	2.5380	153.7	-10.9506
V 292.401	0.4800b	ppb	0.2105	43.9	4.1329
Zn 206.200	5.5517b	ppb	1.7746	32.0	1.7317

680-162078-B-2-A (Samp) **12/19/2018, 4:21:58 AM** **Rack 3, Tube 47**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0427u	-0.2723u	-0.1866u
Al 308.215	-3.5156u	-2.9072u	-1.8861u
As 188.980	-3.3169u	-1.1368u	-4.0739u
B 249.678	5.1614	5.3459	6.2834
Ba 389.178	131.456	131.947	130.034
Be 313.042	-0.0588u	-0.0634u	-0.0486u
Ca 370.602	40207	40122	40132
Cd 226.502	-0.4793u	-0.4294u	-0.0920u
Co 228.615	-0.2134u	0.9560	0.4436
Cr 267.716	0.7706	0.9443	0.7316
Cu 324.754	0.2909	-0.1089u	0.4865
Fe 271.441	14.6708	3.3513	-1.4561u
K 766.491	4208.23	4201.47	4201.06
Mg 279.078	21559.0	21559.2	21571.2
Mn 257.610	2.0698	1.9344	2.0930
Mo 202.032	-0.1208u	-0.5973u	-2.3115u
Na 330.237	33723.7	33601.4	33801.9
Ni 231.604	2.8055	0.5579	2.8736
Pb 220.353	0.1061	5.2668	1.1417
Sb 206.834	-16.8710u	-8.1801u	-12.7544u
Se 196.026	5.6179	0.2721	6.8849
Si 288.158	12236.2	12186.8	12212.7
Sn 189.925	0.5887	-3.4767u	-3.3206u
Sr 216.596	295.391	294.117	293.220
Ti 334.941	-0.4310	-0.4185	-0.4177
Tl 190.794	2.5716	-0.5039u	3.2613
V 292.401	0.5455	0.4250	-0.0055u
Zn 206.200	7.1424	8.1822	9.4906

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1672	ppb	0.1160	69.4	-36.5199
Al 308.215	-2.7696	ppb	0.8234	29.7	155.351
As 188.980	-2.8425	ppb	1.5250	53.6	0.4973
B 249.678	5.5969	ppb	0.6016	10.7	-60.1664
Ba 389.178	131.146	ppb	0.9933	0.8	1412.93
Be 313.042	-0.0570	ppb	0.0076	13.3	-203.843
Ca 370.602	40154	ppb	46.38	0.1	91565
Cd 226.502	-0.3336	ppb	0.2107	63.2	6.6817
Co 228.615	0.3954	ppb	0.5862	148.3	-10.0421
Cr 267.716	0.8155	ppb	0.1132	13.9	42.7255
Cu 324.754	0.2228	ppb	0.3035	136.2	211.045
Fe 271.441	5.5220	ppb	8.2797	149.9	32.2039
K 766.491	4203.59	ppb	4.0264	0.1	114834
Mg 279.078	21563.1	ppb	6.9801	0.0	31094.6
Mn 257.610	2.0324	ppb	0.0857	4.2	349.320
Mo 202.032	-1.0099	ppb	1.1521	114.1	1.9515
Na 330.237	33709.0	ppb	101.069	0.3	946.104
Ni 231.604	2.0790	ppb	1.3177	63.4	0.6218
Pb 220.353	2.1716	ppb	2.7301	125.7	7.9508
Sb 206.834	-12.6018	ppb	4.3474	34.5	5.9805
Se 196.026	4.2583	ppb	3.5098	82.4	2.8375
Si 288.158	12211.9	ppb	24.7048	0.2	58888.4

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.0695	ppb	2.3034	111.3	-0.9274
Sr 216.596	294.242	ppb	1.0908	0.4	1252.89
Ti 334.941	-0.4224	ppb	0.0075	1.8	-10.0280
Tl 190.794	1.7763	ppb	2.0046	112.9	-9.5299
V 292.401	0.3217	ppb	0.2896	90.0	2.1691
Zn 206.200	8.2717	ppb	1.1767	14.2	2.7128

680-162078-B-5-A (Samp) **12/19/2018, 4:26:23 AM** **Rack 3, Tube 48**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3886	-0.0404u	0.7286
Al 308.215	-3.1372u	-0.0955u	1.2970
As 188.980	3.9577	5.9611	2.7631
B 249.678	18.1772	19.2511	19.0773
Ba 389.178	245.311	245.581	243.826
Be 313.042	-0.0525u	-0.0540u	-0.0465u
Ca 370.602	68245	68261	68292
Cd 226.502	-0.4938u	-0.4597u	-0.4443u
Co 228.615	0.7391	-0.5635u	1.0645
Cr 267.716	-0.2147u	0.0123	-0.3046u
Cu 324.754	1.8838	1.3421	1.5941
Fe 271.441	2.4526	3.0281	4.4083
K 766.491	5113.96	5102.94	5101.64
Mg 279.078	34058.5	34060.2	34127.6
Mn 257.610	1.6422	1.6539	1.7349
Mo 202.032	-0.9100u	0.0011	-1.3897u
Na 330.237	36148.3	36682.7	36213.6
Ni 231.604	1.9015	2.5187	2.2454
Pb 220.353	2.0202	-2.1417u	2.4809
Sb 206.834	2.1976	-5.9677u	-3.7710u
Se 196.026	12.1118	-4.4007u	-0.9584u
Si 288.158	11570.4	11579.8	11578.8
Sn 189.925	-2.6037u	1.7742	1.3621
Sr 216.596	527.083	526.584	527.610
Ti 334.941	-0.7440	-0.7294	-0.8100
Tl 190.794	-1.1196u	-0.7293u	-1.0780u
V 292.401	0.0888	-0.0636u	0.5760
Zn 206.200	7.5347	8.8294	4.2171

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3589	ppb	0.3854	107.4	-18.0247
Al 308.215	-0.6452	ppb	2.2676	351.5	160.671
As 188.980	4.2273	ppb	1.6160	38.2	2.3631
B 249.678	18.8352	ppb	0.5764	3.1	28.9516
Ba 389.178	244.906	ppb	0.9448	0.4	2687.96
Be 313.042	-0.0510	ppb	0.0040	7.8	-194.752
Ca 370.602	68266	ppb	23.84	0.0	155645
Cd 226.502	-0.4659	ppb	0.0253	5.4	4.5810
Co 228.615	0.4133	ppb	0.8615	208.4	-9.9475
Cr 267.716	-0.1690	ppb	0.1633	96.7	19.8896
Cu 324.754	1.6067	ppb	0.2711	16.9	265.632
Fe 271.441	3.2963	ppb	1.0051	30.5	30.3805
K 766.491	5106.18	ppb	6.7715	0.1	139433

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	34082.1	ppb	39.3821	0.1	49129.3
Mn 257.610	1.6770	ppb	0.0505	3.0	371.928
Mo 202.032	-0.7662	ppb	0.7065	92.2	2.5005
Na 330.237	36348.2	ppb	291.540	0.8	1015.66
Ni 231.604	2.2219	ppb	0.3093	13.9	0.8202
Pb 220.353	0.7865	ppb	2.5463	323.8	7.1388
Sb 206.834	-2.5137	ppb	4.2254	168.1	10.5041
Se 196.026	2.2509	ppb	8.7115	387.0	2.4551
Si 288.158	11576.3	ppb	5.1897	0.0	55838.2
Sn 189.925	0.1775	ppb	2.4174	1361.8	-0.1989
Sr 216.596	527.092	ppb	0.5133	0.1	2236.67
Ti 334.941	-0.7611	ppb	0.0429	5.6	-5.8989
Tl 190.794	-0.9757	ppb	0.2143	22.0	-10.6755
V 292.401	0.2004	ppb	0.3341	166.7	0.5306
Zn 206.200	6.8604	ppb	2.3790	34.7	2.2053

680-162078-B-4-A (Samp) **12/19/2018, 4:30:48 AM** **Rack 3, Tube 49**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0951u	-0.1777u	-0.3302u
Al 308.215	-5.1279u	-3.0891u	-2.8267u
As 188.980	-2.8452u	8.2846	-3.5478u
B 249.678	4.3078	5.1498	3.4016
Ba 389.178	93.9498	95.6010	94.0929
Be 313.042	-0.0476u	-0.0494u	-0.0535u
Ca 370.602	24274	24246	24325
Cd 226.502	-0.4884u	-0.4082u	-0.3434u
Co 228.615	0.7656	0.1266	-0.5125u
Cr 267.716	0.3443	0.4622	0.7022
Cu 324.754	-0.0789u	0.3207	0.4592
Fe 271.441	11.3876	8.9501	-5.3356u
K 766.491	2997.38	2999.21	3007.39
Mg 279.078	9853.31	9839.15	9838.99
Mn 257.610	-0.1326	-0.1263	-0.1198
Mo 202.032	-0.4530u	0.2983	0.2438
Na 330.237	11306.5	11130.3	11096.0
Ni 231.604	-0.5908u	-0.4983u	-0.9136u
Pb 220.353	0.1206	-1.6979u	-3.0822u
Sb 206.834	-2.3301u	-5.3015u	-1.2583u
Se 196.026	-13.1605u	6.0573	15.6270
Si 288.158	15775.5	15802.5	15808.7
Sn 189.925	1.1919	1.1896	4.5642
Sr 216.596	152.128	152.634	153.821
Ti 334.941	-0.1894	-0.2602	-0.1434
Tl 190.794	-3.6615u	-2.6376u	3.0068
V 292.401	2.0366	1.8710	1.6580
Zn 206.200	5.7612	-1.9204u	0.4384

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2010	ppb	0.1193	59.3	-37.1318
Al 308.215	-3.6812	ppb	1.2597	34.2	153.123
As 188.980	0.6306	ppb	6.6379	1052.7	1.4138
B 249.678	4.2864	ppb	0.8743	20.4	-68.9861

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	94.5479	ppb	0.9148	1.0	995.089
Be 313.042	-0.0502	ppb	0.0030	6.0	-199.420
Ca 370.602	24282	ppb	39.95	0.2	55386
Cd 226.502	-0.4133	ppb	0.0727	17.6	5.3640
Co 228.615	0.1266	ppb	0.6391	505.0	-11.3998
Cr 267.716	0.5029	ppb	0.1824	36.3	35.2805
Cu 324.754	0.2337	ppb	0.2795	119.6	211.465
Fe 271.441	5.0007	ppb	9.0341	180.7	31.7776
K 766.491	3001.33	ppb	5.3297	0.2	82067.2
Mg 279.078	9843.82	ppb	8.2231	0.1	14212.0
Mn 257.610	-0.1262	ppb	0.0064	5.0	55.8828
Mo 202.032	0.0297	ppb	0.4189	1411.0	4.2932
Na 330.237	11177.6	ppb	112.956	1.0	352.323
Ni 231.604	-0.6676	ppb	0.2180	32.7	-3.1953
Pb 220.353	-1.5532	ppb	1.6063	103.4	5.7671
Sb 206.834	-2.9633	ppb	2.0947	70.7	10.2981
Se 196.026	2.8413	ppb	14.6607	516.0	2.5673
Si 288.158	15795.5	ppb	17.6725	0.1	76086.5
Sn 189.925	2.3152	ppb	1.9477	84.1	0.4907
Sr 216.596	152.861	ppb	0.8692	0.6	655.573
Ti 334.941	-0.1977	ppb	0.0589	29.8	-24.3174
Tl 190.794	-1.0974	ppb	3.5911	327.2	-10.7271
V 292.401	1.8552	ppb	0.1898	10.2	24.4458
Zn 206.200	1.4264	ppb	3.9350	275.9	0.2494

680-162091-C-1-C (Samp) **12/19/2018, 4:35:14 AM** **Rack 3, Tube 50**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0396	0.1774	-0.1842u
Al 308.215	3.9994	1.5506	4.6686
As 188.980	-3.9028u	3.7947	1.3212
B 249.678	14.2107	13.4148	14.0368
Ba 389.178	81.2237	82.4354	82.4582
Be 313.042	-0.0044u	-0.0095u	0.0036
Ca 370.602	25360	25386	25370
Cd 226.502	0.1378	-0.1984u	-0.0472u
Co 228.615	3.6079	3.2074	3.9669
Cr 267.716	-0.4345u	0.4701	-0.3560u
Cu 324.754	2.1048	1.4012	1.4732
Fe 271.441	386.483	388.200	386.125
K 766.491	2287.72	2287.69	2285.53
Mg 279.078	22127.9	22107.7	22073.7
Mn 257.610	239.267	238.762	239.055
Mo 202.032	-1.1144u	-1.1911u	-0.6849u
Na 330.237	36021.9	36191.3	36425.9
Ni 231.604	25.4763	24.3400	25.9819
Pb 220.353	-6.7576u	1.0577	-0.0543u
Sb 206.834	-11.7272u	-5.1502u	-0.6791u
Se 196.026	-4.3700u	-18.5099u	1.4700
Si 288.158	16322.3	16293.1	16279.3
Sn 189.925	-2.6702u	2.3731	2.4406
Sr 216.596	65.3423	67.0332	67.2516
Ti 334.941	-0.4630	-0.4595	-0.6144

Label	Replicates Concentration		
Tl 190.794	-7.1215u	-4.5692u	-6.3275u
V 292.401	0.7609	0.7077	0.3059
Zn 206.200	13.9468	15.1891	18.2168

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0109	ppb	0.1825	1673.8	-28.5815
Al 308.215	3.4062	ppb	1.6414	48.2	170.847
As 188.980	0.4044	ppb	3.9298	971.8	1.3551
B 249.678	13.8874	ppb	0.4184	3.0	-4.7489
Ba 389.178	82.0391	ppb	0.7062	0.9	868.560
Be 313.042	-0.0035	ppb	0.0066	190.0	-161.822
Ca 370.602	25372	ppb	12.92	0.1	57875
Cd 226.502	-0.0359	ppb	0.1684	469.0	11.8377
Co 228.615	3.5941	ppb	0.3799	10.6	6.0646
Cr 267.716	-0.1068	ppb	0.5012	469.4	21.8791
Cu 324.754	1.6597	ppb	0.3871	23.3	267.816
Fe 271.441	386.936	ppb	1.1091	0.3	346.534
K 766.491	2286.98	ppb	1.2563	0.1	62598.2
Mg 279.078	22103.1	ppb	27.3634	0.1	31869.9
Mn 257.610	239.028	ppb	0.2533	0.1	26263.3
Mo 202.032	-0.9968	ppb	0.2728	27.4	1.9748
Na 330.237	36213.0	ppb	202.866	0.6	1012.04
Ni 231.604	25.2661	ppb	0.8409	3.3	32.8436
Pb 220.353	-1.9181	ppb	4.2279	220.4	5.5727
Sb 206.834	-5.8522	ppb	5.5574	95.0	9.0142
Se 196.026	-7.1367	ppb	10.2733	144.0	0.6883
Si 288.158	16298.3	ppb	21.9480	0.1	78498.6
Sn 189.925	0.7145	ppb	2.9314	410.3	-0.0249
Sr 216.596	66.5424	ppb	1.0450	1.6	290.777
Ti 334.941	-0.5123	ppb	0.0885	17.3	-18.9421
Tl 190.794	-6.0061	ppb	1.3061	21.7	-12.6916
V 292.401	0.5915	ppb	0.2488	42.1	6.2141
Zn 206.200	15.7842	ppb	2.1964	13.9	5.4173

Cont Calib Verif (CCV) **12/19/2018, 4:39:40 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	493.910	498.353	496.072
Al 308.215	9846.05	9849.87	9825.76
As 188.980	504.372	500.161	499.891
B 249.678	501.051	505.476	503.768
Ba 389.178	484.130	483.555	482.965
Be 313.042	528.013	528.128	529.019
Ca 370.602	10048	10043	10053
Cd 226.502	516.531	514.453	513.802
Co 228.615	508.193	508.739	506.945
Cr 267.716	507.811	507.025	508.155
Cu 324.754	491.841	490.916	489.616
Fe 271.441	10088.8	10098.7	10101.3
K 766.491	9640.27	9638.27	9642.92
Mg 279.078	10208.4	10209.9	10222.3
Mn 257.610	499.501	499.556	498.768
Mo 202.032	501.750	502.056	501.671

Label	Replicates Concentration		
Na 330.237	10147.8	10523.5	10402.4
Ni 231.604	504.783	502.308	503.467
Pb 220.353	498.187	497.034	495.970
Sb 206.834	492.590	488.890	491.474
Se 196.026	496.216	495.723	477.587
Si 288.158	5315.47	5311.30	5315.67
Sn 189.925	495.484	503.641	506.280
Sr 216.596	512.682	507.427	507.572
Ti 334.941	503.854	504.068	504.386
Tl 190.794	483.754	492.194	476.580
V 292.401	495.159	494.625	494.722
Zn 206.200	1023.49	1004.88	1002.69

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	496.112	ppb	2.2220	0.4	18356.1	99.22234
Al 308.215	9840.56	ppb	12.9567	0.1	24853.5	98.40562
As 188.980	501.475	ppb	2.5128	0.5	133.452	100.29497
B 249.678	503.432	ppb	2.2312	0.4	3280.80	100.68635
Ba 389.178	483.550	ppb	0.5827	0.1	5317.84	96.70998
Be 313.042	528.387	ppb	0.5509	0.1	438792	105.67732
Ca 370.602	10048	ppb	4.794	0.0	22946	100.48154
Cd 226.502	514.929	ppb	1.4255	0.3	8425.98	102.98574
Co 228.615	507.959	ppb	0.9195	0.2	2543.31	101.59177
Cr 267.716	507.663	ppb	0.5794	0.1	11810.3	101.53269
Cu 324.754	490.791	ppb	1.1175	0.2	19575.0	98.15824
Fe 271.441	10096.3	ppb	6.6189	0.1	8374.20	100.91226
K 766.491	9640.49	ppb	2.3307	0.0	263012	96.40488
Mg 279.078	10213.6	ppb	7.6289	0.1	14737.0	102.13564
Mn 257.610	499.275	ppb	0.4401	0.1	54677.7	99.85498
Mo 202.032	501.825	ppb	0.2033	0.0	1134.53	100.36510
Na 330.237	10357.9	ppb	191.779	1.9	326.932	103.57918
Ni 231.604	503.519	ppb	1.2383	0.2	696.965	100.70383
Pb 220.353	497.064	ppb	1.1086	0.2	297.646	99.41276
Sb 206.834	490.985	ppb	1.8978	0.4	228.677	98.19697
Se 196.026	489.842	ppb	10.6159	2.2	95.3616	97.96842
Si 288.158	5314.15	ppb	2.4662	0.0	25923.6	106.28294
Sn 189.925	501.802	ppb	5.6284	1.1	162.362	100.36037
Sr 216.596	509.227	ppb	2.9929	0.6	2152.29	101.84545
Ti 334.941	504.103	ppb	0.2679	0.1	60369.1	100.82051
Tl 190.794	484.176	ppb	7.8157	1.6	191.767	96.83522
V 292.401	494.835	ppb	0.2847	0.1	7141.66	98.96709
Zn 206.200	1010.35	ppb	11.4326	1.1	363.174	101.03540

Cont Calib Blank (CCB) **12/19/2018, 4:44:05 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1750u	-0.0463u	0.2687
Al 308.215	0.0886	-4.6582u	-1.1026u
As 188.980	2.5236	0.2007	1.7098
B 249.678	3.4146	4.7631	4.1327
Ba 389.178	-0.3016u	1.5554	1.7973
Be 313.042	0.0531	0.0530	0.0518
Ca 370.602	2.032	2.884	-1.663u

Label	Replicates Concentration		
Cd 226.502	-0.3749u	-0.1654u	-0.1030u
Co 228.615	0.4709	0.4820	0.1142
Cr 267.716	-0.2879u	-0.1398u	-0.0682u
Cu 324.754	0.6305	-0.2046u	0.7635
Fe 271.441	-0.3149u	2.4242	3.8104
K 766.491	3.4648	3.5093	3.3288
Mg 279.078	-5.4603u	-3.2831u	3.2048
Mn 257.610	0.1650	0.2301	0.2226
Mo 202.032	0.8963	-0.8795u	-0.1048u
Na 330.237	119.969	38.4345	485.328
Ni 231.604	0.6310	1.5676	-1.7471u
Pb 220.353	0.8792	4.3927	-1.0983u
Sb 206.834	-4.9501u	-7.2591u	-6.7932u
Se 196.026	5.4836	-2.8651u	3.8073
Si 288.158	18.4038	16.3524	16.2957
Sn 189.925	-3.2531u	3.0547	1.0305
Sr 216.596	-0.2266u	-0.4662u	0.4455
Ti 334.941	0.3498	0.2343	0.2058
Tl 190.794	6.6523	-3.6018u	3.5287
V 292.401	-0.0338u	0.5066	0.0590
Zn 206.200	1.0728	-1.0985u	-1.9818u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0158	ppb	0.2283	1442.8	-28.4217	0.01582
Al 308.215	-1.8907	ppb	2.4695	130.6	157.556	-1.89074
As 188.980	1.4780	ppb	1.1786	79.7	1.6375	1.47802
B 249.678	4.1035	ppb	0.6747	16.4	-70.2169	4.10345
Ba 389.178	1.0170	ppb	1.1484	112.9	-52.7765	1.01703
Be 313.042	0.0526	ppb	0.0008	1.4	-117.174	0.05262
Ca 370.602	1.084	ppb	2.417	223.0	39.74	1.08404
Cd 226.502	-0.2144	ppb	0.1425	66.4	8.5793	-0.21441
Co 228.615	0.3557	ppb	0.2092	58.8	-10.2495	0.35569
Cr 267.716	-0.1653	ppb	0.1121	67.8	19.6846	-0.16529
Cu 324.754	0.3965	ppb	0.5247	132.4	217.905	0.39648
Fe 271.441	1.9732	ppb	2.0993	106.4	29.2809	1.97323
K 766.491	3.4343	ppb	0.0940	2.7	361.823	3.43430
Mg 279.078	-1.8462	ppb	4.5077	244.2	28.4323	-1.84621
Mn 257.610	0.2059	ppb	0.0356	17.3	43.8536	0.20592
Mo 202.032	-0.0293	ppb	0.8903	3035.0	4.1607	-0.02933
Na 330.237	214.577	ppb	237.995	110.9	63.4124	214.57709
Ni 231.604	0.1505	ppb	1.7088	1135.6	-2.0585	0.15048
Pb 220.353	1.3912	ppb	2.7811	199.9	7.4928	1.39116
Sb 206.834	-6.3341	ppb	1.2210	19.3	8.7833	-6.33413
Se 196.026	2.1419	ppb	4.4165	206.2	2.4341	2.14193
Si 288.158	17.0173	ppb	1.2011	7.1	365.240	17.01731
Sn 189.925	0.2774	ppb	3.2206	1161.2	-0.1711	0.27735
Sr 216.596	-0.0824	ppb	0.4726	573.3	9.3997	-0.08244
Ti 334.941	0.2633	ppb	0.0763	29.0	-3.9782	0.26332
Tl 190.794	2.1931	ppb	5.2559	239.7	-9.3573	2.19306
V 292.401	0.1773	ppb	0.2890	163.0	0.0471	0.17729
Zn 206.200	-0.6692	ppb	1.5719	234.9	-0.5045	-0.66917

680-162105-B-4-A (Samp) **12/19/2018, 4:48:28 AM** **Rack 3, Tube 51**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5184u	-0.7373u	-0.7667u
Al 308.215	75.8868	77.0462	73.5362
As 188.980	-3.2233u	6.1694	13.6213
B 249.678	429.967	434.426	434.563
Ba 389.178	170.128	170.633	168.251
Be 313.042	-0.0959u	-0.0812u	-0.0909u
Ca 370.602	391451	389108	390825
Cd 226.502	-0.3175u	0.3393	-0.2032
Co 228.615	3.1509	4.1444	4.8382
Cr 267.716	3.5255	3.6014	3.8879
Cu 324.754	9.1243	8.9021	9.0299
Fe 271.441	6151.45	6174.61	6160.19
K 766.491	47454.0x	47399.9x	47417.7x
Mg 279.078	69835.9	69886.9	69863.7
Mn 257.610	4049.34	4051.80	4050.47
Mo 202.032	0.8233	-0.6081u	1.5427
Na 330.237	294969x	293880x	292035x
Ni 231.604	25.2621	23.5961	23.6616
Pb 220.353	12.7896	11.9739	9.1562
Sb 206.834	-15.3509u	-2.5437u	-4.9919u
Se 196.026	6.1437	-9.7141u	-24.1979u
Si 288.158	12348.4	12354.0	12343.3
Sn 189.925	1.8214	7.8922	2.7365
Sr 216.596	1210.54	1214.51	1211.65
Ti 334.941	-0.2690	-0.3888	-0.3778
Tl 190.794	-9.8466u	-9.7722u	-2.3788
V 292.401	2.2615	1.7415	1.2448
Zn 206.200	892.444	885.903	895.097

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6741b	ppb	0.1357	20.1	-51.5508
Al 308.215	75.4897b	ppb	1.7883	2.4	351.848
As 188.980	5.5225b	ppb	8.4409	152.8	2.7168
B 249.678	432.985b	ppb	2.6146	0.6	2810.64
Ba 389.178	169.671b	ppb	1.2553	0.7	1890.42
Be 313.042	-0.0893b	ppb	0.0075	8.4	-189.545
Ca 370.602	390461b	ppb	1213	0.3	890136
Cd 226.502	-0.0605b	ppb	0.3509	580.3	15.6020
Co 228.615	4.0445b	ppb	0.8481	21.0	8.5162
Cr 267.716	3.6716b	ppb	0.1911	5.2	120.378
Cu 324.754	9.0188b	ppb	0.1115	1.2	559.533
Fe 271.441	6162.08b	ppb	11.6940	0.2	5103.26
K 766.491	47423.9xb	ppb	27.5976	0.1	1292770
Mg 279.078	69862.2b	ppb	25.5054	0.0	100629
Mn 257.610	4050.54b	ppb	1.2300	0.0	443222
Mo 202.032	0.5860b	ppb	1.0949	186.9	5.4501
Na 330.237	293628xb	ppb	1483.14	0.5	7793.49
Ni 231.604	24.1733b	ppb	0.9435	3.9	31.3247
Pb 220.353	11.3066b	ppb	1.9064	16.9	13.6489
Sb 206.834	-7.6288b	ppb	6.7986	89.1	8.3382
Se 196.026	-9.2561b	ppb	15.1760	164.0	0.6351
Si 288.158	12348.6b	ppb	5.3621	0.0	59544.9

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	4.1500b	ppb	3.2729	78.9	1.1212
Sr 216.596	1212.23b	ppb	2.0485	0.2	5132.66
Ti 334.941	-0.3452b	ppb	0.0662	19.2	163.730
Tl 190.794	-7.3325b	ppb	4.2902	58.5	-12.0054
V 292.401	1.7493b	ppb	0.5084	29.1	23.4497
Zn 206.200	891.148b	ppb	4.7323	0.5	320.450

680-162105-B-1-A (Samp) **12/19/2018, 4:52:53 AM** **Rack 3, Tube 52**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2568	-0.0969u	-0.4532u
Al 308.215	24.0504	21.6553	19.3593
As 188.980	1.2866	-3.2504u	3.2391
B 249.678	265.599	262.360	264.422
Ba 389.178	919.083	920.033	919.385
Be 313.042	-0.0703u	-0.0715u	-0.0630u
Ca 370.602	91923	91825	91703
Cd 226.502	-0.5399u	-0.4527u	0.0815
Co 228.615	0.6301	-0.8497u	1.1265
Cr 267.716	0.5225	0.5622	0.3982
Cu 324.754	1.0954	1.0214	0.7813
Fe 271.441	254.998	255.851	248.041
K 766.491	153746x	153620x	153578x
Mg 279.078	29967.6	29962.4	29971.0
Mn 257.610	395.460	394.721	395.050
Mo 202.032	1.2447	1.6453	1.4253
Na 330.237	53381.1	54323.2	53596.0
Ni 231.604	0.9410	1.3853	0.9892
Pb 220.353	-5.2402u	1.1538	-4.2963u
Sb 206.834	-8.6732u	-6.0467u	-10.8617u
Se 196.026	-1.8054u	-7.2376u	3.3752
Si 288.158	15953.1	15932.5	15945.7
Sn 189.925	2.1242	2.9429	-0.1879u
Sr 216.596	686.063	685.696	681.162
Ti 334.941	2.9959	2.9981	3.1352
Tl 190.794	-2.5071u	-3.1016u	-0.0211
V 292.401	2.7426	2.1278	1.9640
Zn 206.200	3.3050	2.6152	1.9142

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0978b	ppb	0.3550	363.2	-34.6949
Al 308.215	21.6883b	ppb	2.3457	10.8	216.775
As 188.980	0.4251b	ppb	3.3294	783.2	1.3598
B 249.678	264.127b	ppb	1.6398	0.6	1680.05
Ba 389.178	919.500b	ppb	0.4855	0.1	10171.1
Be 313.042	-0.0683b	ppb	0.0046	6.7	-209.722
Ca 370.602	91817b	ppb	110.1	0.1	209335
Cd 226.502	-0.3037b	ppb	0.3364	110.8	7.3643
Co 228.615	0.3023b	ppb	1.0281	340.1	-10.4470
Cr 267.716	0.4943b	ppb	0.0855	17.3	36.2871
Cu 324.754	0.9660b	ppb	0.1642	17.0	240.456
Fe 271.441	252.963b	ppb	4.2839	1.7	236.020
K 766.491	153648xb	ppb	87.1704	0.1	4187825

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	29967.0b	ppb	4.3344	0.0	43196.7
Mn 257.610	395.077b	ppb	0.3702	0.1	43363.2
Mo 202.032	1.4385b	ppb	0.2006	13.9	7.4630
Na 330.237	53766.8b	ppb	493.731	0.9	1474.68
Ni 231.604	1.1052b	ppb	0.2438	22.1	-0.7316
Pb 220.353	-2.7942b	ppb	3.4515	123.5	5.0697
Sb 206.834	-8.5272b	ppb	2.4108	28.3	7.7905
Se 196.026	-1.8893b	ppb	5.3069	280.9	1.7035
Si 288.158	15943.8b	ppb	10.4427	0.1	76798.5
Sn 189.925	1.6264b	ppb	1.6237	99.8	0.2729
Sr 216.596	684.307b	ppb	2.7296	0.4	2900.92
Ti 334.941	3.0431b	ppb	0.0798	2.6	434.403
Tl 190.794	-1.8766b	ppb	1.6342	87.1	-10.9109
V 292.401	2.2781b	ppb	0.4105	18.0	30.4834
Zn 206.200	2.6115b	ppb	0.6954	26.6	0.6762

680-162105-B-6-A (Samp) **12/19/2018, 4:57:19 AM** **Rack 3, Tube 53**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.0404u	-0.4553u	-0.5264u
Al 308.215	111437	111311	111332
As 188.980	19.6591	23.1587	6.2293
B 249.678	516.612	515.889	517.213
Ba 389.178	-1.7755	-2.0986	-1.3529
Be 313.042	9.8332	9.8255	9.8315
Ca 370.602	570919	569804	570191
Cd 226.502	80.1427	79.9900	79.9202
Co 228.615	1227.17	1226.59	1226.38
Cr 267.716	79.7715	78.7355	78.5883
Cu 324.754	3581.99	3591.20	3584.39
Fe 271.441	23251.9	23200.6	23205.6
K 766.491	38762.9x	38730.0x	38738.6x
Mg 279.078	55526.3	55515.5	55459.7
Mn 257.610	3675.33	3672.52	3673.40
Mo 202.032	-0.8598u	-1.3614u	-0.5828u
Na 330.237	98159.2x	98162.6x	98225.6x
Ni 231.604	2749.13	2748.95	2745.57
Pb 220.353	2.9560	-3.3135u	6.4635
Sb 206.834	-12.2131u	-4.5399u	-16.3748u
Se 196.026	-1.2801	25.1693	24.7901
Si 288.158	38455.6	38440.7	38421.4
Sn 189.925	8.5240	2.4199	4.2342
Sr 216.596	386.240	386.843	381.851
Ti 334.941	0.5926	0.5538	0.4740
Tl 190.794	-12.1004u	-1.4538	9.2016
V 292.401	132.546	133.878	133.063
Zn 206.200	4442.54	4470.16	4444.08

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6740b	ppb	0.3192	47.4	-52.5689
Al 308.215	111360b	ppb	67.5718	0.1	279316
As 188.980	16.3490b	ppb	8.9369	54.7	5.5978
B 249.678	516.571b	ppb	0.6627	0.1	3356.02

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-1.7423b	ppb	0.3740	21.5	-20.7114
Be 313.042	9.8300b	ppb	0.0041	0.0	8097.85
Ca 370.602	570305b	ppb	566.4	0.1	1300030
Cd 226.502	80.0176b	ppb	0.1138	0.1	1342.00
Co 228.615	1226.72b	ppb	0.4098	0.0	6160.71
Cr 267.716	79.0317b	ppb	0.6449	0.8	1869.64
Cu 324.754	3585.86b	ppb	4.7734	0.1	141681
Fe 271.441	23219.4b	ppb	28.2788	0.1	19218.7
K 766.491	38743.8xb	ppb	17.0458	0.0	1056202
Mg 279.078	55500.5b	ppb	35.7658	0.1	79920.4
Mn 257.610	3673.75b	ppb	1.4373	0.0	401973
Mo 202.032	-0.9347b	ppb	0.3947	42.2	1.7266
Na 330.237	98182.5xb	ppb	37.4146	0.0	2633.33
Ni 231.604	2747.88b	ppb	2.0060	0.1	3815.42
Pb 220.353	2.0354b	ppb	4.9531	243.4	6.4645
Sb 206.834	-11.0426b	ppb	6.0037	54.4	7.4072
Se 196.026	16.2264b	ppb	15.1623	93.4	5.3980
Si 288.158	38439.3b	ppb	17.1327	0.0	184755
Sn 189.925	5.0594b	ppb	3.1346	62.0	1.3910
Sr 216.596	384.978b	ppb	2.7249	0.7	1618.93
Ti 334.941	0.5401b	ppb	0.0605	11.2	226.838
Tl 190.794	-1.4509b	ppb	10.6510	734.1	-8.9981
V 292.401	133.162b	ppb	0.6716	0.5	1935.74
Zn 206.200	4452.26b	ppb	15.5195	0.3	1602.02

680-162105-B-8-A (Samp) **12/19/2018, 5:01:44 AM** **Rack 3, Tube 54**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5464u	-0.6457u	-1.1743u
Al 308.215	48.7082	46.7003	50.2470
As 188.980	1.5679	12.8635	3.0030
B 249.678	352.315	351.015	348.088
Ba 389.178	73.9356	75.2602	76.1849
Be 313.042	-0.1293u	-0.1190u	-0.1271u
Ca 370.602	589973	586352	587220
Cd 226.502	0.3896	0.6283	0.6087
Co 228.615	15.4588	14.7516	14.8535
Cr 267.716	6.5518	7.2031	7.4501
Cu 324.754	6.3487	6.2730	6.2463
Fe 271.441	185.257	191.155	200.875
K 766.491	40196.8x	40075.0x	40081.7x
Mg 279.078	52259.8	52214.9	52195.2
Mn 257.610	7283.77	7281.81	7294.31
Mo 202.032	3.2456	3.9666	3.4010
Na 330.237	281759x	279331x	279694x
Ni 231.604	103.977	103.666	105.101
Pb 220.353	-1.4111u	-0.3864	5.4467
Sb 206.834	-16.6349u	-6.7576u	-15.7576u
Se 196.026	13.0950	9.1304	11.3771
Si 288.158	11931.2	11918.7	11915.3
Sn 189.925	-4.8633u	5.1856	-1.0771u
Sr 216.596	2190.48	2183.91	2188.40
Ti 334.941	0.8154	0.7077	0.7377

Label	Replicates Concentration		
Tl 190.794	-7.7071u	-7.1960u	-6.8941u
V 292.401	2.5161	2.0146	1.6578
Zn 206.200	21.1659	27.0881	30.0417

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7888b	ppb	0.3375	42.8	-50.8076
Al 308.215	48.5518b	ppb	1.7785	3.7	284.117
As 188.980	5.8115b	ppb	6.1492	105.8	2.7796
B 249.678	350.472b	ppb	2.1652	0.6	2261.21
Ba 389.178	75.1269b	ppb	1.1306	1.5	821.647
Be 313.042	-0.1251b	ppb	0.0054	4.4	-187.315
Ca 370.602	587848b	ppb	1891	0.3	1340146
Cd 226.502	0.5422b	ppb	0.1325	24.4	20.7376
Co 228.615	15.0213b	ppb	0.3823	2.5	63.5393
Cr 267.716	7.0683b	ppb	0.4641	6.6	205.322
Cu 324.754	6.2893b	ppb	0.0531	0.8	450.507
Fe 271.441	192.429b	ppb	7.8868	4.1	186.962
K 766.491	40117.8xb	ppb	68.4773	0.2	1093650
Mg 279.078	52223.3b	ppb	33.0729	0.1	75182.2
Mn 257.610	7286.63b	ppb	6.7220	0.1	796938
Mo 202.032	3.5377b	ppb	0.3795	10.7	12.1934
Na 330.237	280261xb	ppb	1309.21	0.5	7443.66
Ni 231.604	104.248b	ppb	0.7552	0.7	142.601
Pb 220.353	1.2164b	ppb	3.6992	304.1	7.9500
Sb 206.834	-13.0500b	ppb	5.4671	41.9	5.7617
Se 196.026	11.2008b	ppb	1.9882	17.8	4.8651
Si 288.158	11921.8b	ppb	8.3729	0.1	57496.7
Sn 189.925	-0.2516b	ppb	5.0750	2017.1	-0.3070
Sr 216.596	2187.60b	ppb	3.3584	0.2	9251.31
Ti 334.941	0.7536b	ppb	0.0556	7.4	232.569
Tl 190.794	-7.2657b	ppb	0.4110	5.7	-10.5113
V 292.401	2.0628b	ppb	0.4312	20.9	26.2524
Zn 206.200	26.0986b	ppb	4.5199	17.3	9.1259

680-162105-A-9-A (Samp) **12/19/2018, 5:06:09 AM** **Rack 3, Tube 55**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3646u	-0.3667u	-0.8293u
Al 308.215	8.0011	9.1311	6.7928
As 188.980	4.3599	8.7998	7.1700
B 249.678	333.432	333.568	334.997
Ba 389.178	74.6107	72.4721	72.8930
Be 313.042	-0.1298u	-0.1302u	-0.1266u
Ca 370.602	568109	567289	566949
Cd 226.502	0.4351	0.2534	0.3277
Co 228.615	14.3916	15.2802	15.0270
Cr 267.716	0.0242	-0.1124	0.1635
Cu 324.754	5.4909	6.1218	5.1723
Fe 271.441	89.8677	88.0223	86.8880
K 766.491	38833.2x	38781.7x	38928.4x
Mg 279.078	50405.6	50352.2	50338.7
Mn 257.610	7212.32	7214.64	7192.04
Mo 202.032	2.7527	2.4094	2.1033

Label	Replicates Concentration		
Na 330.237	263477x	262522x	264018x
Ni 231.604	109.610	110.040	112.846
Pb 220.353	1.9177	0.3035	-3.1841u
Sb 206.834	-3.5601u	-9.2607u	-3.1901u
Se 196.026	-2.9168	15.1755	7.8539
Si 288.158	11406.3	11401.2	11411.6
Sn 189.925	-2.1100u	3.5596	-5.6962u
Sr 216.596	2117.22	2113.42	2111.25
Ti 334.941	-0.2486	-0.4138	-0.3367
Tl 190.794	-3.7167	0.3336	-3.1632
V 292.401	1.5145	1.7494	2.1758
Zn 206.200	34.9670	29.2819	29.7832

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5202b	ppb	0.2677	51.5	-40.7193
Al 308.215	7.9750b	ppb	1.1694	14.7	182.370
As 188.980	6.7766b	ppb	2.2460	33.1	3.0353
B 249.678	333.999b	ppb	0.8671	0.3	2150.43
Ba 389.178	73.3252b	ppb	1.1329	1.5	799.786
Be 313.042	-0.1289b	ppb	0.0020	1.5	-192.817
Ca 370.602	567449b	ppb	596.0	0.1	1293645
Cd 226.502	0.3387b	ppb	0.0914	27.0	17.3566
Co 228.615	14.8996b	ppb	0.4578	3.1	62.9197
Cr 267.716	0.0251b	ppb	0.1380	550.1	41.4701
Cu 324.754	5.5950b	ppb	0.4833	8.6	423.063
Fe 271.441	88.2594b	ppb	1.5040	1.7	101.154
K 766.491	38847.8xb	ppb	74.4134	0.2	1059035
Mg 279.078	50365.5b	ppb	35.3656	0.1	72506.9
Mn 257.610	7206.33b	ppb	12.4331	0.2	788150
Mo 202.032	2.4218b	ppb	0.3249	13.4	9.6811
Na 330.237	263339xb	ppb	757.400	0.3	6997.69
Ni 231.604	110.832b	ppb	1.7574	1.6	151.751
Pb 220.353	-0.3210b	ppb	2.6076	812.4	7.0414
Sb 206.834	-5.3370b	ppb	3.4031	63.8	9.2093
Se 196.026	6.7042b	ppb	9.1008	135.7	3.9995
Si 288.158	11406.4b	ppb	5.1971	0.0	55023.0
Sn 189.925	-1.4155b	ppb	4.6668	329.7	-0.6863
Sr 216.596	2113.96b	ppb	3.0222	0.1	8940.14
Ti 334.941	-0.3331b	ppb	0.0826	24.8	96.3610
Tl 190.794	-2.1821b	ppb	2.1961	100.6	-8.4264
V 292.401	1.8132b	ppb	0.3353	18.5	22.9127
Zn 206.200	31.3440b	ppb	3.1476	10.0	11.0161

680-162091-C-3-C (Samp) **12/19/2018, 5:10:35 AM** **Rack 3, Tube 56**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3347	0.5012	0.2306
Al 308.215	783.264	783.780	781.074
As 188.980	3.3860	1.1985	1.6385
B 249.678	157.881	158.436	159.484
Ba 389.178	15.9525	13.8286	14.0042
Be 313.042	1.3022	1.2980	1.3125
Ca 370.602	44946	44894	44941

Label	Replicates Concentration		
Cd 226.502	0.1789	-0.1433	0.0038
Co 228.615	74.4540	74.3148	75.0683
Cr 267.716	-0.0087	-0.2528u	-0.1384
Cu 324.754	4.7819	5.9564	6.0564
Fe 271.441	12398.0	12375.0	12391.4
K 766.491	4762.33	4759.77	4767.08
Mg 279.078	61529.5	61489.1	61594.3
Mn 257.610	1597.29	1595.00	1598.67
Mo 202.032	-1.6178u	0.1145	-0.4602u
Na 330.237	60874.6	60711.0	60724.2
Ni 231.604	144.217	147.856	148.919
Pb 220.353	-0.8917u	-0.3672u	0.5850
Sb 206.834	0.9939	-0.4498	-15.5076u
Se 196.026	6.0849	-8.2735u	3.4534
Si 288.158	15517.1	15482.6	15514.7
Sn 189.925	-4.0516u	-3.6564u	4.3923
Sr 216.596	101.920	99.5070	99.7257
Ti 334.941	-1.6938	-1.8697u	-1.7018
Tl 190.794	5.5716	-4.9599u	-5.9563u
V 292.401	0.3724	0.9207	0.3314
Zn 206.200	204.490	205.158	209.097

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3555	ppb	0.1365	38.4	-15.7816
Al 308.215	782.706	ppb	1.4368	0.2	2124.66
As 188.980	2.0744	ppb	1.1570	55.8	1.8207
B 249.678	158.600	ppb	0.8143	0.5	957.291
Ba 389.178	14.5951	ppb	1.1788	8.1	163.003
Be 313.042	1.3043	ppb	0.0074	0.6	925.567
Ca 370.602	44927	ppb	28.69	0.1	102451
Cd 226.502	0.0132	ppb	0.1613	1225.4	22.1605
Co 228.615	74.6124	ppb	0.4009	0.5	363.731
Cr 267.716	-0.1333	ppb	0.1221	91.6	25.7232
Cu 324.754	5.5982	ppb	0.7087	12.7	426.027
Fe 271.441	12388.2	ppb	11.8577	0.1	10235.1
K 766.491	4763.06	ppb	3.7105	0.1	130082
Mg 279.078	61537.6	ppb	53.0627	0.1	88663.5
Mn 257.610	1596.99	ppb	1.8541	0.1	174934
Mo 202.032	-0.6545	ppb	0.8823	134.8	2.5583
Na 330.237	60769.9	ppb	90.8918	0.1	1657.66
Ni 231.604	146.997	ppb	2.4657	1.7	201.948
Pb 220.353	-0.2246	ppb	0.7486	333.3	6.7022
Sb 206.834	-4.9878	ppb	9.1389	183.2	9.6564
Se 196.026	0.4216	ppb	7.6443	1813.3	2.2211
Si 288.158	15504.8	ppb	19.2183	0.1	74691.1
Sn 189.925	-1.1052	ppb	4.7651	431.1	-0.6115
Sr 216.596	100.384	ppb	1.3347	1.3	435.738
Ti 334.941	-1.7551	ppb	0.0993	5.7	-27.6848
Tl 190.794	-1.7816	ppb	6.3875	358.5	-10.7870
V 292.401	0.5415	ppb	0.3290	60.8	8.3567
Zn 206.200	206.248	ppb	2.4892	1.2	73.9783

680-161941-A-4-A (Samp) **12/19/2018, 5:15:00 AM** **Rack 3, Tube 57**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5979	-0.1810u	-0.0095u
Al 308.215	7.5350	5.9099	9.1194
As 188.980	11.4989	10.2171	17.3011
B 249.678	193.888	193.123	194.061
Ba 389.178	70.7405	71.3532	71.5620
Be 313.042	-0.0648u	-0.0600u	-0.0648u
Ca 370.602	158237	157978	157938
Cd 226.502	-0.0514u	-0.4389u	-0.2857u
Co 228.615	6.2313	5.2774	5.2105
Cr 267.716	-0.0926	-0.0228	-0.2771u
Cu 324.754	0.6657	1.3579	1.0762
Fe 271.441	36.9906	41.0586	37.1044
K 766.491	61841.2x	61710.7x	61577.3x
Mg 279.078	35076.9	35030.3	35040.9
Mn 257.610	915.018	913.530	913.919
Mo 202.032	2.0753	2.9515	2.1097
Na 330.237	37495.2	37186.4	37697.3
Ni 231.604	36.9440	34.9554	34.2622
Pb 220.353	-4.4624u	-0.6801u	-4.1041u
Sb 206.834	-18.6181u	-4.9031u	-2.8481u
Se 196.026	7.6875	-10.2715u	4.7109
Si 288.158	23002.4	22960.0	22938.6
Sn 189.925	1.2859	4.6406	0.7032
Sr 216.596	476.325	475.972	477.801
Ti 334.941	-0.6121	-0.6701	-0.5980
Tl 190.794	-7.8338u	-2.4680u	-4.3551u
V 292.401	0.9871	0.7758	0.9112
Zn 206.200	11.7600	8.7536	8.7553

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1358b	ppb	0.4093	301.4	-24.1013
Al 308.215	7.5214b	ppb	1.6048	21.3	181.209
As 188.980	13.0057b	ppb	3.7747	29.0	4.6792
B 249.678	193.691b	ppb	0.4993	0.3	1206.02
Ba 389.178	71.2186b	ppb	0.4270	0.6	761.203
Be 313.042	-0.0632b	ppb	0.0028	4.4	-192.245
Ca 370.602	158051b	ppb	161.9	0.1	360322
Cd 226.502	-0.2587b	ppb	0.1952	75.5	7.9937
Co 228.615	5.5731b	ppb	0.5710	10.2	15.9947
Cr 267.716	-0.1308b	ppb	0.1314	100.4	22.7221
Cu 324.754	1.0333b	ppb	0.3481	33.7	243.083
Fe 271.441	38.3845b	ppb	2.3165	6.0	59.5610
K 766.491	61709.7xb	ppb	131.999	0.2	1682121
Mg 279.078	35049.4b	ppb	24.4483	0.1	50512.6
Mn 257.610	914.156b	ppb	0.7721	0.1	100140
Mo 202.032	2.3788b	ppb	0.4962	20.9	9.5853
Na 330.237	37459.7b	ppb	257.297	0.7	1044.95
Ni 231.604	35.3872b	ppb	1.3921	3.9	46.9078
Pb 220.353	-3.0822b	ppb	2.0880	67.7	4.9390
Sb 206.834	-8.7898b	ppb	8.5734	97.5	7.6589
Se 196.026	0.7090b	ppb	9.6251	1357.6	2.2495
Si 288.158	22967.0b	ppb	32.4926	0.1	110503

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	2.2099b	ppb	2.1251	96.2	0.4599
Sr 216.596	476.699b	ppb	0.9703	0.2	2023.44
Ti 334.941	-0.6267b	ppb	0.0382	6.1	13.5078
Tl 190.794	-4.8856b	ppb	2.7220	55.7	-11.9536
V 292.401	0.8914b	ppb	0.1071	12.0	10.3158
Zn 206.200	9.7563b	ppb	1.7352	17.8	3.2474

680-161941-D-3-A (Samp) **12/19/2018, 5:19:25 AM** **Rack 3, Tube 58**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0291u	-0.8189u	-0.6702u
Al 308.215	220.273	229.566	222.792
As 188.980	3.6149	2.3008	0.6043
B 249.678	190.174	187.660	188.150
Ba 389.178	74.3909	73.8165	73.9991
Be 313.042	-0.0381u	-0.0548u	-0.0372u
Ca 370.602	153540	153118	153225
Cd 226.502	-0.3725u	-0.3248u	0.1061
Co 228.615	6.2475	7.0790	5.3874
Cr 267.716	0.9616	0.7074	1.1081
Cu 324.754	0.7054	1.2321	1.0911
Fe 271.441	993.540	975.149	986.625
K 766.491	60508.9x	60408.0x	60404.4x
Mg 279.078	34055.2	33939.5	34000.4
Mn 257.610	906.885	904.711	905.380
Mo 202.032	0.9318	2.4866	1.5533
Na 330.237	36407.5	36433.8	36088.0
Ni 231.604	36.6341	32.3928	33.1514
Pb 220.353	0.5328	4.7672	-2.7153u
Sb 206.834	-12.7796u	-7.0719u	-10.3678u
Se 196.026	-16.3719u	5.0044	-4.7272u
Si 288.158	23028.5	22978.3	22970.6
Sn 189.925	5.0622	-0.7755u	-1.4727u
Sr 216.596	464.563	463.849	462.694
Ti 334.941	2.1282	2.1995	2.1341
Tl 190.794	1.5498	-4.0452u	-5.0731u
V 292.401	0.8806	1.9103	1.7685
Zn 206.200	7.4762	11.6450	9.7819

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5061b	ppb	0.4197	82.9	-48.0617
Al 308.215	224.210b	ppb	4.8058	2.1	724.441
As 188.980	2.1733b	ppb	1.5093	69.4	1.8226
B 249.678	188.661b	ppb	1.3327	0.7	1171.20
Ba 389.178	74.0688b	ppb	0.2935	0.4	792.116
Be 313.042	-0.0434b	ppb	0.0099	22.9	-176.385
Ca 370.602	153295b	ppb	219.5	0.1	349478
Cd 226.502	-0.1971b	ppb	0.2636	133.8	9.7459
Co 228.615	6.2380b	ppb	0.8458	13.6	19.4014
Cr 267.716	0.9257b	ppb	0.2027	21.9	47.3309
Cu 324.754	1.0095b	ppb	0.2727	27.0	242.355
Fe 271.441	985.105b	ppb	9.2896	0.9	839.369
K 766.491	60440.4xb	ppb	59.3074	0.1	1647527

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	33998.3b	ppb	57.8646	0.2	48998.6
Mn 257.610	905.658b	ppb	1.1135	0.1	99206.6
Mo 202.032	1.6572b	ppb	0.7826	47.2	7.9445
Na 330.237	36309.7b	ppb	192.494	0.5	1014.54
Ni 231.604	34.0594b	ppb	2.2617	6.6	45.0617
Pb 220.353	0.8616b	ppb	3.7521	435.5	7.2517
Sb 206.834	-10.0731b	ppb	2.8652	28.4	7.1118
Se 196.026	-5.3649b	ppb	10.7024	199.5	1.0883
Si 288.158	22992.5b	ppb	31.4430	0.1	110625
Sn 189.925	0.9380b	ppb	3.5886	382.6	0.0475
Sr 216.596	463.702b	ppb	0.9428	0.2	1968.79
Ti 334.941	2.1539b	ppb	0.0395	1.8	342.856
Tl 190.794	-2.5228b	ppb	3.5642	141.3	-11.0074
V 292.401	1.5198b	ppb	0.5581	36.7	19.6863
Zn 206.200	9.6343b	ppb	2.0883	21.7	3.2045

680-162105-A-2-A (Samp) **12/19/2018, 5:23:51 AM** **Rack 3, Tube 59**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4889u	0.5561	-0.0368u
Al 308.215	2.5290	4.3455	1.9193
As 188.980	0.9151	6.0973	0.5182
B 249.678	261.511	262.219	260.635
Ba 389.178	898.592	897.813	899.728
Be 313.042	-0.0662u	-0.0614u	-0.0741u
Ca 370.602	90416	90338	90418
Cd 226.502	-0.3419u	-0.5203u	-0.6226u
Co 228.615	-0.1163u	0.3446	0.3608
Cr 267.716	-0.2691u	0.2533	-0.3449u
Cu 324.754	0.3758	0.5736	0.3111
Fe 271.441	141.227	134.614	138.939
K 766.491	151357x	151574x	151534x
Mg 279.078	29636.7	29571.8	29651.6
Mn 257.610	385.800	386.296	386.192
Mo 202.032	1.9994	0.7970	0.5303
Na 330.237	53091.3	52973.7	53117.8
Ni 231.604	2.5931	-0.0352u	2.9625
Pb 220.353	-2.0590u	4.2608	2.2621
Sb 206.834	-7.1972u	-8.2200u	-15.8636u
Se 196.026	-1.6417u	13.9430	15.0793
Si 288.158	15726.7	15688.0	15691.0
Sn 189.925	4.7756	3.4350	8.6097
Sr 216.596	674.292	674.761	672.578
Ti 334.941	0.1111	-0.0171	0.1028
Tl 190.794	2.8330	-0.7200u	-5.4321u
V 292.401	1.3008	1.8162	0.9710
Zn 206.200	6.4938	3.5564	4.5866

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0101b	ppb	0.5241	5178.2	-30.6469
Al 308.215	2.9313b	ppb	1.2621	43.1	169.717
As 188.980	2.5102b	ppb	3.1129	124.0	1.9100
B 249.678	261.455b	ppb	0.7937	0.3	1662.18

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	898.711b	ppb	0.9627	0.1	9939.98
Be 313.042	-0.0672b	ppb	0.0064	9.5	-209.010
Ca 370.602	90391b	ppb	45.58	0.1	206084
Cd 226.502	-0.4949b	ppb	0.1420	28.7	4.1498
Co 228.615	0.1964b	ppb	0.2709	137.9	-11.0091
Cr 267.716	-0.1202b	ppb	0.3257	270.9	21.9812
Cu 324.754	0.4202b	ppb	0.1368	32.6	218.890
Fe 271.441	138.260b	ppb	3.3581	2.4	141.543
K 766.491	151488xb	ppb	115.909	0.1	4128970
Mg 279.078	29620.0b	ppb	42.3867	0.1	42697.0
Mn 257.610	386.096b	ppb	0.2614	0.1	42379.4
Mo 202.032	1.1089b	ppb	0.7826	70.6	6.7227
Na 330.237	53060.9b	ppb	76.6791	0.1	1456.10
Ni 231.604	1.8401b	ppb	1.6346	88.8	0.2897
Pb 220.353	1.4880b	ppb	3.2302	217.1	7.5796
Sb 206.834	-10.4269b	ppb	4.7360	45.4	6.9379
Se 196.026	9.1269b	ppb	9.3432	102.4	3.8017
Si 288.158	15701.9b	ppb	21.5566	0.1	75637.6
Sn 189.925	5.6068b	ppb	2.6856	47.9	1.5627
Sr 216.596	673.877b	ppb	1.1489	0.2	2856.82
Ti 334.941	0.0656b	ppb	0.0718	109.4	76.6040
Tl 190.794	-1.1064b	ppb	4.1461	374.7	-10.5893
V 292.401	1.3627b	ppb	0.4260	31.3	17.1879
Zn 206.200	4.8789b	ppb	1.4903	30.5	1.4924

680-162105-A-7-A (Samp) **12/19/2018, 5:28:16 AM** **Rack 3, Tube 60**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4915u	-0.8021u	-0.8421u
Al 308.215	114374	114432	114108
As 188.980	33.7217	17.6412	24.8922
B 249.678	535.083	534.710	536.030
Ba 389.178	4.1796	2.2797	3.7157
Be 313.042	10.1052	10.0937	10.1070
Ca 370.602	584535	582721	585255
Cd 226.502	81.4035	81.6090	82.2019
Co 228.615	1250.70	1247.04	1248.72
Cr 267.716	80.9461	81.2035	81.3195
Cu 324.754	3677.15	3671.69	3693.23
Fe 271.441	23583.9	23603.9	23614.6
K 766.491	40935.7x	40910.6x	40852.4x
Mg 279.078	56994.7	57017.4	57019.7
Mn 257.610	3762.81	3757.22	3758.21
Mo 202.032	0.2789	-0.1877u	1.0316
Na 330.237	101901x	101655x	101636x
Ni 231.604	2804.97	2797.50	2801.92
Pb 220.353	-7.3295u	4.3025	1.7096u
Sb 206.834	-7.5752u	-8.7667u	-11.7540u
Se 196.026	11.9901	23.3879	5.9958
Si 288.158	39754.7	39756.3	39805.8
Sn 189.925	-1.8851u	-3.1880u	0.7576
Sr 216.596	397.785	396.690	399.210
Ti 334.941	0.3370	0.2172	0.2345

Label	Replicates Concentration		
Tl 190.794	-8.8503u	-8.4351u	-0.6412
V 292.401	136.901	136.736	137.206
Zn 206.200	4560.76	4548.82	4531.35

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7119b	ppb	0.1919	27.0	-53.9186
Al 308.215	114305b	ppb	172.746	0.2	286697
As 188.980	25.4184b	ppb	8.0532	31.7	7.9914
B 249.678	535.274b	ppb	0.6801	0.1	3481.54
Ba 389.178	3.3917b	ppb	0.9905	29.2	37.8900
Be 313.042	10.1019b	ppb	0.0072	0.1	8325.80
Ca 370.602	584170b	ppb	1306	0.2	1331637
Cd 226.502	81.7381b	ppb	0.4146	0.5	1370.52
Co 228.615	1248.82b	ppb	1.8360	0.1	6271.93
Cr 267.716	81.1564b	ppb	0.1911	0.2	1919.22
Cu 324.754	3680.69b	ppb	11.1958	0.3	145423
Fe 271.441	23600.8b	ppb	15.5856	0.1	19534.1
K 766.491	40899.6xb	ppb	42.7444	0.1	1114956
Mg 279.078	57010.6b	ppb	13.8358	0.0	82094.4
Mn 257.610	3759.41b	ppb	2.9833	0.1	411346
Mo 202.032	0.3743b	ppb	0.6152	164.4	4.6687
Na 330.237	101730xb	ppb	147.923	0.1	2726.64
Ni 231.604	2801.47b	ppb	3.7555	0.1	3889.87
Pb 220.353	-0.4391b	ppb	6.1064	1390.5	4.9786
Sb 206.834	-9.3653b	ppb	2.1527	23.0	8.1587
Se 196.026	13.7913b	ppb	8.8348	64.1	4.9409
Si 288.158	39772.3b	ppb	29.0316	0.1	191151
Sn 189.925	-1.4385b	ppb	2.0104	139.8	-0.7144
Sr 216.596	397.895b	ppb	1.2635	0.3	1673.11
Ti 334.941	0.2629b	ppb	0.0647	24.6	198.960
Tl 190.794	-5.9756b	ppb	4.6243	77.4	-10.8406
V 292.401	136.948b	ppb	0.2381	0.2	1990.67
Zn 206.200	4546.98b	ppb	14.7893	0.3	1636.11

Cont Calib Verif (CCV) **12/19/2018, 5:32:42 AM** **Rack S, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	492.002	493.283	497.260
Al 308.215	9815.78	9827.59	9834.05
As 188.980	503.579	522.104	504.321
B 249.678	508.164	507.210	509.472
Ba 389.178	482.345	480.919	479.813
Be 313.042	527.432	526.943	527.651
Ca 370.602	10043	10025	10058
Cd 226.502	513.697	513.961	514.111
Co 228.615	504.743	505.465	507.585
Cr 267.716	506.143	504.221	504.434
Cu 324.754	489.656	488.180	490.593
Fe 271.441	10086.3	10074.3	10114.0
K 766.491	9623.81	9617.49	9653.20
Mg 279.078	10215.1	10207.7	10225.5
Mn 257.610	498.608	497.477	498.259
Mo 202.032	497.355	499.426	496.821

Label	Replicates Concentration		
Na 330.237	9813.88	10118.0	10301.7
Ni 231.604	501.120	503.324	503.589
Pb 220.353	503.813	506.161	498.637
Sb 206.834	485.497	484.241	499.489
Se 196.026	496.321	478.011	488.127
Si 288.158	5307.12	5288.11	5297.40
Sn 189.925	477.790	498.150	490.528
Sr 216.596	506.083	507.287	508.083
Ti 334.941	501.622	501.277	502.075
Tl 190.794	489.836	488.874	485.019
V 292.401	491.040	492.937	492.368
Zn 206.200	1016.02	1014.47	1020.45

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	494.182	ppb	2.7419	0.6	18284.6	98.83632
Al 308.215	9825.81	ppb	9.2666	0.1	24816.4	98.25809
As 188.980	510.001	ppb	10.4880	2.1	135.703	102.00025
B 249.678	508.282	ppb	1.1359	0.2	3313.45	101.65636
Ba 389.178	481.026	ppb	1.2694	0.3	5289.82	96.20515
Be 313.042	527.342	ppb	0.3624	0.1	437925	105.46842
Ca 370.602	10042	ppb	16.34	0.2	22932	100.42113
Cd 226.502	513.923	ppb	0.2093	0.0	8409.56	102.78461
Co 228.615	505.931	ppb	1.4774	0.3	2533.13	101.18616
Cr 267.716	504.933	ppb	1.0536	0.2	11746.9	100.98653
Cu 324.754	489.476	ppb	1.2167	0.2	19523.1	97.89525
Fe 271.441	10091.5	ppb	20.3470	0.2	8370.18	100.86487
K 766.491	9631.50	ppb	19.0557	0.2	262768	96.31501
Mg 279.078	10216.1	ppb	8.9373	0.1	14740.7	102.16087
Mn 257.610	498.115	ppb	0.5790	0.1	54550.8	99.62293
Mo 202.032	497.867	ppb	1.3760	0.3	1125.61	99.57343
Na 330.237	10077.9	ppb	246.375	2.4	319.522	100.77863
Ni 231.604	502.678	ppb	1.3555	0.3	695.798	100.53554
Pb 220.353	502.870	ppb	3.8492	0.8	301.052	100.57406
Sb 206.834	489.743	ppb	8.4643	1.7	228.147	97.94850
Se 196.026	487.487	ppb	9.1719	1.9	94.9127	97.49732
Si 288.158	5297.54	ppb	9.5081	0.2	25842.3	105.95090
Sn 189.925	488.823	ppb	10.2864	2.1	158.156	97.76458
Sr 216.596	507.151	ppb	1.0070	0.2	2143.57	101.43011
Ti 334.941	501.658	ppb	0.4001	0.1	60076.3	100.33159
Tl 190.794	487.909	ppb	2.5490	0.5	193.319	97.58187
V 292.401	492.115	ppb	0.9735	0.2	7102.46	98.42295
Zn 206.200	1016.98	ppb	3.1020	0.3	365.560	101.69801

Cont Calib Blank (CCB) **12/19/2018, 5:37:06 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0453u	0.2784	0.3398
Al 308.215	-2.0148u	1.0361	-0.2504u
As 188.980	4.0960	3.4373	-0.1325u
B 249.678	6.1962	6.2987	4.6225
Ba 389.178	1.4498	0.1642	1.3966
Be 313.042	0.0299	0.0304	0.0350
Ca 370.602	2.499	-1.296u	5.025

Label	Replicates Concentration		
Cd 226.502	-0.1371u	0.0110	-0.1764u
Co 228.615	0.0338	-0.2737u	0.3425
Cr 267.716	-0.4830u	-0.1454u	-0.6011u
Cu 324.754	-0.2809u	0.0446	0.2860
Fe 271.441	12.4684	-0.1036u	6.2146
K 766.491	9.1264	9.7854	7.9316
Mg 279.078	0.2998	-1.9190u	2.5563
Mn 257.610	0.2200	0.1716	0.2072
Mo 202.032	0.4313	-0.8736u	-0.3598u
Na 330.237	-37.3120u	-0.5844u	-145.921u
Ni 231.604	0.9151	0.9788	2.7835
Pb 220.353	1.2203	-0.1976u	-1.3416u
Sb 206.834	-9.3384u	-1.3755u	-8.4892u
Se 196.026	-6.4324u	5.4616	0.2485
Si 288.158	13.8384	14.0565	12.4641
Sn 189.925	3.8883	3.4713	4.5228
Sr 216.596	0.3362	-0.5771u	-1.2187u
Ti 334.941	0.2579	0.1220	0.2400
Tl 190.794	-5.0160u	-4.6345u	-0.4666u
V 292.401	0.3126	-0.6101u	0.0751
Zn 206.200	2.9157	-2.6058u	-1.1898u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1910	ppb	0.2069	108.3	-21.9327	0.19098
Al 308.215	-0.4097	ppb	1.5316	373.8	161.263	-0.40972
As 188.980	2.4669	ppb	2.2752	92.2	1.8985	2.46692
B 249.678	5.7058	ppb	0.9396	16.5	-59.4355	5.70581
Ba 389.178	1.0035	ppb	0.7274	72.5	-52.9221	1.00354
Be 313.042	0.0318	ppb	0.0028	8.8	-134.511	0.03176
Ca 370.602	2.076	ppb	3.182	153.2	41.99	2.07629
Cd 226.502	-0.1008	ppb	0.0989	98.0	10.4375	-0.10082
Co 228.615	0.0342	ppb	0.3081	901.0	-11.8678	0.03419
Cr 267.716	-0.4098	ppb	0.2365	57.7	14.0078	-0.40983
Cu 324.754	0.0166	ppb	0.2845	1718.4	202.918	0.01655
Fe 271.441	6.1932	ppb	6.2860	101.5	32.7372	6.19316
K 766.491	8.9478	ppb	0.9397	10.5	512.088	8.94777
Mg 279.078	0.3123	ppb	2.2377	716.4	31.5419	0.31235
Mn 257.610	0.1996	ppb	0.0251	12.6	43.1778	0.19958
Mo 202.032	-0.2674	ppb	0.6574	245.9	3.6244	-0.26735
Na 330.237	-61.2725	ppb	75.5728	123.3	56.1383	-61.27252
Ni 231.604	1.5591	ppb	1.0608	68.0	-0.1004	1.55913
Pb 220.353	-0.1063	ppb	1.2834	1207.5	6.6151	-0.10628
Sb 206.834	-6.4010	ppb	4.3729	68.3	8.7527	-6.40102
Se 196.026	-0.2408	ppb	5.9621	2476.4	1.9801	-0.24075
Si 288.158	13.4530	ppb	0.8633	6.4	348.152	13.45303
Sn 189.925	3.9608	ppb	0.5295	13.4	1.0226	3.96079
Sr 216.596	-0.4865	ppb	0.7814	160.6	7.6822	-0.48651
Ti 334.941	0.2066	ppb	0.0738	35.7	-10.7534	0.20663
Tl 190.794	-3.3724	ppb	2.5237	74.8	-11.6760	-3.37238
V 292.401	-0.0741	ppb	0.4791	646.4	-3.6000	-0.07412
Zn 206.200	-0.2933	ppb	2.8678	977.7	-0.3692	-0.29331

680-162078-B-3-D (Samp) **12/19/2018, 5:41:30 AM** **Rack 4, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6067u	-0.5327u	0.4889
Al 308.215	0.0366	-0.1289u	-1.6332u
As 188.980	0.2999	-1.0863u	-2.8428u
B 249.678	6.9239	5.9119	5.4683
Ba 389.178	82.4148	80.5447	81.2156
Be 313.042	-0.0492u	-0.0535u	-0.0494u
Ca 370.602	30131	30116	30085
Cd 226.502	-0.3224u	-0.0410u	-0.3959u
Co 228.615	-0.5651u	-0.0241u	1.1789
Cr 267.716	1.0767	0.8362	0.4562
Cu 324.754	-0.3179u	0.0606	0.4219
Fe 271.441	-9.5505u	2.4133	5.7766
K 766.491	3164.44	3165.56	3158.44
Mg 279.078	14407.6	14395.8	14406.7
Mn 257.610	1.5701	1.5969	1.5888
Mo 202.032	-0.1553u	-0.9605u	-1.1099u
Na 330.237	16317.1	16776.1	16155.8
Ni 231.604	0.4295	3.6325	1.4483
Pb 220.353	-5.7422u	0.4893	5.5960
Sb 206.834	-2.0906u	-3.7784u	-4.9677u
Se 196.026	-4.4428u	-3.0022u	-4.1634u
Si 288.158	12189.8	12191.3	12179.5
Sn 189.925	-0.1986u	1.1593	4.0429
Sr 216.596	201.699	200.667	199.186
Ti 334.941	-0.2521	-0.3182	-0.3080
Tl 190.794	-4.5727u	6.7366	1.0611
V 292.401	0.5381	0.4482	0.5747
Zn 206.200	4.9538	8.6470	-1.4751u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2168	ppb	0.6123	282.4	-37.9449
Al 308.215	-0.5752	ppb	0.9200	159.9	160.859
As 188.980	-1.2097	ppb	1.5750	130.2	0.9282
B 249.678	6.1013	ppb	0.7461	12.2	-56.7675
Ba 389.178	81.3917	ppb	0.9474	1.2	853.596
Be 313.042	-0.0507	ppb	0.0024	4.8	-199.227
Ca 370.602	30111	ppb	23.29	0.1	68672
Cd 226.502	-0.2531	ppb	0.1873	74.0	7.9916
Co 228.615	0.1966	ppb	0.8927	454.2	-11.0435
Cr 267.716	0.7897	ppb	0.3129	39.6	41.9860
Cu 324.754	0.0549	ppb	0.3699	674.3	204.413
Fe 271.441	-0.4536	ppb	8.0557	1776.1	27.2766
K 766.491	3162.81	ppb	3.8276	0.1	86468.3
Mg 279.078	14403.4	ppb	6.5754	0.0	20780.4
Mn 257.610	1.5853	ppb	0.0137	0.9	265.325
Mo 202.032	-0.7419	ppb	0.5135	69.2	2.5552
Na 330.237	16416.3	ppb	321.844	2.0	490.384
Ni 231.604	1.8368	ppb	1.6365	89.1	0.2853
Pb 220.353	0.1144	ppb	5.6784	4964.6	6.7448
Sb 206.834	-3.6122	ppb	1.4457	40.0	10.0110
Se 196.026	-3.8695	ppb	0.7640	19.7	1.2890
Si 288.158	12186.9	ppb	6.4374	0.1	58768.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.6678	ppb	2.1660	129.9	0.2815
Sr 216.596	200.517	ppb	1.2632	0.6	856.912
Ti 334.941	-0.2928	ppb	0.0356	12.1	-19.5820
Tl 190.794	1.0750	ppb	5.6546	526.0	-9.8221
V 292.401	0.5203	ppb	0.0651	12.5	5.0826
Zn 206.200	4.0419	ppb	5.1223	126.7	1.1906

680-162105-A-5-A (Samp) **12/19/2018, 5:45:57 AM** **Rack 4, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6186u	-0.3375u	-0.0862u
Al 308.215	28.3989	25.5708	27.9800
As 188.980	9.4214	3.8776	9.2481
B 249.678	424.983	423.206	426.043
Ba 389.178	162.549	162.264	160.412
Be 313.042	-0.0922u	-0.0914u	-0.0860u
Ca 370.602	380800	379255	379835
Cd 226.502	-0.3104u	-0.1491	-0.2427
Co 228.615	3.8010	3.8838	3.8539
Cr 267.716	0.3179	0.4105	0.8801
Cu 324.754	7.9512	7.9196	7.8589
Fe 271.441	5829.98	5831.49	5841.67
K 766.491	45920.1x	45948.3x	45978.1x
Mg 279.078	68196.9	68174.6	68273.1
Mn 257.610	3940.96	3940.56	3946.53
Mo 202.032	1.3765	0.7725	0.4555
Na 330.237	285504x	285197x	284430x
Ni 231.604	21.9006	22.0559	24.2785
Pb 220.353	1.8636	11.5769	6.8130
Sb 206.834	-9.0262u	-10.8644u	-4.2497u
Se 196.026	-14.3629u	4.1589	-8.7357u
Si 288.158	11983.2	11994.5	11999.8
Sn 189.925	3.9713	-4.8340u	1.0706
Sr 216.596	1178.13	1180.20	1181.51
Ti 334.941	-0.9490	-0.9650	-1.0820
Tl 190.794	-12.4273u	-4.2054u	-4.6163u
V 292.401	1.6135	1.8297	1.4714
Zn 206.200	857.067	858.576	857.759

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3474b	ppb	0.2663	76.7	-39.4642
Al 308.215	27.3165b	ppb	1.5263	5.6	231.079
As 188.980	7.5157b	ppb	3.1519	41.9	3.2425
B 249.678	424.744b	ppb	1.4337	0.3	2755.49
Ba 389.178	161.742b	ppb	1.1603	0.7	1800.67
Be 313.042	-0.0899b	ppb	0.0034	3.7	-191.237
Ca 370.602	379963b	ppb	780.2	0.2	866205
Cd 226.502	-0.2341b	ppb	0.0810	34.6	12.5212
Co 228.615	3.8462b	ppb	0.0420	1.1	7.4957
Cr 267.716	0.5362b	ppb	0.3015	56.2	47.2620
Cu 324.754	7.9099b	ppb	0.0469	0.6	515.715
Fe 271.441	5834.38b	ppb	6.3539	0.1	4833.33
K 766.491	45948.8xb	ppb	29.0058	0.1	1252569

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	68214.9b	ppb	51.6591	0.1	98256.7
Mn 257.610	3942.68b	ppb	3.3371	0.1	431422
Mo 202.032	0.8682b	ppb	0.4679	53.9	6.0910
Na 330.237	285044xb	ppb	553.170	0.2	7567.35
Ni 231.604	22.7450b	ppb	1.3303	5.8	29.3400
Pb 220.353	6.7511b	ppb	4.8569	71.9	10.9690
Sb 206.834	-8.0468b	ppb	3.4144	42.4	8.1322
Se 196.026	-6.3132b	ppb	9.4955	150.4	1.1864
Si 288.158	11992.5b	ppb	8.4754	0.1	57836.2
Sn 189.925	0.0693b	ppb	4.4872	6475.6	-0.2023
Sr 216.596	1179.95b	ppb	1.7033	0.1	4996.19
Ti 334.941	-0.9987b	ppb	0.0726	7.3	79.7945
Tl 190.794	-7.0830b	ppb	4.6328	65.4	-11.9306
V 292.401	1.6382b	ppb	0.1804	11.0	21.8286
Zn 206.200	857.801b	ppb	0.7552	0.1	308.449

680-162142-H-3-A (Samp) **12/19/2018, 5:50:23 AM** **Rack 4, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5127	-0.2991u	-0.4667u
Al 308.215	-1.4491u	-1.4952u	0.3126
As 188.980	4.1658	3.4075	0.7151
B 249.678	5.9539	5.9353	4.5849
Ba 389.178	38.5325	38.8533	38.3697
Be 313.042	-0.0581u	-0.0479u	-0.0612u
Ca 370.602	33527	33531	33465
Cd 226.502	-0.4874u	-0.0420u	-0.2411u
Co 228.615	-0.1247u	0.3145	-0.9645u
Cr 267.716	-0.1296u	-0.4071u	-0.0491u
Cu 324.754	15.1960	15.0919	14.8745
Fe 271.441	11.1179	2.4611	17.3215
K 766.491	1638.96	1634.06	1634.47
Mg 279.078	14390.8	14397.5	14371.6
Mn 257.610	4.2072	4.2130	4.1369
Mo 202.032	-0.0966u	-0.5236u	-2.0871u
Na 330.237	4193.43	4103.28	4218.79
Ni 231.604	0.6634	1.6651	2.9745
Pb 220.353	-7.2124u	4.5717	3.8601
Sb 206.834	-7.2369u	-11.4323u	-9.8580u
Se 196.026	-14.4498u	7.8840	-6.4526u
Si 288.158	2666.49	2669.68	2660.14
Sn 189.925	-2.6279u	0.2155	9.4653
Sr 216.596	48.1762	48.8848	47.5677
Ti 334.941	-0.2335	-0.1347	-0.1931
Tl 190.794	0.2371	-1.6791u	-3.2392u
V 292.401	-0.3299u	0.1540	0.1426
Zn 206.200	31.2639	29.8178	28.7539

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0843	ppb	0.5238	621.1	-32.4528
Al 308.215	-0.8773	ppb	1.0307	117.5	160.084
As 188.980	2.7628	ppb	1.8135	65.6	1.9767
B 249.678	5.4914	ppb	0.7851	14.3	-60.8809

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	38.5852	ppb	0.2461	0.6	378.475
Be 313.042	-0.0558	ppb	0.0070	12.5	-202.294
Ca 370.602	33508	ppb	37.08	0.1	76416
Cd 226.502	-0.2568	ppb	0.2231	86.9	7.9631
Co 228.615	-0.2582	ppb	0.6499	251.7	-13.3288
Cr 267.716	-0.1953	ppb	0.1878	96.2	19.0306
Cu 324.754	15.0541	ppb	0.1640	1.1	796.185
Fe 271.441	10.3002	ppb	7.4639	72.5	36.1106
K 766.491	1635.83	ppb	2.7199	0.2	44851.5
Mg 279.078	14386.6	ppb	13.4235	0.1	20756.3
Mn 257.610	4.1857	ppb	0.0424	1.0	549.576
Mo 202.032	-0.9024	ppb	1.0479	116.1	2.1935
Na 330.237	4171.84	ppb	60.7053	1.5	167.646
Ni 231.604	1.7677	ppb	1.1590	65.6	0.1897
Pb 220.353	0.4064	ppb	6.6077	1625.7	6.9164
Sb 206.834	-9.5091	ppb	2.1194	22.3	7.3674
Se 196.026	-4.3395	ppb	11.3159	260.8	1.1997
Si 288.158	2665.43	ppb	4.8564	0.2	13075.0
Sn 189.925	2.3510	ppb	6.3231	269.0	0.5014
Sr 216.596	48.2095	ppb	0.6592	1.4	213.422
Ti 334.941	-0.1871	ppb	0.0497	26.5	-6.6362
Tl 190.794	-1.5604	ppb	1.7412	111.6	-10.9194
V 292.401	-0.0111	ppb	0.2762	2488.9	-2.5466
Zn 206.200	29.9452	ppb	1.2598	4.2	10.5131

680-162142-H-2-A (Samp) **12/19/2018, 5:54:49 AM** **Rack 4, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1440u	0.0575	0.4129
Al 308.215	-1.4276u	-1.8528u	-5.8560u
As 188.980	-3.0625u	-1.9457u	2.0676
B 249.678	89.5982	89.2350	89.1695
Ba 389.178	17.3759	18.4213	18.2282
Be 313.042	-0.0800u	-0.0643u	-0.0660u
Ca 370.602	56371	56371	56324
Cd 226.502	-0.1105u	-0.4321u	0.0310
Co 228.615	-0.7788u	-0.2813u	-0.4890u
Cr 267.716	0.1000	-0.2051u	-0.0076u
Cu 324.754	1.4199	0.4561	0.8998
Fe 271.441	-0.2602u	6.4073	-1.1572u
K 766.491	5572.46	5574.92	5567.63
Mg 279.078	11267.0	11275.1	11257.8
Mn 257.610	-0.4781	-0.4383	-0.5572u
Mo 202.032	-0.2159u	-1.4107u	-1.2097u
Na 330.237	4800.18	5320.71	5052.63
Ni 231.604	-0.4833u	-0.7375u	0.1825
Pb 220.353	-2.5959u	-5.5372u	-2.6638u
Sb 206.834	-14.1734u	-3.6193u	-6.4914u
Se 196.026	15.7548	20.8970	13.2541
Si 288.158	4203.82	4205.52	4203.64
Sn 189.925	-1.1519u	-2.8968u	2.8013
Sr 216.596	167.325	166.014	165.907
Ti 334.941	-0.1820	-0.1034	-0.1683

Label	Replicates Concentration		
Tl 190.794	-2.9203u	-4.3915u	-2.0096u
V 292.401	0.0834	0.3493	0.9114
Zn 206.200	3.9759	-0.2251u	5.7463

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1088	ppb	0.2820	259.1	-25.7453
Al 308.215	-3.0455	ppb	2.4433	80.2	154.672
As 188.980	-0.9802	ppb	2.6979	275.2	0.9889
B 249.678	89.3343	ppb	0.2309	0.3	503.519
Ba 389.178	18.0085	ppb	0.5562	3.1	147.000
Be 313.042	-0.0701	ppb	0.0086	12.2	-210.680
Ca 370.602	56356	ppb	27.38	0.0	128496
Cd 226.502	-0.1705	ppb	0.2373	139.2	9.3462
Co 228.615	-0.5163	ppb	0.2499	48.4	-14.6318
Cr 267.716	-0.0376	ppb	0.1547	411.7	22.6859
Cu 324.754	0.9253	ppb	0.4824	52.1	238.759
Fe 271.441	1.6633	ppb	4.1328	248.5	28.9854
K 766.491	5571.67	ppb	3.7084	0.1	152120
Mg 279.078	11266.6	ppb	8.6599	0.1	16261.7
Mn 257.610	-0.4912	ppb	0.0605	12.3	23.1163
Mo 202.032	-0.9454	ppb	0.6398	67.7	2.0967
Na 330.237	5057.84	ppb	260.303	5.1	191.039
Ni 231.604	-0.3461	ppb	0.4751	137.3	-2.7478
Pb 220.353	-3.5990	ppb	1.6789	46.6	4.5679
Sb 206.834	-8.0947	ppb	5.4566	67.4	7.9958
Se 196.026	16.6353	ppb	3.8968	23.4	5.1952
Si 288.158	4204.33	ppb	1.0364	0.0	20459.8
Sn 189.925	-0.4158	ppb	2.9195	702.1	-0.3952
Sr 216.596	166.415	ppb	0.7897	0.5	712.849
Ti 334.941	-0.1513	ppb	0.0420	27.8	-13.5142
Tl 190.794	-3.1071	ppb	1.2019	38.7	-11.5654
V 292.401	0.4480	ppb	0.4227	94.4	4.0570
Zn 206.200	3.1657	ppb	3.0670	96.9	0.8756

MB 680-551423/1-A (Samp) **12/19/2018, 5:59:15 AM** **Rack 4, Tube 5**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0799	-0.2190u	0.1418
Al 308.215	6.4019	4.3119	5.9597
As 188.980	-4.2414u	8.8735	-1.1215u
B 249.678	4.0006	2.8128	2.1840
Ba 389.178	-0.0144	-0.9566u	0.8144
Be 313.042	-0.0598u	-0.0471u	-0.0491u
Ca 370.602	31.03	35.31	29.22
Cd 226.502	-0.0991u	-0.0790	-0.3085u
Co 228.615	-0.2788u	-0.3280u	-0.5394u
Cr 267.716	0.6278	0.1825	0.4165
Cu 324.754	0.7550	0.3753	0.6022
Fe 271.441	1753.67	1751.70	1746.64
K 766.491	15.1994	14.3382	14.5301
Mg 279.078	0.6316	-1.3687u	0.6480
Mn 257.610	5.3462	5.2609	5.2602
Mo 202.032	-1.7940u	0.6253	0.4547

Label	Replicates Concentration		
Na 330.237	86.1974	-72.0311u	271.023
Ni 231.604	-0.4676u	2.0388	2.0844
Pb 220.353	5.8457	-2.7606u	2.7116
Sb 206.834	-9.9622u	-6.0769u	-4.9581u
Se 196.026	3.2356	3.7050	15.7715
Si 288.158	17.6635	17.2377	16.8587
Sn 189.925	13.3090	9.4132	11.8052
Sr 216.596	0.0876	-0.5172u	-0.1189u
Ti 334.941	0.2486	0.2810	0.1649
Tl 190.794	-4.6200u	-5.0017u	0.0181u
V 292.401	-0.1955u	-0.3135u	0.2548
Zn 206.200	5.0285	5.7285	3.8795

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0009	ppb	0.1929	21118.7	-29.3489
Al 308.215	5.5579	ppb	1.1014	19.8	176.292
As 188.980	1.1702	ppb	6.8512	585.5	1.5598
B 249.678	2.9991	ppb	0.9225	30.8	-79.4110
Ba 389.178	-0.0522	ppb	0.8861	1698.2	-64.0841
Be 313.042	-0.0520	ppb	0.0069	13.2	-204.109
Ca 370.602	31.85	ppb	3.128	9.8	106.0
Cd 226.502	-0.1622	ppb	0.1271	78.3	10.7891
Co 228.615	-0.3820	ppb	0.1385	36.2	-13.9114
Cr 267.716	0.4089	ppb	0.2228	54.5	33.2263
Cu 324.754	0.5775	ppb	0.1910	33.1	225.459
Fe 271.441	1750.67	ppb	3.6259	0.2	1469.55
K 766.491	14.6892	ppb	0.4521	3.1	668.567
Mg 279.078	-0.0297	ppb	1.1596	3903.9	30.9908
Mn 257.610	5.2891	ppb	0.0495	0.9	601.133
Mo 202.032	-0.2380	ppb	1.3502	567.3	3.6633
Na 330.237	95.0630	ppb	171.699	180.6	60.0876
Ni 231.604	1.2185	ppb	1.4604	119.8	-0.5733
Pb 220.353	1.9322	ppb	4.3558	225.4	7.8197
Sb 206.834	-6.9991	ppb	2.6264	37.5	8.5242
Se 196.026	7.5707	ppb	7.1059	93.9	3.4632
Si 288.158	17.2533	ppb	0.4026	2.3	367.066
Sn 189.925	11.5091	ppb	1.9647	17.1	3.4688
Sr 216.596	-0.1829	ppb	0.3074	168.1	9.3965
Ti 334.941	0.2315	ppb	0.0599	25.9	-7.7767
Tl 190.794	-3.2012	ppb	2.7945	87.3	-11.6679
V 292.401	-0.0847	ppb	0.2999	353.9	-3.3710
Zn 206.200	4.8788	ppb	0.9336	19.1	1.4944

LCS 680-551423/2-A (Samp) **12/19/2018, 6:03:42 AM** **Rack 4, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	47.3234	48.0969	48.0745
Al 308.215	4738.22	4736.86	4734.06
As 188.980	88.5064	92.9016	96.0258
B 249.678	192.415	193.616	192.551
Ba 389.178	93.8234	92.7351	93.9283
Be 313.042	51.2942	51.4056	51.3288
Ca 370.602	4874	4880	4882

Label	Replicates Concentration		
Cd 226.502	51.1184	50.9686	50.4479
Co 228.615	49.7597	50.7622	49.8947
Cr 267.716	99.8682	100.796	100.490
Cu 324.754	96.0406	95.7910	96.6199
Fe 271.441	4965.37	4980.94	4946.65
K 766.491	7412.80	7419.76	7417.71
Mg 279.078	4943.36	4961.52	4940.01
Mn 257.610	487.062	488.145	487.749
Mo 202.032	95.5963	97.7573	99.9760
Na 330.237	4865.52	4853.88	4930.10
Ni 231.604	98.8856	101.471	99.2512
Pb 220.353	491.555	491.112	481.905
Sb 206.834	41.3015	34.2997	44.5982
Se 196.026	78.6392	102.262	97.9808
Si 288.158	9.5382	13.8415	11.6982
Sn 189.925	108.043	109.805	106.412
Sr 216.596	98.9230	98.9002	97.7680
Ti 334.941	98.2193	98.5600	98.1724
Tl 190.794	42.0410	39.3604	37.4977
V 292.401	95.9473	96.8613	95.9034
Zn 206.200	102.838	97.7792	107.972

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	47.8316	ppb	0.4402	0.9	1743.47
Al 308.215	4736.38	ppb	2.1225	0.0	12040.0
As 188.980	92.4779	ppb	3.7776	4.1	25.6322
B 249.678	192.861	ppb	0.6576	0.3	1195.41
Ba 389.178	93.4956	ppb	0.6607	0.7	980.452
Be 313.042	51.3429	ppb	0.0570	0.1	42489.9
Ca 370.602	4879	ppb	3.928	0.1	11161
Cd 226.502	50.8450	ppb	0.3519	0.7	846.149
Co 228.615	50.1388	ppb	0.5440	1.1	240.246
Cr 267.716	100.385	ppb	0.4728	0.5	2355.43
Cu 324.754	96.1505	ppb	0.4253	0.4	3998.26
Fe 271.441	4964.32	ppb	17.1696	0.3	4119.88
K 766.491	7416.75	ppb	3.5749	0.0	202406
Mg 279.078	4948.30	ppb	11.5735	0.2	7153.14
Mn 257.610	487.652	ppb	0.5481	0.1	53367.8
Mo 202.032	97.7765	ppb	2.1899	2.2	224.411
Na 330.237	4883.16	ppb	41.0636	0.8	185.632
Ni 231.604	99.8692	ppb	1.3991	1.4	136.477
Pb 220.353	488.191	ppb	5.4484	1.1	292.800
Sb 206.834	40.0665	ppb	5.2591	13.1	29.0347
Se 196.026	92.9606	ppb	12.5861	13.5	19.7672
Si 288.158	11.6926	ppb	2.1516	18.4	367.257
Sn 189.925	108.087	ppb	1.6969	1.6	34.7678
Sr 216.596	98.5304	ppb	0.6603	0.7	425.020
Ti 334.941	98.3172	ppb	0.2115	0.2	11756.0
Tl 190.794	39.6330	ppb	2.2839	5.8	6.2965
V 292.401	96.2374	ppb	0.5408	0.6	1387.50
Zn 206.200	102.863	ppb	5.0964	5.0	36.7255

680-161405-A-71-A (Samp) **12/19/2018, 6:08:08 AM** **Rack 4, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4709u	-0.6670u	-0.5379u
Al 308.215	158575	158897	158643
As 188.980	39.7351	32.3227	43.0496
B 249.678	85.6892	84.0949	85.2543
Ba 389.178	1500.95	1502.33	1504.79
Be 313.042	7.4297	7.4142	7.4209
Ca 370.602	60163	60194	60130
Cd 226.502	0.8655	0.5505	0.6501
Co 228.615	103.640	103.375	103.056
Cr 267.716	221.666	222.653	221.908
Cu 324.754	183.288	185.065	184.251
Fe 271.441	261181	261741	261122
K 766.491	18729.6	18791.4	18729.3
Mg 279.078	70211.6	70196.6	70137.4
Mn 257.610	6045.07	6041.53	6047.24
Mo 202.032	3.5451	4.1904	1.8874
Na 330.237	546.848u	493.859u	555.612u
Ni 231.604	249.761	247.499	249.949
Pb 220.353	71.6512	56.3816	68.3088
Sb 206.834	2.0091	-14.6828u	-15.3553u
Se 196.026	12.6828	7.0051	1.4393
Si 288.158	20066.2	20119.0	20080.5
Sn 189.925	16.9325	9.2881	20.2413
Sr 216.596	217.300	216.614	215.594
Ti 334.941	2324.14	2327.58	2324.52
Tl 190.794	1.6651u	4.2854u	3.7741u
V 292.401	296.755	298.178	296.809
Zn 206.200	508.391	497.020	510.490

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5586	ppb	0.0997	17.8	-97.3775
Al 308.215	158705	ppb	169.760	0.1	398014
As 188.980	38.3691	ppb	5.4924	14.3	11.8832
B 249.678	85.0128	ppb	0.8241	1.0	211.252
Ba 389.178	1502.69	ppb	1.9444	0.1	16767.2
Be 313.042	7.4216	ppb	0.0078	0.1	6022.97
Ca 370.602	60162	ppb	32.23	0.1	136773
Cd 226.502	0.6887	ppb	0.1610	23.4	233.746
Co 228.615	103.357	ppb	0.2923	0.3	538.229
Cr 267.716	222.075	ppb	0.5142	0.2	5224.00
Cu 324.754	184.201	ppb	0.8900	0.5	7528.57
Fe 271.441	261348	ppb	341.708	0.1	215294
K 766.491	18750.1	ppb	35.7593	0.2	511288
Mg 279.078	70181.9	ppb	39.2051	0.1	101034
Mn 257.610	6044.61	ppb	2.8833	0.0	661509
Mo 202.032	3.2076	ppb	1.1880	37.0	7.3019
Na 330.237	532.107	ppb	33.4118	6.3	43.1021
Ni 231.604	249.070	ppb	1.3636	0.5	343.801
Pb 220.353	65.4472	ppb	8.0270	12.3	44.2928
Sb 206.834	-9.3430	ppb	9.8370	105.3	13.6223
Se 196.026	7.0424	ppb	5.6218	79.8	3.1146
Si 288.158	20088.6	ppb	27.3155	0.1	96801.6

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	15.4873	ppb	5.6178	36.3	4.7579
Sr 216.596	216.503	ppb	0.8586	0.4	987.972
Ti 334.941	2325.41	ppb	1.8877	0.1	278695
Tl 190.794	3.2415	ppb	1.3889	42.8	-16.0578
V 292.401	297.247	ppb	0.8067	0.3	4385.11
Zn 206.200	505.300	ppb	7.2474	1.4	181.875

680-161405-A-71-Asd (Samp) **12/19/2018, 6:12:34 AM** **Rack 4, Tube 8**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2784u	0.1816u	-0.1150u
Al 308.215	31081.3	31104.4	31088.7
As 188.980	7.0717	7.4827	0.1622
B 249.678	19.0486	18.6631	17.8860
Ba 389.178	299.853	301.354	301.635
Be 313.042	1.4304	1.3976	1.4116
Ca 370.602	12136	12136	12130
Cd 226.502	-0.1856	-0.2288	-0.1512
Co 228.615	21.2010	19.9629	19.6856
Cr 267.716	44.0075	44.5703	44.3184
Cu 324.754	36.1962	35.8138	36.5787
Fe 271.441	53100.0	53134.0	53113.2
K 766.491	3410.71	3413.59	3412.78
Mg 279.078	14118.7	14124.3	14110.3
Mn 257.610	1245.57	1246.28	1245.39
Mo 202.032	-0.0024u	-0.6810u	0.4562
Na 330.237	271.990	122.312u	258.248
Ni 231.604	50.1966	50.8863	49.9356
Pb 220.353	13.8961	13.0509	21.6035
Sb 206.834	-9.8589u	-14.0963u	-8.2370u
Se 196.026	13.0880	5.2640	2.2724
Si 288.158	4057.78	4057.07	4059.95
Sn 189.925	5.9277	-1.0015u	5.0114
Sr 216.596	42.8887	44.6908	45.1348
Ti 334.941	466.964	467.185	466.725
Tl 190.794	-4.8843u	3.8280	2.8174u
V 292.401	59.0734	59.4378	59.1422
Zn 206.200	102.385	105.393	101.890

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0706	ppb	0.2332	330.4	-41.2688
Al 308.215	31091.5	ppb	11.7570	0.0	78104.5
As 188.980	4.9056	ppb	4.1130	83.8	2.6459
B 249.678	18.5325	ppb	0.5922	3.2	-26.5749
Ba 389.178	300.947	ppb	0.9576	0.3	3307.09
Be 313.042	1.4132	ppb	0.0165	1.2	1016.82
Ca 370.602	12134	ppb	3.295	0.0	27615
Cd 226.502	-0.1885	ppb	0.0389	20.6	51.7117
Co 228.615	20.2832	ppb	0.8069	4.0	96.1089
Cr 267.716	44.2987	ppb	0.2819	0.6	1061.09
Cu 324.754	36.1962	ppb	0.3825	1.1	1642.31
Fe 271.441	53115.7	ppb	17.1603	0.0	43777.8
K 766.491	3412.36	ppb	1.4885	0.0	93269.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	14117.8	ppb	7.0311	0.0	20348.7
Mn 257.610	1245.75	ppb	0.4743	0.0	136346
Mo 202.032	-0.0757	ppb	0.5721	755.3	3.2127
Na 330.237	217.517	ppb	82.7354	38.0	57.6637
Ni 231.604	50.3395	ppb	0.4912	1.0	67.6769
Pb 220.353	16.1835	ppb	4.7128	29.1	16.0299
Sb 206.834	-10.7307	ppb	3.0254	28.2	8.0724
Se 196.026	6.8748	ppb	5.5848	81.2	3.2858
Si 288.158	4058.27	ppb	1.4993	0.0	19781.5
Sn 189.925	3.3125	ppb	3.7641	113.6	0.8125
Sr 216.596	44.2381	ppb	1.1895	2.7	209.559
Ti 334.941	466.958	ppb	0.2299	0.0	55935.5
Tl 190.794	0.5870	ppb	4.7652	811.8	-11.4722
V 292.401	59.2178	ppb	0.1936	0.3	871.873
Zn 206.200	103.223	ppb	1.8958	1.8	36.9436

680-161405-A-71-Apds (Samp) **12/19/2018, 6:17:00 AM** **Rack 4, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.3606	51.3405	52.0254
Al 308.215	160740	160617	160725
As 188.980	138.561	129.077	137.799
B 249.678	278.071	280.818	280.054
Ba 389.178	1566.28	1568.53	1564.02
Be 313.042	59.6620	59.7256	59.7434
Ca 370.602	63817	63941	63807
Cd 226.502	51.6702	51.8766	52.5933
Co 228.615	149.549	151.363	150.414
Cr 267.716	317.020	317.842	317.173
Cu 324.754	281.197	277.750	277.798
Fe 271.441	260310	261014	261216
K 766.491	25486.4	25442.8	25472.9
Mg 279.078	73783.8	73770.5	73852.8
Mn 257.610	6388.65	6415.39	6415.04
Mo 202.032	101.239	102.651	104.132
Na 330.237	5554.72	5569.73	5676.24
Ni 231.604	340.096	339.307	345.734
Pb 220.353	553.259	550.707	558.712
Sb 206.834	35.7569	57.5636	35.5235
Se 196.026	118.335	105.900	103.871
Si 288.158	19682.7	19701.0	19714.6
Sn 189.925	112.790	120.311	125.542
Sr 216.596	309.956	312.005	312.346
Ti 334.941	2375.19	2378.96	2378.71
Tl 190.794	38.5553	39.8611	47.0158
V 292.401	389.853	389.662	390.364
Zn 206.200	594.325	588.698	595.194

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.5755	ppb	0.3897	0.8	1835.57
Al 308.215	160694	ppb	67.3922	0.0	403005
As 188.980	135.146	ppb	5.2691	3.9	37.3913
B 249.678	279.648	ppb	1.4180	0.5	1521.97

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1566.28	ppb	2.2575	0.1	17476.7
Be 313.042	59.7103	ppb	0.0428	0.1	49459.1
Ca 370.602	63855	ppb	74.79	0.1	145201
Cd 226.502	52.0467	ppb	0.4845	0.9	1071.80
Co 228.615	150.442	ppb	0.9075	0.6	774.521
Cr 267.716	317.345	ppb	0.4373	0.1	7436.22
Cu 324.754	278.915	ppb	1.9765	0.7	11266.7
Fe 271.441	260846	ppb	475.470	0.2	214884
K 766.491	25467.4	ppb	22.3357	0.1	694362
Mg 279.078	73802.4	ppb	44.1736	0.1	106245
Mn 257.610	6406.36	ppb	15.3367	0.2	701078
Mo 202.032	102.674	ppb	1.4464	1.4	231.379
Na 330.237	5600.23	ppb	66.2555	1.2	176.456
Ni 231.604	341.712	ppb	3.5050	1.0	472.504
Pb 220.353	554.226	ppb	4.0895	0.7	330.767
Sb 206.834	42.9480	ppb	12.6580	29.5	36.3671
Se 196.026	109.369	ppb	7.8307	7.2	22.6451
Si 288.158	19699.4	ppb	15.9876	0.1	94959.7
Sn 189.925	119.548	ppb	6.4101	5.4	38.4821
Sr 216.596	311.436	ppb	1.2931	0.4	1386.71
Ti 334.941	2377.62	ppb	2.1097	0.1	284960
Tl 190.794	41.8107	ppb	4.5548	10.9	0.2156
V 292.401	389.960	ppb	0.3627	0.1	5722.38
Zn 206.200	592.739	ppb	3.5263	0.6	213.308

680-161405-A-71-B MS (Samp) **12/19/2018, 6:21:26 AM** **Rack 4, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	46.1690	46.3988	46.7083
Al 308.215	197534	197634	197558
As 188.980	130.634	134.441	121.015
B 249.678	255.837	256.348	257.315
Ba 389.178	1879.15	1877.36	1878.02
Be 313.042	56.1727	56.1627	56.1967
Ca 370.602	44828	44813	44797
Cd 226.502	47.0614	47.4762	47.5480
Co 228.615	149.589	150.350	150.935
Cr 267.716	347.140	348.331	347.755
Cu 324.754	279.017	275.602	276.389
Fe 271.441	278497	278712	278430
K 766.491	28878.2	28872.2	28912.0
Mg 279.078	73409.1	73358.3	73314.7
Mn 257.610	5274.51	5283.18	5274.52
Mo 202.032	86.7510	86.0046	87.7882
Na 330.237	5337.12	5083.77	5239.30
Ni 231.604	342.418	341.361	344.128
Pb 220.353	500.885	509.581	508.081
Sb 206.834	24.8638	14.8060	23.5501
Se 196.026	89.3237	84.9561	74.7586
Si 288.158	20255.2	20277.3	20272.9
Sn 189.925	104.681	96.0582	103.505
Sr 216.596	305.317	304.238	305.162
Ti 334.941	2650.46	2652.72	2651.05

Label	Replicates Concentration		
Tl 190.794	36.8085	36.4111	40.3398
V 292.401	424.105	425.559	422.685
Zn 206.200	646.891	646.818	648.535

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	46.4254	ppb	0.2706	0.6	1637.95
Al 308.215	197575	ppb	52.1335	0.0	495458
As 188.980	128.697	ppb	6.9198	5.4	35.7241
B 249.678	256.500	ppb	0.7507	0.3	1348.19
Ba 389.178	1878.18	ppb	0.9080	0.0	20943.7
Be 313.042	56.1774	ppb	0.0174	0.0	46524.3
Ca 370.602	44813	ppb	15.70	0.0	101740
Cd 226.502	47.3619	ppb	0.2627	0.6	1010.89
Co 228.615	150.291	ppb	0.6751	0.4	777.143
Cr 267.716	347.742	ppb	0.5955	0.2	8141.86
Cu 324.754	277.003	ppb	1.7884	0.6	11194.8
Fe 271.441	278547	ppb	147.445	0.1	229463
K 766.491	28887.5	ppb	21.4989	0.1	787574
Mg 279.078	73360.7	ppb	47.2547	0.1	105614
Mn 257.610	5277.40	ppb	5.0033	0.1	577667
Mo 202.032	86.8480	ppb	0.8957	1.0	195.438
Na 330.237	5220.07	ppb	127.763	2.4	164.306
Ni 231.604	342.636	ppb	1.3962	0.4	473.795
Pb 220.353	506.182	ppb	4.6485	0.9	302.082
Sb 206.834	21.0733	ppb	5.4672	25.9	27.1805
Se 196.026	83.0128	ppb	7.4745	9.0	17.4572
Si 288.158	20268.5	ppb	11.6796	0.1	97700.4
Sn 189.925	101.415	ppb	4.6760	4.6	32.6055
Sr 216.596	304.906	ppb	0.5836	0.2	1363.83
Ti 334.941	2651.41	ppb	1.1691	0.0	317747
Tl 190.794	37.8531	ppb	2.1627	5.7	-2.5019
V 292.401	424.116	ppb	1.4372	0.3	6224.86
Zn 206.200	647.415	ppb	0.9713	0.2	232.999

Cont Calib Verif (CCV) **12/19/2018, 6:25:53 AM** **Rack S, Tube 10**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	494.560	494.475	495.754
Al 308.215	9835.41	9850.37	9842.78
As 188.980	509.691	506.679	499.577
B 249.678	508.393	510.322	509.187
Ba 389.178	480.665	479.413	479.919
Be 313.042	530.314	530.241	529.915
Ca 370.602	10069	10066	10058
Cd 226.502	515.948	515.820	514.931
Co 228.615	509.534	506.551	508.057
Cr 267.716	506.444	506.740	506.341
Cu 324.754	490.983	489.918	492.474
Fe 271.441	10157.9	10120.2	10092.6
K 766.491	9653.12	9668.57	9645.67
Mg 279.078	10262.8	10255.6	10248.5
Mn 257.610	499.625	498.712	498.947
Mo 202.032	494.405	496.108	497.552

Label	Replicates Concentration		
Na 330.237	10315.3	10340.2	10158.4
Ni 231.604	508.355	510.018	499.766
Pb 220.353	491.775	500.249	485.994
Sb 206.834	482.869	480.985	489.823
Se 196.026	482.827	484.586	483.456
Si 288.158	5307.39	5309.61	5285.12
Sn 189.925	504.189	495.513	495.891
Sr 216.596	507.378	509.814	508.108
Ti 334.941	503.834	503.672	503.057
Tl 190.794	486.503	480.502	478.166
V 292.401	493.654	493.378	492.133
Zn 206.200	1018.14	1019.63	1019.56

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	494.930	ppb	0.7151	0.1	18312.3	98.98592
Al 308.215	9842.85	ppb	7.4788	0.1	24859.1	98.42854
As 188.980	505.316	ppb	5.1931	1.0	134.466	101.06316
B 249.678	509.301	ppb	0.9696	0.2	3320.28	101.86012
Ba 389.178	479.999	ppb	0.6300	0.1	5278.47	95.99979
Be 313.042	530.157	ppb	0.2124	0.0	440263	106.03136
Ca 370.602	10064	ppb	5.644	0.1	22983	100.64444
Cd 226.502	515.567	ppb	0.5541	0.1	8436.42	103.11334
Co 228.615	508.047	ppb	1.4913	0.3	2543.81	101.60941
Cr 267.716	506.508	ppb	0.2070	0.0	11783.5	101.30162
Cu 324.754	491.125	ppb	1.2842	0.3	19588.1	98.22505
Fe 271.441	10123.6	ppb	32.7641	0.3	8396.71	101.18533
K 766.491	9655.79	ppb	11.6785	0.1	263429	96.55788
Mg 279.078	10255.6	ppb	7.1440	0.1	14797.7	102.55649
Mn 257.610	499.095	ppb	0.4742	0.1	54658.2	99.81894
Mo 202.032	496.022	ppb	1.5754	0.3	1121.46	99.20430
Na 330.237	10271.3	ppb	98.5319	1.0	324.611	102.71275
Ni 231.604	506.047	ppb	5.5022	1.1	700.478	101.20933
Pb 220.353	492.673	ppb	7.1695	1.5	295.073	98.53451
Sb 206.834	484.559	ppb	4.6552	1.0	225.847	96.91180
Se 196.026	483.623	ppb	0.8912	0.2	94.1767	96.72457
Si 288.158	5300.71	ppb	13.5463	0.3	25858.0	106.01410
Sn 189.925	498.531	ppb	4.9035	1.0	161.302	99.70622
Sr 216.596	508.433	ppb	1.2498	0.2	2148.99	101.68666
Ti 334.941	503.521	ppb	0.4097	0.1	60299.6	100.70425
Tl 190.794	481.723	ppb	4.3007	0.9	190.746	96.34467
V 292.401	493.055	ppb	0.8105	0.2	7116.22	98.61097
Zn 206.200	1019.11	ppb	0.8450	0.1	366.326	101.91101

Cont Calib Blank (CCB) **12/19/2018, 6:30:17 AM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1136	-0.1800u	0.4720
Al 308.215	2.3275	-3.4916u	-1.1874u
As 188.980	-0.8055u	1.6489	9.0935
B 249.678	5.0490	4.7111	3.9971
Ba 389.178	0.3808	1.8119	0.9104
Be 313.042	0.0484	0.0476	0.0502
Ca 370.602	-3.657u	-3.898u	-0.2751u

Label	Replicates Concentration		
Cd 226.502	0.0197	-0.0025u	-0.2050u
Co 228.615	-0.2490u	0.5788	1.1813
Cr 267.716	-0.4356u	-0.3564u	-0.1560u
Cu 324.754	0.4979	0.1354	0.4950
Fe 271.441	1.9730	4.4484	5.8850
K 766.491	4.9747	5.2988	5.2856
Mg 279.078	-2.8858u	4.8009	-3.0465u
Mn 257.610	0.1643	0.1711	0.2330
Mo 202.032	1.2687	0.4182	0.4752
Na 330.237	63.2409	210.114	-311.346u
Ni 231.604	-1.0409u	0.2795	0.5649
Pb 220.353	2.3468	-0.5775u	1.8786
Sb 206.834	-9.0737u	-14.3731u	-6.8790u
Se 196.026	-0.2609u	3.8590	0.9379
Si 288.158	14.2370	15.4340	14.7992
Sn 189.925	1.7711	0.1134	8.8703
Sr 216.596	1.3660	-0.1490u	0.1711
Ti 334.941	0.3466	0.2816	0.3194
Tl 190.794	-0.3909u	5.2161	3.6825
V 292.401	-0.1996u	-0.1866u	0.3226
Zn 206.200	1.1723	0.8553	-1.8477u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1352	ppb	0.3266	241.6	-24.0002	0.13519
Al 308.215	-0.7838	ppb	2.9305	373.9	160.344	-0.78383
As 188.980	3.3123	ppb	5.1549	155.6	2.1214	3.31230
B 249.678	4.5857	ppb	0.5370	11.7	-66.9759	4.58572
Ba 389.178	1.0343	ppb	0.7236	70.0	-52.5782	1.03433
Be 313.042	0.0488	ppb	0.0013	2.8	-120.447	0.04877
Ca 370.602	-2.610	ppb	2.026	77.6	31.31	-2.60994
Cd 226.502	-0.0626	ppb	0.1238	197.7	11.0616	-0.06262
Co 228.615	0.5037	ppb	0.7181	142.6	-9.5161	0.50373
Cr 267.716	-0.3160	ppb	0.1441	45.6	16.1856	-0.31600
Cu 324.754	0.3761	ppb	0.2085	55.4	217.127	0.37610
Fe 271.441	4.1021	ppb	1.9788	48.2	31.0357	4.10212
K 766.491	5.1864	ppb	0.1834	3.5	409.574	5.18636
Mg 279.078	-0.3771	ppb	4.4850	1189.3	30.5489	-0.37711
Mn 257.610	0.1895	ppb	0.0379	20.0	42.0711	0.18946
Mo 202.032	0.7207	ppb	0.4755	66.0	5.8504	0.72072
Na 330.237	-12.6635	ppb	268.889	2123.3	57.4254	-12.66350
Ni 231.604	-0.0655	ppb	0.8567	1308.0	-2.3587	-0.06549
Pb 220.353	1.2160	ppb	1.5707	129.2	7.3898	1.21596
Sb 206.834	-10.1086	ppb	3.8527	38.1	7.0800	-10.10859Z
Se 196.026	1.5120	ppb	2.1191	140.2	2.3140	1.51202
Si 288.158	14.8234	ppb	0.5989	4.0	354.718	14.82343
Sn 189.925	3.5849	ppb	4.6517	129.8	0.9008	3.58495
Sr 216.596	0.4627	ppb	0.7985	172.6	11.6816	0.46271
Ti 334.941	0.3159	ppb	0.0327	10.3	2.3285	0.31588
Tl 190.794	2.8359	ppb	2.8978	102.2	-9.0903	2.83589
V 292.401	-0.0212	ppb	0.2978	1403.4	-2.9190	-0.02122
Zn 206.200	0.0600	ppb	1.6597	2767.6	-0.2421	0.05997

680-161405-A-71-C MS (Samp) **12/19/2018, 6:34:41 AM** **Rack 4, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	46.6647	47.2893	47.1821
Al 308.215	176871	176776	177196
As 188.980	144.970	144.461	131.838
B 249.678	261.674	261.199	263.914
Ba 389.178	1620.31	1618.03	1618.54
Be 313.042	56.4822	56.3994	56.5637
Ca 370.602	43549	43555	43623
Cd 226.502	48.3250	48.4007	48.7531
Co 228.615	165.735	166.403	168.081
Cr 267.716	333.708	333.880	334.810
Cu 324.754	274.262	273.631	272.363
Fe 271.441	293793	293498	293932
K 766.491	27603.6	27538.8	27683.7
Mg 279.078	74134.8	73979.7	74227.7
Mn 257.610	7605.60	7605.32	7618.05
Mo 202.032	91.8968	90.9748	89.5800
Na 330.237	5379.73	5436.72	5082.55
Ni 231.604	367.518	370.740	371.597
Pb 220.353	509.237	509.471	518.646
Sb 206.834	18.6452	10.2178	16.4774
Se 196.026	90.4405	88.7222	89.6891
Si 288.158	21647.0	21612.9	21679.8
Sn 189.925	103.728	111.532	108.736
Sr 216.596	296.126	293.596	294.522
Ti 334.941	3283.42	3283.24	3290.90
Tl 190.794	38.3180	40.4326	42.8945
V 292.401	435.465	435.864	436.964
Zn 206.200	636.426	638.124	641.185

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	47.0454	ppb	0.3340	0.7	1662.03
Al 308.215	176947	ppb	220.106	0.1	443750
As 188.980	140.423	ppb	7.4391	5.3	38.8518
B 249.678	262.262	ppb	1.4501	0.6	1371.70
Ba 389.178	1618.96	ppb	1.1972	0.1	18072.3
Be 313.042	56.4818	ppb	0.0822	0.1	46775.7
Ca 370.602	43576	ppb	41.33	0.1	98952
Cd 226.502	48.4929	ppb	0.2284	0.5	1039.91
Co 228.615	166.739	ppb	1.2088	0.7	866.346
Cr 267.716	334.133	ppb	0.5925	0.2	7833.08
Cu 324.754	273.419	ppb	0.9674	0.4	11056.9
Fe 271.441	293741	ppb	221.605	0.1	241979
K 766.491	27608.7	ppb	72.5484	0.3	752723
Mg 279.078	74114.1	ppb	125.262	0.2	106678
Mn 257.610	7609.66	ppb	7.2688	0.1	832686
Mo 202.032	90.8172	ppb	1.1664	1.3	204.141
Na 330.237	5299.67	ppb	190.173	3.6	164.174
Ni 231.604	369.952	ppb	2.1507	0.6	511.735
Pb 220.353	512.451	ppb	5.3657	1.0	306.147
Sb 206.834	15.1135	ppb	4.3761	29.0	24.7518
Se 196.026	89.6173	ppb	0.8614	1.0	18.8924
Si 288.158	21646.6	ppb	33.4413	0.2	104345

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	107.999	ppb	3.9534	3.7	34.7392
Sr 216.596	294.748	ppb	1.2800	0.4	1324.43
Ti 334.941	3285.85	ppb	4.3686	0.1	393726
Tl 190.794	40.5484	ppb	2.2904	5.6	-1.0315
V 292.401	436.098	ppb	0.7762	0.2	6406.16
Zn 206.200	638.578	ppb	2.4120	0.4	229.845

680-161405-A-96-A (Samp) **12/19/2018, 6:39:08 AM** **Rack 4, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.6927u	0.4085u	1.1363
Al 308.215	125961	126143	126038
As 188.980	52.6220	56.3907	51.2847
B 249.678	68.4795	68.0896	68.9585
Ba 389.178	979.230	978.565	979.832
Be 313.042	6.3928	6.4020	6.3757
Ca 370.602	45439	45503	45472
Cd 226.502	4.0029	4.1370	4.3396
Co 228.615	57.7117	58.9268	57.6791
Cr 267.716	163.998	163.874	163.732
Cu 324.754	186.204	185.453	186.592
Fe 271.441	143796	143792	143635
K 766.491	11747.9	11750.6	11739.0
Mg 279.078	32620.4	32637.1	32609.5
Mn 257.610	1643.95	1645.94	1644.15
Mo 202.032	7.4246	9.1871	6.3962
Na 330.237	1273.94	1275.44	1451.99
Ni 231.604	181.646	182.706	180.261
Pb 220.353	365.885	372.060	368.513
Sb 206.834	-5.7828	-15.6341u	-15.4508u
Se 196.026	7.0653	-6.2683u	15.2575
Si 288.158	17244.3	17237.7	17234.0
Sn 189.925	22.2055	26.0649	22.4432
Sr 216.596	366.104	366.208	364.011
Ti 334.941	399.814	400.119	399.367
Tl 190.794	-4.9592u	-0.4097u	5.6887u
V 292.401	188.775	189.224	190.130
Zn 206.200	873.649	882.387	895.920

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7458	ppb	0.3668	49.2	-30.9777
Al 308.215	126048	ppb	91.3105	0.1	316143
As 188.980	53.4325	ppb	2.6477	5.0	15.6209
B 249.678	68.5092	ppb	0.4352	0.6	218.577
Ba 389.178	979.209	ppb	0.6339	0.1	10882.4
Be 313.042	6.3902	ppb	0.0134	0.2	5162.01
Ca 370.602	45472	ppb	31.78	0.1	103408
Cd 226.502	4.1598	ppb	0.1695	4.1	197.908
Co 228.615	58.1059	ppb	0.7111	1.2	288.517
Cr 267.716	163.868	ppb	0.1329	0.1	3848.19
Cu 324.754	186.083	ppb	0.5793	0.3	7576.21
Fe 271.441	143741	ppb	91.6782	0.1	118424
K 766.491	11745.8	ppb	6.0434	0.1	320392

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	32622.3	ppb	13.8898	0.0	46981.9
Mn 257.610	1644.68	ppb	1.0962	0.1	180130
Mo 202.032	7.6693	ppb	1.4114	18.4	19.2159
Na 330.237	1333.79	ppb	102.366	7.7	76.9298
Ni 231.604	181.538	ppb	1.2259	0.7	249.994
Pb 220.353	368.819	ppb	3.0988	0.8	222.015
Sb 206.834	-12.2892	ppb	5.6355	45.9	9.5757
Se 196.026	5.3515	ppb	10.8648	203.0	2.7436
Si 288.158	17238.6	ppb	5.2425	0.0	83033.9
Sn 189.925	23.5712	ppb	2.1629	9.2	7.3779
Sr 216.596	365.441	ppb	1.2395	0.3	1588.18
Ti 334.941	399.767	ppb	0.3782	0.1	47957.3
Tl 190.794	0.1066	ppb	5.3427	5011.1	-14.7828
V 292.401	189.376	ppb	0.6903	0.4	2780.23
Zn 206.200	883.985	ppb	11.2215	1.3	318.010

680-161405-A-90-A (Samp) **12/19/2018, 6:43:33 AM** **Rack 4, Tube 13**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	3.6024	3.4141	3.4365
Al 308.215	91518.5	91436.9	91214.3
As 188.980	409.322	413.841	398.282
B 249.678	86.4775	87.2135	87.1969
Ba 389.178	3482.61	3481.84	3473.45
Be 313.042	4.9269	4.9363	4.9218
Ca 370.602	84349	84433	84328
Cd 226.502	13.7334	13.5157	13.3685
Co 228.615	52.9165	52.9248	51.2231
Cr 267.716	182.948	183.090	182.925
Cu 324.754	1073.43	1068.29	1080.69
Fe 271.441	144644	144884	144674
K 766.491	11576.4	11556.0	11537.3
Mg 279.078	26958.6	26947.2	26898.7
Mn 257.610	3741.73	3740.53	3736.71
Mo 202.032	4.8135	6.5059	6.9230
Na 330.237	1384.06	865.247u	1225.04
Ni 231.604	157.877	156.028	158.320
Pb 220.353	7025.69	7052.31	7030.90
Sb 206.834	-1.1136	6.6954	7.1652
Se 196.026	25.1392	37.7176	30.8182
Si 288.158	12402.9	12425.2	12407.4
Sn 189.925	169.481	168.710	167.442
Sr 216.596	352.224	352.386	349.912
Ti 334.941	1170.90	1172.78	1170.75
Tl 190.794	2.7441u	-4.1629u	-5.6006u
V 292.401	182.434	182.155	181.558
Zn 206.200	5302.06	5246.58	5226.36

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	3.4843	ppb	0.1029	3.0	73.9863
Al 308.215	91389.9	ppb	157.473	0.2	229265
As 188.980	407.148	ppb	8.0041	2.0	108.959
B 249.678	86.9626	ppb	0.4202	0.5	341.794

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	3479.30	ppb	5.0800	0.1	38624.8
Be 313.042	4.9283	ppb	0.0074	0.1	3950.97
Ca 370.602	84370	ppb	55.81	0.1	192136
Cd 226.502	13.5392	ppb	0.1836	1.4	349.828
Co 228.615	52.3548	ppb	0.9801	1.9	266.975
Cr 267.716	182.987	ppb	0.0895	0.0	4297.12
Cu 324.754	1074.14	ppb	6.2315	0.6	42613.3
Fe 271.441	144734	ppb	130.762	0.1	119241
K 766.491	11556.6	ppb	19.5967	0.2	315234
Mg 279.078	26934.8	ppb	31.8010	0.1	38772.4
Mn 257.610	3739.66	ppb	2.6223	0.1	409167
Mo 202.032	6.0808	ppb	1.1172	18.4	15.6232
Na 330.237	1158.12	ppb	265.805	23.0	61.6552
Ni 231.604	157.408	ppb	1.2155	0.8	216.458
Pb 220.353	7036.30	ppb	14.1062	0.2	4131.00
Sb 206.834	4.2490	ppb	4.6501	109.4	17.0941
Se 196.026	31.2250	ppb	6.2991	20.2	7.8721
Si 288.158	12411.8	ppb	11.8081	0.1	59919.3
Sn 189.925	168.544	ppb	1.0297	0.6	54.3600
Sr 216.596	351.507	ppb	1.3836	0.4	1529.79
Ti 334.941	1171.48	ppb	1.1311	0.1	140351
Tl 190.794	-2.3398	ppb	4.4611	190.7	-15.0482
V 292.401	182.049	ppb	0.4479	0.2	2678.18
Zn 206.200	5258.33	ppb	39.1965	0.7	1892.24

680-161405-A-93-A (Samp) **12/19/2018, 6:47:59 AM** **Rack 4, Tube 14**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0064u	-1.2004u	-0.5640u
Al 308.215	130690	130794	130786
As 188.980	257.164	253.871	256.615
B 249.678	51.1232	51.3609	51.1977
Ba 389.178	2157.14	2154.32	2158.84
Be 313.042	6.9585	6.9431	6.9546
Ca 370.602	31445	31434	31449
Cd 226.502	5.8513	5.9207	6.4066
Co 228.615	113.667	114.530	112.657
Cr 267.716	169.621	170.084	170.168
Cu 324.754	263.007	262.778	262.593
Fe 271.441	238353	238187	238710
K 766.491	16378.4	16370.5	16369.0
Mg 279.078	33483.9	33458.8	33491.7
Mn 257.610	20472.4	20483.1	20506.2
Mo 202.032	19.5267	19.1162	18.8790
Na 330.237	653.244u	444.306u	571.385u
Ni 231.604	160.503	163.690	162.785
Pb 220.353	869.187	879.197	872.945
Sb 206.834	-2.6257	-5.8267	-4.4110
Se 196.026	20.1131	4.0865	-5.9816
Si 288.158	15140.8	15152.2	15151.4
Sn 189.925	27.8999	25.9801	35.1648
Sr 216.596	184.459	184.412	182.594
Ti 334.941	1777.44	1778.34	1781.59

Label	Replicates Concentration		
Tl 190.794	8.0713	0.1901u	2.1709
V 292.401	309.220	307.891	307.905
Zn 206.200	1450.82	1450.06	1450.57

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5860	ppb	0.6037	103.0	-59.0828
Al 308.215	130757	ppb	58.0300	0.0	327955
As 188.980	255.884	ppb	1.7644	0.7	69.2391
B 249.678	51.2273	ppb	0.1216	0.2	6.8319
Ba 389.178	2156.77	ppb	2.2814	0.1	23982.8
Be 313.042	6.9521	ppb	0.0080	0.1	5625.24
Ca 370.602	31443	ppb	8.091	0.0	71642
Cd 226.502	6.0596	ppb	0.3025	5.0	302.256
Co 228.615	113.618	ppb	0.9377	0.8	583.712
Cr 267.716	169.958	ppb	0.2946	0.2	4041.42
Cu 324.754	262.793	ppb	0.2074	0.1	10624.2
Fe 271.441	238416	ppb	267.310	0.1	196407
K 766.491	16372.7	ppb	5.0174	0.0	446493
Mg 279.078	33478.1	ppb	17.1449	0.1	48004.4
Mn 257.610	20487.2	ppb	17.2816	0.1	2240330
Mo 202.032	19.1740	ppb	0.3277	1.7	43.6274
Na 330.237	556.312	ppb	105.281	18.9	44.5180
Ni 231.604	162.326	ppb	1.6421	1.0	223.230
Pb 220.353	873.776	ppb	5.0565	0.6	519.612
Sb 206.834	-4.2878	ppb	1.6040	37.4	15.1089
Se 196.026	6.0727	ppb	13.1602	216.7	4.3987
Si 288.158	15148.1	ppb	6.3883	0.0	73069.8
Sn 189.925	29.6816	ppb	4.8447	16.3	9.3580
Sr 216.596	183.822	ppb	1.0631	0.6	844.650
Ti 334.941	1779.13	ppb	2.1781	0.1	213143
Tl 190.794	3.4774	ppb	4.0998	117.9	-9.6112
V 292.401	308.339	ppb	0.7629	0.2	4537.69
Zn 206.200	1450.48	ppb	0.3848	0.0	522.013

680-161405-A-77-A (Samp) **12/19/2018, 6:52:25 AM** **Rack 4, Tube 15**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.9776u	-0.7786u	-0.0197u
Al 308.215	83084.4	83157.9	83157.2
As 188.980	31.4912	30.9373	28.7992
B 249.678	51.8311	54.7204	53.0508
Ba 389.178	705.995	704.749	704.890
Be 313.042	3.6824	3.6596	3.6715
Ca 370.602	514680	513416	514926
Cd 226.502	1.1033	0.7131	1.0873
Co 228.615	64.4350	64.3054	64.7153
Cr 267.716	129.733	130.100	129.832
Cu 324.754	128.733	129.206	129.514
Fe 271.441	167721	167777	167888
K 766.491	12836.2	12837.4	12851.8
Mg 279.078	70978.2	71014.2	70955.3
Mn 257.610	4987.88	4992.35	4990.00
Mo 202.032	2.6329	1.4356	3.6996

Label	Replicates Concentration		
Na 330.237	593.996u	1248.66	758.230
Ni 231.604	143.920	144.989	144.401
Pb 220.353	44.8632	55.9119	40.7100
Sb 206.834	-5.8323	-4.7722	-13.9697u
Se 196.026	4.8676	-23.9589u	27.1210
Si 288.158	13371.7	13357.0	13354.6
Sn 189.925	14.8226	14.5903	11.6775
Sr 216.596	587.419	587.571	584.851
Ti 334.941	1689.41	1688.09	1688.21
Tl 190.794	-3.0574u	2.6119u	-1.0991u
V 292.401	184.986	185.587	185.757
Zn 206.200	337.283	328.817	337.027

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5920	ppb	0.5055	85.4	-81.6486
Al 308.215	83133.2	ppb	42.2475	0.1	208568
As 188.980	30.4092	ppb	1.4216	4.7	9.6018
B 249.678	53.2008	ppb	1.4505	2.7	91.3126
Ba 389.178	705.211	ppb	0.6822	0.1	7887.07
Be 313.042	3.6712	ppb	0.0114	0.3	2974.83
Ca 370.602	514340	ppb	810.2	0.2	1172211
Cd 226.502	0.9679	ppb	0.2208	22.8	162.124
Co 228.615	64.4852	ppb	0.2095	0.3	333.685
Cr 267.716	129.888	ppb	0.1899	0.1	3070.25
Cu 324.754	129.151	ppb	0.3937	0.3	5335.60
Fe 271.441	167795	ppb	84.9022	0.1	138237
K 766.491	12841.8	ppb	8.7005	0.1	350262
Mg 279.078	70982.6	ppb	29.7353	0.0	102215
Mn 257.610	4990.08	ppb	2.2364	0.0	546127
Mo 202.032	2.5894	ppb	1.1326	43.7	7.3961
Na 330.237	866.963	ppb	340.609	39.3	61.9246
Ni 231.604	144.437	ppb	0.5349	0.4	198.412
Pb 220.353	47.1617	ppb	7.8573	16.7	34.1332
Sb 206.834	-8.1914	ppb	5.0321	61.4	11.8854
Se 196.026	2.6765	ppb	25.6103	956.8	2.4813
Si 288.158	13361.1	ppb	9.2546	0.1	64485.8
Sn 189.925	13.6968	ppb	1.7526	12.8	4.1778
Sr 216.596	586.614	ppb	1.5284	0.3	2529.05
Ti 334.941	1688.57	ppb	0.7321	0.0	202432
Tl 190.794	-0.5149	ppb	2.8794	559.2	-14.6474
V 292.401	185.444	ppb	0.4053	0.2	2737.64
Zn 206.200	334.376	ppb	4.8157	1.4	120.263

680-161405-A-74-A (Samp) **12/19/2018, 6:56:51 AM** **Rack 4, Tube 16**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	2.3132	1.6508	2.1208
Al 308.215	109676	109984	109629
As 188.980	403.039	403.105	410.852
B 249.678	63.2688	60.8607	62.7157
Ba 389.178	1729.90	1724.49	1721.80
Be 313.042	5.6781	5.7248	5.7011
Ca 370.602	51314	51303	51310

Label	Replicates Concentration		
Cd 226.502	7.9010	8.1115	8.0645
Co 228.615	72.2142	72.4234	71.0731
Cr 267.716	172.148	171.887	172.439
Cu 324.754	323.057	325.199	324.381
Fe 271.441	204899	204707	204994
K 766.491	8024.52	8062.14	8031.84
Mg 279.078	29504.9	29499.6	29561.4
Mn 257.610	7888.46	7878.21	7867.29
Mo 202.032	11.3179	10.5096	7.9492
Na 330.237	357.473u	685.323u	386.791u
Ni 231.604	174.755	175.168	173.459
Pb 220.353	3941.72	3944.96	3960.62
Sb 206.834	-0.4553	-4.4196	-1.7594
Se 196.026	17.1337	4.6218	16.3068
Si 288.158	14858.3	14903.2	14892.6
Sn 189.925	35.3311	35.0483	31.6777
Sr 216.596	154.055	154.591	153.446
Ti 334.941	1324.97	1328.24	1329.31
Tl 190.794	3.4259u	6.3422u	2.9727u
V 292.401	240.699	241.862	240.028
Zn 206.200	3908.27	3855.99	3879.41

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.0283	ppb	0.3408	16.8	16.9209
Al 308.215	109763	ppb	192.862	0.2	275325
As 188.980	405.665	ppb	4.4922	1.1	108.695
B 249.678	62.2817	ppb	1.2613	2.0	115.082
Ba 389.178	1725.40	ppb	4.1264	0.2	19180.5
Be 313.042	5.7013	ppb	0.0233	0.4	4589.34
Ca 370.602	51309	ppb	5.954	0.0	116730
Cd 226.502	8.0257	ppb	0.1105	1.4	307.378
Co 228.615	71.9035	ppb	0.7268	1.0	368.607
Cr 267.716	172.158	ppb	0.2762	0.2	4061.51
Cu 324.754	324.212	ppb	1.0805	0.3	13039.9
Fe 271.441	204867	ppb	146.211	0.1	168771
K 766.491	8039.50	ppb	19.9457	0.2	219379
Mg 279.078	29521.9	ppb	34.2381	0.1	42449.5
Mn 257.610	7877.99	ppb	10.5879	0.1	861685
Mo 202.032	9.9256	ppb	1.7587	17.7	23.3319
Na 330.237	476.529	ppb	181.414	38.1	40.8285
Ni 231.604	174.461	ppb	0.8917	0.5	240.139
Pb 220.353	3949.10	ppb	10.1060	0.3	2321.62
Sb 206.834	-2.2114	ppb	2.0205	91.4	15.4067
Se 196.026	12.6875	ppb	6.9973	55.2	4.5481
Si 288.158	14884.7	ppb	23.4370	0.2	71783.2
Sn 189.925	34.0190	ppb	2.0326	6.0	10.7636
Sr 216.596	154.031	ppb	0.5732	0.4	710.367
Ti 334.941	1327.51	ppb	2.2638	0.2	159046
Tl 190.794	4.2470	ppb	1.8286	43.1	-12.9130
V 292.401	240.863	ppb	0.9282	0.4	3547.52
Zn 206.200	3881.22	ppb	26.1831	0.7	1396.74

680-161405-A-89-A (Samp) **12/19/2018, 7:01:17 AM** **Rack 4, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2586u	0.3088u	0.5103u
Al 308.215	194798	194834	195259
As 188.980	53.5943	44.6030	63.1198
B 249.678	90.1667	88.3513	85.1924
Ba 389.178	1892.06	1895.47	1900.35
Be 313.042	9.6855	9.7071	9.7160
Ca 370.602	39113	39123	39209
Cd 226.502	1.6333	1.7638	1.8942
Co 228.615	140.945	142.584	140.846
Cr 267.716	266.036	265.882	266.685
Cu 324.754	228.322	231.571	227.563
Fe 271.441	337368	337312	337964
K 766.491	23796.5	23833.4	23873.7
Mg 279.078	68819.5	68869.9	68910.3
Mn 257.610	10049.0	10048.6	10076.1
Mo 202.032	6.1476	7.2590	8.0610
Na 330.237	680.602u	515.919u	743.503u
Ni 231.604	312.977	310.686	307.514
Pb 220.353	98.6698	114.588	91.9155
Sb 206.834	-18.3001u	-18.6190u	-16.4782
Se 196.026	12.5089	15.4090	29.1675
Si 288.158	20862.6	20845.5	20887.5
Sn 189.925	17.1838	13.7803	6.5614
Sr 216.596	169.862	170.098	171.173
Ti 334.941	2504.92	2506.70	2509.64
Tl 190.794	2.1363u	3.4103u	0.5720u
V 292.401	366.664	366.352	367.849
Zn 206.200	610.364	619.542	622.592

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3593	ppb	0.1332	37.1	-70.8449
Al 308.215	194964	ppb	256.514	0.1	488911
As 188.980	53.7724	ppb	9.2597	17.2	16.0997
B 249.678	87.9035	ppb	2.5172	2.9	153.916
Ba 389.178	1895.96	ppb	4.1660	0.2	21155.1
Be 313.042	9.7028	ppb	0.0157	0.2	7916.33
Ca 370.602	39148	ppb	53.13	0.1	88789
Cd 226.502	1.7638	ppb	0.1304	7.4	312.229
Co 228.615	141.458	ppb	0.9759	0.7	733.957
Cr 267.716	266.201	ppb	0.4263	0.2	6265.81
Cu 324.754	229.152	ppb	2.1292	0.9	9319.43
Fe 271.441	337548	ppb	361.212	0.1	278058
K 766.491	23834.5	ppb	38.6204	0.2	649860
Mg 279.078	68866.6	ppb	45.4719	0.1	99087.0
Mn 257.610	10057.9	ppb	15.7465	0.2	1100352
Mo 202.032	7.1559	ppb	0.9608	13.4	14.9895
Na 330.237	646.675	ppb	117.524	18.2	38.4764
Ni 231.604	310.392	ppb	2.7432	0.9	428.992
Pb 220.353	101.724	ppb	11.6409	11.4	65.7477
Sb 206.834	-17.7991	ppb	1.1550	6.5	11.5538
Se 196.026	19.0285	ppb	8.8996	46.8	5.5414
Si 288.158	20865.2	ppb	21.1631	0.1	100538

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	12.5085	ppb	5.4242	43.4	3.7925
Sr 216.596	170.378	ppb	0.6984	0.4	811.681
Ti 334.941	2507.09	ppb	2.3817	0.1	300447
Tl 190.794	2.0395	ppb	1.4216	69.7	-17.7888
V 292.401	366.955	ppb	0.7896	0.2	5415.26
Zn 206.200	617.499	ppb	6.3650	1.0	222.346

680-161405-A-83-A (Samp) **12/19/2018, 7:05:43 AM** **Rack 4, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.3428u	-1.2839u	-1.6120u
Al 308.215	145541	145818	145663
As 188.980	30.9867	36.7875	30.6033
B 249.678	48.1184	46.3651	48.6949
Ba 389.178	1954.95	1952.05	1954.20
Be 313.042	6.1496	6.1433	6.1350
Ca 370.602	29262	29287	29255
Cd 226.502	4.1498	4.0835	3.9510
Co 228.615	81.7687	82.2492	81.8297
Cr 267.716	171.817	171.775	171.478
Cu 324.754	128.133	128.981	128.914
Fe 271.441	206610	206528	205901
K 766.491	11256.7	11284.1	11248.5
Mg 279.078	36309.6	36358.2	36322.1
Mn 257.610	26370.6	26405.5	26350.7
Mo 202.032	7.5538	7.0197	8.1493
Na 330.237	99.7234u	628.457u	652.858u
Ni 231.604	197.628	199.190	198.378
Pb 220.353	66.0953	53.9481	66.3301
Sb 206.834	-12.7608u	-8.0574	1.1185
Se 196.026	5.8209	3.5595	-0.2189
Si 288.158	17366.1	17374.6	17302.8
Sn 189.925	19.8098	15.0847	21.4536
Sr 216.596	119.300	118.465	121.453
Ti 334.941	1580.63	1577.57	1574.27
Tl 190.794	-0.3504	3.8092	-8.8603u
V 292.401	248.113	247.217	248.000
Zn 206.200	501.392	515.268	504.500

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.4129	ppb	0.1749	12.4	-68.5234
Al 308.215	145674	ppb	139.104	0.1	365345
As 188.980	32.7925	ppb	3.4651	10.6	10.3034
B 249.678	47.7261	ppb	1.2135	2.5	15.6704
Ba 389.178	1953.74	ppb	1.5053	0.1	21721.9
Be 313.042	6.1426	ppb	0.0073	0.1	4952.18
Ca 370.602	29268	ppb	16.83	0.1	66876
Cd 226.502	4.0615	ppb	0.1012	2.5	245.498
Co 228.615	81.9492	ppb	0.2616	0.3	421.618
Cr 267.716	171.690	ppb	0.1850	0.1	4090.58
Cu 324.754	128.676	ppb	0.4715	0.4	5325.51
Fe 271.441	206347	ppb	388.115	0.2	169991
K 766.491	11263.1	ppb	18.6676	0.2	307236

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	36330.0	ppb	25.2205	0.1	52043.5
Mn 257.610	26375.6	ppb	27.7734	0.1	2884096
Mo 202.032	7.5743	ppb	0.5651	7.5	18.0108
Na 330.237	460.346	ppb	312.547	67.9	47.3504
Ni 231.604	198.398	ppb	0.7812	0.4	273.401
Pb 220.353	62.1245	ppb	7.0819	11.4	43.9600
Sb 206.834	-6.5666	ppb	7.0587	107.5	13.5160
Se 196.026	3.0538	ppb	3.0515	99.9	4.5013
Si 288.158	17347.8	ppb	39.2680	0.2	83613.8
Sn 189.925	18.7827	ppb	3.3063	17.6	5.8259
Sr 216.596	119.740	ppb	1.5416	1.3	565.680
Ti 334.941	1577.49	ppb	3.1795	0.2	189007
Tl 190.794	-1.8005	ppb	6.4581	358.7	-8.4130
V 292.401	247.777	ppb	0.4883	0.2	3649.80
Zn 206.200	507.053	ppb	7.2816	1.4	182.445

680-161405-A-88-A (Samp) **12/19/2018, 7:10:10 AM** **Rack 4, Tube 19**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.2689u	-1.8821u	-2.1133u
Al 308.215	203184	203435	203590
As 188.980	34.8701	29.0691	36.5692
B 249.678	49.2300	45.7632	46.9721
Ba 389.178	1550.01	1548.89	1551.43
Be 313.042	10.4205	10.4372	10.4870
Ca 370.602	30407	30397	30469
Cd 226.502	3.2169	3.2793	3.9179
Co 228.615	98.2318	96.9923	95.9456
Cr 267.716	243.058	242.432	244.595
Cu 324.754	101.089	102.001	101.699
Fe 271.441	258158	258086	258795
K 766.491	16482.9	16498.1	16539.3
Mg 279.078	46676.0	46647.3	46781.8
Mn 257.610	31265.4x	31235.3x	31381.3x
Mo 202.032	9.6609	10.8106	7.2800
Na 330.237	328.435u	397.929u	381.147u
Ni 231.604	212.878	215.206	218.266
Pb 220.353	73.2792	72.8407	69.8919
Sb 206.834	-11.4389	-2.1502	-9.1949
Se 196.026	29.5067	3.6253	16.8309
Si 288.158	21688.2	21669.7	21772.7
Sn 189.925	15.0654	17.2616	5.8161
Sr 216.596	177.892	179.572	180.607
Ti 334.941	1843.71	1844.76	1849.38
Tl 190.794	-7.0024u	-10.2166u	-4.5458
V 292.401	315.662	316.499	318.527
Zn 206.200	682.206	688.110	681.179

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.7548b	ppb	0.4364	24.9	-81.8788
Al 308.215	203403b	ppb	205.106	0.1	510062
As 188.980	33.5028b	ppb	3.9326	11.7	10.5880
B 249.678	47.3218b	ppb	1.7597	3.7	-39.4801

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1550.11b	ppb	1.2720	0.1	17269.1
Be 313.042	10.4482b	ppb	0.0346	0.3	8532.05
Ca 370.602	30424b	ppb	39.18	0.1	69502
Cd 226.502	3.4714b	ppb	0.3880	11.2	279.115
Co 228.615	97.0565b	ppb	1.1445	1.2	501.816
Cr 267.716	243.361b	ppb	1.1131	0.5	5771.14
Cu 324.754	101.596b	ppb	0.4649	0.5	4268.81
Fe 271.441	258347b	ppb	390.325	0.2	212822
K 766.491	16506.7b	ppb	29.1945	0.2	450147
Mg 279.078	46701.7b	ppb	70.8302	0.2	66918.4
Mn 257.610	31294.0xb	ppb	77.0965	0.2	3421933
Mo 202.032	9.2505b	ppb	1.8007	19.5	20.9580
Na 330.237	369.170b	ppb	36.2621	9.8	39.3246
Ni 231.604	215.450b	ppb	2.7022	1.3	297.093
Pb 220.353	72.0040b	ppb	1.8422	2.6	49.5937
Sb 206.834	-7.5947b	ppb	4.8467	63.8	14.3588
Se 196.026	16.6543b	ppb	12.9416	77.7	7.3993
Si 288.158	21710.2b	ppb	54.9365	0.3	104562
Sn 189.925	12.7144b	ppb	6.0742	47.8	3.8593
Sr 216.596	179.357b	ppb	1.3703	0.8	830.464
Ti 334.941	1845.95b	ppb	3.0185	0.2	221194
Tl 190.794	-7.2549b	ppb	2.8438	39.2	-10.7018
V 292.401	316.896b	ppb	1.4735	0.5	4665.82
Zn 206.200	683.832b	ppb	3.7405	0.5	246.112

680-161405-A-82-A (Samp) **12/19/2018, 7:14:36 AM** **Rack 4, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4678u	0.7197u	-0.1623u
Al 308.215	118533	118447	118529
As 188.980	44.8463	30.7483	40.9672
B 249.678	51.4852	52.6037	52.8870
Ba 389.178	1038.83	1037.77	1039.44
Be 313.042	5.6351	5.6365	5.6619
Ca 370.602	23691	23680	23696
Cd 226.502	0.8030	0.7902	0.4316
Co 228.615	66.0890	67.0556	66.6971
Cr 267.716	162.614	162.320	162.359
Cu 324.754	152.627	155.859	152.865
Fe 271.441	208947	208952	208701
K 766.491	12145.1	12130.9	12133.9
Mg 279.078	35710.6	35730.1	35747.2
Mn 257.610	4211.91	4210.98	4210.65
Mo 202.032	4.0654	3.4689	2.5388
Na 330.237	278.924u	197.965u	163.197u
Ni 231.604	166.128	165.929	165.153
Pb 220.353	56.4693	53.6775	50.9665
Sb 206.834	-9.0926	-0.7507	-12.7326u
Se 196.026	6.7817	11.1511	-15.0923u
Si 288.158	15556.2	15580.9	15569.6
Sn 189.925	12.0072	16.2933	14.9458
Sr 216.596	92.8486	92.3350	91.4543
Ti 334.941	1788.12	1786.67	1789.39

Label	Replicates Concentration		
Tl 190.794	12.4460u	18.0445	3.8237u
V 292.401	251.799	251.998	252.999
Zn 206.200	368.223	364.629	369.672

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0299	ppb	0.6166	2064.7	-66.8437
Al 308.215	118503	ppb	48.5017	0.0	297235
As 188.980	38.8539	ppb	7.2827	18.7	11.9108
B 249.678	52.3253	ppb	0.7412	1.4	44.0541
Ba 389.178	1038.68	ppb	0.8495	0.1	11566.3
Be 313.042	5.6445	ppb	0.0150	0.3	4539.58
Ca 370.602	23689	ppb	8.384	0.0	53701
Cd 226.502	0.6749	ppb	0.2109	31.2	190.767
Co 228.615	66.6139	ppb	0.4887	0.7	346.587
Cr 267.716	162.431	ppb	0.1598	0.1	3828.86
Cu 324.754	153.784	ppb	1.8013	1.2	6316.57
Fe 271.441	208867	ppb	143.358	0.1	172066
K 766.491	12136.6	ppb	7.5085	0.1	331043
Mg 279.078	35729.3	ppb	18.2875	0.1	51430.7
Mn 257.610	4211.18	ppb	0.6512	0.0	460831
Mo 202.032	3.3577	ppb	0.7693	22.9	8.4703
Na 330.237	213.362	ppb	59.3802	27.8	40.6347
Ni 231.604	165.737	ppb	0.5151	0.3	228.019
Pb 220.353	53.7044	ppb	2.7515	5.1	37.6397
Sb 206.834	-7.5253	ppb	6.1428	81.6	13.1463
Se 196.026	0.9468	ppb	14.0611	1485.1	1.9440
Si 288.158	15568.9	ppb	12.3319	0.1	75086.3
Sn 189.925	14.4155	ppb	2.1917	15.2	4.4106
Sr 216.596	92.2126	ppb	0.7052	0.8	450.371
Ti 334.941	1788.06	ppb	1.3569	0.1	214221
Tl 190.794	11.4381	ppb	7.1638	62.6	-11.4574
V 292.401	252.265	ppb	0.6429	0.3	3717.56
Zn 206.200	367.508	ppb	2.5964	0.7	132.234

Cont Calib Verif (CCV) **12/19/2018, 7:19:02 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	493.288	498.379	497.538
Al 308.215	9849.64	9864.00	9845.79
As 188.980	497.511	516.935	513.972
B 249.678	509.535	511.199	508.864
Ba 389.178	481.381	479.098	478.134
Be 313.042	533.519	533.850	532.032
Ca 370.602	10100	10096	10061
Cd 226.502	517.845	518.465	515.278
Co 228.615	509.883	508.775	507.334
Cr 267.716	507.558	509.044	506.618
Cu 324.754	487.254	490.235	492.248
Fe 271.441	10177.0	10202.0	10138.3
K 766.491	9695.10	9700.43	9665.37
Mg 279.078	10319.0	10321.4	10290.6
Mn 257.610	499.568	500.137	498.903
Mo 202.032	497.025	501.442	499.217

Label	Replicates Concentration		
Na 330.237	10302.5	10301.2	10422.3
Ni 231.604	502.972	503.726	506.723
Pb 220.353	499.164	499.558	482.582
Sb 206.834	501.394	487.195	485.550
Se 196.026	470.639	488.880	510.985
Si 288.158	5342.28	5342.41	5315.55
Sn 189.925	484.354	486.381	494.501
Sr 216.596	508.652	509.621	507.332
Ti 334.941	506.679	506.268	504.216
Tl 190.794	475.898	476.853	483.807
V 292.401	494.352	493.881	492.819
Zn 206.200	996.425	992.334	1009.59

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	496.402	ppb	2.7292	0.5	18366.8	99.28038
Al 308.215	9853.14	ppb	9.5991	0.1	24885.0	98.53143
As 188.980	509.473	ppb	10.4645	2.1	135.563	101.89458
B 249.678	509.866	ppb	1.2024	0.2	3324.04	101.97316
Ba 389.178	479.537	ppb	1.6675	0.3	5273.41	95.90749
Be 313.042	533.133	ppb	0.9682	0.2	442736	106.62669
Ca 370.602	10086	ppb	21.51	0.2	23032	100.85928
Cd 226.502	517.196	ppb	1.6898	0.3	8463.04	103.43915
Co 228.615	508.664	ppb	1.2785	0.3	2546.89	101.73278
Cr 267.716	507.740	ppb	1.2233	0.2	11812.1	101.54803
Cu 324.754	489.912	ppb	2.5127	0.5	19540.4	97.98248
Fe 271.441	10172.4	ppb	32.0908	0.3	8436.98	101.67358
K 766.491	9686.97	ppb	18.8924	0.2	264279	96.86967
Mg 279.078	10310.3	ppb	17.1534	0.2	14876.4	103.10323
Mn 257.610	499.536	ppb	0.6175	0.1	54706.7	99.90716
Mo 202.032	499.228	ppb	2.2084	0.4	1128.68	99.84563
Na 330.237	10342.0	ppb	69.5491	0.7	326.477	103.42034
Ni 231.604	504.474	ppb	1.9841	0.4	698.291	100.89472
Pb 220.353	493.768	ppb	9.6896	2.0	295.713	98.75358
Sb 206.834	491.380	ppb	8.7117	1.8	228.867	98.27596
Se 196.026	490.168	ppb	20.2042	4.1	95.4235	98.03357
Si 288.158	5333.41	ppb	15.4695	0.3	26015.0	106.66821
Sn 189.925	488.412	ppb	5.3697	1.1	158.022	97.68238
Sr 216.596	508.535	ppb	1.1491	0.2	2149.38	101.70695
Ti 334.941	505.721	ppb	1.3193	0.3	60563.2	101.14419
Tl 190.794	478.853	ppb	4.3173	0.9	189.548	95.77058
V 292.401	493.684	ppb	0.7853	0.2	7125.01	98.73674
Zn 206.200	999.450	ppb	9.0177	0.9	359.250	99.94501

Cont Calib Blank (CCB) **12/19/2018, 7:23:27 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0408	0.2209	-0.2586u
Al 308.215	-3.5982u	-2.7795u	-0.0591u
As 188.980	3.8975	-1.9617u	3.3471
B 249.678	3.8241	3.9576	4.6285
Ba 389.178	1.4962	2.0888	1.1240
Be 313.042	0.0509	0.0392	0.0444
Ca 370.602	7.251	-0.8949u	0.0728

Label	Replicates Concentration		
Cd 226.502	0.1103	-0.0544u	0.1257
Co 228.615	-0.9754u	-0.0267u	-0.7334u
Cr 267.716	-0.5439u	-0.2319u	0.0383
Cu 324.754	0.3436	-0.1284u	-0.0255u
Fe 271.441	17.6102	6.1250	16.3202
K 766.491	4.6706	4.6935	5.1092
Mg 279.078	3.8589	-2.8731u	0.2384
Mn 257.610	0.1922	0.2411	0.1927
Mo 202.032	0.1547	-0.4223u	0.8261
Na 330.237	-19.8343u	-173.745u	-20.3944u
Ni 231.604	1.1444	1.1748	0.2597
Pb 220.353	-4.2020u	-3.5183u	0.9920
Sb 206.834	-2.2445u	-0.9131u	-11.4679u
Se 196.026	5.2466	-7.8649u	-1.0651u
Si 288.158	17.2476	15.3828	16.0842
Sn 189.925	2.3987	5.3613	-3.4414u
Sr 216.596	-0.1058u	0.0082	-0.0939u
Ti 334.941	0.4253	0.3832	0.4600
Tl 190.794	-0.4733u	-2.0625u	-1.4918u
V 292.401	-0.0573u	0.1372	0.5178
Zn 206.200	-0.8292u	-1.5153u	0.2022

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0010	ppb	0.2422	24056.4	-28.9743	0.00101
Al 308.215	-2.1456	ppb	1.8528	86.4	156.924	-2.14561
As 188.980	1.7609	ppb	3.2356	183.7	1.7121	1.76094
B 249.678	4.1367	ppb	0.4311	10.4	-70.0042	4.13672
Ba 389.178	1.5696	ppb	0.4866	31.0	-46.6368	1.56965
Be 313.042	0.0448	ppb	0.0059	13.1	-123.656	0.04483
Ca 370.602	2.143	ppb	4.450	207.7	42.14	2.14306
Cd 226.502	0.0605	ppb	0.0998	165.0	13.0761	0.06050
Co 228.615	-0.5785	ppb	0.4930	85.2	-14.9509	-0.57849
Cr 267.716	-0.2459	ppb	0.2913	118.5	17.8135	-0.24586
Cu 324.754	0.0632	ppb	0.2482	392.5	204.766	0.06324
Fe 271.441	13.3518	ppb	6.2918	47.1	38.5997	13.35179
K 766.491	4.8244	ppb	0.2469	5.1	399.710	4.82444
Mg 279.078	0.4080	ppb	3.3692	825.7	31.6802	0.40804
Mn 257.610	0.2086	ppb	0.0281	13.5	44.1765	0.20864
Mo 202.032	0.1862	ppb	0.6248	335.6	4.6460	0.18617
Na 330.237	-71.3246	ppb	88.6992	124.4	55.8734	-71.32458
Ni 231.604	0.8597	ppb	0.5198	60.5	-1.0718	0.85966
Pb 220.353	-2.2428	ppb	2.8222	125.8	5.3628	-2.24277
Sb 206.834	-4.8751	ppb	5.7481	117.9	9.4347	-4.87514
Se 196.026	-1.2278	ppb	6.5573	534.1	1.7921	-1.22781
Si 288.158	16.2382	ppb	0.9419	5.8	361.544	16.23817
Sn 189.925	1.4395	ppb	4.4790	311.1	0.2055	1.43954
Sr 216.596	-0.0638	ppb	0.0626	98.2	9.4623	-0.06383
Ti 334.941	0.4228	ppb	0.0385	9.1	15.1420	0.42284
Tl 190.794	-1.3425	ppb	0.8051	60.0	-10.8315	-1.34254
V 292.401	0.1992	ppb	0.2925	146.8	0.3512	0.19925
Zn 206.200	-0.7141	ppb	0.8645	121.1	-0.5206	-0.71413

680-161405-A-95-A (Samp) **12/19/2018, 7:27:51 AM** **Rack 4, Tube 21**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0051u	-0.4309u	0.0124u
Al 308.215	80946.9	80991.8	81198.2
As 188.980	76.0989	75.0508	82.7447
B 249.678	47.0567	49.2127	49.2023
Ba 389.178	1313.24	1310.67	1311.68
Be 313.042	4.4093	4.3785	4.3920
Ca 370.602	41744	41734	41741
Cd 226.502	1.2370	1.2699	1.4370
Co 228.615	61.8629	60.1579	60.8858
Cr 267.716	126.055	125.867	126.026
Cu 324.754	195.778	197.508	198.934
Fe 271.441	179464	179522	179992
K 766.491	14747.2	14761.2	14807.8
Mg 279.078	30367.5	30319.9	30387.3
Mn 257.610	4390.88	4388.72	4396.46
Mo 202.032	3.3476	2.9712	5.0465
Na 330.237	829.383	523.585u	659.059u
Ni 231.604	143.438	138.611	140.640
Pb 220.353	819.614	809.979	814.351
Sb 206.834	-7.9175	-10.9380u	-6.9694
Se 196.026	21.9850	-6.1958u	10.9203
Si 288.158	11516.9	11520.5	11542.5
Sn 189.925	19.3611	16.8350	23.1478
Sr 216.596	174.817	175.675	173.623
Ti 334.941	1614.09	1615.99	1617.16
Tl 190.794	-4.0695u	6.2137u	3.3406u
V 292.401	212.378	212.004	212.638
Zn 206.200	1001.34	998.438	1016.65

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1412	ppb	0.2511	177.8	-66.5047
Al 308.215	81045.6	ppb	134.056	0.2	203337
As 188.980	77.9648	ppb	4.1726	5.4	22.1760
B 249.678	48.4905	ppb	1.2418	2.6	47.6848
Ba 389.178	1311.86	ppb	1.2921	0.1	14583.6
Be 313.042	4.3933	ppb	0.0154	0.4	3500.50
Ca 370.602	41740	ppb	5.272	0.0	94910
Cd 226.502	1.3146	ppb	0.1072	8.2	176.684
Co 228.615	60.9689	ppb	0.8555	1.4	315.619
Cr 267.716	125.983	ppb	0.1009	0.1	2979.51
Cu 324.754	197.407	ppb	1.5804	0.8	8031.11
Fe 271.441	179660	ppb	289.752	0.2	148009
K 766.491	14772.1	ppb	31.7498	0.2	402870
Mg 279.078	30358.2	ppb	34.6281	0.1	43698.9
Mn 257.610	4392.02	ppb	3.9970	0.1	480547
Mo 202.032	3.7885	ppb	1.1057	29.2	9.9066
Na 330.237	670.675	ppb	153.229	22.8	54.2531
Ni 231.604	140.897	ppb	2.4239	1.7	193.496
Pb 220.353	814.648	ppb	4.8246	0.6	484.096
Sb 206.834	-8.6083	ppb	2.0725	24.1	11.9288
Se 196.026	8.9032	ppb	14.1983	159.5	3.5711
Si 288.158	11526.6	ppb	13.8867	0.1	55679.4

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	19.7813	ppb	3.1773	16.1	6.1496
Sr 216.596	174.705	ppb	1.0305	0.6	791.754
Ti 334.941	1615.75	ppb	1.5451	0.1	193566
Tl 190.794	1.8282	ppb	5.3058	290.2	-14.3319
V 292.401	212.340	ppb	0.3187	0.2	3130.57
Zn 206.200	1005.47	ppb	9.7839	1.0	361.796

680-161405-A-94-A (Samp) **12/19/2018, 7:32:17 AM** **Rack 4, Tube 22**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1764u	-0.3498u	-0.3268u
Al 308.215	148140	147991	148050
As 188.980	72.4183	69.2163	68.1709
B 249.678	62.9961	62.4894	60.9384
Ba 389.178	1774.68	1771.45	1771.06
Be 313.042	7.1861	7.1728	7.1845
Ca 370.602	24938	24940	24959
Cd 226.502	2.5839	2.8540	2.7920
Co 228.615	84.1851	83.7372	83.3705
Cr 267.716	197.737	197.599	197.348
Cu 324.754	203.892	203.197	204.490
Fe 271.441	236932	237106	236911
K 766.491	22109.1	22118.0	22098.8
Mg 279.078	36154.8	36184.9	36214.4
Mn 257.610	7673.50	7693.85	7685.31
Mo 202.032	8.3150	4.7385	7.1887
Na 330.237	481.542u	249.962u	495.161u
Ni 231.604	189.351	185.932	190.791
Pb 220.353	273.392	289.594	289.558
Sb 206.834	-18.2564u	-1.8297	-8.8201
Se 196.026	1.4247	2.6559	14.6516
Si 288.158	17172.1	17168.7	17150.8
Sn 189.925	16.2138	22.7955	18.7029
Sr 216.596	119.042	121.368	121.463
Ti 334.941	1833.89	1833.49	1831.71
Tl 190.794	-2.2168u	8.5832u	9.6117u
V 292.401	305.174	302.131	304.005
Zn 206.200	696.119	700.037	711.501

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2844	ppb	0.0942	33.1	-76.7292
Al 308.215	148060	ppb	75.4829	0.1	371330
As 188.980	69.9352	ppb	2.2130	3.2	20.1652
B 249.678	62.1413	ppb	1.0721	1.7	81.8941
Ba 389.178	1772.40	ppb	1.9897	0.1	19719.1
Be 313.042	7.1811	ppb	0.0072	0.1	5817.57
Ca 370.602	24945	ppb	11.60	0.0	56574
Cd 226.502	2.7433	ppb	0.1415	5.2	247.782
Co 228.615	83.7643	ppb	0.4079	0.5	434.141
Cr 267.716	197.562	ppb	0.1974	0.1	4655.07
Cu 324.754	203.860	ppb	0.6470	0.3	8298.48
Fe 271.441	236983	ppb	107.388	0.0	195225
K 766.491	22108.6	ppb	9.6030	0.0	602822

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	36184.7	ppb	29.8034	0.1	52041.9
Mn 257.610	7684.22	ppb	10.2166	0.1	840571
Mo 202.032	6.7474	ppb	1.8287	27.1	15.6570
Na 330.237	408.888	ppb	137.803	33.7	42.3655
Ni 231.604	188.691	ppb	2.4958	1.3	259.908
Pb 220.353	284.181	ppb	9.3435	3.3	172.758
Sb 206.834	-9.6354	ppb	8.2436	85.6	12.8684
Se 196.026	6.2441	ppb	7.3071	117.0	3.1993
Si 288.158	17163.9	ppb	11.4227	0.1	82743.6
Sn 189.925	19.2374	ppb	3.3232	17.3	5.9733
Sr 216.596	120.625	ppb	1.3710	1.1	577.218
Ti 334.941	1833.03	ppb	1.1610	0.1	219609
Tl 190.794	5.3261	ppb	6.5525	123.0	-13.6792
V 292.401	303.770	ppb	1.5354	0.5	4471.57
Zn 206.200	702.553	ppb	7.9932	1.1	252.837

680-161405-A-87-A (Samp) **12/19/2018, 7:36:43 AM** **Rack 4, Tube 23**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0844	-1.3218u	-1.3402u
Al 308.215	145637	146049	145951
As 188.980	336.747	347.029	336.666
B 249.678	49.8262	49.4225	50.4218
Ba 389.178	2154.81	2160.47	2155.20
Be 313.042	8.6086	8.6320	8.5994
Ca 370.602	43355	43481	43423
Cd 226.502	6.5886	6.1665	6.4748
Co 228.615	99.7703	100.740	98.8979
Cr 267.716	167.642	167.851	167.300
Cu 324.754	340.057	339.286	340.893
Fe 271.441	235159	235568	235320
K 766.491	13315.1	13339.7	13331.9
Mg 279.078	32272.8	32339.8	32331.6
Mn 257.610	28246.5x	28211.6x	28192.8x
Mo 202.032	11.0452	11.3858	10.7672
Na 330.237	354.519u	594.585u	570.563u
Ni 231.604	169.411	169.843	164.979
Pb 220.353	1102.91	1113.83	1103.22
Sb 206.834	0.6621	-7.4463	1.3148
Se 196.026	-1.8999	13.7487	13.9421
Si 288.158	18744.6	18772.1	18772.8
Sn 189.925	114.404	101.672	111.578
Sr 216.596	212.072	211.433	211.522
Ti 334.941	1547.03	1548.68	1548.35
Tl 190.794	-2.3016	0.4056	-2.9735
V 292.401	293.537	293.601	293.491
Zn 206.200	1137.07	1156.29	1148.25

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9155b	ppb	0.7198	78.6	-52.6309
Al 308.215	145879b	ppb	215.201	0.1	365863
As 188.980	340.147b	ppb	5.9597	1.8	91.4693
B 249.678	49.8902b	ppb	0.5027	1.0	0.9748

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	2156.83b	ppb	3.1608	0.1	23981.3
Be 313.042	8.6133b	ppb	0.0168	0.2	7007.23
Ca 370.602	43420b	ppb	62.80	0.1	99103
Cd 226.502	6.4100b	ppb	0.2184	3.4	306.379
Co 228.615	99.8029b	ppb	0.9217	0.9	511.960
Cr 267.716	167.598b	ppb	0.2781	0.2	4002.57
Cu 324.754	340.079b	ppb	0.8040	0.2	13672.6
Fe 271.441	235349b	ppb	205.931	0.1	193880
K 766.491	13328.9b	ppb	12.5750	0.1	363537
Mg 279.078	32314.7b	ppb	36.5605	0.1	46239.3
Mn 257.610	28217.0xb	ppb	27.2327	0.1	3085420
Mo 202.032	11.0660b	ppb	0.3098	2.8	25.4131
Na 330.237	506.555b	ppb	132.214	26.1	44.4724
Ni 231.604	168.078b	ppb	2.6923	1.6	231.242
Pb 220.353	1106.65b	ppb	6.2161	0.6	656.562
Sb 206.834	-1.8231b	ppb	4.8807	267.7	16.2256
Se 196.026	8.5969b	ppb	9.0910	105.7	5.6368
Si 288.158	18763.2b	ppb	16.0832	0.1	90413.3
Sn 189.925	109.218b	ppb	6.6861	6.1	35.1337
Sr 216.596	211.676b	ppb	0.3459	0.2	961.604
Ti 334.941	1548.02b	ppb	0.8695	0.1	185464
Tl 190.794	-1.6232b	ppb	1.7888	110.2	-8.6981
V 292.401	293.543b	ppb	0.0551	0.0	4321.18
Zn 206.200	1147.21b	ppb	9.6526	0.8	412.866

680-161405-A-81-A (Samp) **12/19/2018, 7:41:10 AM** **Rack 4, Tube 24**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6584u	-0.4872u	-0.7505u
Al 308.215	141215	141381	141367
As 188.980	171.588	163.608	176.549
B 249.678	44.3093	45.1334	43.6135
Ba 389.178	1100.50	1100.92	1100.92
Be 313.042	6.8292	6.8348	6.8254
Ca 370.602	28652	28691	28674
Cd 226.502	3.3766	2.8840	3.8349
Co 228.615	79.3315	81.2662	79.7780
Cr 267.716	163.721	164.205	164.229
Cu 324.754	212.853	214.394	213.997
Fe 271.441	222199	222431	222444
K 766.491	9509.60	9506.73	9521.43
Mg 279.078	32293.6	32311.9	32328.2
Mn 257.610	16327.5	16359.1	16341.7
Mo 202.032	8.4119	6.4643	8.6155
Na 330.237	147.403u	-130.104u	349.367u
Ni 231.604	148.912	149.917	145.002
Pb 220.353	509.325	511.531	506.370
Sb 206.834	0.4336	-6.2979	-1.8334
Se 196.026	23.9964	21.0287	41.4669
Si 288.158	17549.5	17542.3	17548.8
Sn 189.925	20.7765	14.0649	18.7697
Sr 216.596	115.944	117.112	115.050
Ti 334.941	1477.67	1479.29	1479.92

Label	Replicates Concentration		
Tl 190.794	-2.6890u	-1.2744u	10.7883
V 292.401	274.514	275.816	274.550
Zn 206.200	789.122	796.280	791.488

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6320	ppb	0.1336	21.1	-66.0930
Al 308.215	141321	ppb	92.1533	0.1	354435
As 188.980	170.582	ppb	6.5287	3.8	46.6984
B 249.678	44.3521	ppb	0.7608	1.7	-23.2342
Ba 389.178	1100.78	ppb	0.2414	0.0	12256.4
Be 313.042	6.8298	ppb	0.0047	0.1	5524.71
Ca 370.602	28672	ppb	19.78	0.1	65270
Cd 226.502	3.3652	ppb	0.4756	14.1	246.386
Co 228.615	80.1252	ppb	1.0130	1.3	411.970
Cr 267.716	164.051	ppb	0.2869	0.2	3893.51
Cu 324.754	213.748	ppb	0.8000	0.4	8685.46
Fe 271.441	222358	ppb	137.767	0.1	183178
K 766.491	9512.59	ppb	7.7929	0.1	259527
Mg 279.078	32311.2	ppb	17.3164	0.1	46367.3
Mn 257.610	16342.8	ppb	15.8032	0.1	1787186
Mo 202.032	7.8306	ppb	1.1876	15.2	18.3309
Na 330.237	122.222	ppb	240.725	197.0	36.4344
Ni 231.604	147.944	ppb	2.5964	1.8	203.281
Pb 220.353	509.076	ppb	2.5895	0.5	305.353
Sb 206.834	-2.5659	ppb	3.4250	133.5	15.6243
Se 196.026	28.8307	ppb	11.0434	38.3	8.3844
Si 288.158	17546.9	ppb	3.9363	0.0	84564.3
Sn 189.925	17.8703	ppb	3.4450	19.3	5.5302
Sr 216.596	116.035	ppb	1.0342	0.9	554.497
Ti 334.941	1478.96	ppb	1.1590	0.1	177194
Tl 190.794	2.2750	ppb	7.4066	325.6	-11.1421
V 292.401	274.960	ppb	0.7413	0.3	4048.17
Zn 206.200	792.297	ppb	3.6467	0.5	285.124

680-161405-A-128-A (Samp) **12/19/2018, 7:45:36 AM** **Rack 4, Tube 25**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2438u	-0.0324u	0.2878u
Al 308.215	100332	100240	100222
As 188.980	231.489	230.835	220.164
B 249.678	54.2758	53.1090	54.1955
Ba 389.178	784.157	780.954	784.090
Be 313.042	4.8585	4.8491	4.8695
Ca 370.602	75386	75386	75311
Cd 226.502	2.8817	2.7810	2.8554
Co 228.615	65.2842	63.5645	63.6140
Cr 267.716	146.583	147.180	146.171
Cu 324.754	181.410	180.998	179.483
Fe 271.441	168202	168584	168202
K 766.491	10394.5	10390.8	10372.2
Mg 279.078	53524.4	53530.9	53540.6
Mn 257.610	5937.88	5937.54	5925.63
Mo 202.032	4.6131	6.0996	5.2994

Label	Replicates Concentration		
Na 330.237	5834.04	5881.98	5377.79
Ni 231.604	128.369	130.681	130.331
Pb 220.353	569.012	588.735	579.458
Sb 206.834	-10.6674u	-6.9666	-7.9612
Se 196.026	15.2018	20.2753	12.6155
Si 288.158	13760.5	13775.3	13763.5
Sn 189.925	20.4524	21.0724	29.1000
Sr 216.596	135.618	136.511	136.470
Ti 334.941	1275.18	1275.09	1272.71
Tl 190.794	2.8189u	-1.3687u	9.1877
V 292.401	218.404	218.924	218.614
Zn 206.200	715.635	718.853	704.658

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1664	ppb	0.1736	104.3	-48.6098
Al 308.215	100265	ppb	59.1299	0.1	251514
As 188.980	227.496	ppb	6.3581	2.8	61.6073
B 249.678	53.8601	ppb	0.6517	1.2	95.1983
Ba 389.178	783.067	ppb	1.8303	0.2	8734.04
Be 313.042	4.8591	ppb	0.0102	0.2	3893.17
Ca 370.602	75361	ppb	43.54	0.1	171596
Cd 226.502	2.8394	ppb	0.0522	1.8	193.980
Co 228.615	64.1543	ppb	0.9789	1.5	328.054
Cr 267.716	146.645	ppb	0.5074	0.3	3460.94
Cu 324.754	180.631	ppb	1.0147	0.6	7366.58
Fe 271.441	168330	ppb	220.674	0.1	138677
K 766.491	10385.9	ppb	11.9302	0.1	283327
Mg 279.078	53532.0	ppb	8.1622	0.0	77061.7
Mn 257.610	5933.68	ppb	6.9798	0.1	649196
Mo 202.032	5.3374	ppb	0.7440	13.9	13.5712
Na 330.237	5697.94	ppb	278.288	4.9	188.890
Ni 231.604	129.794	ppb	1.2461	1.0	178.066
Pb 220.353	579.068	ppb	9.8673	1.7	345.878
Sb 206.834	-8.5317	ppb	1.9152	22.4	11.7637
Se 196.026	16.0309	ppb	3.8966	24.3	5.1138
Si 288.158	13766.4	ppb	7.7916	0.1	66412.3
Sn 189.925	23.5416	ppb	4.8237	20.5	7.3688
Sr 216.596	136.199	ppb	0.5040	0.4	626.313
Ti 334.941	1274.33	ppb	1.4003	0.1	152763
Tl 190.794	3.5460	ppb	5.3156	149.9	-12.6077
V 292.401	218.647	ppb	0.2614	0.1	3217.10
Zn 206.200	713.049	ppb	7.4424	1.0	256.535

680-161405-A-129-A (Samp) **12/19/2018, 7:50:03 AM** **Rack 4, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1102u	0.2255u	0.0377u
Al 308.215	91411.1	91362.6	91396.3
As 188.980	190.707	194.875	189.226
B 249.678	61.6598	63.0005	60.4322
Ba 389.178	658.853	660.516	657.625
Be 313.042	4.3329	4.3410	4.3548
Ca 370.602	93744	93840	93731

Label	Replicates Concentration		
Cd 226.502	1.9286	2.6499	2.6394
Co 228.615	48.9131	47.4083	47.5074
Cr 267.716	141.545	141.452	141.167
Cu 324.754	167.479	167.765	169.097
Fe 271.441	145062	145165	144808
K 766.491	10927.9	10941.2	10945.5
Mg 279.078	57808.5	57800.4	57706.5
Mn 257.610	4065.61	4069.69	4061.17
Mo 202.032	6.8113	6.0944	5.4305
Na 330.237	6571.76	6192.02	6527.33
Ni 231.604	112.060	114.935	108.173
Pb 220.353	541.535	539.305	536.555
Sb 206.834	-3.9078	-3.5402	-12.1575u
Se 196.026	1.7855	1.7757	-7.6401u
Si 288.158	12864.7	12881.6	12856.4
Sn 189.925	36.6256	31.6152	21.6671
Sr 216.596	188.116	188.410	187.076
Ti 334.941	1344.01	1346.43	1343.91
Tl 190.794	7.3264u	2.1222u	-0.7031u
V 292.401	183.621	183.552	183.980
Zn 206.200	675.304	676.247	675.292

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0510	ppb	0.1682	330.0	-52.4407
Al 308.215	91390.0	ppb	24.8602	0.0	229265
As 188.980	191.602	ppb	2.9292	1.5	52.0878
B 249.678	61.6975	ppb	1.2846	2.1	171.415
Ba 389.178	658.998	ppb	1.4509	0.2	7353.81
Be 313.042	4.3429	ppb	0.0111	0.3	3466.36
Ca 370.602	93772	ppb	59.20	0.1	213577
Cd 226.502	2.4060	ppb	0.4134	17.2	168.373
Co 228.615	47.9429	ppb	0.8417	1.8	246.454
Cr 267.716	141.388	ppb	0.1967	0.1	3332.38
Cu 324.754	168.113	ppb	0.8635	0.5	6867.57
Fe 271.441	145011	ppb	183.828	0.1	119470
K 766.491	10938.2	ppb	9.1603	0.1	298381
Mg 279.078	57771.8	ppb	56.6842	0.1	83192.2
Mn 257.610	4065.49	ppb	4.2620	0.1	444946
Mo 202.032	6.1121	ppb	0.6905	11.3	15.6885
Na 330.237	6430.37	ppb	207.608	3.2	210.382
Ni 231.604	111.722	ppb	3.3939	3.0	152.966
Pb 220.353	539.132	ppb	2.4944	0.5	322.308
Sb 206.834	-6.5352	ppb	4.8726	74.6	12.1393
Se 196.026	-1.3596	ppb	5.4390	400.0	1.6949
Si 288.158	12867.6	ppb	12.8569	0.1	62102.8
Sn 189.925	29.9693	ppb	7.6139	25.4	9.4520
Sr 216.596	187.867	ppb	0.7010	0.4	838.885
Ti 334.941	1344.78	ppb	1.4256	0.1	161215
Tl 190.794	2.9152	ppb	4.0731	139.7	-12.7506
V 292.401	183.718	ppb	0.2297	0.1	2704.65
Zn 206.200	675.614	ppb	0.5481	0.1	243.032

680-161405-A-102-A (Samp) **12/19/2018, 7:54:29 AM** **Rack 4, Tube 27**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0414u	0.8598u	-0.8715u
Al 308.215	148408	148161	148077
As 188.980	50.6974	51.9125	42.5678
B 249.678	66.5756	66.8114	67.6169
Ba 389.178	1679.17	1674.95	1672.57
Be 313.042	6.8792	6.8428	6.8497
Ca 370.602	28793	28700	28702
Cd 226.502	1.2891	1.5150	0.9503
Co 228.615	74.7719	74.3079	74.6400
Cr 267.716	202.170	201.937	201.971
Cu 324.754	179.245	177.530	176.973
Fe 271.441	231169	230969	230735
K 766.491	18004.6	17964.6	17968.3
Mg 279.078	39666.9	39593.2	39599.8
Mn 257.610	3843.51	3834.01	3836.66
Mo 202.032	8.1946	6.5510	6.1262
Na 330.237	1236.74	870.855u	1091.41
Ni 231.604	193.913	200.840	195.483
Pb 220.353	107.406	114.817	110.022
Sb 206.834	-3.2594	-14.8583u	-15.4224u
Se 196.026	6.6934	4.8758	10.2404
Si 288.158	19910.2	19861.4	19831.7
Sn 189.925	20.5830	20.1276	14.9753
Sr 216.596	131.090	128.395	130.140
Ti 334.941	2023.01	2020.17	2017.63
Tl 190.794	14.3630u	11.9848u	12.6754u
V 292.401	283.671	282.686	281.664
Zn 206.200	489.974	496.912	495.938

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0177	ppb	0.8659	4897.3	-74.7437
Al 308.215	148216	ppb	171.991	0.1	371718
As 188.980	48.3926	ppb	5.0809	10.5	14.4674
B 249.678	67.0013	ppb	0.5460	0.8	120.571
Ba 389.178	1675.56	ppb	3.3423	0.2	18645.9
Be 313.042	6.8572	ppb	0.0193	0.3	5549.08
Ca 370.602	28732	ppb	53.14	0.2	65143
Cd 226.502	1.2514	ppb	0.2842	22.7	218.767
Co 228.615	74.5733	ppb	0.2391	0.3	389.518
Cr 267.716	202.026	ppb	0.1260	0.1	4750.07
Cu 324.754	177.916	ppb	1.1843	0.7	7273.68
Fe 271.441	230958	ppb	216.938	0.1	190261
K 766.491	17979.1	ppb	22.1430	0.1	490276
Mg 279.078	39620.0	ppb	40.7896	0.1	57033.7
Mn 257.610	3838.06	ppb	4.9039	0.1	420081
Mo 202.032	6.9573	ppb	1.0924	15.7	16.2271
Na 330.237	1066.34	ppb	184.228	17.3	60.4638
Ni 231.604	196.745	ppb	3.6319	1.8	271.111
Pb 220.353	110.748	ppb	3.7587	3.4	70.7296
Sb 206.834	-11.1800	ppb	6.8652	61.4	12.0583
Se 196.026	7.2699	ppb	2.7283	37.5	3.0408
Si 288.158	19867.8	ppb	39.6452	0.2	95728.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	18.5620	ppb	3.1145	16.8	5.7545
Sr 216.596	129.875	ppb	1.3670	1.1	614.740
Ti 334.941	2020.27	ppb	2.6955	0.1	242044
Tl 190.794	13.0077	ppb	1.2234	9.4	-11.7470
V 292.401	282.673	ppb	1.0036	0.4	4164.61
Zn 206.200	494.275	ppb	3.7564	0.8	177.872

680-161405-A-73-A (Samp) **12/19/2018, 7:58:56 AM** **Rack 4, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.7835	1.1307	1.5826
Al 308.215	93897.3	93714.8	93616.8
As 188.980	91.4858	90.5095	95.2810
B 249.678	55.5426	53.7855	55.2291
Ba 389.178	949.057	947.082	947.693
Be 313.042	4.0700	4.0890	4.0794
Ca 370.602	59160	59103	59076
Cd 226.502	5.0743	5.0600	5.1547
Co 228.615	62.6467	63.0006	62.8938
Cr 267.716	174.420	174.480	174.152
Cu 324.754	270.118	270.071	271.109
Fe 271.441	153570	153778	153690
K 766.491	8167.58	8166.37	8161.54
Mg 279.078	42535.6	42624.4	42580.8
Mn 257.610	4986.35	4975.93	4973.20
Mo 202.032	8.3653	7.9961	10.3858
Na 330.237	97.9998u	608.626u	375.760u
Ni 231.604	213.040	210.022	211.937
Pb 220.353	1385.89	1376.26	1374.68
Sb 206.834	-3.8902	-7.6941	-15.8502u
Se 196.026	24.1561	7.6721	26.3857
Si 288.158	13202.8	13204.2	13201.9
Sn 189.925	30.3690	31.9166	29.1408
Sr 216.596	144.114	140.458	141.018
Ti 334.941	1449.30	1448.92	1446.74
Tl 190.794	5.1571u	9.8999	-2.0682u
V 292.401	263.617	263.221	263.357
Zn 206.200	1910.94	1907.50	1888.71

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.4990	ppb	0.3344	22.3	1.7386
Al 308.215	93743.0	ppb	142.342	0.2	235166
As 188.980	92.4255	ppb	2.5207	2.7	25.9291
B 249.678	54.8524	ppb	0.9371	1.7	116.675
Ba 389.178	947.944	ppb	1.0109	0.1	10548.5
Be 313.042	4.0795	ppb	0.0095	0.2	3244.24
Ca 370.602	59113	ppb	42.74	0.1	134578
Cd 226.502	5.0963	ppb	0.0511	1.0	219.002
Co 228.615	62.8470	ppb	0.1815	0.3	322.674
Cr 267.716	174.351	ppb	0.1748	0.1	4100.39
Cu 324.754	270.433	ppb	0.5864	0.2	10905.9
Fe 271.441	153680	ppb	104.427	0.1	126611
K 766.491	8165.16	ppb	3.1933	0.0	222804

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	42580.3	ppb	44.3893	0.1	61296.7
Mn 257.610	4978.49	ppb	6.9393	0.1	544701
Mo 202.032	8.9157	ppb	1.2864	14.4	21.8526
Na 330.237	360.795	ppb	255.642	70.9	46.7478
Ni 231.604	211.666	ppb	1.5273	0.7	291.853
Pb 220.353	1378.94	ppb	6.0666	0.4	814.667
Sb 206.834	-9.1448	ppb	6.1106	66.8	11.2145
Se 196.026	19.4046	ppb	10.2216	52.7	5.7122
Si 288.158	13203.0	ppb	1.1403	0.0	63717.6
Sn 189.925	30.4754	ppb	1.3910	4.6	9.6152
Sr 216.596	141.863	ppb	1.9690	1.4	645.797
Ti 334.941	1448.32	ppb	1.3836	0.1	173561
Tl 190.794	4.3296	ppb	6.0268	139.2	-12.0761
V 292.401	263.398	ppb	0.2013	0.1	3864.04
Zn 206.200	1902.39	ppb	11.9668	0.6	684.522

680-161405-A-121-A (Samp) **12/19/2018, 8:03:23 AM** **Rack 4, Tube 29**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4232u	-0.1699u	0.1083u
Al 308.215	148087	148155	148370
As 188.980	50.2838	51.5817	53.1994
B 249.678	47.3141	47.7811	48.3694
Ba 389.178	1042.86	1042.51	1044.25
Be 313.042	6.9230	6.9300	6.9276
Ca 370.602	30925	30974	30939
Cd 226.502	2.1981	2.7242	2.2789
Co 228.615	71.8929	70.7383	71.7276
Cr 267.716	172.024	171.200	172.164
Cu 324.754	108.908	108.558	109.327
Fe 271.441	202399	202348	202725
K 766.491	10216.2	10221.2	10243.5
Mg 279.078	33955.7	33961.5	33996.4
Mn 257.610	8081.53	8110.66	8090.94
Mo 202.032	6.4703	8.8197	5.8517
Na 330.237	908.996	759.437u	969.255
Ni 231.604	133.290	136.377	135.605
Pb 220.353	181.850	185.864	168.033
Sb 206.834	-21.3976u	-8.5142	-12.3777u
Se 196.026	5.0780	25.3862	2.0491
Si 288.158	17800.2	17792.3	17841.5
Sn 189.925	10.1534	13.0689	16.3715
Sr 216.596	126.217	126.672	126.274
Ti 334.941	1432.69	1433.68	1435.69
Tl 190.794	5.3265u	5.1102u	6.3413u
V 292.401	263.266	262.986	262.710
Zn 206.200	531.336	537.744	540.663

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1205	ppb	0.2968	246.3	-52.6933
Al 308.215	148204	ppb	147.645	0.1	371687
As 188.980	51.6883	ppb	1.4607	2.8	15.2822
B 249.678	47.8215	ppb	0.5288	1.1	20.1487

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1043.21	ppb	0.9184	0.1	11612.8
Be 313.042	6.9269	ppb	0.0035	0.1	5607.00
Ca 370.602	30946	ppb	25.32	0.1	70327
Cd 226.502	2.4004	ppb	0.2833	11.8	215.574
Co 228.615	71.4529	ppb	0.6244	0.9	367.331
Cr 267.716	171.796	ppb	0.5211	0.3	4053.57
Cu 324.754	108.931	ppb	0.3847	0.4	4545.47
Fe 271.441	202491	ppb	204.258	0.1	166814
K 766.491	10227.0	ppb	14.5604	0.1	278997
Mg 279.078	33971.2	ppb	21.9939	0.1	48848.7
Mn 257.610	8094.38	ppb	14.8618	0.2	885365
Mo 202.032	7.0472	ppb	1.5659	22.2	16.8795
Na 330.237	879.229	ppb	108.030	12.3	58.8633
Ni 231.604	135.090	ppb	1.6067	1.2	185.428
Pb 220.353	178.582	ppb	9.3537	5.2	110.794
Sb 206.834	-14.0965	ppb	6.6115	46.9	10.0576
Se 196.026	10.8378	ppb	12.6900	117.1	4.2244
Si 288.158	17811.4	ppb	26.4326	0.1	85831.2
Sn 189.925	13.1979	ppb	3.1110	23.6	4.0161
Sr 216.596	126.388	ppb	0.2480	0.2	593.364
Ti 334.941	1434.02	ppb	1.5292	0.1	171818
Tl 190.794	5.5927	ppb	0.6573	11.8	-12.1690
V 292.401	262.988	ppb	0.2778	0.1	3869.25
Zn 206.200	536.581	ppb	4.7709	0.9	193.067

680-161405-A-126-A (Samp) **12/19/2018, 8:07:49 AM** **Rack 4, Tube 30**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-1.5864u	-0.9543u	-0.9959u
Al 308.215	115430	115577	115647
As 188.980	69.9453	78.9923	70.9801
B 249.678	52.7358	54.9045	51.5238
Ba 389.178	1668.79	1665.78	1670.46
Be 313.042	6.6523	6.6435	6.6579
Ca 370.602	37164	37111	37169
Cd 226.502	3.7263	3.3957	3.6911
Co 228.615	171.413	172.752	174.018
Cr 267.716	153.489	153.153	153.597
Cu 324.754	142.632	143.157	140.935
Fe 271.441	260197	260155	260153
K 766.491	10110.6	10123.8	10117.1
Mg 279.078	36096.6	36076.2	36094.9
Mn 257.610	21567.4	21617.3	21645.8
Mo 202.032	9.3712	9.6439	10.7270
Na 330.237	220.146u	517.089u	312.309u
Ni 231.604	163.000	159.433	163.197
Pb 220.353	202.114	207.694	197.228
Sb 206.834	2.7338	-13.1027	-24.3131u
Se 196.026	9.5582	4.2465	4.8676
Si 288.158	14872.4	14878.3	14877.4
Sn 189.925	18.9354	11.8374	12.2864
Sr 216.596	110.366	109.592	111.980
Ti 334.941	1484.00	1482.42	1482.82

Label	Replicates Concentration		
Tl 190.794	1.6040u	-5.6807u	-5.9291u
V 292.401	271.186	271.405	271.121
Zn 206.200	458.397	453.582	442.369

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.1789	ppb	0.3535	30.0	-82.6037
Al 308.215	115551	ppb	110.698	0.1	289838
As 188.980	73.3059	ppb	4.9517	6.8	21.1093
B 249.678	53.0547	ppb	1.7128	3.2	-2.6849
Ba 389.178	1668.34	ppb	2.3715	0.1	18571.4
Be 313.042	6.6512	ppb	0.0072	0.1	5375.06
Ca 370.602	37148	ppb	32.23	0.1	84614
Cd 226.502	3.6044	ppb	0.1815	5.0	278.359
Co 228.615	172.727	ppb	1.3027	0.8	879.007
Cr 267.716	153.413	ppb	0.2312	0.2	3662.04
Cu 324.754	142.241	ppb	1.1614	0.8	5873.21
Fe 271.441	260168	ppb	24.7966	0.0	214326
K 766.491	10117.2	ppb	6.5891	0.1	276005
Mg 279.078	36089.2	ppb	11.3154	0.0	51756.1
Mn 257.610	21610.2	ppb	39.6979	0.2	2363127
Mo 202.032	9.9141	ppb	0.7171	7.2	22.4355
Na 330.237	349.848	ppb	151.989	43.4	39.6212
Ni 231.604	161.877	ppb	2.1186	1.3	222.536
Pb 220.353	202.345	ppb	5.2369	2.6	126.457
Sb 206.834	-11.5607	ppb	13.5892	117.5	12.3459
Se 196.026	6.2241	ppb	2.9041	46.7	4.4700
Si 288.158	14876.0	ppb	3.1934	0.0	71747.1
Sn 189.925	14.3531	ppb	3.9747	27.7	4.3903
Sr 216.596	110.646	ppb	1.2187	1.1	541.052
Ti 334.941	1483.08	ppb	0.8245	0.1	177700
Tl 190.794	-3.3353	ppb	4.2793	128.3	-12.7662
V 292.401	271.237	ppb	0.1491	0.1	4002.95
Zn 206.200	451.449	ppb	8.2240	1.8	162.518

Cont Calib Verif (CCV) **12/19/2018, 8:12:16 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	497.886	496.473	498.052
Al 308.215	9927.56	9904.49	9893.46
As 188.980	531.887	514.601	507.061
B 249.678	511.325	509.682	514.211
Ba 389.178	479.294	480.499	480.103
Be 313.042	535.195	534.778	535.062
Ca 370.602	10118	10105	10111
Cd 226.502	517.990	518.406	518.721
Co 228.615	509.920	512.039	510.642
Cr 267.716	509.220	509.571	509.885
Cu 324.754	492.706	494.069	492.609
Fe 271.441	10175.3	10168.2	10199.2
K 766.491	9749.10	9737.45	9715.53
Mg 279.078	10348.4	10340.5	10349.5
Mn 257.610	502.575	501.630	501.585
Mo 202.032	501.468	498.654	499.461

Label	Replicates Concentration		
Na 330.237	10273.0	10149.4	10530.3
Ni 231.604	504.060	502.815	507.545
Pb 220.353	498.884	494.117	504.315
Sb 206.834	489.199	485.730	488.890
Se 196.026	516.292	503.698	508.921
Si 288.158	5355.62	5346.18	5340.03
Sn 189.925	501.344	490.580	497.268
Sr 216.596	509.367	511.735	511.896
Ti 334.941	506.456	506.641	506.213
Tl 190.794	478.562	484.596	485.638
V 292.401	494.769	494.289	493.995
Zn 206.200	1009.46	1016.15	1006.28

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	497.470	ppb	0.8675	0.2	18406.4	99.49408
Al 308.215	9908.50	ppb	17.3973	0.2	25023.8	99.08503
As 188.980	517.850	ppb	12.7278	2.5	137.773	103.56999
B 249.678	511.739	ppb	2.2926	0.4	3336.64	102.34789
Ba 389.178	479.965	ppb	0.6142	0.1	5278.20	95.99304
Be 313.042	535.012	ppb	0.2128	0.0	444297	107.00238
Ca 370.602	10112	ppb	6.481	0.1	23090	101.11505
Cd 226.502	518.373	ppb	0.3666	0.1	8482.27	103.67454
Co 228.615	510.867	ppb	1.0772	0.2	2557.98	102.17338
Cr 267.716	509.559	ppb	0.3326	0.1	11854.3	101.91174
Cu 324.754	493.128	ppb	0.8166	0.2	19667.2	98.62558
Fe 271.441	10180.9	ppb	16.2609	0.2	8444.10	101.75840
K 766.491	9734.02	ppb	17.0453	0.2	265562	97.34024
Mg 279.078	10346.1	ppb	4.9346	0.0	14928.0	103.46143
Mn 257.610	501.930	ppb	0.5590	0.1	54968.7	100.38608
Mo 202.032	499.861	ppb	1.4489	0.3	1130.10	99.97215
Na 330.237	10317.6	ppb	194.346	1.9	325.822	103.17585
Ni 231.604	504.807	ppb	2.4520	0.5	698.751	100.96133
Pb 220.353	499.105	ppb	5.1024	1.0	298.841	99.82107
Sb 206.834	487.940	ppb	1.9199	0.4	227.330	97.58794
Se 196.026	509.637	ppb	6.3275	1.2	99.1327	101.92735
Si 288.158	5347.28	ppb	7.8559	0.1	26082.2	106.94553
Sn 189.925	496.397	ppb	5.4345	1.1	160.610	99.27950
Sr 216.596	510.999	ppb	1.4159	0.3	2159.79	102.19984
Ti 334.941	506.437	ppb	0.2144	0.0	60649.0	101.28732
Tl 190.794	482.932	ppb	3.8205	0.8	191.250	96.58644
V 292.401	494.351	ppb	0.3908	0.1	7134.67	98.87019
Zn 206.200	1010.63	ppb	5.0362	0.5	363.273	101.06311

Cont Calib Blank (CCB) **12/19/2018, 8:16:40 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1259	0.7140	0.1292
Al 308.215	0.9504	4.0532	-1.1608u
As 188.980	-2.2564u	2.3638	4.3093
B 249.678	3.8507	3.3470	3.1483
Ba 389.178	1.0008	0.7328	1.7236
Be 313.042	0.0489	0.0469	0.0719
Ca 370.602	2.742	4.913	4.687

Label	Replicates Concentration		
Cd 226.502	-0.0276u	0.1730	-0.0749u
Co 228.615	1.0442	0.0176	-0.3687u
Cr 267.716	-0.0186u	-0.5244u	-0.2333u
Cu 324.754	0.1207	1.1236	0.7901
Fe 271.441	9.5026	1.9227	7.8008
K 766.491	5.2419	5.1888	5.1398
Mg 279.078	1.5338	1.4748	3.2192
Mn 257.610	0.2993	0.3919	0.4397
Mo 202.032	-0.1964u	1.7087	0.5658
Na 330.237	-157.958u	146.644	109.538
Ni 231.604	-1.1638u	3.0701	1.7572
Pb 220.353	0.2213	-0.2913u	-5.1088u
Sb 206.834	1.8667	-4.7812u	-11.3030u
Se 196.026	1.3801	-3.0960u	9.8542
Si 288.158	16.9595	17.6172	17.6770
Sn 189.925	5.7028	-0.1142u	-3.3768u
Sr 216.596	-0.4837u	-0.0035u	-0.6406u
Ti 334.941	0.3855	0.4390	0.3631
Tl 190.794	-2.7133u	-3.4101u	-0.1096u
V 292.401	0.2612	0.2154	0.1220
Zn 206.200	3.0289	0.8869	-0.0459u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3230	ppb	0.3386	104.8	-17.0363	0.32300
Al 308.215	1.2809	ppb	2.6227	204.7	165.516	1.28095
As 188.980	1.4722	ppb	3.3724	229.1	1.6359	1.47220
B 249.678	3.4487	ppb	0.3620	10.5	-74.6318	3.44865
Ba 389.178	1.1524	ppb	0.5125	44.5	-51.2664	1.15238
Be 313.042	0.0559	ppb	0.0139	24.9	-114.475	0.05589
Ca 370.602	4.114	ppb	1.194	29.0	46.64	4.11370
Cd 226.502	0.0235	ppb	0.1316	559.8	12.4692	0.02352
Co 228.615	0.2310	ppb	0.7303	316.1	-10.8794	0.23102
Cr 267.716	-0.2588	ppb	0.2539	98.1	17.5146	-0.25876
Cu 324.754	0.6781	ppb	0.5107	75.3	229.026	0.67813
Fe 271.441	6.4087	ppb	3.9771	62.1	32.9378	6.40870
K 766.491	5.1902	ppb	0.0510	1.0	409.678	5.19018
Mg 279.078	2.0759	ppb	0.9906	47.7	34.0801	2.07593
Mn 257.610	0.3770	ppb	0.0714	18.9	62.5874	0.37697
Mo 202.032	0.6927	ppb	0.9589	138.4	5.7872	0.69268
Na 330.237	32.7416	ppb	166.189	507.6	58.6188	32.74162
Ni 231.604	1.2212	ppb	2.1672	177.5	-0.5705	1.22117
Pb 220.353	-1.7263	ppb	2.9405	170.3	5.6652	-1.72628
Sb 206.834	-4.7392	ppb	6.5849	138.9	9.4942	-4.73918
Se 196.026	2.7128	ppb	6.5772	242.4	2.5428	2.71280
Si 288.158	17.4179	ppb	0.3981	2.3	367.101	17.41788
Sn 189.925	0.7372	ppb	4.5993	623.8	-0.0221	0.73725
Sr 216.596	-0.3759	ppb	0.3319	88.3	8.1410	-0.37594
Ti 334.941	0.3959	ppb	0.0390	9.9	11.9201	0.39590
Tl 190.794	-2.0776	ppb	1.7396	83.7	-11.1363	-2.07764
V 292.401	0.1995	ppb	0.0710	35.6	0.3456	0.19952
Zn 206.200	1.2900	ppb	1.5766	122.2	0.2006	1.28995

MB 680-550520/1-A (Samp) **12/19/2018, 8:21:04 AM** **Rack 4, Tube 31**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3043	-0.0289u	-0.2134u
Al 308.215	2.3710	4.7348	7.8121
As 188.980	3.3605	-3.4094u	8.8940
B 249.678	2.4340	3.3110	1.8252
Ba 389.178	0.3012	0.5246	0.5566
Be 313.042	-0.0454u	-0.0504u	-0.0556u
Ca 370.602	58.97	54.79	53.14
Cd 226.502	-0.2914u	-0.0374u	-0.2132u
Co 228.615	0.6157	0.4806	1.1950
Cr 267.716	0.2585	0.0864	0.1264
Cu 324.754	0.5989	0.2232	1.1312
Fe 271.441	20.6308	18.0119	19.7300
K 766.491	17.2181	17.2975	17.4429
Mg 279.078	-2.9443u	-4.3404u	2.4754
Mn 257.610	4.4264	4.3532	4.3196
Mo 202.032	-0.4672u	1.2904	-0.3401u
Na 330.237	158.450	53.4198	-43.4455u
Ni 231.604	-1.5427u	1.8570	3.4148
Pb 220.353	6.5039	-0.1754u	2.3465
Sb 206.834	0.3223	-7.2782u	-7.3840u
Se 196.026	-4.3906u	-15.1883u	18.7320
Si 288.158	31.8956	29.3943	29.8175
Sn 189.925	9.5522	15.8161	8.6912
Sr 216.596	-0.1852u	0.1000	0.6150
Ti 334.941	0.4875	0.5615	0.6017
Tl 190.794	3.7670	2.3322	4.2420
V 292.401	-0.1800u	-0.0512u	-0.2160u
Zn 206.200	5.6860	4.3981	5.0126

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0207	ppb	0.2624	1267.9	-28.2374
Al 308.215	4.9726	ppb	2.7283	54.9	174.758
As 188.980	2.9484	ppb	6.1621	209.0	2.0254
B 249.678	2.5234	ppb	0.7469	29.6	-80.8759
Ba 389.178	0.4608	ppb	0.1392	30.2	-58.9395
Be 313.042	-0.0505	ppb	0.0051	10.1	-202.838
Ca 370.602	55.63	ppb	3.001	5.4	164.1
Cd 226.502	-0.1807	ppb	0.1301	72.0	9.1482
Co 228.615	0.7638	ppb	0.3795	49.7	-8.1987
Cr 267.716	0.1571	ppb	0.0901	57.3	27.1805
Cu 324.754	0.6511	ppb	0.4562	70.1	227.966
Fe 271.441	19.4576	ppb	1.3305	6.8	43.7011
K 766.491	17.3195	ppb	0.1140	0.7	740.254
Mg 279.078	-1.6031	ppb	3.6004	224.6	28.7349
Mn 257.610	4.3664	ppb	0.0547	1.3	498.765
Mo 202.032	0.1610	ppb	0.9802	608.7	4.5893
Na 330.237	56.1415	ppb	100.975	179.9	59.2275
Ni 231.604	1.2430	ppb	2.5351	203.9	-0.5405
Pb 220.353	2.8917	ppb	3.3729	116.6	8.3725
Sb 206.834	-4.7800	ppb	4.4190	92.4	9.4780
Se 196.026	-0.2823	ppb	17.3293	6138.7	1.9726
Si 288.158	30.3691	ppb	1.3388	4.4	429.881

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	11.3532	ppb	3.8889	34.3	3.4183
Sr 216.596	0.1766	ppb	0.4056	229.7	10.4817
Ti 334.941	0.5502	ppb	0.0579	10.5	30.3890
Tl 190.794	3.4470	ppb	0.9943	28.8	-8.8342
V 292.401	-0.1491	ppb	0.0866	58.1	-4.7280
Zn 206.200	5.0322	ppb	0.6442	12.8	1.5472

LCS 680-550520/2-A (Samp) **12/19/2018, 8:25:31 AM** **Rack 4, Tube 32**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	47.4218	48.0603	47.6418
Al 308.215	4739.05	4735.21	4717.70
As 188.980	96.8904	93.5216	94.6928
B 249.678	191.555	192.053	192.632
Ba 389.178	94.4184	91.5768	92.2901
Be 313.042	51.3336	51.3154	51.2715
Ca 370.602	4868	4869	4854
Cd 226.502	50.9641	50.7290	50.7475
Co 228.615	49.8610	49.3222	49.5248
Cr 267.716	99.7868	99.8255	100.723
Cu 324.754	96.5035	96.2248	97.2960
Fe 271.441	4924.05	4939.48	4920.09
K 766.491	7399.53	7395.53	7376.32
Mg 279.078	4921.97	4934.42	4922.51
Mn 257.610	484.987	484.235	483.763
Mo 202.032	97.4595	95.9268	96.4844
Na 330.237	4991.37	4955.81	5008.21
Ni 231.604	95.9319	96.0157	98.5781
Pb 220.353	474.264	493.177	485.245
Sb 206.834	48.0813	42.5092	46.7402
Se 196.026	93.9436	106.495	98.8779
Si 288.158	24.0197	23.8039	23.0763
Sn 189.925	109.164	112.934	112.224
Sr 216.596	97.1936	98.0404	98.3241
Ti 334.941	97.7585	98.0173	97.8004
Tl 190.794	40.1268	38.6767	31.1494
V 292.401	96.1142	95.2387	94.2878
Zn 206.200	99.0554	104.303	102.733

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	47.7080	ppb	0.3244	0.7	1738.89
Al 308.215	4730.65	ppb	11.3834	0.2	12025.6
As 188.980	95.0349	ppb	1.7103	1.8	26.3070
B 249.678	192.080	ppb	0.5391	0.3	1190.18
Ba 389.178	92.7618	ppb	1.4784	1.6	972.272
Be 313.042	51.3068	ppb	0.0319	0.1	42460.0
Ca 370.602	4864	ppb	8.341	0.2	11126
Cd 226.502	50.8135	ppb	0.1307	0.3	845.610
Co 228.615	49.5693	ppb	0.2722	0.5	237.388
Cr 267.716	100.112	ppb	0.5296	0.5	2349.09
Cu 324.754	96.6748	ppb	0.5558	0.6	4018.93
Fe 271.441	4927.87	ppb	10.2456	0.2	4089.82
K 766.491	7390.46	ppb	12.4052	0.2	201690

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	4926.30	ppb	7.0386	0.1	7121.48
Mn 257.610	484.328	ppb	0.6173	0.1	53004.2
Mo 202.032	96.6236	ppb	0.7758	0.8	221.814
Na 330.237	4985.13	ppb	26.7485	0.5	188.327
Ni 231.604	96.8419	ppb	1.5042	1.6	132.270
Pb 220.353	484.229	ppb	9.4975	2.0	290.478
Sb 206.834	45.7769	ppb	2.9083	6.4	31.6038
Se 196.026	99.7722	ppb	6.3233	6.3	21.0646
Si 288.158	23.6333	ppb	0.4943	2.1	424.308
Sn 189.925	111.441	ppb	2.0036	1.8	35.8547
Sr 216.596	97.8527	ppb	0.5881	0.6	422.188
Ti 334.941	97.8587	ppb	0.1389	0.1	11701.0
Tl 190.794	36.6510	ppb	4.8193	13.1	5.0537
V 292.401	95.2136	ppb	0.9135	1.0	1372.70
Zn 206.200	102.030	ppb	2.6935	2.6	36.4259

680-161405-A-5-A (Samp) **12/19/2018, 8:29:57 AM** **Rack 4, Tube 33**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3313u	-0.0893u	-0.0308u
Al 308.215	122044	122146	122387
As 188.980	103.410	91.7868	98.0370
B 249.678	36.8154	36.0709	35.3160
Ba 389.178	914.844	918.144	917.307
Be 313.042	5.6157	5.6457	5.6291
Ca 370.602	19207	19186	19169
Cd 226.502	1.6833	0.9817	1.7208
Co 228.615	76.5698	77.2516	76.9916
Cr 267.716	142.413	143.074	142.712
Cu 324.754	98.7718	99.3891	99.4919
Fe 271.441	221687	221730	221549
K 766.491	6599.08	6614.56	6607.60
Mg 279.078	30194.4	30199.9	30196.0
Mn 257.610	6776.23	6773.38	6768.63
Mo 202.032	6.4010	5.3119	5.8013
Na 330.237	685.700u	86.8757u	236.055u
Ni 231.604	126.993	122.610	125.517
Pb 220.353	257.047	251.646	260.057
Sb 206.834	-8.7054	-7.8780	-12.2737u
Se 196.026	30.6770	-1.7818u	11.1940
Si 288.158	26912.6	26932.6	26924.4
Sn 189.925	14.8949	21.7042	17.7175
Sr 216.596	86.5449	86.5771	85.7483
Ti 334.941	1200.47	1202.62	1202.35
Tl 190.794	-1.1967u	-9.8055u	0.8138u
V 292.401	258.204	258.690	258.403
Zn 206.200	480.085	485.499	485.596

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0704	ppb	0.2278	323.6	-61.3776
Al 308.215	122192	ppb	176.315	0.1	306484
As 188.980	97.7446	ppb	5.8171	6.0	27.4804
B 249.678	36.0675	ppb	0.7497	2.1	-78.2600

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	916.765	ppb	1.7157	0.2	10211.8
Be 313.042	5.6302	ppb	0.0150	0.3	4526.84
Ca 370.602	19187	ppb	18.67	0.1	43447
Cd 226.502	1.4619	ppb	0.4163	28.5	213.883
Co 228.615	76.9377	ppb	0.3441	0.4	393.260
Cr 267.716	142.733	ppb	0.3307	0.2	3377.95
Cu 324.754	99.2176	ppb	0.3895	0.4	4166.74
Fe 271.441	221655	ppb	94.4773	0.0	182599
K 766.491	6607.08	ppb	7.7504	0.1	180339
Mg 279.078	30196.7	ppb	2.8394	0.0	43431.4
Mn 257.610	6772.75	ppb	3.8396	0.1	740862
Mo 202.032	5.8381	ppb	0.5455	9.3	13.8572
Na 330.237	336.210	ppb	311.723	92.7	43.1649
Ni 231.604	125.040	ppb	2.2301	1.8	171.449
Pb 220.353	256.250	ppb	4.2616	1.7	156.706
Sb 206.834	-9.6190	ppb	2.3360	24.3	12.4035
Se 196.026	13.3631	ppb	16.3378	122.3	4.5158
Si 288.158	26923.2	ppb	10.0156	0.0	129548
Sn 189.925	18.1055	ppb	3.4212	18.9	5.6064
Sr 216.596	86.2901	ppb	0.4695	0.5	428.870
Ti 334.941	1201.81	ppb	1.1686	0.1	143997
Tl 190.794	-3.3961	ppb	5.6410	166.1	-17.1251
V 292.401	258.432	ppb	0.2446	0.1	3806.99
Zn 206.200	483.727	ppb	3.1536	0.7	174.083

680-161405-A-5-Asd (Samp) **12/19/2018, 8:34:23 AM** **Rack 4, Tube 34**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2019	-0.5720u	-0.2016u
Al 308.215	25293.6	25238.6	25242.5
As 188.980	17.1792	22.2282	23.9524
B 249.678	8.1256	7.8650	8.5573
Ba 389.178	194.089	195.286	193.638
Be 313.042	1.1071	1.0980	1.0900
Ca 370.602	4018	4011	4026
Cd 226.502	-0.1110	0.1585	0.2589
Co 228.615	17.1795	16.7851	16.9193
Cr 267.716	29.8047	29.7164	29.6377
Cu 324.754	20.8611	20.2110	20.6369
Fe 271.441	46957.5	46754.3	46729.0
K 766.491	1315.97	1314.19	1312.09
Mg 279.078	6368.29	6367.13	6352.70
Mn 257.610	1457.69	1453.98	1455.36
Mo 202.032	2.9507	-0.0722u	0.8829
Na 330.237	298.548	249.921	-67.6451u
Ni 231.604	28.7552	29.0940	28.0191
Pb 220.353	54.3750	59.1736	55.7323
Sb 206.834	-3.8899u	-10.1472u	-7.0836u
Se 196.026	-7.7661u	21.4426	-2.1960u
Si 288.158	5739.93	5710.24	5711.56
Sn 189.925	10.0257	12.0977	0.9199
Sr 216.596	18.3668	18.1861	19.8100
Ti 334.941	253.593	252.829	252.532

Label	Replicates Concentration		
Tl 190.794	-1.2977u	1.8382u	-3.9514u
V 292.401	54.1840	53.9906	53.8896
Zn 206.200	104.129	110.602	111.171

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1906	ppb	0.3870	203.1	-43.3999
Al 308.215	25258.2	ppb	30.6562	0.1	63481.7
As 188.980	21.1199	ppb	3.5200	16.7	6.9135
B 249.678	8.1826	ppb	0.3496	4.3	-89.8931
Ba 389.178	194.337	ppb	0.8516	0.4	2114.13
Be 313.042	1.0984	ppb	0.0086	0.8	753.731
Ca 370.602	4018	ppb	7.592	0.2	9128
Cd 226.502	0.1022	ppb	0.1913	187.2	51.2970
Co 228.615	16.9613	ppb	0.2005	1.2	77.1260
Cr 267.716	29.7196	ppb	0.0836	0.3	722.146
Cu 324.754	20.5697	ppb	0.3302	1.6	1024.38
Fe 271.441	46813.6	ppb	125.275	0.3	38586.8
K 766.491	1314.08	ppb	1.9418	0.1	36082.6
Mg 279.078	6362.70	ppb	8.6866	0.1	9175.66
Mn 257.610	1455.68	ppb	1.8787	0.1	159250
Mo 202.032	1.2538	ppb	1.5452	123.2	6.3079
Na 330.237	160.275	ppb	198.876	124.1	57.0250
Ni 231.604	28.6228	ppb	0.5496	1.9	37.4983
Pb 220.353	56.4270	ppb	2.4736	4.4	39.7246
Sb 206.834	-7.0402	ppb	3.1288	44.4	9.5378
Se 196.026	3.8268	ppb	15.5079	405.2	2.7458
Si 288.158	5720.58	ppb	16.7778	0.3	27749.6
Sn 189.925	7.6811	ppb	5.9463	77.4	2.2282
Sr 216.596	18.7876	ppb	0.8900	4.7	100.622
Ti 334.941	252.984	ppb	0.5471	0.2	30283.6
Tl 190.794	-1.1370	ppb	2.8982	254.9	-11.8832
V 292.401	54.0214	ppb	0.1496	0.3	793.883
Zn 206.200	108.634	ppb	3.9114	3.6	38.8873

680-161405-A-5-Apds (Samp) **12/19/2018, 8:38:50 AM** **Rack 4, Tube 35**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	54.3764	55.0816	54.0649
Al 308.215	125006	124901	124690
As 188.980	210.542	220.990	201.433
B 249.678	246.536	245.642	247.374
Ba 389.178	994.892	994.603	995.585
Be 313.042	61.1475	61.1753	61.2458
Ca 370.602	23924	23943	23923
Cd 226.502	55.9964	55.6163	56.2420
Co 228.615	127.648	125.602	127.022
Cr 267.716	246.843	245.973	247.315
Cu 324.754	199.464	200.114	200.317
Fe 271.441	221281	221201	221654
K 766.491	15095.8	15099.7	15089.8
Mg 279.078	34854.7	34859.5	34872.6
Mn 257.610	7106.40	7111.59	7131.63
Mo 202.032	109.989	110.504	111.685

Label	Replicates Concentration		
Na 330.237	6005.00	5734.60	6038.71
Ni 231.604	225.001	228.349	223.321
Pb 220.353	765.422	765.007	769.318
Sb 206.834	44.3218	52.7363	50.8231
Se 196.026	95.5014	98.1530	98.7527
Si 288.158	26384.3	26363.2	26424.6
Sn 189.925	119.560	121.204	114.722
Sr 216.596	189.247	189.742	188.853
Ti 334.941	1279.10	1279.94	1281.22
Tl 190.794	40.6967	51.1209	40.6876
V 292.401	356.253	358.030	357.831
Zn 206.200	592.710	581.941	588.924

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.5076	ppb	0.5209	1.0	1956.80
Al 308.215	124866	ppb	160.638	0.1	313190
As 188.980	210.988	ppb	9.7863	4.6	57.3324
B 249.678	246.517	ppb	0.8661	0.4	1338.71
Ba 389.178	995.026	ppb	0.5046	0.1	11085.3
Be 313.042	61.1895	ppb	0.0507	0.1	50680.1
Ca 370.602	23930	ppb	10.95	0.0	54268
Cd 226.502	55.9516	ppb	0.3152	0.6	1103.26
Co 228.615	126.757	ppb	1.0484	0.8	643.519
Cr 267.716	246.710	ppb	0.6808	0.3	5792.32
Cu 324.754	199.965	ppb	0.4455	0.2	8142.99
Fe 271.441	221379	ppb	241.443	0.1	182375
K 766.491	15095.1	ppb	5.0082	0.0	411674
Mg 279.078	34862.3	ppb	9.2755	0.0	50148.0
Mn 257.610	7116.54	ppb	13.3196	0.2	778474
Mo 202.032	110.726	ppb	0.8695	0.8	250.145
Na 330.237	5926.10	ppb	166.702	2.8	190.212
Ni 231.604	225.557	ppb	2.5597	1.1	311.093
Pb 220.353	766.583	ppb	2.3780	0.3	455.797
Sb 206.834	49.2937	ppb	4.4108	8.9	38.0948
Se 196.026	97.4690	ppb	1.7302	1.8	20.5737
Si 288.158	26390.7	ppb	31.1551	0.1	127020
Sn 189.925	118.495	ppb	3.3700	2.8	38.1410
Sr 216.596	189.281	ppb	0.4455	0.2	861.564
Ti 334.941	1280.09	ppb	1.0678	0.1	153387
Tl 190.794	44.1684	ppb	6.0211	13.6	2.8884
V 292.401	357.371	ppb	0.9738	0.3	5234.34
Zn 206.200	587.858	ppb	5.4633	0.9	211.521

680-161405-A-5-B MS (Samp) **12/19/2018, 8:43:16 AM** **Rack 4, Tube 36**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	48.1746	49.3697	49.0305
Al 308.215	137095	136826	137011
As 188.980	295.144	313.951	310.210
B 249.678	369.838	367.484	368.444
Ba 389.178	1112.39	1112.02	1114.78
Be 313.042	106.742	106.471	106.689
Ca 370.602	31172	31126	31164

Label	Replicates Concentration		
Cd 226.502	100.322	100.210	101.236
Co 228.615	153.937	154.778	154.600
Cr 267.716	341.311	341.729	342.182
Cu 324.754	294.359	291.469	293.944
Fe 271.441	189868	189722	189918
K 766.491	21607.4	21526.1	21585.4
Mg 279.078	37352.8	37259.0	37315.0
Mn 257.610	6481.92	6497.78	6501.51
Mo 202.032	191.882	189.213	191.319
Na 330.237	10224.2	10578.0	10523.7
Ni 231.604	306.906	310.771	302.447
Pb 220.353	1243.58	1245.83	1242.98
Sb 206.834	47.8168	33.5013	34.0904
Se 196.026	200.991	176.190	187.831
Si 288.158	27911.3	27862.6	27904.3
Sn 189.925	206.637	191.305	202.265
Sr 216.596	291.984	291.279	291.576
Ti 334.941	1579.33	1577.78	1579.95
Tl 190.794	74.1408	66.8008	70.3396
V 292.401	437.470	436.468	437.352
Zn 206.200	689.794	681.002	690.698

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.8583	ppb	0.6159	1.3	1752.25
Al 308.215	136978	ppb	137.453	0.1	343554
As 188.980	306.435	ppb	9.9559	3.2	82.4273
B 249.678	368.589	ppb	1.1837	0.3	2192.20
Ba 389.178	1113.06	ppb	1.4999	0.1	12388.0
Be 313.042	106.634	ppb	0.1437	0.1	88432.6
Ca 370.602	31154	ppb	24.77	0.1	70802
Cd 226.502	100.589	ppb	0.5630	0.6	1807.95
Co 228.615	154.438	ppb	0.4435	0.3	783.840
Cr 267.716	341.740	ppb	0.4357	0.1	7993.64
Cu 324.754	293.257	ppb	1.5623	0.5	11817.4
Fe 271.441	189836	ppb	101.694	0.1	156397
K 766.491	21573.0	ppb	42.0433	0.2	588223
Mg 279.078	37308.9	ppb	47.2225	0.1	53677.0
Mn 257.610	6493.74	ppb	10.4026	0.2	710373
Mo 202.032	190.805	ppb	1.4070	0.7	431.031
Na 330.237	10442.0	ppb	190.552	1.8	311.552
Ni 231.604	306.708	ppb	4.1656	1.4	423.850
Pb 220.353	1244.13	ppb	1.5020	0.1	735.278
Sb 206.834	38.4695	ppb	8.1003	21.1	32.0627
Se 196.026	188.337	ppb	12.4080	6.6	37.9260
Si 288.158	27892.8	ppb	26.3441	0.1	134260
Sn 189.925	200.069	ppb	7.8982	3.9	64.5776
Sr 216.596	291.613	ppb	0.3538	0.1	1284.14
Ti 334.941	1579.02	ppb	1.1146	0.1	189194
Tl 190.794	70.4270	ppb	3.6708	5.2	14.7933
V 292.401	437.097	ppb	0.5475	0.1	6378.63
Zn 206.200	687.165	ppb	5.3562	0.8	247.180

680-161405-A-5-C MSD (Samp) **12/19/2018, 8:47:43 AM** **Rack 4, Tube 37**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	48.5984	49.4384	48.9368
Al 308.215	141517	141614	141588
As 188.980	334.819	344.423	337.412
B 249.678	374.110	373.559	374.234
Ba 389.178	1230.23	1228.31	1234.90
Be 313.042	107.139	107.050	107.023
Ca 370.602	32789	32793	32820
Cd 226.502	101.128	100.477	101.357
Co 228.615	161.727	161.526	162.437
Cr 267.716	347.771	347.516	347.862
Cu 324.754	299.780	300.203	300.706
Fe 271.441	203521	203482	203575
K 766.491	22150.8	22118.6	22121.0
Mg 279.078	38521.8	38553.8	38551.4
Mn 257.610	8180.88	8216.07	8225.90
Mo 202.032	188.246	191.491	189.454
Na 330.237	10421.2	10409.4	10352.3
Ni 231.604	316.240	315.347	313.285
Pb 220.353	1340.31	1329.80	1347.73
Sb 206.834	28.3159	39.8720	39.9983
Se 196.026	174.344	197.074	180.333
Si 288.158	31103.9	31101.7	31097.7
Sn 189.925	193.922	203.109	195.596
Sr 216.596	300.211	299.545	300.256
Ti 334.941	1678.85	1676.98	1676.81
Tl 190.794	66.3902	63.1680	78.0818
V 292.401	453.485	453.828	455.608
Zn 206.200	725.423	742.012	735.361

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.9912	ppb	0.4227	0.9	1757.97
Al 308.215	141573	ppb	50.3131	0.0	355075
As 188.980	338.885	ppb	4.9685	1.5	91.0178
B 249.678	373.968	ppb	0.3590	0.1	2214.70
Ba 389.178	1231.15	ppb	3.3918	0.3	13704.1
Be 313.042	107.071	ppb	0.0610	0.1	88796.3
Ca 370.602	32801	ppb	16.55	0.1	74563
Cd 226.502	100.987	ppb	0.4562	0.5	1825.24
Co 228.615	161.897	ppb	0.4786	0.3	822.730
Cr 267.716	347.716	ppb	0.1793	0.1	8137.65
Cu 324.754	300.229	ppb	0.4637	0.2	12095.5
Fe 271.441	203526	ppb	46.5837	0.0	167673
K 766.491	22130.1	ppb	17.9273	0.1	603409
Mg 279.078	38542.4	ppb	17.8404	0.0	55433.7
Mn 257.610	8207.62	ppb	23.6745	0.3	897774
Mo 202.032	189.730	ppb	1.6401	0.9	428.393
Na 330.237	10394.3	ppb	36.8576	0.4	308.803
Ni 231.604	314.957	ppb	1.5156	0.5	435.306
Pb 220.353	1339.28	ppb	9.0116	0.7	791.172
Sb 206.834	36.0620	ppb	6.7087	18.6	31.3075
Se 196.026	183.917	ppb	11.7811	6.4	37.2065
Si 288.158	31101.1	ppb	3.1584	0.0	149662

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	197.542	ppb	4.8933	2.5	63.7587
Sr 216.596	300.004	ppb	0.3985	0.1	1322.97
Ti 334.941	1677.55	ppb	1.1320	0.1	200997
Tl 190.794	69.2134	ppb	7.8475	11.3	14.4545
V 292.401	454.307	ppb	1.1397	0.3	6632.39
Zn 206.200	734.265	ppb	8.3489	1.1	264.147

680-161405-A-2-A (Samp) **12/19/2018, 8:52:10 AM** **Rack 4, Tube 38**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.9515	1.0082	1.1446
Al 308.215	86050.1	86247.3	86003.3
As 188.980	223.576	238.557	233.977
B 249.678	37.8568	40.2175	39.2062
Ba 389.178	825.082	826.738	827.987
Be 313.042	4.5683	4.5692	4.5486
Ca 370.602	22347	22378	22385
Cd 226.502	2.8551	2.8592	2.6475
Co 228.615	35.2029	35.9108	35.0839
Cr 267.716	113.734	113.845	113.333
Cu 324.754	116.745	116.490	114.800
Fe 271.441	115194	115260	115171
K 766.491	5982.72	5998.83	5977.67
Mg 279.078	20348.4	20368.0	20349.2
Mn 257.610	2231.42	2235.25	2229.09
Mo 202.032	6.2101	6.3756	6.4815
Na 330.237	179.762u	609.591	756.015
Ni 231.604	96.8176	97.1258	99.7656
Pb 220.353	726.832	725.152	723.103
Sb 206.834	-0.6222	-14.4086u	-10.3392u
Se 196.026	-0.7999u	10.8117	15.2019
Si 288.158	23879.6	23919.6	23892.4
Sn 189.925	21.1815	24.9888	17.5213
Sr 216.596	100.516	102.674	101.789
Ti 334.941	1049.53	1051.55	1049.29
Tl 190.794	7.8458u	-1.5665u	-2.4848u
V 292.401	166.152	167.292	165.426
Zn 206.200	649.875	639.348	644.921

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.0348	ppb	0.0993	9.6	-12.5444
Al 308.215	86100.3	ppb	129.451	0.2	216003
As 188.980	232.037	ppb	7.6764	3.3	62.6995
B 249.678	39.0935	ppb	1.1844	3.0	49.3124
Ba 389.178	826.602	ppb	1.4571	0.2	9167.30
Be 313.042	4.5621	ppb	0.0116	0.3	3637.95
Ca 370.602	22370	ppb	20.37	0.1	50843
Cd 226.502	2.7873	ppb	0.1211	4.3	151.073
Co 228.615	35.3992	ppb	0.4470	1.3	179.585
Cr 267.716	113.637	ppb	0.2691	0.2	2680.53
Cu 324.754	116.012	ppb	1.0573	0.9	4805.13
Fe 271.441	115208	ppb	46.2076	0.0	94921.8
K 766.491	5986.41	ppb	11.0528	0.2	163423

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	20355.2	ppb	11.1084	0.1	29311.8
Mn 257.610	2231.92	ppb	3.1100	0.1	244263
Mo 202.032	6.3557	ppb	0.1368	2.2	16.7079
Na 330.237	515.123	ppb	299.516	58.1	57.7517
Ni 231.604	97.9030	ppb	1.6204	1.7	133.774
Pb 220.353	725.029	ppb	1.8673	0.3	431.116
Sb 206.834	-8.4567	ppb	7.0833	83.8	10.5550
Se 196.026	8.4046	ppb	8.2680	98.4	3.4733
Si 288.158	23897.2	ppb	20.4478	0.1	115020
Sn 189.925	21.2305	ppb	3.7340	17.6	6.6192
Sr 216.596	101.660	ppb	1.0850	1.1	467.281
Ti 334.941	1050.12	ppb	1.2404	0.1	125795
Tl 190.794	1.2648	ppb	5.7178	452.1	-13.0517
V 292.401	166.290	ppb	0.9408	0.6	2443.23
Zn 206.200	644.715	ppb	5.2668	0.8	231.879

680-161405-A-3-A (Samp) **12/19/2018, 8:56:37 AM** **Rack 4, Tube 39**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	0.6309	0.2919u	1.1662
Al 308.215	93692.6	93800.7	93740.8
As 188.980	254.038	261.765	250.319
B 249.678	35.5327	37.1071	36.4389
Ba 389.178	864.958	868.297	866.036
Be 313.042	4.1335	4.1296	4.1241
Ca 370.602	21508	21535	21489
Cd 226.502	1.9773	2.0901	2.0099
Co 228.615	36.6683	36.5019	37.2370
Cr 267.716	118.971	119.744	119.198
Cu 324.754	122.162	121.440	123.216
Fe 271.441	118150	118209	118138
K 766.491	6313.34	6331.33	6314.63
Mg 279.078	21251.2	21297.8	21252.5
Mn 257.610	2216.86	2223.36	2216.99
Mo 202.032	5.2140	5.8664	5.0422
Na 330.237	629.928	507.430u	426.082u
Ni 231.604	103.381	102.387	103.549
Pb 220.353	783.474	771.356	779.569
Sb 206.834	-6.6021u	-19.2192u	1.5779
Se 196.026	8.5167	4.9996	4.9047
Si 288.158	23911.2	23989.6	23941.1
Sn 189.925	25.2566	18.6739	25.9841
Sr 216.596	102.630	103.257	103.243
Ti 334.941	1074.65	1078.08	1075.78
Tl 190.794	5.3858u	-0.9772u	0.5604u
V 292.401	171.869	172.856	172.009
Zn 206.200	643.036	652.932	638.733

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6963	ppb	0.4408	63.3	-25.7939
Al 308.215	93744.7	ppb	54.1515	0.1	235166
As 188.980	255.374	ppb	5.8388	2.3	68.8633
B 249.678	36.3596	ppb	0.7902	2.2	27.9523

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	866.430	ppb	1.7041	0.2	9611.19
Be 313.042	4.1291	ppb	0.0047	0.1	3278.56
Ca 370.602	21511	ppb	23.09	0.1	48880
Cd 226.502	2.0258	ppb	0.0580	2.9	141.306
Co 228.615	36.8024	ppb	0.3854	1.0	186.995
Cr 267.716	119.304	ppb	0.3970	0.3	2812.44
Cu 324.754	122.272	ppb	0.8931	0.7	5052.76
Fe 271.441	118165	ppb	37.8629	0.0	97357.5
K 766.491	6319.77	ppb	10.0366	0.2	172509
Mg 279.078	21267.1	ppb	26.5389	0.1	30624.1
Mn 257.610	2219.07	ppb	3.7113	0.2	242866
Mo 202.032	5.3742	ppb	0.4348	8.1	14.4494
Na 330.237	521.147	ppb	102.613	19.7	57.5784
Ni 231.604	103.106	ppb	0.6280	0.6	141.004
Pb 220.353	778.133	ppb	6.1854	0.8	462.153
Sb 206.834	-8.0811	ppb	10.4772	129.7	10.8085
Se 196.026	6.1404	ppb	2.0586	33.5	3.0313
Si 288.158	23947.3	ppb	39.5406	0.2	115261
Sn 189.925	23.3048	ppb	4.0270	17.3	7.2915
Sr 216.596	103.043	ppb	0.3584	0.3	473.822
Ti 334.941	1076.17	ppb	1.7520	0.2	128918
Tl 190.794	1.6563	ppb	3.3201	200.4	-12.9973
V 292.401	172.245	ppb	0.5341	0.3	2530.50
Zn 206.200	644.901	ppb	7.2805	1.1	231.948

680-161405-A-4-A (Samp) **12/19/2018, 9:01:04 AM** **Rack 4, Tube 40**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4231u	0.3146u	0.1519u
Al 308.215	117493	117406	117434
As 188.980	337.518	342.949	323.218
B 249.678	42.4741	40.1191	40.4230
Ba 389.178	1003.27	1003.16	1002.21
Be 313.042	5.5959	5.5959	5.5838
Ca 370.602	22117	22166	22137
Cd 226.502	2.7024	2.9051	2.2042
Co 228.615	66.2630	65.5086	65.7135
Cr 267.716	143.885	144.158	143.193
Cu 324.754	139.217	138.941	137.775
Fe 271.441	183695	184125	183771
K 766.491	7971.55	7960.97	7949.15
Mg 279.078	26594.7	26634.8	26626.6
Mn 257.610	6740.43	6725.26	6752.06
Mo 202.032	6.4258	7.0671	6.6622
Na 330.237	257.261u	510.595u	682.910u
Ni 231.604	123.776	127.096	128.393
Pb 220.353	913.586	915.650	920.551
Sb 206.834	-19.4480u	-11.2715u	-2.7793
Se 196.026	-4.8049u	3.0793	6.0738
Si 288.158	26050.8	26021.7	26006.2
Sn 189.925	19.4708	21.8887	22.3259
Sr 216.596	111.881	112.635	112.744
Ti 334.941	1244.74	1244.56	1242.94

Label	Replicates Concentration		
Tl 190.794	-2.9678u	-0.9450u	9.7880
V 292.401	238.570	239.224	238.736
Zn 206.200	676.982	689.645	681.720

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2965	ppb	0.1365	46.0	-44.8653
Al 308.215	117444	ppb	44.3055	0.0	294580
As 188.980	334.562	ppb	10.1925	3.0	89.8924
B 249.678	41.0054	ppb	1.2810	3.1	-6.8694
Ba 389.178	1002.88	ppb	0.5820	0.1	11151.9
Be 313.042	5.5919	ppb	0.0070	0.1	4495.08
Ca 370.602	22140	ppb	24.61	0.1	50263
Cd 226.502	2.6039	ppb	0.3607	13.9	202.863
Co 228.615	65.8283	ppb	0.3901	0.6	336.617
Cr 267.716	143.745	ppb	0.4973	0.3	3397.09
Cu 324.754	138.644	ppb	0.7653	0.6	5713.57
Fe 271.441	183864	ppb	229.713	0.1	151472
K 766.491	7960.56	ppb	11.2059	0.1	217227
Mg 279.078	26618.7	ppb	21.1592	0.1	38278.1
Mn 257.610	6739.25	ppb	13.4369	0.2	737150
Mo 202.032	6.7183	ppb	0.3243	4.8	16.4368
Na 330.237	483.589	ppb	214.106	44.3	50.1132
Ni 231.604	126.421	ppb	2.3815	1.9	173.381
Pb 220.353	916.596	ppb	3.5778	0.4	543.658
Sb 206.834	-11.1663	ppb	8.3349	74.6	10.8916
Se 196.026	1.4494	ppb	5.6195	387.7	2.3650
Si 288.158	26026.2	ppb	22.6267	0.1	125246
Sn 189.925	21.2285	ppb	1.5378	7.2	6.6185
Sr 216.596	112.420	ppb	0.4699	0.4	529.718
Ti 334.941	1244.08	ppb	0.9912	0.1	149045
Tl 190.794	1.9584	ppb	6.8556	350.1	-13.5212
V 292.401	238.843	ppb	0.3403	0.1	3513.70
Zn 206.200	682.783	ppb	6.3982	0.9	245.665

Cont Calib Verif (CCV) **12/19/2018, 9:05:31 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	498.074	496.787	497.264
Al 308.215	9927.78	9918.30	9918.65
As 188.980	509.281	505.290	514.501
B 249.678	513.589	514.478	513.889
Ba 389.178	478.844	478.737	477.889
Be 313.042	536.023	535.836	536.049
Ca 370.602	10111	10088	10107
Cd 226.502	516.972	517.948	518.948
Co 228.615	509.471	510.848	510.405
Cr 267.716	509.066	509.073	508.113
Cu 324.754	493.366	492.355	494.592
Fe 271.441	10194.7	10188.6	10185.3
K 766.491	9750.53	9750.48	9747.65
Mg 279.078	10389.7	10370.3	10373.7
Mn 257.610	501.448	501.169	501.083
Mo 202.032	497.292	499.516	498.365

Label	Replicates Concentration		
Na 330.237	10669.8	10444.2	10452.1
Ni 231.604	509.781	507.671	505.772
Pb 220.353	504.088	491.820	497.981
Sb 206.834	496.038	480.523	490.663
Se 196.026	499.134	497.381	494.472
Si 288.158	5383.55	5373.10	5364.76
Sn 189.925	497.155	504.009	487.506
Sr 216.596	508.335	509.654	508.188
Ti 334.941	505.667	505.621	505.948
Tl 190.794	478.483	479.290	485.913
V 292.401	495.387	495.404	492.642
Zn 206.200	1026.59	1026.24	1010.02

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	497.375	ppb	0.6510	0.1	18402.9	99.47503
Al 308.215	9921.58	ppb	5.3729	0.1	25056.5	99.21575
As 188.980	509.691	ppb	4.6192	0.9	135.620	101.93813
B 249.678	513.985	ppb	0.4526	0.1	3351.75	102.79707
Ba 389.178	478.490	ppb	0.5233	0.1	5261.86	95.69801
Be 313.042	535.969	ppb	0.1161	0.0	445092	107.19382
Ca 370.602	10102	ppb	12.08	0.1	23069	101.02195
Cd 226.502	517.956	ppb	0.9881	0.2	8475.47	103.59123
Co 228.615	510.242	ppb	0.7029	0.1	2554.84	102.04834
Cr 267.716	508.750	ppb	0.5519	0.1	11835.6	101.75008
Cu 324.754	493.438	ppb	1.1198	0.2	19679.4	98.68755
Fe 271.441	10189.5	ppb	4.7597	0.0	8451.16	101.84453
K 766.491	9749.55	ppb	1.6485	0.0	265985	97.49554
Mg 279.078	10377.9	ppb	10.3733	0.1	14973.7	103.77874
Mn 257.610	501.233	ppb	0.1910	0.0	54892.7	100.24669
Mo 202.032	498.391	ppb	1.1126	0.2	1126.79	99.67819
Na 330.237	10522.0	ppb	128.003	1.2	331.218	105.22044
Ni 231.604	507.741	ppb	2.0053	0.4	702.831	101.54827
Pb 220.353	497.963	ppb	6.1341	1.2	298.171	99.59258
Sb 206.834	489.075	ppb	7.8788	1.6	227.846	97.81491
Se 196.026	496.996	ppb	2.3549	0.5	96.7243	99.39912
Si 288.158	5373.80	ppb	9.4132	0.2	26209.2	107.47603
Sn 189.925	496.223	ppb	8.2909	1.7	160.554	99.24466
Sr 216.596	508.726	ppb	0.8072	0.2	2150.18	101.74516
Ti 334.941	505.745	ppb	0.1767	0.0	60566.3	101.14903
Tl 190.794	481.229	ppb	4.0764	0.8	190.540	96.24572
V 292.401	494.478	ppb	1.5900	0.3	7136.57	98.89551
Zn 206.200	1020.95	ppb	9.4712	0.9	366.987	102.09496

Cont Calib Blank (CCB) **12/19/2018, 9:09:56 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0369	0.2050	-0.1863u
Al 308.215	-3.8562u	-0.2767u	-0.5734u
As 188.980	6.2757	-4.6147u	-3.3602u
B 249.678	5.2279	3.8622	3.2182
Ba 389.178	1.9988	1.2520	1.1972
Be 313.042	0.0539	0.0467	0.0473
Ca 370.602	1.603	2.349	5.785

Label	Replicates Concentration		
Cd 226.502	-0.1147u	0.1930	0.2983
Co 228.615	0.0072	-0.0624u	-1.3422u
Cr 267.716	-0.5015u	-0.5154u	-0.0758u
Cu 324.754	0.5390	-0.1110u	0.7595
Fe 271.441	14.7581	8.6467	14.3719
K 766.491	5.4274	4.0801	3.9377
Mg 279.078	1.1070	0.7637	3.3099
Mn 257.610	0.2739	0.2291	0.2899
Mo 202.032	-0.0142u	0.0162	-0.1118u
Na 330.237	157.073	-95.4156u	124.588
Ni 231.604	1.6772	2.0739	0.7759
Pb 220.353	-2.0687u	1.3773	0.1192
Sb 206.834	-2.3039u	-9.6741u	-0.5231u
Se 196.026	-0.8987u	-5.3527u	-3.5051u
Si 288.158	21.1993	19.3709	18.8600
Sn 189.925	2.5370	-1.8984u	0.1363
Sr 216.596	-0.1055u	-0.5104u	-0.9321u
Ti 334.941	0.3779	0.3134	0.3578
Tl 190.794	3.5983	0.0024	0.1263
V 292.401	0.6897	0.2579	0.3757
Zn 206.200	-1.0313u	-0.4034u	-0.7341u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0185	ppb	0.1963	1058.4	-28.3222	0.01855
Al 308.215	-1.5688	ppb	1.9865	126.6	158.377	-1.56876
As 188.980	-0.5664	ppb	5.9585	1052.0	1.0980	-0.56641
B 249.678	4.1027	ppb	1.0262	25.0	-70.2349	4.10274
Ba 389.178	1.4827	ppb	0.4478	30.2	-47.5998	1.48267
Be 313.042	0.0493	ppb	0.0040	8.1	-119.962	0.04927
Ca 370.602	3.246	ppb	2.231	68.7	44.65	3.24584
Cd 226.502	0.1255	ppb	0.2146	170.9	14.1389	0.12553
Co 228.615	-0.4658	ppb	0.7598	163.1	-14.3832	-0.46580
Cr 267.716	-0.3643	ppb	0.2499	68.6	15.0658	-0.36426
Cu 324.754	0.3958	ppb	0.4526	114.3	217.884	0.39583
Fe 271.441	12.5922	ppb	3.4224	27.2	37.9830	12.59224
K 766.491	4.4817	ppb	0.8220	18.3	390.370	4.48174
Mg 279.078	1.7269	ppb	1.3817	80.0	33.5790	1.72685
Mn 257.610	0.2643	ppb	0.0315	11.9	50.2706	0.26431
Mo 202.032	-0.0366	ppb	0.0669	182.7	4.1441	-0.03660
Na 330.237	62.0817	ppb	137.360	221.3	59.3920	62.08171
Ni 231.604	1.5090	ppb	0.6652	44.1	-0.1695	1.50900
Pb 220.353	-0.1907	ppb	1.7438	914.4	6.5657	-0.19071
Sb 206.834	-4.1670	ppb	4.8516	116.4	9.7526	-4.16704
Se 196.026	-3.2522	ppb	2.2378	68.8	1.4064	-3.25216
Si 288.158	19.8101	ppb	1.2299	6.2	378.567	19.81008
Sn 189.925	0.2583	ppb	2.2202	859.6	-0.1773	0.25829
Sr 216.596	-0.5160	ppb	0.4133	80.1	7.5533	-0.51596
Ti 334.941	0.3497	ppb	0.0330	9.4	6.3804	0.34968
Tl 190.794	1.2423	ppb	2.0412	164.3	-9.7546	1.24232
V 292.401	0.4411	ppb	0.2232	50.6	3.8765	0.44107
Zn 206.200	-0.7229	ppb	0.3141	43.4	-0.5237	-0.72292

680-161405-A-64-A (Samp) **12/19/2018, 9:14:20 AM** **Rack 4, Tube 41**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2380u	-0.5710u	0.3927u
Al 308.215	184074	183785	184410
As 188.980	70.6652	64.8609	68.4423
B 249.678	95.0665	93.4645	94.2291
Ba 389.178	2051.10	2046.15	2053.00
Be 313.042	9.3866	9.3784	9.4215
Ca 370.602	39953	39952	40074
Cd 226.502	1.5639	1.4798	1.7923
Co 228.615	148.655	150.425	147.392
Cr 267.716	255.058	254.907	254.429
Cu 324.754	225.869	225.511	224.197
Fe 271.441	317709	318350	319155
K 766.491	21873.6	21880.1	21908.9
Mg 279.078	70182.7	70197.8	70372.9
Mn 257.610	9431.39	9439.17	9438.52
Mo 202.032	5.4402	2.7508	4.4823
Na 330.237	480.324u	414.403u	622.807u
Ni 231.604	315.873	313.014	316.615
Pb 220.353	97.5300	87.2780	97.6401
Sb 206.834	-6.0773	-6.3449	-5.9375
Se 196.026	15.2640	-4.5170u	13.6882
Si 288.158	33750.0	33788.5	33879.9
Sn 189.925	25.5779	12.6459	12.1706
Sr 216.596	174.257	175.273	176.406
Ti 334.941	2686.92	2689.62	2691.43
Tl 190.794	5.2387u	10.5100u	3.2859u
V 292.401	352.347	352.171	353.837
Zn 206.200	561.990	561.094	567.875

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0199	ppb	0.5176	2603.2	-80.9186
Al 308.215	184090	ppb	312.861	0.2	461651
As 188.980	67.9895	ppb	2.9285	4.3	19.8131
B 249.678	94.2534	ppb	0.8013	0.9	216.116
Ba 389.178	2050.09	ppb	3.5373	0.2	22860.9
Be 313.042	9.3955	ppb	0.0229	0.2	7660.84
Ca 370.602	39993	ppb	70.25	0.2	90750
Cd 226.502	1.6120	ppb	0.1617	10.0	294.182
Co 228.615	148.824	ppb	1.5237	1.0	772.188
Cr 267.716	254.798	ppb	0.3285	0.1	5997.71
Cu 324.754	225.192	ppb	0.8804	0.4	9158.74
Fe 271.441	318405	ppb	724.525	0.2	262291
K 766.491	21887.5	ppb	18.8102	0.1	596797
Mg 279.078	70251.1	ppb	105.685	0.2	101091
Mn 257.610	9436.36	ppb	4.3162	0.0	1032391
Mo 202.032	4.2244	ppb	1.3631	32.3	8.6903
Na 330.237	505.845	ppb	106.520	21.1	36.4711
Ni 231.604	315.167	ppb	1.9013	0.6	435.618
Pb 220.353	94.1494	ppb	5.9511	6.3	61.2545
Sb 206.834	-6.1199	ppb	0.2070	3.4	16.3720
Se 196.026	8.1451	ppb	10.9940	135.0	3.4697
Si 288.158	33806.1	ppb	66.7486	0.2	162650

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	16.7981	ppb	7.6072	45.3	5.1827
Sr 216.596	175.312	ppb	1.0750	0.6	827.676
Ti 334.941	2689.32	ppb	2.2660	0.1	322276
Tl 190.794	6.3449	ppb	3.7369	58.9	-15.5133
V 292.401	352.785	ppb	0.9151	0.3	5206.47
Zn 206.200	563.653	ppb	3.6839	0.7	202.945

680-161405-A-6-A (Samp) **12/19/2018, 9:18:47 AM** **Rack 4, Tube 42**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2375u	-0.7223u	0.2391u
Al 308.215	178254	178320	178298
As 188.980	35.5994	52.4424	38.2111
B 249.678	61.0636	59.8884	60.5712
Ba 389.178	1968.19	1972.48	1969.10
Be 313.042	8.3961	8.4046	8.3981
Ca 370.602	26562	26547	26525
Cd 226.502	4.3326	3.8713	4.0323
Co 228.615	106.820	106.651	107.124
Cr 267.716	230.128	229.808	229.847
Cu 324.754	151.384	151.021	151.361
Fe 271.441	267802	267986	267488
K 766.491	14685.2	14678.4	14686.5
Mg 279.078	47285.8	47289.1	47245.6
Mn 257.610	8161.74	8131.95	8141.43
Mo 202.032	6.6547	5.7469	6.0320
Na 330.237	489.472u	263.697u	828.141u
Ni 231.604	220.251	216.826	214.935
Pb 220.353	85.8721	94.0934	84.4302
Sb 206.834	-2.8978	-3.1739	-8.5926
Se 196.026	26.6852	12.9860	6.1227
Si 288.158	36701.6	36775.8	36685.8
Sn 189.925	10.3397	12.8443	10.4774
Sr 216.596	125.377	125.965	124.329
Ti 334.941	2064.42	2067.68	2064.17
Tl 190.794	0.0915u	2.6894u	11.7489u
V 292.401	336.570	335.542	335.420
Zn 206.200	594.416	602.406	589.850

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2402	ppb	0.4807	200.1	-81.1740
Al 308.215	178291	ppb	33.4422	0.0	447112
As 188.980	42.0843	ppb	9.0649	21.5	12.8752
B 249.678	60.5077	ppb	0.5902	1.0	39.8566
Ba 389.178	1969.92	ppb	2.2622	0.1	21932.2
Be 313.042	8.3996	ppb	0.0045	0.1	6831.78
Ca 370.602	26545	ppb	18.29	0.1	60166
Cd 226.502	4.0788	ppb	0.2341	5.7	294.983
Co 228.615	106.865	ppb	0.2395	0.2	553.555
Cr 267.716	229.928	ppb	0.1743	0.1	5411.21
Cu 324.754	151.255	ppb	0.2029	0.1	6230.00
Fe 271.441	267759	ppb	252.005	0.1	220575
K 766.491	14683.4	ppb	4.3459	0.0	400453

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	47273.5	ppb	24.1884	0.1	68005.1
Mn 257.610	8145.04	ppb	15.2180	0.2	891040
Mo 202.032	6.1445	ppb	0.4642	7.6	13.8099
Na 330.237	527.103	ppb	284.097	53.9	42.5138
Ni 231.604	217.337	ppb	2.6946	1.2	299.700
Pb 220.353	88.1319	ppb	5.2129	5.9	57.5818
Sb 206.834	-4.8881	ppb	3.2111	65.7	15.7540
Se 196.026	15.2646	ppb	10.4689	68.6	4.8624
Si 288.158	36721.1	ppb	48.0767	0.1	176609
Sn 189.925	11.2205	ppb	1.4080	12.5	3.3751
Sr 216.596	125.224	ppb	0.8287	0.7	604.159
Ti 334.941	2065.42	ppb	1.9560	0.1	247479
Tl 190.794	4.8433	ppb	6.1199	126.4	-14.8121
V 292.401	335.844	ppb	0.6315	0.2	4945.34
Zn 206.200	595.557	ppb	6.3553	1.1	214.363

680-161405-A-7-A (Samp) **12/19/2018, 9:23:14 AM** **Rack 4, Tube 43**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2626u	0.1012u	-0.3541u
Al 308.215	177632	177604	177981
As 188.980	29.4020	31.6432	27.8371
B 249.678	59.6923	58.1238	60.1869
Ba 389.178	2260.44	2265.42	2269.90
Be 313.042	7.9373	7.9315	7.9515
Ca 370.602	30175	30169	30234
Cd 226.502	1.4361	0.8537	1.2532
Co 228.615	83.0938	82.0970	81.8479
Cr 267.716	230.049	229.887	229.997
Cu 324.754	131.878	131.185	132.895
Fe 271.441	247855	247720	248251
K 766.491	13662.2	13653.5	13671.9
Mg 279.078	48611.3	48549.5	48656.5
Mn 257.610	5620.41	5610.80	5617.35
Mo 202.032	1.5758u	4.9310	2.9863
Na 330.237	585.475u	507.343u	958.111u
Ni 231.604	193.555	199.511	196.583
Pb 220.353	69.9235	67.7340	69.2412
Sb 206.834	-19.9549u	-10.4858	-10.1777
Se 196.026	4.0728	3.2861	13.4086
Si 288.158	37299.2	37244.9	37260.5
Sn 189.925	19.8598	17.2737	18.3282
Sr 216.596	147.815	150.441	148.080
Ti 334.941	1964.88	1960.24	1965.39
Tl 190.794	3.5817u	0.9910u	-1.7581u
V 292.401	308.391	308.624	310.302
Zn 206.200	577.058	572.217	577.525

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1718	ppb	0.2408	140.1	-80.0363
Al 308.215	177739	ppb	210.066	0.1	445727
As 188.980	29.6274	ppb	1.9130	6.5	9.5470
B 249.678	59.3343	ppb	1.0771	1.8	51.9535

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	2265.26	ppb	4.7334	0.2	25205.0
Be 313.042	7.9401	ppb	0.0103	0.1	6450.60
Ca 370.602	30192	ppb	36.04	0.1	68470
Cd 226.502	1.1810	ppb	0.2978	25.2	232.287
Co 228.615	82.3463	ppb	0.6593	0.8	428.654
Cr 267.716	229.978	ppb	0.0828	0.0	5404.71
Cu 324.754	131.986	ppb	0.8598	0.7	5465.25
Fe 271.441	247942	ppb	275.894	0.1	204251
K 766.491	13662.6	ppb	9.2128	0.1	372631
Mg 279.078	48605.8	ppb	53.7515	0.1	69952.5
Mn 257.610	5616.19	ppb	4.9079	0.1	614543
Mo 202.032	3.1643	ppb	1.6847	53.2	7.4122
Na 330.237	683.643	ppb	240.885	35.2	48.6797
Ni 231.604	196.550	ppb	2.9781	1.5	270.837
Pb 220.353	68.9662	ppb	1.1203	1.6	46.0819
Sb 206.834	-13.5395	ppb	5.5581	41.1	11.4757
Se 196.026	6.9225	ppb	5.6309	81.3	3.0929
Si 288.158	37268.2	ppb	27.9495	0.1	179230
Sn 189.925	18.4872	ppb	1.3004	7.0	5.7302
Sr 216.596	148.779	ppb	1.4459	1.0	698.897
Ti 334.941	1963.51	ppb	2.8360	0.1	235279
Tl 190.794	0.9382	ppb	2.6703	284.6	-16.6994
V 292.401	309.106	ppb	1.0429	0.3	4551.85
Zn 206.200	575.600	ppb	2.9393	0.5	207.153

680-161405-A-8-A (Samp) **12/19/2018, 9:27:41 AM** **Rack 4, Tube 44**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0778u	0.0805u	1.0257u
Al 308.215	157770	157414	157490
As 188.980	35.4329	33.3568	37.7718
B 249.678	55.9084	54.6000	57.2568
Ba 389.178	2182.91	2177.48	2178.84
Be 313.042	7.1663	7.1913	7.1926
Ca 370.602	26483	26475	26499
Cd 226.502	0.5049	0.8386	0.7350
Co 228.615	80.5814	79.0067	79.4193
Cr 267.716	207.589	208.201	208.695
Cu 324.754	129.143	128.950	127.318
Fe 271.441	247157	247490	247644
K 766.491	12542.6	12512.3	12517.4
Mg 279.078	44109.0	44132.0	44202.0
Mn 257.610	2583.55	2581.07	2584.56
Mo 202.032	2.2885	4.6411	3.5761
Na 330.237	718.922u	529.164u	230.241u
Ni 231.604	166.358	167.336	166.706
Pb 220.353	75.9615	80.5712	75.7634
Sb 206.834	-12.4649	-5.4231	-20.2498u
Se 196.026	24.1560	24.2971	-3.2368u
Si 288.158	33305.9	33311.9	33357.4
Sn 189.925	19.4089	8.2348	17.0282
Sr 216.596	131.162	131.313	131.348
Ti 334.941	1959.78	1961.11	1960.70

Label	Replicates Concentration		
Tl 190.794	9.5045u	-0.5633u	13.7127u
V 292.401	303.850	303.544	303.900
Zn 206.200	530.169	521.546	530.185

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3428	ppb	0.5967	174.1	-67.7487
Al 308.215	157558	ppb	187.497	0.1	395139
As 188.980	35.5205	ppb	2.2088	6.2	11.1044
B 249.678	55.9217	ppb	1.3284	2.4	29.5425
Ba 389.178	2179.74	ppb	2.8265	0.1	24251.3
Be 313.042	7.1834	ppb	0.0148	0.2	5820.88
Ca 370.602	26486	ppb	11.99	0.0	59960
Cd 226.502	0.6928	ppb	0.1708	24.7	222.869
Co 228.615	79.6691	ppb	0.8165	1.0	415.114
Cr 267.716	208.162	ppb	0.5544	0.3	4891.68
Cu 324.754	128.470	ppb	1.0030	0.8	5326.47
Fe 271.441	247430	ppb	248.940	0.1	203829
K 766.491	12524.1	ppb	16.2437	0.1	341604
Mg 279.078	44147.7	ppb	48.4721	0.1	63568.0
Mn 257.610	2583.06	ppb	1.7951	0.1	282904
Mo 202.032	3.5019	ppb	1.1780	33.6	8.1826
Na 330.237	492.776	ppb	246.364	50.0	43.7971
Ni 231.604	166.800	ppb	0.4955	0.3	229.489
Pb 220.353	77.4321	ppb	2.7204	3.5	51.0685
Sb 206.834	-12.7126	ppb	7.4165	58.3	11.7733
Se 196.026	15.0721	ppb	15.8561	105.2	4.3541
Si 288.158	33325.1	ppb	28.1385	0.1	160307
Sn 189.925	14.8906	ppb	5.8858	39.5	4.5646
Sr 216.596	131.274	ppb	0.0989	0.1	625.055
Ti 334.941	1960.53	ppb	0.6845	0.0	234906
Tl 190.794	7.5513	ppb	7.3357	97.1	-15.0836
V 292.401	303.765	ppb	0.1931	0.1	4474.67
Zn 206.200	527.300	ppb	4.9831	0.9	189.778

680-161405-A-9-A (Samp) **12/19/2018, 9:36:13 AM** **Rack 4, Tube 45**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	5.8373	5.7604	5.5432
Al 308.215	92426.6	92327.7	92466.7
As 188.980	216.067	213.353	212.300
B 249.678	36.9862	38.9388	38.2458
Ba 389.178	819.983	818.598	819.730
Be 313.042	4.1979	4.1759	4.1964
Ca 370.602	22635	22594	22613
Cd 226.502	3.8193	3.7257	3.9739
Co 228.615	52.2481	52.5000	53.2059
Cr 267.716	177.981	177.206	176.978
Cu 324.754	250.984	248.194	251.579
Fe 271.441	152657	152440	152513
K 766.491	7239.79	7248.84	7244.12
Mg 279.078	23615.9	23506.9	23524.1
Mn 257.610	4739.86	4738.76	4745.14
Mo 202.032	4.1677	5.2488	4.0746

Label	Replicates Concentration		
Na 330.237	472.756u	455.423u	397.002u
Ni 231.604	116.974	116.549	115.699
Pb 220.353	3071.53	3051.63	3071.27
Sb 206.834	-0.3794	-1.5167	-6.2516
Se 196.026	11.6690	9.9713	22.8188
Si 288.158	25251.0	25230.0	25194.4
Sn 189.925	133.488	133.606	128.362
Sr 216.596	83.0895	82.2639	83.6746
Ti 334.941	1272.89	1270.81	1270.88
Tl 190.794	0.2728u	2.9120u	0.0584u
V 292.401	185.139	184.528	185.005
Zn 206.200	1962.37	1994.79	1972.66

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	5.7136	ppb	0.1526	2.7	158.192
Al 308.215	92407.0	ppb	71.5619	0.1	231815
As 188.980	213.907	ppb	1.9439	0.9	57.9833
B 249.678	38.0569	ppb	0.9899	2.6	4.8032
Ba 389.178	819.437	ppb	0.7378	0.1	9102.82
Be 313.042	4.1901	ppb	0.0123	0.3	3328.80
Ca 370.602	22614	ppb	20.49	0.1	51373
Cd 226.502	3.8396	ppb	0.1254	3.3	197.478
Co 228.615	52.6513	ppb	0.4965	0.9	269.667
Cr 267.716	177.388	ppb	0.5260	0.3	4170.27
Cu 324.754	250.252	ppb	1.8071	0.7	10109.9
Fe 271.441	152537	ppb	110.554	0.1	125668
K 766.491	7244.25	ppb	4.5244	0.1	197705
Mg 279.078	23549.0	ppb	58.5940	0.2	33883.4
Mn 257.610	4741.25	ppb	3.4089	0.1	518665
Mo 202.032	4.4970	ppb	0.6527	14.5	11.9338
Na 330.237	441.727	ppb	39.6908	9.0	49.0494
Ni 231.604	116.407	ppb	0.6492	0.6	159.474
Pb 220.353	3064.81	ppb	11.4150	0.4	1802.97
Sb 206.834	-2.7159	ppb	3.1144	114.7	14.1330
Se 196.026	14.8197	ppb	6.9792	47.1	4.8191
Si 288.158	25225.1	ppb	28.6519	0.1	121412
Sn 189.925	131.819	ppb	2.9940	2.3	42.4582
Sr 216.596	83.0094	ppb	0.7088	0.9	397.710
Ti 334.941	1271.53	ppb	1.1821	0.1	152321
Tl 190.794	1.0810	ppb	1.5893	147.0	-13.5263
V 292.401	184.891	ppb	0.3214	0.2	2722.02
Zn 206.200	1976.61	ppb	16.5639	0.8	711.231

680-161405-A-10-A (Samp) **12/19/2018, 9:40:40 AM** **Rack 4, Tube 46**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	4.6239	4.5416	3.7826
Al 308.215	102713	102624	102905
As 188.980	207.143	218.712	211.961
B 249.678	35.4787	34.8409	35.7473
Ba 389.178	877.303	877.765	878.654
Be 313.042	4.6395	4.6401	4.6573
Ca 370.602	19248	19260	19285

Label	Replicates Concentration		
Cd 226.502	5.0445	5.2679	5.0597
Co 228.615	83.2693	82.6442	83.5355
Cr 267.716	161.230	160.958	161.529
Cu 324.754	275.638	278.669	274.248
Fe 271.441	195113	194914	195360
K 766.491	6253.18	6252.46	6265.38
Mg 279.078	28568.0	28539.0	28576.7
Mn 257.610	11100.9	11069.0	11074.0
Mo 202.032	7.2609	6.1544	6.6652
Na 330.237	205.444u	124.801u	511.410u
Ni 231.604	130.786	126.275	130.923
Pb 220.353	3570.94	3578.49	3581.64
Sb 206.834	-11.1843u	-14.6436u	-7.7887
Se 196.026	10.9804	-0.3689	13.8711
Si 288.158	23261.6	23242.5	23292.0
Sn 189.925	95.6383	98.7310	97.8553
Sr 216.596	73.0230	70.9600	72.8945
Ti 334.941	1026.62	1026.68	1028.41
Tl 190.794	-4.6660u	2.7957u	6.6341u
V 292.401	198.828	198.919	198.867
Zn 206.200	2916.63	2898.43	2911.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	4.3161	ppb	0.4638	10.7	111.938
Al 308.215	102747	ppb	143.538	0.1	257737
As 188.980	212.605	ppb	5.8114	2.7	57.7312
B 249.678	35.3556	ppb	0.4655	1.3	-56.2331
Ba 389.178	877.907	ppb	0.6870	0.1	9770.28
Be 313.042	4.6457	ppb	0.0101	0.2	3706.06
Ca 370.602	19264	ppb	18.82	0.1	43766
Cd 226.502	5.1240	ppb	0.1248	2.4	252.098
Co 228.615	83.1497	ppb	0.4576	0.6	422.031
Cr 267.716	161.239	ppb	0.2859	0.2	3813.49
Cu 324.754	276.185	ppb	2.2610	0.8	11143.0
Fe 271.441	195129	ppb	223.292	0.1	160751
K 766.491	6257.01	ppb	7.2608	0.1	170798
Mg 279.078	28561.2	ppb	19.7161	0.1	41031.4
Mn 257.610	11081.3	ppb	17.1670	0.2	1211886
Mo 202.032	6.6935	ppb	0.5538	8.3	16.2142
Na 330.237	280.551	ppb	203.955	72.7	39.0807
Ni 231.604	129.328	ppb	2.6451	2.0	177.400
Pb 220.353	3577.02	ppb	5.4947	0.2	2103.85
Sb 206.834	-11.2055	ppb	3.4275	30.6	11.1734
Se 196.026	8.1609	ppb	7.5270	92.2	4.0269
Si 288.158	23265.4	ppb	24.9779	0.1	111992
Sn 189.925	97.4082	ppb	1.5941	1.6	31.3065
Sr 216.596	72.2925	ppb	1.1558	1.6	362.985
Ti 334.941	1027.24	ppb	1.0171	0.1	123084
Tl 190.794	1.5879	ppb	5.7461	361.9	-12.4449
V 292.401	198.871	ppb	0.0458	0.0	2933.82
Zn 206.200	2908.89	ppb	9.4014	0.3	1046.81

680-161405-A-65-A (Samp) **12/19/2018, 9:45:07 AM** **Rack 4, Tube 47**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5469u	-0.7118u	-0.2720u
Al 308.215	130464	130525	130481
As 188.980	208.228	211.412	200.302
B 249.678	60.4419	57.7411	59.1216
Ba 389.178	1947.48	1950.27	1948.17
Be 313.042	7.8250	7.8398	7.8152
Ca 370.602	38641	38614	38679
Cd 226.502	10.3415	10.0986	10.5067
Co 228.615	134.209	134.537	134.529
Cr 267.716	167.982	167.998	168.381
Cu 324.754	242.315	242.280	243.795
Fe 271.441	226848	226454	226706
K 766.491	13239.6	13225.7	13232.5
Mg 279.078	35579.7	35574.9	35602.2
Mn 257.610	19421.3	19482.8	19490.2
Mo 202.032	9.6737	8.6231	9.9116
Na 330.237	816.353u	617.776u	461.292u
Ni 231.604	218.377	219.029	218.830
Pb 220.353	1155.93	1153.77	1172.25
Sb 206.834	-12.6427u	0.4851	-15.4573u
Se 196.026	19.9223	-4.1829	15.1049
Si 288.158	31150.9	31157.2	31104.4
Sn 189.925	36.0050	30.8566	32.2294
Sr 216.596	159.147	161.566	159.571
Ti 334.941	1480.70	1479.52	1480.39
Tl 190.794	3.8172	1.2387u	2.9752
V 292.401	283.213	282.915	283.103
Zn 206.200	1284.94	1285.61	1287.92

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5102	ppb	0.2222	43.5	-55.5136
Al 308.215	130490	ppb	31.3129	0.0	327285
As 188.980	206.647	ppb	5.7211	2.8	56.2232
B 249.678	59.1015	ppb	1.3505	2.3	71.8588
Ba 389.178	1948.64	ppb	1.4535	0.1	21671.1
Be 313.042	7.8267	ppb	0.0124	0.2	6353.33
Ca 370.602	38645	ppb	32.81	0.1	88058
Cd 226.502	10.3156	ppb	0.2053	2.0	362.586
Co 228.615	134.425	ppb	0.1870	0.1	685.282
Cr 267.716	168.120	ppb	0.2260	0.1	3995.03
Cu 324.754	242.797	ppb	0.8648	0.4	9832.46
Fe 271.441	226670	ppb	199.678	0.1	186733
K 766.491	13232.6	ppb	6.9279	0.1	360913
Mg 279.078	35585.6	ppb	14.5502	0.0	51051.6
Mn 257.610	19464.8	ppb	37.7967	0.2	2128538
Mo 202.032	9.4028	ppb	0.6856	7.3	21.8061
Na 330.237	631.807	ppb	177.946	28.2	48.3868
Ni 231.604	218.745	ppb	0.3345	0.2	301.618
Pb 220.353	1160.65	ppb	10.1045	0.9	687.693
Sb 206.834	-9.2050	ppb	8.5091	92.4	12.7383
Se 196.026	10.2814	ppb	12.7560	124.1	5.1406
Si 288.158	31137.5	ppb	28.8370	0.1	149787

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	33.0304	ppb	2.6660	8.1	10.4432
Sr 216.596	160.095	ppb	1.2920	0.8	741.076
Ti 334.941	1480.20	ppb	0.6086	0.0	177354
Tl 190.794	2.6770	ppb	1.3149	49.1	-9.8753
V 292.401	283.077	ppb	0.1506	0.1	4166.93
Zn 206.200	1286.16	ppb	1.5608	0.1	462.860

680-161405-A-11-A (Samp) **12/19/2018, 9:49:34 AM** **Rack 4, Tube 48**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	8.4026	8.7281	8.6760
Al 308.215	103552	103361	103317
As 188.980	340.559	334.873	340.144
B 249.678	42.5653	43.5723	45.7367
Ba 389.178	972.361	971.118	971.035
Be 313.042	4.7736	4.7621	4.7721
Ca 370.602	25919	25896	25904
Cd 226.502	5.5034	5.4761	5.2845
Co 228.615	65.4307	65.1479	64.7464
Cr 267.716	216.469	217.134	215.406
Cu 324.754	403.766	405.528	405.369
Fe 271.441	171663	171679	171528
K 766.491	8635.35	8629.45	8635.96
Mg 279.078	29326.0	29300.4	29311.5
Mn 257.610	5869.76	5846.56	5858.96
Mo 202.032	5.8447	3.6564	3.2599
Na 330.237	417.561u	363.650u	520.678u
Ni 231.604	148.364	149.115	146.361
Pb 220.353	4048.96	4048.78	4037.95
Sb 206.834	-5.1756	-6.4899	-2.8328
Se 196.026	11.3324	25.4761	6.2716
Si 288.158	26387.6	26373.4	26376.3
Sn 189.925	185.380	183.825	185.642
Sr 216.596	92.4197	93.2123	94.1162
Ti 334.941	1347.84	1348.03	1346.57
Tl 190.794	-2.3412u	1.8447u	0.1651u
V 292.401	210.265	209.427	209.539
Zn 206.200	2355.71	2330.76	2361.31

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	8.6022	ppb	0.1748	2.0	263.463
Al 308.215	103410	ppb	125.357	0.1	259397
As 188.980	338.525	ppb	3.1695	0.9	90.9015
B 249.678	43.9581	ppb	1.6205	3.7	25.3355
Ba 389.178	971.505	ppb	0.7429	0.1	10802.4
Be 313.042	4.7692	ppb	0.0063	0.1	3810.95
Ca 370.602	25907	ppb	11.63	0.0	58861
Cd 226.502	5.4213	ppb	0.1193	2.2	238.652
Co 228.615	65.1083	ppb	0.3438	0.5	333.661
Cr 267.716	216.336	ppb	0.8716	0.4	5079.04
Cu 324.754	404.888	ppb	0.9748	0.2	16215.1
Fe 271.441	171623	ppb	82.9042	0.0	141390
K 766.491	8633.58	ppb	3.5960	0.0	235570

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	29312.7	ppb	12.8521	0.0	42171.9
Mn 257.610	5858.43	ppb	11.6106	0.2	640854
Mo 202.032	4.2536	ppb	1.3921	32.7	11.0820
Na 330.237	433.963	ppb	79.7887	18.4	46.1956
Ni 231.604	147.947	ppb	1.4240	1.0	203.295
Pb 220.353	4045.23	ppb	6.3039	0.2	2377.72
Sb 206.834	-4.8328	ppb	1.8525	38.3	13.7039
Se 196.026	14.3600	ppb	9.9538	69.3	4.7776
Si 288.158	26379.1	ppb	7.5063	0.0	126958
Sn 189.925	184.949	ppb	0.9823	0.5	59.6762
Sr 216.596	93.2494	ppb	0.8488	0.9	445.497
Ti 334.941	1347.48	ppb	0.7929	0.1	161437
Tl 190.794	-0.1104	ppb	2.1065	1907.5	-14.2824
V 292.401	209.744	ppb	0.4552	0.2	3087.07
Zn 206.200	2349.26	ppb	16.2615	0.7	845.353

680-161405-A-12-A (Samp) **12/19/2018, 9:54:01 AM** **Rack 4, Tube 49**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	13.9917	13.8391	14.5816
Al 308.215	114042	114108	113997
As 188.980	341.379	333.422	341.932
B 249.678	51.1587	49.8867	50.2642
Ba 389.178	1135.03	1136.67	1137.39
Be 313.042	5.4011	5.4144	5.4008
Ca 370.602	27342	27393	27365
Cd 226.502	4.8512	4.4519	4.5770
Co 228.615	68.0650	67.9057	67.2751
Cr 267.716	310.064	310.739	310.763
Cu 324.754	1518.56	1523.70	1511.17
Fe 271.441	179112	179555	179244
K 766.491	11149.6	11169.8	11171.3
Mg 279.078	31603.3	31638.7	31612.7
Mn 257.610	5546.65	5554.98	5557.46
Mo 202.032	5.3670	5.6661	4.7993
Na 330.237	720.694u	629.154u	399.640u
Ni 231.604	152.746	149.471	152.853
Pb 220.353	4843.11	4870.82	4851.28
Sb 206.834	-5.0879	-14.4831u	-0.3453
Se 196.026	7.8984	26.2845	0.8514
Si 288.158	28867.9	28913.3	28894.6
Sn 189.925	322.182	328.096	325.449
Sr 216.596	111.220	109.834	110.226
Ti 334.941	1472.16	1475.22	1474.12
Tl 190.794	4.4230u	-0.7132u	10.6300
V 292.401	227.087	226.891	225.894
Zn 206.200	2601.36	2621.60	2623.70

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	14.1375	ppb	0.3921	2.8	465.990
Al 308.215	114049	ppb	55.9681	0.0	286068
As 188.980	338.911	ppb	4.7619	1.4	91.0046
B 249.678	50.4365	ppb	0.6533	1.3	61.1333

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1136.36	ppb	1.2124	0.1	12636.9
Be 313.042	5.4054	ppb	0.0078	0.1	4340.33
Ca 370.602	27367	ppb	25.21	0.1	62169
Cd 226.502	4.6267	ppb	0.2042	4.4	232.191
Co 228.615	67.7486	ppb	0.4177	0.6	348.436
Cr 267.716	310.522	ppb	0.3970	0.1	7265.86
Cu 324.754	1517.81	ppb	6.3007	0.4	60125.3
Fe 271.441	179304	ppb	227.488	0.1	147716
K 766.491	11163.6	ppb	12.1253	0.1	304524
Mg 279.078	31618.2	ppb	18.3694	0.1	45494.5
Mn 257.610	5553.03	ppb	5.6614	0.1	607485
Mo 202.032	5.2775	ppb	0.4403	8.3	13.2636
Na 330.237	583.163	ppb	165.394	28.4	48.6499
Ni 231.604	151.690	ppb	1.9227	1.3	208.497
Pb 220.353	4855.07	ppb	14.2373	0.3	2852.32
Sb 206.834	-6.6387	ppb	7.1953	108.4	13.3312
Se 196.026	11.6781	ppb	13.1311	112.4	4.2119
Si 288.158	28891.9	ppb	22.8076	0.1	139036
Sn 189.925	325.242	ppb	2.9624	0.9	105.142
Sr 216.596	110.427	ppb	0.7142	0.6	519.987
Ti 334.941	1473.84	ppb	1.5519	0.1	176577
Tl 190.794	4.7799	ppb	5.6800	118.8	-12.6399
V 292.401	226.624	ppb	0.6402	0.3	3332.60
Zn 206.200	2615.56	ppb	12.3361	0.5	941.165

680-161405-A-13-A (Samp) **12/19/2018, 9:59:23 AM** **Rack 4, Tube 50**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	7.1564	6.9195	6.9913
Al 308.215	123990	123923	124014
As 188.980	88.2317	105.595	90.0683
B 249.678	50.6015	49.7083	50.9694
Ba 389.178	1095.11	1096.62	1094.22
Be 313.042	6.4098	6.3770	6.4099
Ca 370.602	27856	27871	27851
Cd 226.502	2.9500	3.4198	2.8070
Co 228.615	95.5964	96.5991	96.1498
Cr 267.716	288.363	287.981	287.761
Cu 324.754	379.641	376.745	380.246
Fe 271.441	225868	225658	225835
K 766.491	12137.3	12119.0	12131.5
Mg 279.078	35260.7	35243.3	35280.7
Mn 257.610	6881.96	6896.48	6890.80
Mo 202.032	5.9377	6.5663	6.6654
Na 330.237	509.838u	256.042u	340.772u
Ni 231.604	160.885	162.490	159.676
Pb 220.353	1594.81	1598.39	1587.31
Sb 206.834	-16.2739u	-0.7719	-19.0776u
Se 196.026	8.8596	22.0013	17.5711
Si 288.158	30003.0	29969.9	29998.0
Sn 189.925	143.919	140.775	146.058
Sr 216.596	108.583	107.878	109.153
Ti 334.941	1674.63	1675.13	1676.18

Label	Replicates Concentration		
Tl 190.794	9.5794u	3.4473u	4.9090u
V 292.401	267.524	267.381	266.274
Zn 206.200	1113.60	1102.69	1114.63

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	7.0224	ppb	0.1215	1.7	194.870
Al 308.215	123976	ppb	47.3068	0.0	310955
As 188.980	94.6318	ppb	9.5391	10.1	26.6445
B 249.678	50.4264	ppb	0.6485	1.3	14.2569
Ba 389.178	1095.32	ppb	1.2179	0.1	12199.8
Be 313.042	6.3989	ppb	0.0190	0.3	5166.68
Ca 370.602	27859	ppb	10.35	0.0	63220
Cd 226.502	3.0590	ppb	0.3206	10.5	243.122
Co 228.615	96.1151	ppb	0.5023	0.5	494.493
Cr 267.716	288.035	ppb	0.3046	0.1	6752.19
Cu 324.754	378.877	ppb	1.8712	0.5	15201.2
Fe 271.441	225787	ppb	112.986	0.1	186004
K 766.491	12129.3	ppb	9.3888	0.1	330842
Mg 279.078	35261.6	ppb	18.7094	0.1	50726.1
Mn 257.610	6889.75	ppb	7.3181	0.1	753693
Mo 202.032	6.3898	ppb	0.3946	6.2	15.0340
Na 330.237	368.884	ppb	129.212	35.0	41.6419
Ni 231.604	161.017	ppb	1.4114	0.9	221.428
Pb 220.353	1593.50	ppb	5.6535	0.4	940.525
Sb 206.834	-12.0412	ppb	9.8596	81.9	11.8121
Se 196.026	16.1440	ppb	6.6861	41.4	5.0434
Si 288.158	29990.3	ppb	17.8619	0.1	144301
Sn 189.925	143.584	ppb	2.6573	1.9	46.2708
Sr 216.596	108.538	ppb	0.6388	0.6	523.578
Ti 334.941	1675.31	ppb	0.7940	0.0	200718
Tl 190.794	5.9786	ppb	3.2029	53.6	-13.3051
V 292.401	267.060	ppb	0.6844	0.3	3932.52
Zn 206.200	1110.31	ppb	6.6152	0.6	399.530

Cont Calib Verif (CCV) **12/19/2018, 10:03:50 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	504.350	506.197	500.666
Al 308.215	10057.7	10041.3	10049.4
As 188.980	519.720	521.826	518.317
B 249.678	521.217	520.979	523.700
Ba 389.178	483.309	482.261	484.695
Be 313.042	542.500	541.760	541.716
Ca 370.602	10212	10209	10217
Cd 226.502	526.536	524.111	524.534
Co 228.615	517.447	515.862	515.358
Cr 267.716	516.319	515.128	515.660
Cu 324.754	502.646	504.604	498.825
Fe 271.441	10325.2	10284.2	10340.0
K 766.491	9925.50	9907.19	9919.73
Mg 279.078	10556.5	10525.9	10524.7
Mn 257.610	508.006	506.865	507.608
Mo 202.032	502.996	506.775	507.234

Label	Replicates Concentration		
Na 330.237	10242.7	10663.6	10628.7
Ni 231.604	518.011	511.839	513.145
Pb 220.353	499.135	503.784	513.185
Sb 206.834	496.960	508.878	503.887
Se 196.026	499.655	509.463	515.752
Si 288.158	5473.43	5446.20	5449.99
Sn 189.925	505.626	494.279	513.548
Sr 216.596	515.603	513.093	511.171
Ti 334.941	511.607	511.210	511.813
Tl 190.794	494.393	487.093	486.064
V 292.401	501.891	501.179	502.200
Zn 206.200	1011.06	1026.26	1030.02

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	503.738	ppb	2.8157	0.6	18638.7	100.74760
Al 308.215	10049.5	ppb	8.1856	0.1	25377.5	100.49481
As 188.980	519.954	ppb	1.7659	0.3	138.327	103.99086
B 249.678	521.965	ppb	1.5070	0.3	3405.35	104.39303
Ba 389.178	483.422	ppb	1.2210	0.3	5316.82	96.68439
Be 313.042	541.992	ppb	0.4404	0.1	450095	108.39840
Ca 370.602	10212	ppb	4.057	0.0	23320	102.12429
Cd 226.502	525.060	ppb	1.2950	0.2	8591.54	105.01208
Co 228.615	516.222	ppb	1.0900	0.2	2584.90	103.24441
Cr 267.716	515.702	ppb	0.5963	0.1	11997.0	103.14049
Cu 324.754	502.025	ppb	2.9395	0.6	20018.4	100.40500
Fe 271.441	10316.5	ppb	28.8656	0.3	8556.07	103.11304
K 766.491	9917.47	ppb	9.3648	0.1	270562	99.17474
Mg 279.078	10535.7	ppb	18.0180	0.2	15200.9	105.35690
Mn 257.610	507.493	ppb	0.5793	0.1	55578.0	101.49859
Mo 202.032	505.668	ppb	2.3258	0.5	1143.18	101.13364
Na 330.237	10511.7	ppb	233.590	2.2	330.901	105.11658
Ni 231.604	514.331	ppb	3.2527	0.6	711.983	102.86629
Pb 220.353	505.368	ppb	7.1580	1.4	302.507	101.07359
Sb 206.834	503.242	ppb	5.9853	1.2	234.151	100.64836
Se 196.026	508.290	ppb	8.1125	1.6	98.8761	101.65794
Si 288.158	5456.54	ppb	14.7487	0.3	26608.6	109.13081
Sn 189.925	504.484	ppb	9.6850	1.9	163.231	100.89687
Sr 216.596	513.289	ppb	2.2225	0.4	2169.33	102.65781
Ti 334.941	511.543	ppb	0.3063	0.1	61261.2	102.30869
Tl 190.794	489.183	ppb	4.5409	0.9	193.857	97.83669
V 292.401	501.757	ppb	0.5235	0.1	7241.68	100.35133
Zn 206.200	1022.45	ppb	10.0374	1.0	367.524	102.24485

Cont Calib Blank (CCB) **12/19/2018, 10:08:14 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1737u	-0.0321u	0.0274
Al 308.215	-2.3588u	-2.8629u	-6.0549u
As 188.980	-3.9963u	3.4100	1.0485
B 249.678	3.6234	3.3452	3.3121
Ba 389.178	-0.5310u	0.8318	0.7944
Be 313.042	-0.0032u	-0.0109u	-0.0185u
Ca 370.602	-1.965u	-4.250u	4.960

Label	Replicates Concentration		
Cd 226.502	-0.3728u	-0.3292u	-0.0919u
Co 228.615	-0.4426u	0.2539	0.4303
Cr 267.716	-0.6087u	-0.2501u	-1.0453u
Cu 324.754	0.4613	-0.0765u	0.5042
Fe 271.441	-3.7117u	4.3013	1.6231
K 766.491	2.6718	2.2886	2.3209
Mg 279.078	-0.6216u	-1.5366u	-3.8078u
Mn 257.610	0.0909	0.1018	0.0701
Mo 202.032	0.0059	-0.9997u	1.2819
Na 330.237	4.8860	184.820	-41.4883u
Ni 231.604	1.2989	1.5857	2.6737
Pb 220.353	-2.0047u	2.1909	2.0963
Sb 206.834	-5.4916u	-3.4232u	-9.0140u
Se 196.026	0.4075	-8.1946u	-2.0637u
Si 288.158	20.5282	21.1227	18.2333
Sn 189.925	2.7776	1.1945	1.8660
Sr 216.596	0.6358	0.3016	0.5681
Ti 334.941	0.2565	0.4398	0.4582
Tl 190.794	-1.1270u	2.9299	-0.2431u
V 292.401	-0.1219u	0.0963	0.1838
Zn 206.200	-4.4247u	2.0730	-0.4219u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0595	ppb	0.1033	173.7	-31.2175	-0.05946
Al 308.215	-3.7589	ppb	2.0043	53.3	152.874	-3.75886
As 188.980	0.1541	ppb	3.7833	2455.6	1.2882	0.15407
B 249.678	3.4269	ppb	0.1710	5.0	-74.7743	3.42692
Ba 389.178	0.3650	ppb	0.7762	212.6	-60.0100	0.36504
Be 313.042	-0.0109	ppb	0.0077	70.3	-169.944	-0.01088
Ca 370.602	-0.4186	ppb	4.796	1145.7	36.31	-0.41861
Cd 226.502	-0.2646	ppb	0.1512	57.1	7.7623	-0.26463
Co 228.615	0.0805	ppb	0.4615	573.1	-11.6354	0.08053
Cr 267.716	-0.6347	ppb	0.3982	62.7	8.7867	-0.63471
Cu 324.754	0.2964	ppb	0.3236	109.2	213.961	0.29636
Fe 271.441	0.7376	ppb	4.0792	553.1	28.2471	0.73756
K 766.491	2.4271	ppb	0.2125	8.8	334.373	2.42711
Mg 279.078	-1.9887	ppb	1.6405	82.5	28.2285	-1.98866
Mn 257.610	0.0876	ppb	0.0161	18.4	30.9306	0.08760
Mo 202.032	0.0960	ppb	1.1434	1190.7	4.4431	0.09603
Na 330.237	49.4060	ppb	119.542	242.0	59.0586	49.40597
Ni 231.604	1.8528	ppb	0.7253	39.1	0.3076	1.85276
Pb 220.353	0.7608	ppb	2.3955	314.8	7.1233	0.76085
Sb 206.834	-5.9763	ppb	2.8267	47.3	8.9406	-5.97627
Se 196.026	-3.2836	ppb	4.4289	134.9	1.4004	-3.28359
Si 288.158	19.9614	ppb	1.5258	7.6	379.381	19.96139
Sn 189.925	1.9460	ppb	0.7946	40.8	0.3696	1.94603
Sr 216.596	0.5018	ppb	0.1767	35.2	11.8462	0.50183
Ti 334.941	0.3848	ppb	0.1115	29.0	10.5844	0.38485
Tl 190.794	0.5199	ppb	2.1334	410.3	-10.0548	0.51993
V 292.401	0.0527	ppb	0.1574	298.5	-1.7686	0.05274
Zn 206.200	-0.9245	ppb	3.2779	354.6	-0.5963	-0.92451

680-161405-A-14-A (Samp) **12/19/2018, 10:12:39 AM** **Rack 4, Tube 51**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	3.6246	3.8946	4.1356
Al 308.215	162623	162874	162955
As 188.980	75.3139	64.3907	73.2375
B 249.678	59.4742	59.9438	57.8135
Ba 389.178	1338.15	1338.66	1337.99
Be 313.042	7.8180	7.8232	7.8340
Ca 370.602	25126	25180	25132
Cd 226.502	2.0700	2.3112	1.9756
Co 228.615	99.6330	100.426	98.7075
Cr 267.716	290.468	290.358	289.749
Cu 324.754	238.042	238.435	238.135
Fe 271.441	258380	258365	258803
K 766.491	15808.1	15826.9	15841.7
Mg 279.078	46500.8	46485.7	46559.7
Mn 257.610	6051.00	6051.31	6059.63
Mo 202.032	6.5950	7.7479	6.3538
Na 330.237	676.521u	379.818u	595.263u
Ni 231.604	204.211	206.320	202.062
Pb 220.353	711.297	710.169	708.993
Sb 206.834	-15.2498u	-15.9477u	-12.9043
Se 196.026	13.5751	8.3861	26.4574
Si 288.158	34642.5	34709.3	34735.7
Sn 189.925	82.6320	82.6362	83.2885
Sr 216.596	107.712	106.810	106.617
Ti 334.941	1987.48	1991.11	1990.06
Tl 190.794	1.5863u	5.8937u	1.6489u
V 292.401	304.199	304.870	305.663
Zn 206.200	811.470	815.606	819.526

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	3.8849	ppb	0.2556	6.6	69.0923
Al 308.215	162817	ppb	172.974	0.1	408323
As 188.980	70.9807	ppb	5.8008	8.2	20.4715
B 249.678	59.0772	ppb	1.1193	1.9	39.5910
Ba 389.178	1338.27	ppb	0.3490	0.0	14917.9
Be 313.042	7.8250	ppb	0.0082	0.1	6353.19
Ca 370.602	25146	ppb	29.69	0.1	56954
Cd 226.502	2.1189	ppb	0.1731	8.2	255.032
Co 228.615	99.5887	ppb	0.8599	0.9	515.975
Cr 267.716	290.192	ppb	0.3871	0.1	6804.65
Cu 324.754	238.204	ppb	0.2054	0.1	9658.50
Fe 271.441	258516	ppb	248.660	0.1	212961
K 766.491	15825.6	ppb	16.8251	0.1	431582
Mg 279.078	46515.4	ppb	39.1048	0.1	66939.3
Mn 257.610	6053.98	ppb	4.8966	0.1	662407
Mo 202.032	6.8989	ppb	0.7451	10.8	15.6617
Na 330.237	550.534	ppb	153.326	27.9	43.6211
Ni 231.604	204.198	ppb	2.1292	1.0	281.444
Pb 220.353	710.153	ppb	1.1522	0.2	422.228
Sb 206.834	-14.7006	ppb	1.5943	10.8	11.3249
Se 196.026	16.1395	ppb	9.3046	57.7	4.8573
Si 288.158	34695.8	ppb	48.0360	0.1	166893

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	82.8522	ppb	0.3778	0.5	26.5892
Sr 216.596	107.047	ppb	0.5846	0.5	525.129
Ti 334.941	1989.55	ppb	1.8695	0.1	238390
Tl 190.794	3.0430	ppb	2.4690	81.1	-16.0338
V 292.401	304.910	ppb	0.7331	0.2	4491.83
Zn 206.200	815.534	ppb	4.0286	0.5	293.494

680-161405-A-15-A (Samp) **12/19/2018, 10:17:06 AM** **Rack 4, Tube 52**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.2174	1.2368	1.0713
Al 308.215	89496.2	89544.3	89627.8
As 188.980	94.8548	79.5916	83.3322
B 249.678	46.8677	47.0153	46.8797
Ba 389.178	548.368	549.267	548.850
Be 313.042	3.8663	3.8757	3.8684
Ca 370.602	57054	57039	57049
Cd 226.502	3.0296	3.1302	3.1158
Co 228.615	45.8045	45.4283	44.8931
Cr 267.716	125.321	125.385	125.787
Cu 324.754	165.811	166.820	167.884
Fe 271.441	134781	134804	134656
K 766.491	7795.60	7788.28	7785.65
Mg 279.078	29143.9	29144.7	29133.8
Mn 257.610	3131.28	3131.71	3131.15
Mo 202.032	3.7836	4.8808	3.9897
Na 330.237	410.776u	809.693	522.112u
Ni 231.604	107.839	106.577	108.337
Pb 220.353	532.998	523.341	525.610
Sb 206.834	-14.1495u	-1.6285	-2.7561
Se 196.026	7.4018	-0.9709u	-5.8863u
Si 288.158	25257.7	25261.3	25204.5
Sn 189.925	31.0550	29.3975	34.2458
Sr 216.596	118.679	118.263	116.557
Ti 334.941	1110.83	1108.54	1109.25
Tl 190.794	3.6345u	0.6623u	3.1524u
V 292.401	169.603	169.429	169.107
Zn 206.200	860.922	855.375	866.363

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1751	ppb	0.0905	7.7	-9.8168
Al 308.215	89556.1	ppb	66.5867	0.1	224667
As 188.980	85.9262	ppb	7.9554	9.3	24.1829
B 249.678	46.9209	ppb	0.0820	0.2	82.3653
Ba 389.178	548.828	ppb	0.4498	0.1	6099.29
Be 313.042	3.8701	ppb	0.0050	0.1	3068.55
Ca 370.602	57048	ppb	7.637	0.0	129865
Cd 226.502	3.0919	ppb	0.0544	1.8	171.391
Co 228.615	45.3753	ppb	0.4580	1.0	230.965
Cr 267.716	125.498	ppb	0.2526	0.2	2960.07
Cu 324.754	166.838	ppb	1.0366	0.6	6814.92
Fe 271.441	134747	ppb	79.7278	0.1	111015
K 766.491	7789.84	ppb	5.1546	0.1	212575

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	29140.8	ppb	6.0565	0.0	41957.5
Mn 257.610	3131.38	ppb	0.2925	0.0	342663
Mo 202.032	4.2180	ppb	0.5831	13.8	11.5863
Na 330.237	580.860	ppb	205.845	35.4	57.0802
Ni 231.604	107.584	ppb	0.9074	0.8	147.219
Pb 220.353	527.317	ppb	5.0495	1.0	315.326
Sb 206.834	-6.1780	ppb	6.9265	112.1	12.0502
Se 196.026	0.1815	ppb	6.7186	3701.5	1.9311
Si 288.158	25241.2	ppb	31.8056	0.1	121473
Sn 189.925	31.5661	ppb	2.4642	7.8	9.9687
Sr 216.596	117.833	ppb	1.1247	1.0	540.459
Ti 334.941	1109.54	ppb	1.1720	0.1	132942
Tl 190.794	2.4831	ppb	1.5952	64.2	-12.9127
V 292.401	169.379	ppb	0.2516	0.1	2492.91
Zn 206.200	860.887	ppb	5.4939	0.6	309.698

680-161405-A-66-A (Samp) **12/19/2018, 10:21:33 AM** **Rack 4, Tube 53**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5048u	1.2578	0.1185u
Al 308.215	113411	113573	113324
As 188.980	207.506	220.132	213.464
B 249.678	54.6927	55.4357	55.5504
Ba 389.178	1159.27	1162.46	1159.11
Be 313.042	5.9444	5.9486	5.9231
Ca 370.602	39870	39865	39824
Cd 226.502	4.6080	4.7966	4.4509
Co 228.615	58.3890	58.4081	58.0445
Cr 267.716	154.657	154.447	154.435
Cu 324.754	235.302	238.074	234.881
Fe 271.441	162996	163250	162969
K 766.491	10534.8	10542.5	10524.5
Mg 279.078	29261.4	29290.4	29232.4
Mn 257.610	5069.11	5072.74	5059.90
Mo 202.032	4.7871	4.2780	5.3012
Na 330.237	499.114u	427.506u	465.513u
Ni 231.604	143.324	147.638	147.417
Pb 220.353	1406.74	1412.36	1420.43
Sb 206.834	-7.9785	-7.3553	-7.4974
Se 196.026	21.4601	-6.1488u	0.5720
Si 288.158	29967.5	30015.7	29999.9
Sn 189.925	41.7669	37.6699	34.2671
Sr 216.596	160.468	159.253	159.247
Ti 334.941	1357.16	1358.29	1358.45
Tl 190.794	4.0513u	3.6797u	7.0263u
V 292.401	213.614	213.474	213.187
Zn 206.200	1410.20	1416.33	1408.18

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6270	ppb	0.5794	92.4	-32.3236
Al 308.215	113436	ppb	126.611	0.1	284531
As 188.980	213.701	ppb	6.3163	3.0	57.9547
B 249.678	55.2263	ppb	0.4656	0.8	109.742

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1160.28	ppb	1.8887	0.2	12894.8
Be 313.042	5.9387	ppb	0.0137	0.2	4785.63
Ca 370.602	39853	ppb	25.36	0.1	90655
Cd 226.502	4.6185	ppb	0.1731	3.7	219.419
Co 228.615	58.2805	ppb	0.2047	0.4	299.138
Cr 267.716	154.513	ppb	0.1247	0.1	3641.24
Cu 324.754	236.085	ppb	1.7346	0.7	9553.25
Fe 271.441	163072	ppb	155.113	0.1	134346
K 766.491	10533.9	ppb	9.0167	0.1	287363
Mg 279.078	29261.4	ppb	29.0127	0.1	42104.8
Mn 257.610	5067.25	ppb	6.6220	0.1	554346
Mo 202.032	4.7887	ppb	0.5116	10.7	12.4194
Na 330.237	464.044	ppb	35.8263	7.7	49.8453
Ni 231.604	146.126	ppb	2.4292	1.7	200.774
Pb 220.353	1413.18	ppb	6.8818	0.5	834.554
Sb 206.834	-7.6104	ppb	0.3266	4.3	12.0918
Se 196.026	5.2944	ppb	14.3975	271.9	3.0013
Si 288.158	29994.4	ppb	24.5445	0.1	144296
Sn 189.925	37.9013	ppb	3.7552	9.9	12.0218
Sr 216.596	159.656	ppb	0.7033	0.4	723.935
Ti 334.941	1357.97	ppb	0.7047	0.1	162693
Tl 190.794	4.9191	ppb	1.8344	37.3	-12.1783
V 292.401	213.425	ppb	0.2181	0.1	3140.11
Zn 206.200	1411.57	ppb	4.2466	0.3	507.907

680-161405-A-16-A (Samp) **12/19/2018, 10:26:00 AM** **Rack 4, Tube 54**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.7149	1.6204	1.9201
Al 308.215	103697	103733	103762
As 188.980	168.440	172.532	178.395
B 249.678	54.7016	52.3653	53.2365
Ba 389.178	696.659	695.364	696.688
Be 313.042	4.4021	4.4106	4.4081
Ca 370.602	48344	48378	48311
Cd 226.502	4.8601	5.4277	5.4434
Co 228.615	48.0968	49.4932	50.1078
Cr 267.716	169.346	169.171	169.524
Cu 324.754	231.135	232.449	229.629
Fe 271.441	144919	144768	144941
K 766.491	8084.63	8080.36	8098.79
Mg 279.078	30792.5	30775.0	30833.6
Mn 257.610	3114.42	3114.00	3114.54
Mo 202.032	4.5904	3.9126	4.3706
Na 330.237	502.457u	734.857	636.515u
Ni 231.604	133.017	132.429	133.870
Pb 220.353	826.850	829.928	819.894
Sb 206.834	-27.4825u	-9.7172u	-19.0137u
Se 196.026	-1.5042u	9.8998	25.4254
Si 288.158	27259.2	27253.3	27262.9
Sn 189.925	31.5014	38.1187	49.6836
Sr 216.596	133.181	133.387	132.325
Ti 334.941	1244.68	1243.64	1245.19

Label	Replicates Concentration		
Tl 190.794	1.1154u	-3.2544u	-10.3712u
V 292.401	186.684	187.101	186.022
Zn 206.200	1413.25	1405.09	1413.93

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.7518	ppb	0.1532	8.7	9.0667
Al 308.215	103731	ppb	32.7581	0.0	260200
As 188.980	173.123	ppb	5.0035	2.9	47.2067
B 249.678	53.4345	ppb	1.1807	2.2	115.954
Ba 389.178	696.237	ppb	0.7565	0.1	7740.26
Be 313.042	4.4069	ppb	0.0043	0.1	3513.95
Ca 370.602	48344	ppb	33.16	0.1	110007
Cd 226.502	5.2437	ppb	0.3323	6.3	215.084
Co 228.615	49.2326	ppb	1.0305	2.1	252.007
Cr 267.716	169.347	ppb	0.1768	0.1	3979.28
Cu 324.754	231.071	ppb	1.4111	0.6	9351.36
Fe 271.441	144876	ppb	94.3599	0.1	119358
K 766.491	8087.93	ppb	9.6452	0.1	220699
Mg 279.078	30800.4	ppb	30.1059	0.1	44345.6
Mn 257.610	3114.32	ppb	0.2826	0.0	340818
Mo 202.032	4.2912	ppb	0.3458	8.1	11.5881
Na 330.237	624.610	ppb	116.656	18.7	55.9040
Ni 231.604	133.105	ppb	0.7243	0.5	182.686
Pb 220.353	825.558	ppb	5.1401	0.6	490.000
Sb 206.834	-18.7378	ppb	8.8859	47.4	6.7566
Se 196.026	11.2737	ppb	13.5173	119.9	4.0096
Si 288.158	27258.5	ppb	4.8547	0.0	131161
Sn 189.925	39.7679	ppb	9.2026	23.1	12.6267
Sr 216.596	132.964	ppb	0.5634	0.4	606.720
Ti 334.941	1244.50	ppb	0.7877	0.1	149111
Tl 190.794	-4.1701	ppb	5.7978	139.0	-16.0571
V 292.401	186.602	ppb	0.5441	0.3	2745.19
Zn 206.200	1410.76	ppb	4.9192	0.3	507.585

680-161405-A-17-A (Samp) **12/19/2018, 10:30:27 AM** **Rack 4, Tube 55**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.0991	1.1392	1.4413
Al 308.215	112016	111911	111940
As 188.980	279.228	274.298	270.286
B 249.678	48.5083	50.6519	51.1460
Ba 389.178	846.812	845.927	845.421
Be 313.042	4.8340	4.8527	4.8426
Ca 370.602	35229	35274	35219
Cd 226.502	6.8250	7.1316	6.5756
Co 228.615	55.8248	55.4650	55.0292
Cr 267.716	184.032	183.518	183.462
Cu 324.754	244.987	244.584	243.484
Fe 271.441	156923	157258	156890
K 766.491	8389.87	8380.12	8357.94
Mg 279.078	29266.2	29286.9	29267.2
Mn 257.610	4199.30	4200.55	4200.04
Mo 202.032	4.7490	7.0868	5.6140

Label	Replicates Concentration		
Na 330.237	1005.50	947.194	617.544u
Ni 231.604	143.072	146.188	144.007
Pb 220.353	1026.48	1022.15	1039.36
Sb 206.834	-14.2087u	-0.1287	-10.6070u
Se 196.026	21.4358	3.1850	18.7335
Si 288.158	28682.7	28732.2	28684.4
Sn 189.925	52.3080	47.7568	39.7931
Sr 216.596	130.733	131.787	133.598
Ti 334.941	1287.70	1288.84	1287.80
Tl 190.794	1.6314u	5.8792u	3.3141u
V 292.401	198.670	200.430	200.074
Zn 206.200	1535.55	1525.63	1521.73

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.2265	ppb	0.1871	15.3	-10.5927
Al 308.215	111956	ppb	54.2797	0.0	280820
As 188.980	274.604	ppb	4.4790	1.6	74.0086
B 249.678	50.1021	ppb	1.4021	2.8	81.3013
Ba 389.178	846.053	ppb	0.7040	0.1	9405.39
Be 313.042	4.8431	ppb	0.0094	0.2	3874.47
Ca 370.602	35241	ppb	29.39	0.1	80135
Cd 226.502	6.8441	ppb	0.2785	4.1	251.022
Co 228.615	55.4397	ppb	0.3984	0.7	284.009
Cr 267.716	183.671	ppb	0.3138	0.2	4315.54
Cu 324.754	244.352	ppb	0.7779	0.3	9878.13
Fe 271.441	157024	ppb	203.810	0.1	129364
K 766.491	8375.97	ppb	16.3628	0.2	228549
Mg 279.078	29273.4	ppb	11.6965	0.0	42132.1
Mn 257.610	4199.96	ppb	0.6250	0.0	459517
Mo 202.032	5.8166	ppb	1.1820	20.3	14.8322
Na 330.237	856.747	ppb	209.198	24.4	60.5856
Ni 231.604	144.422	ppb	1.5987	1.1	198.409
Pb 220.353	1029.33	ppb	8.9524	0.9	609.478
Sb 206.834	-8.3148	ppb	7.3145	88.0	11.7142
Se 196.026	14.4514	ppb	9.8501	68.2	4.6806
Si 288.158	28699.7	ppb	28.1033	0.1	138080
Sn 189.925	46.6193	ppb	6.3345	13.6	14.8471
Sr 216.596	132.039	ppb	1.4489	1.1	605.744
Ti 334.941	1288.11	ppb	0.6301	0.0	154328
Tl 190.794	3.6082	ppb	2.1392	59.3	-12.8440
V 292.401	199.725	ppb	0.9307	0.5	2938.44
Zn 206.200	1527.63	ppb	7.1263	0.5	549.658

680-161405-A-18-A (Samp) **12/19/2018, 10:34:54 AM** **Rack 4, Tube 56**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0237u	-0.1759u	-0.1034u
Al 308.215	130593	130733	130694
As 188.980	126.825	127.940	138.751
B 249.678	45.6694	45.4826	44.9738
Ba 389.178	1202.19	1205.56	1204.33
Be 313.042	6.3604	6.3556	6.3576
Ca 370.602	29126	29162	29135

Label	Replicates Concentration		
Cd 226.502	4.0411	3.7165	3.6559
Co 228.615	137.509	140.157	139.541
Cr 267.716	155.173	154.649	155.185
Cu 324.754	128.382	127.874	129.504
Fe 271.441	223778	223955	223765
K 766.491	9870.13	9867.38	9881.17
Mg 279.078	31362.4	31367.6	31336.5
Mn 257.610	14732.7	14791.1	14740.1
Mo 202.032	10.4990	8.5652	8.7783
Na 330.237	590.131u	719.083u	766.674u
Ni 231.604	145.175	140.739	144.098
Pb 220.353	356.046	370.135	362.957
Sb 206.834	-2.6320	4.7721	-11.4375
Se 196.026	19.5696	16.3234	8.4183
Si 288.158	30694.1	30710.5	30709.0
Sn 189.925	27.5943	21.1155	23.7517
Sr 216.596	126.464	129.193	128.026
Ti 334.941	1435.63	1437.60	1438.72
Tl 190.794	-2.9728u	-0.0854u	5.2630u
V 292.401	265.125	266.254	266.831
Zn 206.200	594.185	590.124	583.184

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0852	ppb	0.1011	118.6	-49.8527
Al 308.215	130674	ppb	72.0995	0.1	327744
As 188.980	131.172	ppb	6.5870	5.0	36.3033
B 249.678	45.3753	ppb	0.3600	0.8	-17.8161
Ba 389.178	1204.03	ppb	1.7030	0.1	13401.8
Be 313.042	6.3579	ppb	0.0024	0.0	5132.05
Ca 370.602	29141	ppb	18.69	0.1	66300
Cd 226.502	3.8045	ppb	0.2071	5.4	254.165
Co 228.615	139.069	ppb	1.3859	1.0	708.148
Cr 267.716	155.002	ppb	0.3059	0.2	3680.13
Cu 324.754	128.587	ppb	0.8342	0.6	5325.99
Fe 271.441	223833	ppb	105.805	0.0	184396
K 766.491	9872.89	ppb	7.2948	0.1	269347
Mg 279.078	31355.5	ppb	16.6518	0.1	45010.6
Mn 257.610	14754.6	ppb	31.7867	0.2	1613547
Mo 202.032	9.2809	ppb	1.0603	11.4	21.5775
Na 330.237	691.962	ppb	91.3428	13.2	51.8110
Ni 231.604	143.337	ppb	2.3138	1.6	196.810
Pb 220.353	363.046	ppb	7.0453	1.9	219.763
Sb 206.834	-3.0991	ppb	8.1149	261.8	15.3765
Se 196.026	14.7704	ppb	5.7356	38.8	5.5459
Si 288.158	30704.5	ppb	9.0349	0.0	147707
Sn 189.925	24.1538	ppb	3.2580	13.5	7.5666
Sr 216.596	127.894	ppb	1.3695	1.1	604.983
Ti 334.941	1437.32	ppb	1.5681	0.1	172203
Tl 190.794	0.7349	ppb	4.1788	568.6	-12.3925
V 292.401	266.070	ppb	0.8675	0.3	3919.22
Zn 206.200	589.164	ppb	5.5632	0.9	212.027

x (Samp) **12/19/2018, 10:39:21 AM** **Rack 4, Tube 57**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	10.6937	11.2151	10.7907
Al 308.215	219.870	216.951	226.220
As 188.980	16.9111	19.2801	19.0321
B 249.678	111.466	113.053	111.425
Ba 389.178	11.0581	11.6031	11.8918
Be 313.042	4.5811	4.6058	4.5831
Ca 370.602	549.3	553.6	556.8
Cd 226.502	5.4646	5.5210	5.7874
Co 228.615	10.6477	11.7265	11.1807
Cr 267.716	10.6653	10.9904	10.7704
Cu 324.754	22.3426	22.0281	22.2121
Fe 271.441	84.1875	81.6983	91.8639
K 766.491	1059.42	1058.71	1057.73
Mg 279.078	565.068	568.990	566.804
Mn 257.610	11.7523	12.1131	12.8141
Mo 202.032	10.1298	10.6790	11.2669
Na 330.237	1179.57	1200.00	1056.14
Ni 231.604	48.1504	46.9848	43.5101
Pb 220.353	15.7619	8.1344	11.7327
Sb 206.834	15.1947	12.8982	8.9955
Se 196.026	13.7164	11.6490	33.7024
Si 288.158	154.092	154.717	150.617
Sn 189.925	57.0457	54.0077	53.4012
Sr 216.596	10.7538	11.2056	11.8907
Ti 334.941	11.6085	11.5115	11.6606
Tl 190.794	21.3774	32.4928	22.1125
V 292.401	10.7011	10.1096	10.7050
Zn 206.200	21.1979	22.8510	21.3087

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.8998	ppb	0.2773	2.5	374.951
Al 308.215	221.013	ppb	4.7392	2.1	716.816
As 188.980	18.4078	ppb	1.3021	7.1	6.1019
B 249.678	111.981	ppb	0.9282	0.8	655.872
Ba 389.178	11.5177	ppb	0.4234	3.7	64.3987
Be 313.042	4.5900	ppb	0.0137	0.3	3651.88
Ca 370.602	553.3	ppb	3.737	0.7	1299
Cd 226.502	5.5910	ppb	0.1724	3.1	103.422
Co 228.615	11.1850	ppb	0.5394	4.8	44.2114
Cr 267.716	10.8087	ppb	0.1659	1.5	274.471
Cu 324.754	22.1943	ppb	0.1580	0.7	1078.09
Fe 271.441	85.9165	ppb	5.2988	6.2	99.0750
K 766.491	1058.62	ppb	0.8506	0.1	29120.1
Mg 279.078	566.954	ppb	1.9655	0.3	847.658
Mn 257.610	12.2265	ppb	0.5399	4.4	1361.19
Mo 202.032	10.6919	ppb	0.5687	5.3	28.3111
Na 330.237	1145.24	ppb	77.8305	6.8	87.8647
Ni 231.604	46.2151	ppb	2.4140	5.2	61.9505
Pb 220.353	11.8763	ppb	3.8158	32.1	13.6294
Sb 206.834	12.3628	ppb	3.1341	25.4	17.0924
Se 196.026	19.6893	ppb	12.1797	61.9	5.7779
Si 288.158	153.142	ppb	2.2089	1.4	1024.97

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	54.8182	ppb	1.9527	3.6	17.5043
Sr 216.596	11.2834	ppb	0.5725	5.1	56.8848
Ti 334.941	11.5936	ppb	0.0757	0.7	1354.87
Tl 190.794	25.3276	ppb	6.2162	24.5	0.2912
V 292.401	10.5053	ppb	0.3426	3.3	149.051
Zn 206.200	21.7859	ppb	0.9241	4.2	7.5727

Cont Calib Verif (CCV) **12/19/2018, 10:43:48 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	510.121	506.431	502.457
Al 308.215	10055.4	10042.2	10027.4
As 188.980	518.184	548.397	521.388
B 249.678	521.849	524.012	523.759
Ba 389.178	482.862	482.054	480.460
Be 313.042	543.026	543.953	543.327
Ca 370.602	10184	10195	10180
Cd 226.502	523.004	524.187	523.441
Co 228.615	513.814	516.728	515.143
Cr 267.716	515.006	515.240	514.619
Cu 324.754	506.797	501.202	504.180
Fe 271.441	10265.0	10281.8	10306.6
K 766.491	9950.83	9937.37	9924.34
Mg 279.078	10523.3	10524.7	10529.7
Mn 257.610	506.568	506.129	505.791
Mo 202.032	502.695	504.749	501.829
Na 330.237	10479.8	10326.8	10219.8
Ni 231.604	512.264	508.455	510.832
Pb 220.353	514.485	501.507	506.583
Sb 206.834	501.211	502.443	493.215
Se 196.026	522.547	508.508	490.425
Si 288.158	5452.55	5447.28	5443.38
Sn 189.925	488.797	504.267	499.726
Sr 216.596	511.169	513.992	511.265
Ti 334.941	510.874	511.017	510.699
Tl 190.794	486.449	477.458	490.463
V 292.401	500.543	501.701	500.366
Zn 206.200	1025.62	1023.85	1018.83

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	506.337	ppb	3.8332	0.8	18735.0	101.26731
Al 308.215	10041.7	ppb	13.9870	0.1	25357.8	100.41669
As 188.980	529.323	ppb	16.5959	3.1	140.799	105.86462
B 249.678	523.206	ppb	1.1825	0.2	3413.73	104.64128
Ba 389.178	481.792	ppb	1.2223	0.3	5298.70	96.35841
Be 313.042	543.435	ppb	0.4725	0.1	451295	108.68707
Ca 370.602	10186	ppb	8.060	0.1	23261	101.86206
Cd 226.502	523.544	ppb	0.5986	0.1	8566.77	104.70879
Co 228.615	515.228	ppb	1.4591	0.3	2579.93	103.04568
Cr 267.716	514.955	ppb	0.3134	0.1	11979.6	102.99095
Cu 324.754	504.060	ppb	2.7998	0.6	20098.6	100.81196
Fe 271.441	10284.5	ppb	20.9524	0.2	8529.65	102.79315
K 766.491	9937.51	ppb	13.2413	0.1	271108	99.37514

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10525.9	ppb	3.3644	0.0	15186.8	105.25885
Mn 257.610	506.163	ppb	0.3897	0.1	55432.5	101.23253
Mo 202.032	503.091	ppb	1.4996	0.3	1137.38	100.61819
Na 330.237	10342.1	ppb	130.658	1.3	326.421	103.42139
Ni 231.604	510.517	ppb	1.9237	0.4	706.682	102.10338
Pb 220.353	507.525	ppb	6.5405	1.3	303.772	101.50502
Sb 206.834	498.956	ppb	5.0099	1.0	232.253	99.79129
Se 196.026	507.160	ppb	16.1033	3.2	98.6609	101.43201
Si 288.158	5447.74	ppb	4.5995	0.1	26565.2	108.95474
Sn 189.925	497.596	ppb	7.9519	1.6	160.999	99.51929
Sr 216.596	512.142	ppb	1.6026	0.3	2164.55	102.42838
Ti 334.941	510.863	ppb	0.1588	0.0	61179.8	102.17267
Tl 190.794	484.790	ppb	6.6594	1.4	192.028	96.95799
V 292.401	500.870	ppb	0.7248	0.1	7229.02	100.17403
Zn 206.200	1022.77	ppb	3.5258	0.3	367.638	102.27663

Cont Calib Blank (CCB) **12/19/2018, 10:48:13 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2375u	-0.0881u	1.1107
Al 308.215	-2.8846u	-2.7770u	-0.7671u
As 188.980	-3.0294u	-0.9636u	3.1403
B 249.678	5.5618	5.1284	4.5661
Ba 389.178	0.5959	0.9615	0.2425
Be 313.042	-0.0064u	-0.0088u	0.0071
Ca 370.602	-3.622u	0.1108	0.2973
Cd 226.502	0.0951	-0.1019u	-0.2965u
Co 228.615	0.2219	-0.1345u	0.1704
Cr 267.716	-0.1197u	-0.5717u	-0.2340u
Cu 324.754	-0.0922u	0.0813	-0.1125u
Fe 271.441	-0.4332u	4.4952	4.1750
K 766.491	2.2338	2.4590	1.2692
Mg 279.078	-4.9066u	6.3263	-5.7601u
Mn 257.610	-0.0049u	0.1235	0.1355
Mo 202.032	-0.2264u	0.2844	-0.0813u
Na 330.237	108.067	171.816	-103.288u
Ni 231.604	1.7483	1.4906	-0.0013u
Pb 220.353	-6.5073u	-0.4268u	-4.9582u
Sb 206.834	-8.3091u	-2.3468u	-7.1688u
Se 196.026	-3.7730u	-2.7854u	-0.8358u
Si 288.158	19.6270	20.5368	19.3711
Sn 189.925	5.0945	9.1485	1.8209
Sr 216.596	-0.2400u	-0.5535u	-0.4654u
Ti 334.941	0.3178	0.2262	0.1520
Tl 190.794	-4.3035u	1.1252	-3.9516u
V 292.401	-0.1393u	0.0910	-0.0104u
Zn 206.200	-2.6568u	4.9723	-0.9173u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2617	ppb	0.7390	282.4	-19.3111	0.26167
Al 308.215	-2.1429	ppb	1.1927	55.7	156.923	-2.14289
As 188.980	-0.2842	ppb	3.1405	1104.9	1.1725	-0.28423
B 249.678	5.0854	ppb	0.4992	9.8	-63.6065	5.08543

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	0.6000	ppb	0.3595	59.9	-57.4035	0.60000
Be 313.042	-0.0027	ppb	0.0086	321.5	-163.112	-0.00267
Ca 370.602	-1.071	ppb	2.211	206.4	34.83	-1.07144
Cd 226.502	-0.1011	ppb	0.1958	193.6	10.4289	-0.10112
Co 228.615	0.0859	ppb	0.1926	224.2	-11.6097	0.08593
Cr 267.716	-0.3084	ppb	0.2350	76.2	16.3597	-0.30845
Cu 324.754	-0.0411	ppb	0.1066	258.9	200.644	-0.04115
Fe 271.441	2.7456	ppb	2.7576	100.4	29.9087	2.74563
K 766.491	1.9873	ppb	0.6320	31.8	322.387	1.98734
Mg 279.078	-1.4468	ppb	6.7452	466.2	29.0090	-1.44681
Mn 257.610	0.0847	ppb	0.0778	91.9	30.6078	0.08471
Mo 202.032	-0.0078	ppb	0.2633	3396.0	4.2093	-0.00775
Na 330.237	58.8651	ppb	144.000	244.6	59.3076	58.86510
Ni 231.604	1.0792	ppb	0.9445	87.5	-0.7676	1.07921
Pb 220.353	-3.9641	ppb	3.1598	79.7	4.3535	-3.96413
Sb 206.834	-5.9416	ppb	3.1649	53.3	8.9571	-5.94157
Se 196.026	-2.4647	ppb	1.4947	60.6	1.5564	-2.46473
Si 288.158	19.8450	ppb	0.6127	3.1	378.962	19.84497
Sn 189.925	5.3546	ppb	3.6707	68.6	1.4743	5.35464
Sr 216.596	-0.4196	ppb	0.1617	38.5	7.9520	-0.41964
Ti 334.941	0.2320	ppb	0.0831	35.8	-7.7211	0.23198
Tl 190.794	-2.3766	ppb	3.0377	127.8	-11.2609	-2.37662
V 292.401	-0.0196	ppb	0.1154	589.8	-2.8231	-0.01956
Zn 206.200	0.4660	ppb	3.9983	857.9	-0.0959	0.46605

MB 680-551565/1-A (Samp) **12/19/2018, 10:52:35 AM** **Rack 1, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7988	-0.5498u	0.6482
Al 308.215	-5.5688u	-1.0036u	-6.6694u
As 188.980	1.0683	1.1892	4.9191
B 249.678	2.7008	2.4468	1.7237
Ba 389.178	0.0305	-0.2020u	-0.2668u
Be 313.042	-0.0430u	-0.0495u	-0.0586u
Ca 370.602	-4.363u	-9.543u	-4.450u
Cd 226.502	0.0095	-0.1014u	-0.4668u
Co 228.615	-0.3492u	-0.2686u	-0.2717u
Cr 267.716	-0.2964u	-0.4984u	-0.5664u
Cu 324.754	0.2487	0.3875	0.2875
Fe 271.441	2.9293	-7.5061u	1.8029
K 766.491	0.1835	0.8604	1.2173
Mg 279.078	-3.7353u	-1.3056u	-5.6007u
Mn 257.610	-0.0879u	-0.0686u	-0.0196u
Mo 202.032	-1.3101u	-0.1813u	-0.3660u
Na 330.237	207.301	22.8815	-223.319u
Ni 231.604	1.9077	2.8059	0.4381
Pb 220.353	-5.8247u	2.8708	1.2576
Sb 206.834	-10.1852u	-15.7152u	-7.7579u
Se 196.026	-7.7994u	2.9959	-0.5380u
Si 288.158	19.0393	15.1916	16.2843
Sn 189.925	-3.4620u	-1.6182u	6.3766
Sr 216.596	-0.1871u	0.7175	0.9008
Ti 334.941	0.1800	0.0553	0.1634

Label	Replicates	Concentration	
Tl 190.794	2.0677	-1.5704u	0.9648
V 292.401	0.1064	-0.4713u	0.0179
Zn 206.200	0.3885	3.1301	0.0180

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2991	ppb	0.7390	247.1	-17.9239
Al 308.215	-4.4139	ppb	3.0043	68.1	151.217
As 188.980	2.3922	ppb	2.1892	91.5	1.8788
B 249.678	2.2904	ppb	0.5070	22.1	-82.4175
Ba 389.178	-0.1461	ppb	0.1563	107.0	-65.6895
Be 313.042	-0.0504	ppb	0.0078	15.6	-202.698
Ca 370.602	-6.119	ppb	2.966	48.5	23.32
Cd 226.502	-0.1862	ppb	0.2492	133.8	9.0368
Co 228.615	-0.2965	ppb	0.0457	15.4	-13.5263
Cr 267.716	-0.4537	ppb	0.1405	31.0	12.9870
Cu 324.754	0.3079	ppb	0.0716	23.3	214.402
Fe 271.441	-0.9246	ppb	5.7275	619.4	26.8553
K 766.491	0.7537	ppb	0.5251	69.7	288.766
Mg 279.078	-3.5472	ppb	2.1537	60.7	25.9851
Mn 257.610	-0.0587	ppb	0.0352	60.0	14.9117
Mo 202.032	-0.6191	ppb	0.6055	97.8	2.8321
Na 330.237	2.2880	ppb	216.048	9442.7	57.8160
Ni 231.604	1.7172	ppb	1.1953	69.6	0.1197
Pb 220.353	-0.5654	ppb	4.6255	818.1	6.3462
Sb 206.834	-11.2194	ppb	4.0782	36.3	6.5955
Se 196.026	-1.7805	ppb	5.5038	309.1	1.6868
Si 288.158	16.8384	ppb	1.9828	11.8	363.907
Sn 189.925	0.4321	ppb	5.2300	1210.3	-0.1210
Sr 216.596	0.4771	ppb	0.5824	122.1	11.7522
Ti 334.941	0.1329	ppb	0.0677	51.0	-19.5964
Tl 190.794	0.4873	ppb	1.8654	382.8	-10.0684
V 292.401	-0.1156	ppb	0.3112	269.1	-4.1698
Zn 206.200	1.1789	ppb	1.6999	144.2	0.1607

LCS 680-551565/2-A (Samp) **12/19/2018, 10:56:57 AM** **Rack 1, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	502.779	501.389	500.762
Al 308.215	10021.7	10028.1	10010.0
As 188.980	520.325	526.254	513.104
B 249.678	520.891	522.271	520.958
Ba 389.178	480.729	478.768	478.776
Be 313.042	540.442	539.882	539.882
Ca 370.602	10143	10157	10142
Cd 226.502	520.374	521.118	519.357
Co 228.615	516.113	515.914	512.464
Cr 267.716	509.943	509.645	510.149
Cu 324.754	503.627	501.884	501.174
Fe 271.441	10242.2	10214.3	10218.6
K 766.491	9890.90	9880.91	9873.35
Mg 279.078	10474.1	10456.5	10438.2
Mn 257.610	505.456	505.004	504.853
Mo 202.032	501.812	501.469	499.987

Label	Replicates Concentration		
Na 330.237	10329.2	10515.4	10672.2
Ni 231.604	511.168	511.756	509.181
Pb 220.353	499.093	501.650	504.166
Sb 206.834	499.995	495.972	492.022
Se 196.026	521.658	500.716	494.806
Si 288.158	5396.69	5395.31	5384.15
Sn 189.925	515.098	513.600	504.013
Sr 216.596	509.927	511.082	510.549
Ti 334.941	506.446	506.583	506.469
Tl 190.794	478.320	477.712	486.482
V 292.401	497.150	496.908	496.855
Zn 206.200	1029.90	1027.49	1030.12

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	501.643	ppb	1.0320	0.2	18561.1
Al 308.215	10019.9	ppb	9.1855	0.1	25303.1
As 188.980	519.894	ppb	6.5855	1.3	138.312
B 249.678	521.373	ppb	0.7783	0.1	3401.45
Ba 389.178	479.424	ppb	1.1299	0.2	5272.34
Be 313.042	540.069	ppb	0.3234	0.1	448498
Ca 370.602	10147	ppb	8.375	0.1	23172
Cd 226.502	520.283	ppb	0.8839	0.2	8513.48
Co 228.615	514.830	ppb	2.0515	0.4	2577.91
Cr 267.716	509.912	ppb	0.2537	0.0	11862.5
Cu 324.754	502.228	ppb	1.2621	0.3	20026.3
Fe 271.441	10225.0	ppb	15.0138	0.1	8480.63
K 766.491	9881.72	ppb	8.8019	0.1	269587
Mg 279.078	10456.3	ppb	17.9340	0.2	15086.6
Mn 257.610	505.104	ppb	0.3139	0.1	55316.4
Mo 202.032	501.089	ppb	0.9698	0.2	1132.87
Na 330.237	10505.6	ppb	171.676	1.6	330.752
Ni 231.604	510.702	ppb	1.3492	0.3	706.940
Pb 220.353	501.636	ppb	2.5362	0.5	300.322
Sb 206.834	495.996	ppb	3.9865	0.8	230.936
Se 196.026	505.727	ppb	14.1099	2.8	98.3879
Si 288.158	5392.05	ppb	6.8802	0.1	26298.0
Sn 189.925	510.904	ppb	6.0143	1.2	165.312
Sr 216.596	510.519	ppb	0.5782	0.1	2157.72
Ti 334.941	506.500	ppb	0.0734	0.0	60657.0
Tl 190.794	480.838	ppb	4.8974	1.0	190.382
V 292.401	496.971	ppb	0.1571	0.0	7172.66
Zn 206.200	1029.17	ppb	1.4621	0.1	369.945

LLCS 680-551565/3-A (Samp) **12/19/2018, 11:01:19 AM** **Rack 1, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.8938	0.4660	0.8091
Al 308.215	4.3159	5.0967	3.7989
As 188.980	-4.5143u	1.6407	1.0942
B 249.678	11.0318	10.8880	10.7270
Ba 389.178	1.3855	2.0625	0.3912
Be 313.042	0.0957	0.1130	0.1403
Ca 370.602	87.90	88.18	90.19

Label	Replicates Concentration		
Cd 226.502	-0.0270u	-0.0553u	-0.0985u
Co 228.615	-0.6213u	0.9882	0.6967
Cr 267.716	0.0483	0.1626	-0.0539u
Cu 324.754	0.8152	0.8707	1.1405
Fe 271.441	13.2114	9.3398	10.7582
K 766.491	19.7847	19.8603	20.9906
Mg 279.078	15.5737	22.4120	17.9288
Mn 257.610	7.1807	7.3420	7.4666
Mo 202.032	0.0981	0.6603	-0.0033u
Na 330.237	-69.5665u	-201.474u	-4.2219u
Ni 231.604	0.7646	0.9915	3.4909
Pb 220.353	-3.0635u	-4.5494u	1.1914
Sb 206.834	-3.9535u	-7.9045u	-8.9826u
Se 196.026	0.4416	-9.5252u	1.1122
Si 288.158	17.1844	16.3082	18.0716
Sn 189.925	0.7616	5.0302	3.2530
Sr 216.596	-0.5997u	-1.4456u	0.6582
Ti 334.941	0.4869	0.5488	0.5024
Tl 190.794	1.6569	3.9359	1.6800
V 292.401	0.5248	0.5912	0.5043
Zn 206.200	8.3879	11.3391	9.2790

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7230	ppb	0.2265	31.3	-2.2002
Al 308.215	4.4038	ppb	0.6534	14.8	173.357
As 188.980	-0.5931	ppb	3.4068	574.4	1.0909
B 249.678	10.8823	ppb	0.1525	1.4	-24.6018
Ba 389.178	1.2797	ppb	0.8406	65.7	-49.8330
Be 313.042	0.1164	ppb	0.0225	19.3	-64.2299
Ca 370.602	88.75	ppb	1.249	1.4	239.7
Cd 226.502	-0.0603	ppb	0.0360	59.8	11.1089
Co 228.615	0.3545	ppb	0.8576	241.9	-10.2577
Cr 267.716	0.0523	ppb	0.1083	206.9	24.7510
Cu 324.754	0.9421	ppb	0.1740	18.5	239.447
Fe 271.441	11.1031	ppb	1.9587	17.6	36.8138
K 766.491	20.2119	ppb	0.6755	3.3	819.083
Mg 279.078	18.6382	ppb	3.4739	18.6	57.8611
Mn 257.610	7.3298	ppb	0.1433	2.0	822.839
Mo 202.032	0.2517	ppb	0.3575	142.0	4.7935
Na 330.237	-91.7542	ppb	100.480	109.5	55.3227
Ni 231.604	1.7490	ppb	1.5128	86.5	0.1629
Pb 220.353	-2.1405	ppb	2.9796	139.2	5.4228
Sb 206.834	-6.9469	ppb	2.6478	38.1	8.5033
Se 196.026	-2.6571	ppb	5.9574	224.2	1.5204
Si 288.158	17.1881	ppb	0.8817	5.1	365.780
Sn 189.925	3.0149	ppb	2.1442	71.1	0.7160
Sr 216.596	-0.4624	ppb	1.0586	228.9	7.7703
Ti 334.941	0.5127	ppb	0.0322	6.3	25.9692
Tl 190.794	2.4243	ppb	1.3092	54.0	-9.2588
V 292.401	0.5401	ppb	0.0454	8.4	5.2706
Zn 206.200	9.6687	ppb	1.5137	15.7	3.2158

680-161833-A-271-D (Samp) **12/19/2018, 11:05:41 AM** **Rack 1, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0956	-0.5476u	0.4929
Al 308.215	1.3839	0.7092	-1.2401u
As 188.980	0.7956	6.4007	0.9483
B 249.678	5.3749	5.1127	6.1055
Ba 389.178	-1.0648u	-1.5862u	-1.1472u
Be 313.042	-0.0507u	-0.0411u	-0.0575u
Ca 370.602	38595	38498	38349
Cd 226.502	-0.0234u	0.3780	0.1304
Co 228.615	1.0326	0.7059	0.6055
Cr 267.716	-0.2355u	-0.4374u	-0.2424u
Cu 324.754	51.1099	50.8402	50.6494
Fe 271.441	-8.6700u	-2.2304u	-2.6021u
K 766.491	4092.36	4082.09	4053.19
Mg 279.078	7459.01	7459.71	7418.25
Mn 257.610	-0.0763	0.1303	0.0855
Mo 202.032	-1.6634u	-0.4076u	-0.3615u
Na 330.237	13824.4	13857.5	14173.6
Ni 231.604	3.0251	0.5043	0.1717
Pb 220.353	0.9094	4.2752	-1.0765u
Sb 206.834	-5.6874u	-1.3264u	-14.4040u
Se 196.026	9.2501	-6.8453u	-4.8066u
Si 288.158	3704.48	3700.65	3695.87
Sn 189.925	-0.5946u	2.8926	1.3342
Sr 216.596	139.174	139.332	137.961
Ti 334.941	-0.0984	-0.0757	-0.1435
Tl 190.794	4.5430	10.3958	1.1416
V 292.401	-0.0028u	0.7065	-0.1265u
Zn 206.200	46.4128	50.4472	49.1249

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0136	ppb	0.5251	3855.6	-29.1225
Al 308.215	0.2843	ppb	1.3626	479.3	163.007
As 188.980	2.7149	ppb	3.1929	117.6	1.9640
B 249.678	5.5310	ppb	0.5145	9.3	-60.6014
Ba 389.178	-1.2661	ppb	0.2803	22.1	-70.7174
Be 313.042	-0.0497	ppb	0.0083	16.6	-196.941
Ca 370.602	38481	ppb	123.9	0.3	87752
Cd 226.502	0.1617	ppb	0.2025	125.3	14.7272
Co 228.615	0.7814	ppb	0.2233	28.6	-8.1068
Cr 267.716	-0.3051	ppb	0.1146	37.6	16.5475
Cu 324.754	50.8665	ppb	0.2314	0.5	2209.12
Fe 271.441	-4.5008	ppb	3.6154	80.3	23.9746
K 766.491	4075.88	ppb	20.3104	0.5	111353
Mg 279.078	7445.66	ppb	23.7405	0.3	10757.2
Mn 257.610	0.0465	ppb	0.1087	233.6	63.0825
Mo 202.032	-0.8108	ppb	0.7387	91.1	2.4000
Na 330.237	13951.8	ppb	192.753	1.4	425.339
Ni 231.604	1.2337	ppb	1.5603	126.5	-0.5536
Pb 220.353	1.3694	ppb	2.7054	197.6	7.4799
Sb 206.834	-7.1392	ppb	6.6586	93.3	8.4227
Se 196.026	-0.8006	ppb	8.7637	1094.7	1.8735
Si 288.158	3700.33	ppb	4.3110	0.1	18041.6

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.2107	ppb	1.7469	144.3	0.1331
Sr 216.596	138.822	ppb	0.7498	0.5	596.250
Ti 334.941	-0.1058	ppb	0.0345	32.6	-21.9948
Tl 190.794	5.3601	ppb	4.6809	87.3	-8.0375
V 292.401	0.1924	ppb	0.4495	233.6	0.2825
Zn 206.200	48.6616	ppb	2.0567	4.2	17.2488

680-161833-A-271-Dsd (Samp) **12/19/2018, 11:10:04 AM** **Rack 1, Tube 5**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2972	0.3717	-0.0987u
Al 308.215	-3.3888u	-1.9106u	-0.5613u
As 188.980	-0.4097u	-1.5889u	-1.1966u
B 249.678	1.4153	2.4810	1.2806
Ba 389.178	0.4381	-0.9056u	-1.6265u
Be 313.042	-0.0514u	-0.0591u	-0.0541u
Ca 370.602	7926	7936	7947
Cd 226.502	-0.1744u	-0.2220u	-0.3105u
Co 228.615	0.2411	0.9563	0.5310
Cr 267.716	-0.2501u	-0.3198u	-0.3824u
Cu 324.754	10.7130	10.6574	10.4832
Fe 271.441	0.6723	13.2232	7.0581
K 766.491	833.372	835.136	834.568
Mg 279.078	1530.56	1532.48	1535.03
Mn 257.610	0.1452	0.1669	0.1815
Mo 202.032	-0.6912u	-1.2378u	-0.4561u
Na 330.237	2828.42	2860.52	2881.89
Ni 231.604	1.5635	0.0406	1.5716
Pb 220.353	-5.8804u	1.5749	-4.9460u
Sb 206.834	-10.3684u	-9.5901u	-5.8380u
Se 196.026	-10.9167u	-0.0617u	-15.3072u
Si 288.158	775.570	779.494	776.939
Sn 189.925	0.2032	1.4192	-2.3584u
Sr 216.596	28.1948	28.9131	28.5942
Ti 334.941	0.0074	0.0001	0.0209
Tl 190.794	-2.4473u	-13.6109u	-0.4028u
V 292.401	-0.0968u	0.1999	-0.1255u
Zn 206.200	12.1596	10.4931	10.0936

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1901	ppb	0.2528	133.0	-22.0935
Al 308.215	-1.9536	ppb	1.4142	72.4	157.380
As 188.980	-1.0651	ppb	0.6005	56.4	0.9666
B 249.678	1.7256	ppb	0.6576	38.1	-86.2248
Ba 389.178	-0.6980	ppb	1.0479	150.1	-70.2890
Be 313.042	-0.0549	ppb	0.0039	7.2	-205.324
Ca 370.602	7936	ppb	10.65	0.1	18127
Cd 226.502	-0.2356	ppb	0.0691	29.3	8.2373
Co 228.615	0.5762	ppb	0.3597	62.4	-9.1323
Cr 267.716	-0.3174	ppb	0.0662	20.9	16.1748
Cu 324.754	10.6179	ppb	0.1199	1.1	621.159
Fe 271.441	6.9845	ppb	6.2758	89.9	33.4217
K 766.491	834.359	ppb	0.9007	0.1	23008.0

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1532.69	ppb	2.2426	0.1	2239.06
Mn 257.610	0.1646	ppb	0.0183	11.1	46.8777
Mo 202.032	-0.7950	ppb	0.4011	50.4	2.4356
Na 330.237	2856.94	ppb	26.9145	0.9	133.026
Ni 231.604	1.0586	ppb	0.8816	83.3	-0.7968
Pb 220.353	-3.0838	ppb	4.0616	131.7	4.8697
Sb 206.834	-8.5989	ppb	2.4224	28.2	7.7751
Se 196.026	-8.7619	ppb	7.8478	89.6	0.3568
Si 288.158	777.334	ppb	1.9919	0.3	4013.73
Sn 189.925	-0.2453	ppb	1.9283	786.0	-0.3402
Sr 216.596	28.5674	ppb	0.3599	1.3	130.442
Ti 334.941	0.0095	ppb	0.0106	111.8	-28.9818
Tl 190.794	-5.4870	ppb	7.1094	129.6	-12.5556
V 292.401	-0.0075	ppb	0.1801	2410.0	-2.5713
Zn 206.200	10.9154	ppb	1.0958	10.0	3.6646

680-161833-A-271-Dpd (Samp) **12/19/2018, 11:15:30 AM** **Rack 1, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2582	-0.1245u	-0.0789u
Al 308.215	-3.0829u	0.5595	-1.9827u
As 188.980	-0.3411u	9.0579	2.0046
B 249.678	3.8140	5.1436	5.3497
Ba 389.178	-0.7991u	-1.5889u	-1.0448u
Be 313.042	-0.0504u	-0.0410u	-0.0408u
Ca 370.602	38265	38359	38399
Cd 226.502	-0.2826u	-0.6712u	-0.2963u
Co 228.615	0.4150	0.2983	0.6385
Cr 267.716	-0.2224u	-0.5476u	-0.6077u
Cu 324.754	590.429	586.456	591.641
Fe 271.441	5.5563	-5.7452u	-4.2456u
K 766.491	4045.84	4056.88	4065.46
Mg 279.078	7414.98	7426.49	7436.86
Mn 257.610	0.4219	0.4598	0.4547
Mo 202.032	-0.3579u	0.0039	-0.6466u
Na 330.237	14284.4	13960.3	13913.4
Ni 231.604	-0.2062u	-0.4482u	0.4790
Pb 220.353	269.703	264.159	274.145
Sb 206.834	-4.1887u	-9.4510u	-8.9571u
Se 196.026	11.2700	1.8303	0.5849
Si 288.158	3695.43	3700.61	3700.39
Sn 189.925	-2.2350u	-1.6600u	3.8657
Sr 216.596	139.012	138.390	140.297
Ti 334.941	-0.1315	-0.1120	-0.0320
Tl 190.794	4.9444	-1.7193u	-8.8248u
V 292.401	0.2789	0.0242	0.2221
Zn 206.200	45.5420	43.7358	45.6637

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0183	ppb	0.2090	1145.1	-28.9527
Al 308.215	-1.5020	ppb	1.8682	124.4	158.526
As 188.980	3.5738	ppb	4.8920	136.9	2.1906
B 249.678	4.7691	ppb	0.8335	17.5	-65.7279

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-1.1443	ppb	0.4042	35.3	-69.3836
Be 313.042	-0.0441	ppb	0.0055	12.4	-192.227
Ca 370.602	38341	ppb	69.00	0.2	87433
Cd 226.502	-0.4167	ppb	0.2205	52.9	5.2854
Co 228.615	0.4506	ppb	0.1728	38.4	-9.7685
Cr 267.716	-0.4592	ppb	0.2073	45.1	12.9710
Cu 324.754	589.508	ppb	2.7124	0.5	23460.4
Fe 271.441	-1.4782	ppb	6.1380	415.2	26.4483
K 766.491	4056.06	ppb	9.8370	0.2	110813
Mg 279.078	7426.11	ppb	10.9442	0.1	10729.0
Mn 257.610	0.4455	ppb	0.0205	4.6	106.611
Mo 202.032	-0.3335	ppb	0.3259	97.7	3.4754
Na 330.237	14052.7	ppb	201.992	1.4	428.003
Ni 231.604	-0.0585	ppb	0.4809	822.5	-2.3491
Pb 220.353	269.336	ppb	5.0033	1.9	164.564
Sb 206.834	-7.5323	ppb	2.9061	38.6	8.2478
Se 196.026	4.5617	ppb	5.8428	128.1	2.8951
Si 288.158	3698.81	ppb	2.9283	0.1	18034.0
Sn 189.925	-0.0098	ppb	3.3685	34487.4	-0.2624
Sr 216.596	139.233	ppb	0.9727	0.7	597.997
Ti 334.941	-0.0918	ppb	0.0527	57.4	-20.3817
Tl 190.794	-1.8666	ppb	6.8858	368.9	-11.0475
V 292.401	0.1751	ppb	0.1337	76.4	0.0386
Zn 206.200	44.9805	ppb	1.0797	2.4	15.9240

680-161833-A-271-E M (Samp) **12/19/2018, 11:19:23 AM** **Rack 1, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2991u	0.3494	1.0048
Al 308.215	-1.1186u	0.0669	-1.7855u
As 188.980	-3.3726u	4.3392	-0.1773u
B 249.678	4.5060	5.0850	4.1114
Ba 389.178	-1.7360u	-2.9157u	-1.3261u
Be 313.042	-0.0462u	-0.0575u	-0.0528u
Ca 370.602	38324	38320	38457
Cd 226.502	-0.3794u	-0.2593u	-0.8321u
Co 228.615	1.3088	-0.1181u	1.3741
Cr 267.716	-0.1257u	-0.6851u	-0.5653u
Cu 324.754	594.624	594.680	595.190
Fe 271.441	5.2444	6.2010	-4.7101u
K 766.491	4068.47	4068.65	4070.80
Mg 279.078	7420.57	7420.63	7453.09
Mn 257.610	0.4081	0.4019	0.3774
Mo 202.032	0.2358	-0.6992u	-0.6474u
Na 330.237	13822.9	14292.3	14263.3
Ni 231.604	1.1117	1.7575	1.1810
Pb 220.353	272.200	281.924	271.594
Sb 206.834	-17.2595u	-15.6563u	-2.9475u
Se 196.026	-6.6138u	-2.5833u	3.1915
Si 288.158	3698.63	3693.54	3706.43
Sn 189.925	-0.4589u	4.9329	1.6831
Sr 216.596	140.749	138.471	138.386
Ti 334.941	-0.2082	-0.0584	-0.0860

Label	Replicates Concentration		
Tl 190.794	4.6368	2.8661	0.3836
V 292.401	0.0313	0.7596	0.1988
Zn 206.200	50.6507	46.8913	45.4654

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3517	ppb	0.6520	185.4	-16.5932
Al 308.215	-0.9458	ppb	0.9383	99.2	159.923
As 188.980	0.2631	ppb	3.8747	1472.7	1.3170
B 249.678	4.5675	ppb	0.4897	10.7	-67.0872
Ba 389.178	-1.9926	ppb	0.8253	41.4	-78.7959
Be 313.042	-0.0521	ppb	0.0057	10.9	-198.926
Ca 370.602	38367	ppb	78.15	0.2	87492
Cd 226.502	-0.4903	ppb	0.3021	61.6	4.0866
Co 228.615	0.8549	ppb	0.8433	98.6	-7.7327
Cr 267.716	-0.4587	ppb	0.2945	64.2	12.9822
Cu 324.754	594.831	ppb	0.3116	0.1	23670.4
Fe 271.441	2.2451	ppb	6.0424	269.1	29.5349
K 766.491	4069.31	ppb	1.2961	0.0	111174
Mg 279.078	7431.43	ppb	18.7571	0.3	10736.7
Mn 257.610	0.3958	ppb	0.0162	4.1	101.199
Mo 202.032	-0.3703	ppb	0.5255	141.9	3.3926
Na 330.237	14126.2	ppb	263.059	1.9	429.934
Ni 231.604	1.3501	ppb	0.3546	26.3	-0.3919
Pb 220.353	275.239	ppb	5.7968	2.1	168.024
Sb 206.834	-11.9544	ppb	7.8413	65.6	6.2668
Se 196.026	-2.0019	ppb	4.9284	246.2	1.6447
Si 288.158	3699.53	ppb	6.4964	0.2	18037.5
Sn 189.925	2.0524	ppb	2.7148	132.3	0.4059
Sr 216.596	139.202	ppb	1.3404	1.0	597.857
Ti 334.941	-0.1175	ppb	0.0797	67.8	-23.4468
Tl 190.794	2.6288	ppb	2.1365	81.3	-9.1747
V 292.401	0.3299	ppb	0.3815	115.6	2.3014
Zn 206.200	47.6691	ppb	2.6787	5.6	16.8916

680-161833-A-271-F M (Samp) **12/19/2018, 11:23:17 AM** **Rack 1, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1371	0.1955	0.4234
Al 308.215	0.4016	0.9467	-1.7886u
As 188.980	-0.7929u	2.2412	0.0917
B 249.678	5.7759	5.2735	4.5721
Ba 389.178	-1.4887u	-0.6171	-0.0959
Be 313.042	-0.0478u	-0.0548u	-0.0437u
Ca 370.602	38392	38458	38416
Cd 226.502	-0.3997u	-0.2219u	-0.3900u
Co 228.615	0.3398	0.3213	0.6285
Cr 267.716	-0.5138u	-0.0454u	-0.4930u
Cu 324.754	596.040	600.154	600.697
Fe 271.441	6.0837	2.3572	0.8738
K 766.491	4069.00	4068.91	4081.33
Mg 279.078	7437.52	7455.20	7469.25
Mn 257.610	0.4934	0.4172	0.4991
Mo 202.032	-1.4097u	0.9673	-0.0337u

Label	Replicates Concentration		
Na 330.237	14671.4	14362.2	14287.3
Ni 231.604	1.9130	2.8214	-1.4256u
Pb 220.353	274.602	273.343	271.811
Sb 206.834	0.1510	-9.8159u	-6.4193u
Se 196.026	-2.7856u	15.8100	10.0345
Si 288.158	3698.18	3706.08	3699.86
Sn 189.925	-6.2333u	0.4421	7.9331
Sr 216.596	139.470	138.634	137.853
Ti 334.941	-0.0417	-0.1143	-0.1835
Tl 190.794	-11.5197u	-2.7671u	3.1699
V 292.401	0.7476	0.5223	0.2298
Zn 206.200	40.1223	46.4097	44.4455

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2520	ppb	0.1513	60.0	-20.2862
Al 308.215	-0.1468	ppb	1.4477	986.4	161.938
As 188.980	0.5133	ppb	1.5604	304.0	1.3830
B 249.678	5.2072	ppb	0.6046	11.6	-62.7811
Ba 389.178	-0.7339	ppb	0.7037	95.9	-64.8001
Be 313.042	-0.0488	ppb	0.0056	11.5	-196.144
Ca 370.602	38422	ppb	33.53	0.1	87617
Cd 226.502	-0.3372	ppb	0.0999	29.6	6.5844
Co 228.615	0.4299	ppb	0.1723	40.1	-9.8740
Cr 267.716	-0.3507	ppb	0.2646	75.4	15.4912
Cu 324.754	598.964	ppb	2.5465	0.4	23833.4
Fe 271.441	3.1049	ppb	2.6842	86.5	30.2176
K 766.491	4073.08	ppb	7.1430	0.2	111277
Mg 279.078	7453.99	ppb	15.8963	0.2	10769.2
Mn 257.610	0.4699	ppb	0.0457	9.7	109.416
Mo 202.032	-0.1587	ppb	1.1934	752.2	3.8692
Na 330.237	14440.3	ppb	203.630	1.4	438.214
Ni 231.604	1.1029	ppb	2.2364	202.8	-0.7348
Pb 220.353	273.252	ppb	1.3978	0.5	166.859
Sb 206.834	-5.3614	ppb	5.0670	94.5	9.2202
Se 196.026	7.6863	ppb	9.5176	123.8	3.4904
Si 288.158	3701.37	ppb	4.1603	0.1	18046.3
Sn 189.925	0.7140	ppb	7.0871	992.6	-0.0278
Sr 216.596	138.653	ppb	0.8086	0.6	595.528
Ti 334.941	-0.1132	ppb	0.0709	62.6	-22.8467
Tl 190.794	-3.7056	ppb	7.3896	199.4	-11.8135
V 292.401	0.4999	ppb	0.2597	51.9	4.7461
Zn 206.200	43.6592	ppb	3.2166	7.4	15.4485

680-161833-A-261-D (Samp) **12/19/2018, 11:27:11 AM** **Rack 1, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5776	0.1231	0.3764
Al 308.215	1.2905	2.0277	1.3288
As 188.980	4.1654	4.8498	1.7563
B 249.678	13.0872	13.4872	13.6534
Ba 389.178	22.4514	24.9280	23.5247
Be 313.042	-0.0653u	-0.0660u	-0.0648u
Ca 370.602	35406	35420	35498

Label	Replicates Concentration		
Cd 226.502	0.0525	0.2431	-0.2844u
Co 228.615	1.2392	-0.1891u	0.3193
Cr 267.716	-0.4688u	-0.4287u	-0.1478u
Cu 324.754	313.057	312.135	312.553
Fe 271.441	12.0496	4.7850	-1.3225u
K 766.491	2940.68	2868.87	2871.16
Mg 279.078	6719.06	6724.21	6759.60
Mn 257.610	1.5288	1.4800	1.4689
Mo 202.032	-1.4748u	-0.3288u	-0.5862u
Na 330.237	13696.2	13393.0	13909.2
Ni 231.604	4.4370	4.7413	5.1075
Pb 220.353	-0.5945u	-1.9581u	-4.5595u
Sb 206.834	-11.2990u	-8.7934u	-14.4815u
Se 196.026	-17.1070u	-1.3942u	10.2160
Si 288.158	4289.93	4294.80	4297.96
Sn 189.925	-0.3117u	-4.8887u	-0.4726u
Sr 216.596	114.202	114.356	114.460
Ti 334.941	-0.1362	-0.1795	-0.2330u
Tl 190.794	-0.4399u	-3.3105u	5.4031
V 292.401	0.3884	0.2286	0.5598
Zn 206.200	401.669	413.420	416.514

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3590	ppb	0.2278	63.4	-16.2145
Al 308.215	1.5490	ppb	0.4150	26.8	166.178
As 188.980	3.5905	ppb	1.6249	45.3	2.1951
B 249.678	13.4093	ppb	0.2910	2.2	-7.5724
Ba 389.178	23.6347	ppb	1.2419	5.3	204.945
Be 313.042	-0.0654	ppb	0.0006	0.9	-210.293
Ca 370.602	35441	ppb	49.40	0.1	80824
Cd 226.502	0.0037	ppb	0.2671	7204.1	12.1476
Co 228.615	0.4564	ppb	0.7239	158.6	-9.7359
Cr 267.716	-0.3484	ppb	0.1749	50.2	15.5374
Cu 324.754	312.582	ppb	0.4621	0.1	12534.7
Fe 271.441	5.1707	ppb	6.6944	129.5	31.9303
K 766.491	2893.57	ppb	40.8128	1.4	79130.3
Mg 279.078	6734.29	ppb	22.0680	0.3	9732.41
Mn 257.610	1.4926	ppb	0.0319	2.1	217.686
Mo 202.032	-0.7966	ppb	0.6013	75.5	2.4321
Na 330.237	13666.2	ppb	259.386	1.9	417.000
Ni 231.604	4.7619	ppb	0.3357	7.1	4.3504
Pb 220.353	-2.3707	ppb	2.0145	85.0	5.2878
Sb 206.834	-11.5246	ppb	2.8507	24.7	6.4606
Se 196.026	-2.7617	ppb	13.7127	496.5	1.5000
Si 288.158	4294.23	ppb	4.0448	0.1	20891.1
Sn 189.925	-1.8910	ppb	2.5973	137.4	-0.8721
Sr 216.596	114.339	ppb	0.1298	0.1	492.789
Ti 334.941	-0.1829	ppb	0.0485	26.5	-33.7444
Tl 190.794	0.5509	ppb	4.4405	806.1	-10.0400
V 292.401	0.3923	ppb	0.1657	42.2	3.2192
Zn 206.200	410.535	ppb	7.8317	1.9	147.480

680-161833-A-261-E M (Samp) **12/19/2018, 11:31:05 AM** **Rack 1, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4429	0.1195	0.0015u
Al 308.215	6.1591	6.7288	5.0055
As 188.980	6.4022	9.3777	7.0901
B 249.678	13.8591	13.8434	12.5326
Ba 389.178	23.7492	22.4959	24.4452
Be 313.042	-0.0460u	-0.0537u	-0.0501u
Ca 370.602	35065	35139	35142
Cd 226.502	-0.1659u	0.1038	-0.2190u
Co 228.615	0.6727	-0.2442u	0.6917
Cr 267.716	-0.4107u	-0.1754u	-0.0087u
Cu 324.754	849.403	857.532	848.707
Fe 271.441	0.0713	14.5728	16.1735
K 766.491	2831.05	2837.24	2882.31
Mg 279.078	6656.92	6672.76	6678.37
Mn 257.610	1.3663	1.3309	1.3024
Mo 202.032	-0.7117u	-0.9432u	-0.9253u
Na 330.237	13552.8	13487.3	13524.4
Ni 231.604	4.2868	4.3912	4.5097
Pb 220.353	278.926	282.699	277.852
Sb 206.834	-1.0498u	-9.7637u	-10.3008u
Se 196.026	4.7618	-5.9006u	-5.9989u
Si 288.158	4258.69	4273.63	4267.86
Sn 189.925	2.3438	-4.3894u	4.5245
Sr 216.596	112.615	114.684	113.759
Ti 334.941	-0.1000	0.0708	-0.1997u
Tl 190.794	-6.9959u	3.3268	3.6453
V 292.401	0.5203	0.0337	0.8257
Zn 206.200	413.460	410.785	410.867

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1879	ppb	0.2285	121.6	-22.5599
Al 308.215	5.9645	ppb	0.8780	14.7	177.245
As 188.980	7.6233	ppb	1.5578	20.4	3.2593
B 249.678	13.4117	ppb	0.7614	5.7	-7.5657
Ba 389.178	23.5634	ppb	0.9878	4.2	204.088
Be 313.042	-0.0499	ppb	0.0038	7.6	-197.496
Ca 370.602	35115	ppb	43.68	0.1	80080
Cd 226.502	-0.0937	ppb	0.1731	184.7	10.5665
Co 228.615	0.3734	ppb	0.5349	143.3	-10.1506
Cr 267.716	-0.1983	ppb	0.2019	101.9	19.0239
Cu 324.754	851.881	ppb	4.9066	0.6	33811.9
Fe 271.441	10.2725	ppb	8.8707	86.4	36.1226
K 766.491	2850.20	ppb	27.9766	1.0	77948.3
Mg 279.078	6669.35	ppb	11.1202	0.2	9638.86
Mn 257.610	1.3332	ppb	0.0320	2.4	199.939
Mo 202.032	-0.8601	ppb	0.1288	15.0	2.2888
Na 330.237	13521.5	ppb	32.8804	0.2	413.205
Ni 231.604	4.3959	ppb	0.1116	2.5	3.8419
Pb 220.353	279.826	ppb	2.5453	0.9	170.713
Sb 206.834	-7.0381	ppb	5.1929	73.8	8.4750
Se 196.026	-2.3792	ppb	6.1845	259.9	1.5729
Si 288.158	4266.73	ppb	7.5372	0.2	20759.4

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	0.8263	ppb	4.6467	562.4	0.0085
Sr 216.596	113.686	ppb	1.0368	0.9	490.037
Ti 334.941	-0.0763	ppb	0.1368	179.4	-21.2170
Tl 190.794	-0.0079	ppb	6.0539	76171.6	-10.2733
V 292.401	0.4599	ppb	0.3995	86.9	4.2174
Zn 206.200	411.704	ppb	1.5211	0.4	147.900

Cont Calib Verif (CCV) **12/19/2018, 11:35:00 AM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	506.241	509.843	506.864
Al 308.215	10116.5	10158.3	10132.0
As 188.980	519.754	536.708	517.871
B 249.678	526.859	526.391	525.523
Ba 389.178	482.316	483.387	482.413
Be 313.042	545.865	546.561	546.448
Ca 370.602	10207	10218	10205
Cd 226.502	525.232	526.135	526.627
Co 228.615	518.726	518.083	518.380
Cr 267.716	515.566	515.967	515.785
Cu 324.754	507.200	508.646	509.226
Fe 271.441	10282.1	10308.3	10283.5
K 766.491	10003.7	10023.2	10027.0
Mg 279.078	10560.0	10567.7	10556.4
Mn 257.610	508.764	508.943	509.156
Mo 202.032	510.105	510.241	506.296
Na 330.237	10523.5	10585.9	10660.5
Ni 231.604	510.425	511.991	512.019
Pb 220.353	502.718	503.673	507.031
Sb 206.834	508.066	504.700	502.547
Se 196.026	508.454	519.842	498.221
Si 288.158	5451.89	5451.72	5456.54
Sn 189.925	499.318	512.535	502.913
Sr 216.596	516.645	517.572	514.599
Ti 334.941	511.294	512.105	511.539
Tl 190.794	480.706	491.187	490.574
V 292.401	502.024	503.773	502.510
Zn 206.200	1040.78	1038.26	1024.88

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	507.650	ppb	1.9254	0.4	18783.7	101.52991
Al 308.215	10135.6	ppb	21.1252	0.2	25593.5	101.35613
As 188.980	524.778	ppb	10.3747	2.0	139.599	104.95557
B 249.678	526.257	ppb	0.6780	0.1	3434.24	105.25148
Ba 389.178	482.706	ppb	0.5925	0.1	5308.91	96.54110
Be 313.042	546.292	ppb	0.3733	0.1	453667	109.25832
Ca 370.602	10210	ppb	6.773	0.1	23315	102.09912
Cd 226.502	525.998	ppb	0.7074	0.1	8606.85	105.19961
Co 228.615	518.396	ppb	0.3219	0.1	2595.84	103.67926
Cr 267.716	515.773	ppb	0.2007	0.0	11998.6	103.15462
Cu 324.754	508.357	ppb	1.0434	0.2	20268.2	101.67146
Fe 271.441	10291.3	ppb	14.7484	0.1	8535.46	102.86156
K 766.491	10018.0	ppb	12.4704	0.1	273300	100.17953

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10561.4	ppb	5.7333	0.1	15237.9	105.61384
Mn 257.610	508.954	ppb	0.1965	0.0	55738.0	101.79084
Mo 202.032	508.881	ppb	2.2395	0.4	1150.42	101.77612
Na 330.237	10589.9	ppb	68.6010	0.6	332.931	105.89945
Ni 231.604	511.478	ppb	0.9124	0.2	708.015	102.29563
Pb 220.353	504.474	ppb	2.2651	0.4	301.981	100.89479
Sb 206.834	505.104	ppb	2.7816	0.6	234.975	101.02088
Se 196.026	508.839	ppb	10.8157	2.1	98.9809	101.76779
Si 288.158	5453.38	ppb	2.7315	0.1	26593.2	109.06766
Sn 189.925	504.922	ppb	6.8337	1.4	163.373	100.98438
Sr 216.596	516.272	ppb	1.5213	0.3	2181.93	103.25446
Ti 334.941	511.646	ppb	0.4160	0.1	61273.7	102.32923
Tl 190.794	487.489	ppb	5.8823	1.2	193.155	97.49779
V 292.401	502.769	ppb	0.9028	0.2	7256.33	100.55387
Zn 206.200	1034.64	ppb	8.5448	0.8	371.911	103.46397

Cont Calib Blank (CCB) **12/19/2018, 11:38:55 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3333u	-0.2538u	0.0559
Al 308.215	2.6128	-1.2309u	-3.5739u
As 188.980	3.0229	5.5754	-3.4218u
B 249.678	4.7257	4.4405	4.4630
Ba 389.178	0.4228	-0.2797u	-0.0194u
Be 313.042	-0.0060u	0.0131	-0.0073u
Ca 370.602	-3.151u	-1.252u	-1.310u
Cd 226.502	-0.3357u	0.0667	0.0490
Co 228.615	0.4900	-0.8807u	0.0245
Cr 267.716	-0.4823u	-0.3960u	0.0460
Cu 324.754	0.4729	0.8417	0.4549
Fe 271.441	8.2104	2.6106	4.4826
K 766.491	2.9203	2.0769	3.0108
Mg 279.078	-1.6423u	-1.2603u	-1.9787u
Mn 257.610	0.1726	0.0927	0.0558
Mo 202.032	0.6821	-0.4218u	0.0801
Na 330.237	-34.6771u	222.848	161.325
Ni 231.604	1.5487	-0.9637u	-0.2225u
Pb 220.353	-1.0773u	3.6019	-3.5208u
Sb 206.834	-11.7212u	-6.4938u	-11.8548u
Se 196.026	2.3809	1.2013	5.5106
Si 288.158	20.9557	21.0347	18.8333
Sn 189.925	-1.8644u	1.5155	3.0747
Sr 216.596	-0.6294u	0.5502	-0.6781u
Ti 334.941	0.3465	0.2784	0.1823
Tl 190.794	-1.2361u	-3.6362u	2.3939
V 292.401	-0.1273u	0.8228	0.2504
Zn 206.200	-0.2540u	3.3019	0.9520

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1771	ppb	0.2056	116.1	-35.5754	-0.17707
Al 308.215	-0.7307	ppb	3.1235	427.5	160.472	-0.73069
As 188.980	1.7255	ppb	4.6368	268.7	1.7028	1.72548
B 249.678	4.5431	ppb	0.1585	3.5	-67.2660	4.54307

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	0.0412	ppb	0.3551	861.5	-63.6020	0.04122
Be 313.042	-0.0001	ppb	0.0114	22084.9	-160.940	-0.00005
Ca 370.602	-1.904	ppb	1.080	56.7	32.91	-1.90436
Cd 226.502	-0.0733	ppb	0.2274	310.1	10.8893	-0.07332
Co 228.615	-0.1221	ppb	0.6970	570.9	-12.6533	-0.12209
Cr 267.716	-0.2774	ppb	0.2834	102.2	17.0816	-0.27741
Cu 324.754	0.5898	ppb	0.2183	37.0	225.537	0.58982
Fe 271.441	5.1012	ppb	2.8507	55.9	31.8318	5.10119
K 766.491	2.6693	ppb	0.5150	19.3	340.974	2.66932
Mg 279.078	-1.6271	ppb	0.3595	22.1	28.7477	-1.62709
Mn 257.610	0.1070	ppb	0.0597	55.8	33.0583	0.10704
Mo 202.032	0.1135	ppb	0.5527	487.0	4.4823	0.11349
Na 330.237	116.499	ppb	134.488	115.4	60.8251	116.49879
Ni 231.604	0.1208	ppb	1.2909	1068.3	-2.0992	0.12084
Pb 220.353	-0.3321	ppb	3.6194	1089.9	6.4827	-0.33209
Sb 206.834	-10.0233	ppb	3.0573	30.5	7.1270	-10.02327Z
Se 196.026	3.0309	ppb	2.2270	73.5	2.6034	3.03093
Si 288.158	20.2746	ppb	1.2488	6.2	380.451	20.27456
Sn 189.925	0.9086	ppb	2.5248	277.9	0.0334	0.90859
Sr 216.596	-0.2524	ppb	0.6955	275.5	8.6690	-0.25243
Ti 334.941	0.2691	ppb	0.0825	30.7	-3.2815	0.26907
Tl 190.794	-0.8262	ppb	3.0359	367.5	-10.6157	-0.82616
V 292.401	0.3153	ppb	0.4783	151.7	2.0468	0.31529
Zn 206.200	1.3333	ppb	1.8084	135.6	0.2162	1.33332

680-161833-A-261-F M (Samp) **12/19/2018, 11:42:48 AM** **Rack 1, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0049u	-0.0432u	-1.0132u
Al 308.215	5.9890	5.1848	7.4414
As 188.980	-4.1119u	0.4276	1.9837
B 249.678	14.2999	13.0334	13.7280
Ba 389.178	23.7776	24.9260	24.4372
Be 313.042	-0.0217u	-0.0247u	-0.0346u
Ca 370.602	35011	35118	35061
Cd 226.502	-0.1697u	-0.0359u	-0.3334u
Co 228.615	-0.3273u	0.3306	-0.2048u
Cr 267.716	-0.0489u	-0.1302u	-0.4144u
Cu 324.754	853.739	860.161	857.792
Fe 271.441	-1.3866u	-2.0916u	9.5122
K 766.491	2834.90	2891.06	2841.30
Mg 279.078	6642.15	6656.88	6662.33
Mn 257.610	0.9512	0.9100	1.0709
Mo 202.032	0.3902	-1.4175u	0.2074
Na 330.237	13619.1	13512.1	13536.5
Ni 231.604	5.1000	6.4288	5.8413
Pb 220.353	273.637	274.919	286.432
Sb 206.834	-3.7337u	-5.7956u	-2.6237u
Se 196.026	-1.5299u	-12.5502u	-7.3223u
Si 288.158	4249.94	4248.33	4248.19
Sn 189.925	0.0641	9.3395	3.9652
Sr 216.596	113.088	114.569	113.866
Ti 334.941	-0.0622	-0.0009	-0.0621

Label	Replicates Concentration		
Tl 190.794	-3.2797u	-1.8205u	-1.3103u
V 292.401	0.5658	-0.0904u	0.1326
Zn 206.200	405.968	421.425	419.998

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3538	ppb	0.5714	161.5	-42.6321
Al 308.215	6.2050	ppb	1.1437	18.4	177.850
As 188.980	-0.5668	ppb	3.1671	558.7	1.0980
B 249.678	13.6871	ppb	0.6342	4.6	-5.7038
Ba 389.178	24.3802	ppb	0.5763	2.4	213.144
Be 313.042	-0.0270	ppb	0.0068	25.1	-178.501
Ca 370.602	35063	ppb	53.67	0.2	79962
Cd 226.502	-0.1797	ppb	0.1490	82.9	9.1569
Co 228.615	-0.0672	ppb	0.3498	520.9	-12.3735
Cr 267.716	-0.1978	ppb	0.1919	97.0	19.0329
Cu 324.754	857.231	ppb	3.2480	0.4	34023.0
Fe 271.441	2.0114	ppb	6.5055	323.4	29.2986
K 766.491	2855.75	ppb	30.7483	1.1	78099.6
Mg 279.078	6653.79	ppb	10.4378	0.2	9616.44
Mn 257.610	0.9774	ppb	0.0836	8.6	160.980
Mo 202.032	-0.2733	ppb	0.9951	364.1	3.6110
Na 330.237	13555.9	ppb	56.0735	0.4	414.104
Ni 231.604	5.7900	ppb	0.6658	11.5	5.7799
Pb 220.353	278.330	ppb	7.0464	2.5	169.836
Sb 206.834	-4.0510	ppb	1.6096	39.7	9.8090
Se 196.026	-7.1341	ppb	5.5126	77.3	0.6670
Si 288.158	4248.82	ppb	0.9700	0.0	20673.6
Sn 189.925	4.4563	ppb	4.6572	104.5	1.1848
Sr 216.596	113.841	ppb	0.7408	0.7	490.666
Ti 334.941	-0.0417	ppb	0.0354	84.8	-17.1115
Tl 190.794	-2.1368	ppb	1.0221	47.8	-11.1605
V 292.401	0.2026	ppb	0.3337	164.7	0.4345
Zn 206.200	415.797	ppb	8.5420	2.1	149.373

680-161833-A-235-B (Samp) **12/19/2018, 11:46:43 AM** **Rack 1, Tube 12**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4610	-0.6121u	-0.7104u
Al 308.215	30.8245	27.9478	26.4898
As 188.980	4.3509	-4.4748u	4.4391
B 249.678	14.8835	13.6201	13.4644
Ba 389.178	27.0431	26.3491	26.3182
Be 313.042	-0.0500u	-0.0566u	-0.0472u
Ca 370.602	36697	36589	36851
Cd 226.502	-0.3860u	-0.4626u	-0.3124u
Co 228.615	0.3247	0.6665	1.0104
Cr 267.716	-0.1662u	-0.4822u	-0.2477u
Cu 324.754	215.404	212.808	213.367
Fe 271.441	138.511	147.850	149.142
K 766.491	2588.71	2592.41	2592.06
Mg 279.078	7395.42	7396.88	7412.02
Mn 257.610	5.7206	5.8084	5.8190
Mo 202.032	-0.9268u	0.3836	0.4622

Label	Replicates Concentration		
Na 330.237	14289.1	14201.3	14444.0
Ni 231.604	2.0361	2.9179	2.5425
Pb 220.353	-0.6585u	-2.5409u	-1.4136u
Sb 206.834	-4.8893u	-6.9467u	-6.5193u
Se 196.026	16.1313	-17.5819u	12.0089
Si 288.158	4543.67	4536.65	4537.50
Sn 189.925	-0.4389u	7.2503	1.8392
Sr 216.596	125.068	124.034	124.443
Ti 334.941	0.8686	1.0077	0.8952
Tl 190.794	3.1798	7.4870	4.3676
V 292.401	0.2883	0.4619	-0.1209u
Zn 206.200	20.1615	16.1999	17.7195

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2872	ppb	0.6498	226.3	-40.2322
Al 308.215	28.4207	ppb	2.2057	7.8	233.549
As 188.980	1.4384	ppb	5.1212	356.0	1.6274
B 249.678	13.9894	ppb	0.7783	5.6	-3.8163
Ba 389.178	26.5702	ppb	0.4099	1.5	238.244
Be 313.042	-0.0513	ppb	0.0048	9.4	-198.489
Ca 370.602	36712	ppb	131.8	0.4	83720
Cd 226.502	-0.3870	ppb	0.0751	19.4	5.8870
Co 228.615	0.6672	ppb	0.3429	51.4	-8.6692
Cr 267.716	-0.2987	ppb	0.1640	54.9	16.7295
Cu 324.754	213.859	ppb	1.3663	0.6	8639.78
Fe 271.441	145.168	ppb	5.8007	4.0	147.241
K 766.491	2591.06	ppb	2.0408	0.1	70885.6
Mg 279.078	7401.44	ppb	9.1938	0.1	10693.4
Mn 257.610	5.7827	ppb	0.0540	0.9	690.200
Mo 202.032	-0.0270	ppb	0.7802	2890.6	4.1636
Na 330.237	14311.5	ppb	122.873	0.9	434.867
Ni 231.604	2.4988	ppb	0.4425	17.7	1.2049
Pb 220.353	-1.5376	ppb	0.9473	61.6	5.7764
Sb 206.834	-6.1184	ppb	1.0857	17.7	8.8822
Se 196.026	3.5194	ppb	18.3902	522.5	2.6966
Si 288.158	4539.27	ppb	3.8309	0.1	22067.7
Sn 189.925	2.8835	ppb	3.9496	137.0	0.6753
Sr 216.596	124.515	ppb	0.5209	0.4	535.830
Ti 334.941	0.9238	ppb	0.0738	8.0	101.183
Tl 190.794	5.0115	ppb	2.2246	44.4	-8.1863
V 292.401	0.2097	ppb	0.2992	142.6	0.5523
Zn 206.200	18.0270	ppb	1.9986	11.1	6.2241

680-161833-A-223-B (Samp) **12/19/2018, 11:50:36 AM** **Rack 1, Tube 13**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5192u	0.0483	-0.3740u
Al 308.215	10.3673	12.0756	9.9209
As 188.980	1.1342	-3.4412u	-2.2663u
B 249.678	13.7768	12.8677	14.1788
Ba 389.178	22.2485	22.4792	21.4616
Be 313.042	-0.0481u	-0.0627u	-0.0681u
Ca 370.602	29468	29506	29494

Label	Replicates Concentration		
Cd 226.502	-0.1929u	-0.3639u	-0.2695u
Co 228.615	0.3728	0.2930	-0.4746u
Cr 267.716	-0.0446u	-0.4113u	-0.0885u
Cu 324.754	247.684	248.001	248.289
Fe 271.441	15.1728	12.6233	20.1304
K 766.491	2119.03	2121.02	2119.46
Mg 279.078	6220.14	6225.24	6221.59
Mn 257.610	2.6617	2.7644	2.7169
Mo 202.032	-0.0486u	-0.8072u	-0.2402u
Na 330.237	23583.2	23475.7	23465.1
Ni 231.604	6.8889	5.8203	7.2446
Pb 220.353	1.2486	9.7785	-0.2271u
Sb 206.834	-9.1339u	-7.9765u	-6.3301u
Se 196.026	-2.6714u	3.2571	0.8142
Si 288.158	4488.76	4494.51	4489.61
Sn 189.925	1.8348	6.6885	-2.2947u
Sr 216.596	100.987	102.167	100.786
Ti 334.941	0.0314	0.0813	-0.0120
Tl 190.794	2.3897	0.5537	6.2630
V 292.401	0.3610	0.2741	0.2842
Zn 206.200	678.462	683.387	684.555

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2816	ppb	0.2948	104.7	-39.9022
Al 308.215	10.7879	ppb	1.1373	10.5	189.337
As 188.980	-1.5244	ppb	2.3762	155.9	0.8453
B 249.678	13.6078	ppb	0.6717	4.9	-6.2527
Ba 389.178	22.0631	ppb	0.5335	2.4	187.003
Be 313.042	-0.0597	ppb	0.0103	17.3	-206.944
Ca 370.602	29489	ppb	18.95	0.1	67256
Cd 226.502	-0.2755	ppb	0.0857	31.1	7.5777
Co 228.615	0.0637	ppb	0.4679	734.1	-11.7126
Cr 267.716	-0.1815	ppb	0.2002	110.3	19.4954
Cu 324.754	247.991	ppb	0.3023	0.1	9986.36
Fe 271.441	15.9755	ppb	3.8174	23.9	40.8032
K 766.491	2119.84	ppb	1.0471	0.0	58042.9
Mg 279.078	6222.33	ppb	2.6281	0.0	8994.86
Mn 257.610	2.7144	ppb	0.0514	1.9	348.742
Mo 202.032	-0.3653	ppb	0.3944	108.0	3.4035
Na 330.237	23508.0	ppb	65.2916	0.3	675.793
Ni 231.604	6.6512	ppb	0.7413	11.1	6.9769
Pb 220.353	3.6000	ppb	5.4014	150.0	8.7879
Sb 206.834	-7.8135	ppb	1.4090	18.0	8.1243
Se 196.026	0.4666	ppb	2.9795	638.5	2.1151
Si 288.158	4490.96	ppb	3.1036	0.1	21835.7
Sn 189.925	2.0762	ppb	4.4964	216.6	0.4148
Sr 216.596	101.313	ppb	0.7464	0.7	437.737
Ti 334.941	0.0336	ppb	0.0467	139.2	-9.9439
Tl 190.794	3.0688	ppb	2.9146	95.0	-8.9921
V 292.401	0.3064	ppb	0.0475	15.5	1.9174
Zn 206.200	682.135	ppb	3.2342	0.5	245.223

680-161833-A-266-B (Samp) **12/19/2018, 11:54:28 AM** **Rack 1, Tube 14**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2166u	-0.3110u	-0.3284u
Al 308.215	3.7437	1.4032	4.5836
As 188.980	2.4970	-0.4443u	1.5132
B 249.678	14.6725	15.4430	17.2339
Ba 389.178	24.6569	25.2261	24.3306
Be 313.042	-0.0592u	-0.0547u	-0.0685u
Ca 370.602	34979	35110	35086
Cd 226.502	-0.1860u	0.2195	-0.1743u
Co 228.615	0.7777	0.0449	1.0042
Cr 267.716	-0.2314u	-0.2471u	-0.1133u
Cu 324.754	1245.68	1252.36	1258.66
Fe 271.441	10.0111	-6.8921u	-4.5965u
K 766.491	3283.84	3295.89	3295.16
Mg 279.078	7076.88	7085.61	7081.59
Mn 257.610	2.1280	2.1258	2.1089
Mo 202.032	-0.8759u	0.0007	-0.7640u
Na 330.237	13072.9	13135.0	13027.0
Ni 231.604	9.8315	7.9349	9.6624
Pb 220.353	-3.7634u	-4.3140u	-1.4151u
Sb 206.834	-10.8231u	-13.7086u	-7.2800u
Se 196.026	-1.5589u	4.3672	6.1730
Si 288.158	4181.59	4179.43	4179.93
Sn 189.925	2.1879	5.3818	5.4062
Sr 216.596	118.946	116.838	118.402
Ti 334.941	-0.1346	-0.1408	-0.1572
Tl 190.794	-3.4136u	1.8577	2.1200
V 292.401	-0.0676u	0.7363	0.8553
Zn 206.200	345.426	338.600	340.152

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2853	ppb	0.0602	21.1	-40.1117
Al 308.215	3.2435	ppb	1.6481	50.8	170.432
As 188.980	1.1886	ppb	1.4972	126.0	1.5612
B 249.678	15.7831	ppb	1.3141	8.3	8.4073
Ba 389.178	24.7379	ppb	0.4532	1.8	217.544
Be 313.042	-0.0608	ppb	0.0071	11.6	-206.489
Ca 370.602	35058	ppb	69.85	0.2	79950
Cd 226.502	-0.0469	ppb	0.2308	492.1	11.3246
Co 228.615	0.6089	ppb	0.5014	82.3	-8.9708
Cr 267.716	-0.1972	ppb	0.0732	37.1	19.0451
Cu 324.754	1252.23	ppb	6.4943	0.5	49607.2
Fe 271.441	-0.4925	ppb	9.1686	1861.6	27.2738
K 766.491	3291.63	ppb	6.7577	0.2	89979.1
Mg 279.078	7081.36	ppb	4.3698	0.1	10232.4
Mn 257.610	2.1209	ppb	0.0104	0.5	288.128
Mo 202.032	-0.5464	ppb	0.4771	87.3	2.9956
Na 330.237	13078.3	ppb	54.2082	0.4	401.669
Ni 231.604	9.1429	ppb	1.0496	11.5	10.4389
Pb 220.353	-3.1641	ppb	1.5396	48.7	4.8226
Sb 206.834	-10.6039	ppb	3.2199	30.4	6.8727
Se 196.026	2.9938	ppb	4.0448	135.1	2.5966
Si 288.158	4180.32	ppb	1.1279	0.0	20344.8

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	4.3253	ppb	1.8511	42.8	1.1423
Sr 216.596	118.062	ppb	1.0945	0.9	508.478
Ti 334.941	-0.1442	ppb	0.0117	8.1	-27.8198
Tl 190.794	0.1880	ppb	3.1219	1660.4	-10.1908
V 292.401	0.5080	ppb	0.5021	98.8	4.8838
Zn 206.200	341.393	ppb	3.5784	1.0	122.597

680-161833-A-264-B (Samp) **12/19/2018, 11:58:20 AM** **Rack 1, Tube 15**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4810u	-0.2803u	-0.2331u
Al 308.215	10.8708	8.3532	7.6458
As 188.980	8.6954	5.1814	-3.9552u
B 249.678	13.5567	13.5292	13.6382
Ba 389.178	28.4223	28.9230	29.9053
Be 313.042	-0.0745u	-0.0605u	-0.0766u
Ca 370.602	36301	36580	36509
Cd 226.502	-0.3665u	-0.2040u	0.0539
Co 228.615	0.4405	0.3034	0.5717
Cr 267.716	-0.1849u	-0.2272u	-0.3926u
Cu 324.754	254.642	256.647	256.990
Fe 271.441	-3.8685u	10.3067	6.2363
K 766.491	2496.74	2492.42	2493.74
Mg 279.078	7430.38	7430.50	7452.12
Mn 257.610	2.5115	2.4281	2.4861
Mo 202.032	-1.2252u	-0.1718u	-0.8677u
Na 330.237	14277.0	14151.1	14032.7
Ni 231.604	2.2561	2.2366	5.5179
Pb 220.353	0.1083	-4.2323u	-5.8546u
Sb 206.834	-1.7855u	-13.1046u	-4.0410u
Se 196.026	-2.8213u	-12.5652u	0.7889
Si 288.158	4514.08	4529.35	4526.01
Sn 189.925	-0.7846u	0.1788	1.6711
Sr 216.596	123.903	122.759	122.887
Ti 334.941	0.1245	0.0547	-0.0370
Tl 190.794	4.6907	-0.3053u	0.5600
V 292.401	0.4885	0.7318	-0.0062u
Zn 206.200	68.9815	66.2322	62.2397

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3315	ppb	0.1316	39.7	-41.8439
Al 308.215	8.9566	ppb	1.6951	18.9	184.747
As 188.980	3.3072	ppb	6.5302	197.5	2.1203
B 249.678	13.5747	ppb	0.0567	0.4	-6.4611
Ba 389.178	29.0835	ppb	0.7544	2.6	266.128
Be 313.042	-0.0705	ppb	0.0088	12.4	-214.458
Ca 370.602	36463	ppb	145.1	0.4	83153
Cd 226.502	-0.1722	ppb	0.2120	123.1	9.2807
Co 228.615	0.4385	ppb	0.1341	30.6	-9.8240
Cr 267.716	-0.2682	ppb	0.1098	40.9	17.4084
Cu 324.754	256.093	ppb	1.2682	0.5	10306.0
Fe 271.441	4.2248	ppb	7.2985	172.8	31.1494
K 766.491	2494.30	ppb	2.2162	0.1	68248.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	7437.67	ppb	12.5148	0.2	10745.7
Mn 257.610	2.4752	ppb	0.0427	1.7	328.622
Mo 202.032	-0.7549	ppb	0.5357	71.0	2.5260
Na 330.237	14153.6	ppb	122.151	0.9	430.615
Ni 231.604	3.3368	ppb	1.8888	56.6	2.3697
Pb 220.353	-3.3262	ppb	3.0830	92.7	4.7276
Sb 206.834	-6.3104	ppb	5.9911	94.9	8.7990
Se 196.026	-4.8659	ppb	6.9078	142.0	1.0993
Si 288.158	4523.15	ppb	8.0271	0.2	21989.8
Sn 189.925	0.3551	ppb	1.2373	348.4	-0.1442
Sr 216.596	123.183	ppb	0.6266	0.5	530.169
Ti 334.941	0.0474	ppb	0.0810	171.0	-3.6397
Tl 190.794	1.6485	ppb	2.6699	162.0	-9.5826
V 292.401	0.4047	ppb	0.3761	92.9	3.3928
Zn 206.200	65.8178	ppb	3.3899	5.2	23.4228

680-161833-A-234-B (Samp) **12/19/2018, 12:02:13 PM** **Rack 1, Tube 16**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1781u	0.3200	-0.5612u
Al 308.215	13.2685	16.5781	12.1898
As 188.980	-0.4051u	-1.5124u	3.5243
B 249.678	13.8030	12.5574	12.3479
Ba 389.178	25.3878	23.0292	24.2050
Be 313.042	-0.0637u	-0.0530u	-0.0654u
Ca 370.602	36350	36390	36416
Cd 226.502	-0.2636u	-0.1539u	-0.3916u
Co 228.615	0.6348	0.6632	0.1951
Cr 267.716	-0.3000u	0.0740	-0.3943u
Cu 324.754	391.259	394.348	394.481
Fe 271.441	162.491	165.717	159.720
K 766.491	2581.86	2590.24	2590.68
Mg 279.078	7292.18	7300.28	7307.06
Mn 257.610	5.3442	5.4683	5.3726
Mo 202.032	0.6336	-2.0616u	-0.0385u
Na 330.237	13809.4	13766.0	13509.9
Ni 231.604	1.5485	1.8110	3.2565
Pb 220.353	2.3523	2.5632	0.2412
Sb 206.834	-3.2426u	-9.4582u	-5.1963u
Se 196.026	-8.4639u	-0.4400u	-3.2449u
Si 288.158	4415.73	4410.86	4419.75
Sn 189.925	4.6610	1.3201	-2.7087u
Sr 216.596	122.069	121.194	122.499
Ti 334.941	0.0113	-0.0336	0.0295
Tl 190.794	-1.6795u	1.5921	-2.8809u
V 292.401	0.3179	0.1905	0.4116
Zn 206.200	48.8735	47.6682	56.1370

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1398	ppb	0.4419	316.2	-34.7625
Al 308.215	14.0121	ppb	2.2867	16.3	197.425
As 188.980	0.5356	ppb	2.6469	494.2	1.3892
B 249.678	12.9028	ppb	0.7866	6.1	-11.1448

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	24.2073	ppb	1.1793	4.9	211.922
Be 313.042	-0.0607	ppb	0.0067	11.0	-206.281
Ca 370.602	36385	ppb	33.07	0.1	82975
Cd 226.502	-0.2697	ppb	0.1190	44.1	7.8131
Co 228.615	0.4977	ppb	0.2624	52.7	-9.5240
Cr 267.716	-0.2068	ppb	0.2477	119.8	18.8577
Cu 324.754	393.363	ppb	1.8233	0.5	15721.8
Fe 271.441	162.643	ppb	3.0017	1.8	161.634
K 766.491	2587.60	ppb	4.9684	0.2	70791.2
Mg 279.078	7299.84	ppb	7.4509	0.1	10547.1
Mn 257.610	5.3950	ppb	0.0650	1.2	647.311
Mo 202.032	-0.4888	ppb	1.4029	287.0	3.1229
Na 330.237	13695.1	ppb	161.821	1.2	418.546
Ni 231.604	2.2054	ppb	0.9197	41.7	0.7970
Pb 220.353	1.7189	ppb	1.2841	74.7	7.6860
Sb 206.834	-5.9657	ppb	3.1784	53.3	8.9559
Se 196.026	-4.0496	ppb	4.0721	100.6	1.2545
Si 288.158	4415.45	ppb	4.4487	0.1	21473.2
Sn 189.925	1.0908	ppb	3.6902	338.3	0.0942
Sr 216.596	121.921	ppb	0.6651	0.5	524.883
Ti 334.941	0.0024	ppb	0.0325	1361.6	-9.5088
Tl 190.794	-0.9895	ppb	2.3150	234.0	-10.6861
V 292.401	0.3067	ppb	0.1109	36.2	1.9975
Zn 206.200	50.8929	ppb	4.5813	9.0	18.0519

680-161833-A-221-B (Samp) **12/19/2018, 12:06:06 PM** **Rack 1, Tube 17**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1006	-0.6286u	0.3847
Al 308.215	15.8320	12.8044	12.8764
As 188.980	1.7610	1.4304	-0.4803u
B 249.678	11.4407	12.7764	11.3810
Ba 389.178	23.8616	26.1404	25.3911
Be 313.042	-0.0615u	-0.0530u	-0.0724u
Ca 370.602	34080	34104	34132
Cd 226.502	0.1119	-0.4877u	-0.0984u
Co 228.615	-0.3137u	0.8832	0.3022
Cr 267.716	-0.5485u	-0.2599u	-0.4679u
Cu 324.754	408.526	411.756	409.432
Fe 271.441	30.0851	26.4810	38.8287
K 766.491	2749.96	2749.54	2759.99
Mg 279.078	6721.16	6712.92	6728.20
Mn 257.610	3.3638	3.4125	3.4603
Mo 202.032	-0.5031u	0.3319	-1.2589u
Na 330.237	11973.5	11729.6	11758.2
Ni 231.604	2.8854	2.8206	1.4048
Pb 220.353	0.6006	4.6343	-3.7102u
Sb 206.834	-11.7735u	-7.3089u	-12.4719u
Se 196.026	3.5263	0.4265	13.1154
Si 288.158	4433.82	4429.33	4432.85
Sn 189.925	0.6762	2.3257	10.2698
Sr 216.596	113.815	116.735	114.936
Ti 334.941	0.1024	0.1675	0.1536

Label	Replicates Concentration		
Tl 190.794	-6.2520u	-1.9478u	-0.6495u
V 292.401	0.0347	0.6000	0.0598
Zn 206.200	194.274	202.532	206.457

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0478	ppb	0.5227	1094.2	-31.2948
Al 308.215	13.8376	ppb	1.7276	12.5	196.986
As 188.980	0.9037	ppb	1.2099	133.9	1.4860
B 249.678	11.8660	ppb	0.7889	6.6	-17.9934
Ba 389.178	25.1310	ppb	1.1615	4.6	221.562
Be 313.042	-0.0623	ppb	0.0097	15.6	-207.881
Ca 370.602	34105	ppb	25.75	0.1	77778
Cd 226.502	-0.1580	ppb	0.3042	192.5	9.5369
Co 228.615	0.2906	ppb	0.5986	206.0	-10.5732
Cr 267.716	-0.4254	ppb	0.1489	35.0	13.7460
Cu 324.754	409.905	ppb	1.6657	0.4	16374.4
Fe 271.441	31.7983	ppb	6.3496	20.0	53.8509
K 766.491	2753.16	ppb	5.9179	0.2	75303.6
Mg 279.078	6720.76	ppb	7.6481	0.1	9712.89
Mn 257.610	3.4122	ppb	0.0483	1.4	427.587
Mo 202.032	-0.4767	ppb	0.7958	166.9	3.1523
Na 330.237	11820.4	ppb	133.297	1.1	368.830
Ni 231.604	2.3703	ppb	0.8368	35.3	1.0266
Pb 220.353	0.5083	ppb	4.1730	821.0	6.9754
Sb 206.834	-10.5181	ppb	2.8011	26.6	6.9081
Se 196.026	5.6894	ppb	6.6152	116.3	3.1101
Si 288.158	4432.00	ppb	2.3609	0.1	21552.7
Sn 189.925	4.4239	ppb	5.1295	115.9	1.1741
Sr 216.596	115.162	ppb	1.4729	1.3	496.279
Ti 334.941	0.1412	ppb	0.0343	24.3	5.1112
Tl 190.794	-2.9498	ppb	2.9326	99.4	-11.4990
V 292.401	0.2315	ppb	0.3194	138.0	0.8525
Zn 206.200	201.087	ppb	6.2188	3.1	72.1038

680-161833-A-260-B (Samp) **12/19/2018, 12:09:59 PM** **Rack 1, Tube 18**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4232	0.3513	0.3687
Al 308.215	2.6723	2.6720	0.1732
As 188.980	-1.7994u	3.1401	-1.8883u
B 249.678	20.1245	20.7476	21.2058
Ba 389.178	30.0818	29.2486	28.7522
Be 313.042	-0.0626u	-0.0673u	-0.0784u
Ca 370.602	37324	37358	37439
Cd 226.502	-0.1844u	-0.3117u	-0.1790u
Co 228.615	0.1904	0.1315	0.0808
Cr 267.716	-0.4541u	-0.4592u	-0.2467u
Cu 324.754	972.216	975.949	985.174
Fe 271.441	-0.6370u	-13.8601u	-3.2891u
K 766.491	3354.48	3354.96	3362.62
Mg 279.078	6893.57	6907.97	6911.96
Mn 257.610	1.7823	1.7712	1.6831
Mo 202.032	0.5948	-1.0688u	-2.0849u

Label	Replicates Concentration		
Na 330.237	12139.3	11838.6	11692.0
Ni 231.604	16.5038	18.0224	16.0710
Pb 220.353	6.2880	0.6592	1.4689
Sb 206.834	-11.0145u	-4.9545u	-7.8692u
Se 196.026	4.1780	-8.6996u	-0.5081u
Si 288.158	4215.51	4210.13	4213.59
Sn 189.925	3.0397	-2.7997u	-9.5250u
Sr 216.596	128.572	127.248	130.195
Ti 334.941	-0.1243	-0.1376	-0.1704
Tl 190.794	2.2482	-3.0492u	-5.0099u
V 292.401	0.5027	0.5748	0.1254
Zn 206.200	794.916	794.523	775.446

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3810	ppb	0.0375	9.8	-15.4492
Al 308.215	1.8392	ppb	1.4428	78.4	166.908
As 188.980	-0.1825	ppb	2.8778	1576.6	1.1994
B 249.678	20.6926	ppb	0.5428	2.6	41.4614
Ba 389.178	29.3609	ppb	0.6719	2.3	268.674
Be 313.042	-0.0694	ppb	0.0081	11.7	-213.257
Ca 370.602	37374	ppb	59.19	0.2	85228
Cd 226.502	-0.2250	ppb	0.0751	33.4	8.4141
Co 228.615	0.1342	ppb	0.0549	40.9	-11.3594
Cr 267.716	-0.3867	ppb	0.1213	31.4	14.6343
Cu 324.754	977.780	ppb	6.6703	0.7	38779.0
Fe 271.441	-5.9288	ppb	6.9956	118.0	22.7701
K 766.491	3357.35	ppb	4.5657	0.1	91770.3
Mg 279.078	6904.50	ppb	9.6726	0.1	9977.60
Mn 257.610	1.7455	ppb	0.0544	3.1	246.225
Mo 202.032	-0.8530	ppb	1.3528	158.6	2.3051
Na 330.237	11890.0	ppb	228.055	1.9	369.379
Ni 231.604	16.8658	ppb	1.0248	6.1	21.1730
Pb 220.353	2.8053	ppb	3.0431	108.5	8.3219
Sb 206.834	-7.9461	ppb	3.0307	38.1	8.0627
Se 196.026	-1.6766	ppb	6.5179	388.8	1.7068
Si 288.158	4213.08	ppb	2.7293	0.1	20501.8
Sn 189.925	-3.0950	ppb	6.2875	203.2	-1.2625
Sr 216.596	128.672	ppb	1.4764	1.1	553.237
Ti 334.941	-0.1441	ppb	0.0237	16.5	-28.4116
Tl 190.794	-1.9369	ppb	3.7547	193.8	-11.0764
V 292.401	0.4010	ppb	0.2414	60.2	3.3333
Zn 206.200	788.295	ppb	11.1290	1.4	283.428

680-161833-A-239-B (Samp) **12/19/2018, 12:13:52 PM** **Rack 1, Tube 19**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1671u	0.5788	-0.6270u
Al 308.215	10.9378	13.7736	10.6936
As 188.980	3.4704	6.6724	-3.1884u
B 249.678	14.0460	14.2316	13.8389
Ba 389.178	23.2824	25.2765	24.5931
Be 313.042	-0.0699u	-0.0673u	-0.0565u
Ca 370.602	38713	38850	38775

Label	Replicates Concentration		
Cd 226.502	0.5134	0.4436	0.4563
Co 228.615	-0.3654u	0.3562	0.6730
Cr 267.716	-0.2510u	-0.4268u	0.0157
Cu 324.754	169.456	171.846	171.494
Fe 271.441	66.3579	53.4457	58.6091
K 766.491	2933.29	2941.06	2944.03
Mg 279.078	6584.23	6606.49	6601.99
Mn 257.610	3.7498	3.8539	3.9575
Mo 202.032	0.1984	-2.5196u	-1.3868u
Na 330.237	12779.1	12163.1	12627.0
Ni 231.604	0.3101	2.1955	-0.9680u
Pb 220.353	-0.1922u	2.4608	-5.0970u
Sb 206.834	-14.2153u	-5.8581u	1.5172
Se 196.026	-7.0288u	-3.5897u	4.6578
Si 288.158	4395.98	4392.74	4399.21
Sn 189.925	3.2393	-0.2867u	4.1785
Sr 216.596	124.581	124.049	123.995
Ti 334.941	0.1088	0.0783	0.1327
Tl 190.794	-4.6807u	-4.5632u	-0.9926u
V 292.401	0.3655	-0.0220u	0.3420
Zn 206.200	45.8881	32.4441	46.1381

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0718	ppb	0.6085	847.9	-32.2293
Al 308.215	11.8017	ppb	1.7121	14.5	191.872
As 188.980	2.3181	ppb	5.0304	217.0	1.8595
B 249.678	14.0388	ppb	0.1964	1.4	-3.3950
Ba 389.178	24.3840	ppb	1.0134	4.2	213.155
Be 313.042	-0.0645	ppb	0.0071	11.0	-209.037
Ca 370.602	38779	ppb	68.39	0.2	88432
Cd 226.502	0.4711	ppb	0.0372	7.9	19.8257
Co 228.615	0.2213	ppb	0.5322	240.5	-10.9140
Cr 267.716	-0.2207	ppb	0.2228	100.9	18.5113
Cu 324.754	170.932	ppb	1.2900	0.8	6946.11
Fe 271.441	59.4709	ppb	6.4991	10.9	76.6307
K 766.491	2939.46	ppb	5.5439	0.2	80381.0
Mg 279.078	6597.57	ppb	11.7669	0.2	9535.42
Mn 257.610	3.8538	ppb	0.1039	2.7	475.310
Mo 202.032	-1.2360	ppb	1.3653	110.5	1.4411
Na 330.237	12523.0	ppb	320.875	2.6	387.694
Ni 231.604	0.5126	ppb	1.5914	310.5	-1.5551
Pb 220.353	-0.9428	ppb	3.8344	406.7	6.1252
Sb 206.834	-6.1854	ppb	7.8713	127.3	8.8568
Se 196.026	-1.9869	ppb	6.0059	302.3	1.6477
Si 288.158	4395.97	ppb	3.2361	0.1	21379.5
Sn 189.925	2.3770	ppb	2.3542	99.0	0.5109
Sr 216.596	124.208	ppb	0.3239	0.3	534.528
Ti 334.941	0.1066	ppb	0.0273	25.6	0.5030
Tl 190.794	-3.4122	ppb	2.0962	61.4	-11.6925
V 292.401	0.2285	ppb	0.2172	95.1	0.8659
Zn 206.200	41.4901	ppb	7.8351	18.9	14.6680

680-161833-A-228-B (Samp) **12/19/2018, 12:17:46 PM** **Rack 1, Tube 20**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4362u	0.1055	-0.0316u
Al 308.215	20.2410	21.3439	18.2150
As 188.980	-1.2408u	-2.2798u	0.9451
B 249.678	13.3883	14.8873	13.5822
Ba 389.178	24.4003	23.7511	24.6624
Be 313.042	-0.0564u	-0.0545u	-0.0750u
Ca 370.602	37465	37547	37543
Cd 226.502	-0.0652u	-0.3881u	-0.4202u
Co 228.615	0.3265	0.9582	1.2536
Cr 267.716	0.1303	-0.2686u	-0.0016
Cu 324.754	41.8375	41.0688	41.5620
Fe 271.441	45.6958	41.8527	41.5964
K 766.491	2893.40	2926.09	2948.76
Mg 279.078	6848.32	6871.06	6868.46
Mn 257.610	1.9003	1.9662	1.9489
Mo 202.032	-0.4310u	0.1730	-0.7668u
Na 330.237	12595.4	12621.3	12735.1
Ni 231.604	3.1624	1.0630	1.0632
Pb 220.353	-0.9893u	-0.8981u	-1.5815u
Sb 206.834	-10.1467u	2.9254	-12.4875u
Se 196.026	-24.8302u	-13.5878u	10.4099
Si 288.158	4351.88	4345.63	4352.73
Sn 189.925	2.7573	-8.8574u	-0.9621u
Sr 216.596	121.240	122.564	124.062
Ti 334.941	0.0519	-0.0597	-0.0690
Tl 190.794	0.4351	1.7944	1.5709
V 292.401	0.7814	0.0294	0.5329
Zn 206.200	5.7201	3.3677	1.5889

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1208	ppb	0.2816	233.2	-34.0370
Al 308.215	19.9333	ppb	1.5870	8.0	212.270
As 188.980	-0.8585	ppb	1.6461	191.7	1.0210
B 249.678	13.9526	ppb	0.8152	5.8	-3.9519
Ba 389.178	24.2713	ppb	0.4691	1.9	212.161
Be 313.042	-0.0619	ppb	0.0113	18.3	-207.102
Ca 370.602	37518	ppb	46.04	0.1	85558
Cd 226.502	-0.2912	ppb	0.1963	67.4	7.3662
Co 228.615	0.8461	ppb	0.4736	56.0	-7.7764
Cr 267.716	-0.0466	ppb	0.2032	435.7	22.5441
Cu 324.754	41.4894	ppb	0.3895	0.9	1839.16
Fe 271.441	43.0483	ppb	2.2964	5.3	63.1461
K 766.491	2922.75	ppb	27.8307	1.0	79925.5
Mg 279.078	6862.61	ppb	12.4462	0.2	9917.26
Mn 257.610	1.9385	ppb	0.0342	1.8	267.177
Mo 202.032	-0.3416	ppb	0.4763	139.4	3.4565
Na 330.237	12650.6	ppb	74.3185	0.6	391.140
Ni 231.604	1.7629	ppb	1.2120	68.8	0.1817
Pb 220.353	-1.1563	ppb	0.3710	32.1	5.9994
Sb 206.834	-6.5696	ppb	8.3058	126.4	8.6815
Se 196.026	-9.3360	ppb	18.0007	192.8	0.2475
Si 288.158	4350.08	ppb	3.8752	0.1	21159.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.3541	ppb	5.9312	252.0	-1.0223
Sr 216.596	122.622	ppb	1.4117	1.2	527.813
Ti 334.941	-0.0256	ppb	0.0673	262.7	-14.3776
Tl 190.794	1.2668	ppb	0.7289	57.5	-9.7428
V 292.401	0.4479	ppb	0.3832	85.5	4.0063
Zn 206.200	3.5589	ppb	2.0722	58.2	1.0171

Cont Calib Verif (CCV) **12/19/2018, 12:21:42 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	507.950	508.256	507.939
Al 308.215	10184.4	10215.0	10215.8
As 188.980	529.560	523.884	511.714
B 249.678	529.049	531.843	530.222
Ba 389.178	479.723	482.695	480.574
Be 313.042	550.124	550.474	550.678
Ca 370.602	10200	10224	10226
Cd 226.502	530.775	528.970	528.566
Co 228.615	522.516	523.484	521.968
Cr 267.716	517.951	518.784	518.051
Cu 324.754	510.492	512.641	510.517
Fe 271.441	10280.7	10311.5	10283.8
K 766.491	10071.8	10089.7	10090.9
Mg 279.078	10612.0	10616.8	10617.4
Mn 257.610	510.901	511.702	511.718
Mo 202.032	510.634	512.010	514.115
Na 330.237	10648.5	10797.0	10823.0
Ni 231.604	517.447	519.108	516.642
Pb 220.353	505.861	509.961	493.983
Sb 206.834	501.239	504.249	502.195
Se 196.026	506.570	529.992	498.702
Si 288.158	5458.80	5468.19	5449.72
Sn 189.925	520.191	501.408	509.378
Sr 216.596	515.576	518.968	516.459
Ti 334.941	512.752	513.197	512.543
Tl 190.794	491.499	491.417	487.724
V 292.401	503.372	504.374	504.134
Zn 206.200	1045.35	1036.92	1040.33

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	508.048	ppb	0.1803	0.0	18798.5	101.60966
Al 308.215	10205.1	ppb	17.9064	0.2	25767.6	102.05056
As 188.980	521.720	ppb	9.1176	1.7	138.792	104.34392
B 249.678	530.371	ppb	1.4030	0.3	3461.92	106.07424
Ba 389.178	480.997	ppb	1.5302	0.3	5290.03	96.19946
Be 313.042	550.425	ppb	0.2801	0.1	457101	110.08506Q
Ca 370.602	10217	ppb	14.79	0.1	23330	102.16612
Cd 226.502	529.437	ppb	1.1764	0.2	8663.00	105.88739
Co 228.615	522.656	ppb	0.7674	0.1	2617.26	104.53120
Cr 267.716	518.262	ppb	0.4551	0.1	12056.4	103.65236
Cu 324.754	511.217	ppb	1.2332	0.2	20381.1	102.24334
Fe 271.441	10292.0	ppb	16.9504	0.2	8536.29	102.86887
K 766.491	10084.1	ppb	10.7026	0.1	275104	100.84130

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10615.4	ppb	2.9555	0.0	15315.7	106.15414
Mn 257.610	511.440	ppb	0.4670	0.1	56010.2	102.28804
Mo 202.032	512.253	ppb	1.7529	0.3	1158.02	102.45055
Na 330.237	10756.2	ppb	94.1764	0.9	337.311	107.56169
Ni 231.604	517.733	ppb	1.2576	0.2	716.703	103.54651
Pb 220.353	503.269	ppb	8.2987	1.6	301.272	100.65370
Sb 206.834	502.561	ppb	1.5378	0.3	233.817	100.51221
Se 196.026	511.755	ppb	16.2762	3.2	99.5366	102.35094
Si 288.158	5458.91	ppb	9.2341	0.2	26620.4	109.17813
Sn 189.925	510.326	ppb	9.4276	1.8	165.124	102.06516
Sr 216.596	517.001	ppb	1.7600	0.3	2184.93	103.40015
Ti 334.941	512.831	ppb	0.3340	0.1	61415.8	102.56616
Tl 190.794	490.213	ppb	2.1560	0.4	194.294	98.04263
V 292.401	503.960	ppb	0.5229	0.1	7273.39	100.79197
Zn 206.200	1040.87	ppb	4.2410	0.4	374.152	104.08685

Cont Calib Blank (CCB) **12/19/2018, 12:25:36 PM** **Rack S, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2122u	0.1164	0.7898
Al 308.215	0.9744	-0.2379u	1.2242
As 188.980	-1.5388u	1.5923	-3.3105u
B 249.678	5.2560	5.3551	4.6217
Ba 389.178	-0.0752u	0.5203	0.8219
Be 313.042	0.0023	0.0072	0.0059
Ca 370.602	-1.542u	-3.938u	-1.363u
Cd 226.502	-0.3309u	0.0192	-0.2157u
Co 228.615	-0.7882u	0.4470	0.9074
Cr 267.716	-0.0228u	-0.3035u	0.0350
Cu 324.754	1.1566	-0.0638u	0.8491
Fe 271.441	4.6098	1.8816	-0.9944u
K 766.491	2.8755	3.1648	3.2685
Mg 279.078	-1.7252u	-6.6604u	-2.4582u
Mn 257.610	0.0168	0.1247	0.1507
Mo 202.032	1.2502	-0.0623u	-0.8686u
Na 330.237	391.363	159.701	-170.805u
Ni 231.604	-0.5019u	0.0297	0.5069
Pb 220.353	-3.0511u	-2.3714u	-3.6797u
Sb 206.834	-15.2889u	-12.3732u	-2.8625u
Se 196.026	-1.4980u	8.4953	-2.0061u
Si 288.158	17.8552	16.9932	16.3107
Sn 189.925	-1.8423u	4.9774	-0.4805u
Sr 216.596	-1.8173u	-1.0483u	0.1936
Ti 334.941	0.2285	0.1261	0.1849
Tl 190.794	4.8865	-5.5571u	0.7104
V 292.401	-0.0431u	-0.0396u	-0.2096u
Zn 206.200	-0.6468u	1.0369	2.8800

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2313	ppb	0.5108	220.8	-20.4336	0.23134
Al 308.215	0.6536	ppb	0.7821	119.7	163.927	0.65356
As 188.980	-1.0857	ppb	2.4826	228.7	0.9610	-1.08568
B 249.678	5.0776	ppb	0.3979	7.8	-63.6655	5.07758

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	0.4223	ppb	0.4565	108.1	-59.3761	0.42233
Be 313.042	0.0051	ppb	0.0025	49.8	-156.653	0.00511
Ca 370.602	-2.281	ppb	1.438	63.0	32.06	-2.28060
Cd 226.502	-0.1758	ppb	0.1784	101.5	9.2146	-0.17581
Co 228.615	0.1887	ppb	0.8768	464.6	-11.0906	0.18873
Cr 267.716	-0.0971	ppb	0.1811	186.5	21.2680	-0.09710
Cu 324.754	0.6473	ppb	0.6348	98.1	227.807	0.64730
Fe 271.441	1.8323	ppb	2.8024	152.9	29.1530	1.83234
K 766.491	3.1029	ppb	0.2036	6.6	352.792	3.10293
Mg 279.078	-3.6146	ppb	2.6631	73.7	25.8843	-3.61459
Mn 257.610	0.0974	ppb	0.0710	72.9	31.9882	0.09740
Mo 202.032	0.1064	ppb	1.0694	1005.0	4.4665	0.10641
Na 330.237	126.753	ppb	282.528	222.9	61.0931	126.75295
Ni 231.604	0.0116	ppb	0.5047	4358.0	-2.2513	0.01158
Pb 220.353	-3.0341	ppb	0.6543	21.6	4.8987	-3.03407
Sb 206.834	-10.1749	ppb	6.4983	63.9	7.0600	-10.17489Z
Se 196.026	1.6637	ppb	5.9218	355.9	2.3429	1.66374
Si 288.158	17.0531	ppb	0.7740	4.5	365.213	17.05305
Sn 189.925	0.8849	ppb	3.6090	407.9	0.0257	0.88487
Sr 216.596	-0.8907	ppb	1.0147	113.9	5.9720	-0.89067
Ti 334.941	0.1798	ppb	0.0514	28.6	-13.9757	0.17984
Tl 190.794	0.0133	ppb	5.2566	39552.5	-10.2658	0.01329
V 292.401	-0.0974	ppb	0.0971	99.7	-3.9503	-0.09742
Zn 206.200	1.0900	ppb	1.7640	161.8	0.1286	1.09002

680-161833-A-247-B (Samp) **12/19/2018, 12:29:30 PM** **Rack 1, Tube 21**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3135u	0.2878	-0.3250u
Al 308.215	8.4723	10.1811	6.5995
As 188.980	1.0071	-0.6583u	2.2487
B 249.678	13.1010	12.9569	15.5111
Ba 389.178	28.6766	27.2742	26.7836
Be 313.042	-0.0450u	-0.0519u	-0.0548u
Ca 370.602	36212	36165	36339
Cd 226.502	-0.2126u	-0.3401u	-0.2954u
Co 228.615	-0.4364u	0.2857	0.1932
Cr 267.716	-0.4321u	-0.2557u	-0.0700u
Cu 324.754	336.725	338.786	331.360
Fe 271.441	7.1720	11.6741	2.5114
K 766.491	2509.96	2515.15	2513.78
Mg 279.078	7501.25	7503.63	7528.34
Mn 257.610	1.0317	1.1261	1.2569
Mo 202.032	-0.6641u	0.1723	-0.7388u
Na 330.237	14651.1	14417.4	14409.3
Ni 231.604	4.0682	3.1815	2.7823
Pb 220.353	-1.9579u	2.8479	2.4717
Sb 206.834	3.5434	-3.9383u	-5.7367u
Se 196.026	-12.7827u	-5.2548u	-7.9808u
Si 288.158	4578.67	4589.22	4600.48
Sn 189.925	5.7192	4.0787	3.6114
Sr 216.596	122.209	123.872	124.646
Ti 334.941	-0.0060	0.0224	0.0992

Label	Replicates Concentration		
Tl 190.794	-1.3196u	2.8413	-6.7621u
V 292.401	0.1436	0.1064	0.1487
Zn 206.200	33.8668	33.1726	30.1079

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1169	ppb	0.3505	299.8	-33.8950
Al 308.215	8.4177	ppb	1.7914	21.3	183.398
As 188.980	0.8659	ppb	1.4586	168.5	1.4760
B 249.678	13.8564	ppb	1.4349	10.4	-4.5688
Ba 389.178	27.5781	ppb	0.9824	3.6	249.494
Be 313.042	-0.0506	ppb	0.0050	9.9	-197.946
Ca 370.602	36239	ppb	89.76	0.2	82641
Cd 226.502	-0.2827	ppb	0.0647	22.9	7.4794
Co 228.615	0.0142	ppb	0.3930	2776.5	-11.9668
Cr 267.716	-0.2526	ppb	0.1811	71.7	17.7723
Cu 324.754	335.624	ppb	3.8337	1.1	13443.8
Fe 271.441	7.1192	ppb	4.5816	64.4	33.5102
K 766.491	2512.96	ppb	2.6936	0.1	68757.1
Mg 279.078	7511.07	ppb	15.0015	0.2	10851.4
Mn 257.610	1.1382	ppb	0.1131	9.9	182.800
Mo 202.032	-0.4102	ppb	0.5059	123.3	3.3025
Na 330.237	14492.6	ppb	137.290	0.9	439.616
Ni 231.604	3.3440	ppb	0.6581	19.7	2.3801
Pb 220.353	1.1206	ppb	2.6727	238.5	7.3342
Sb 206.834	-2.0439	ppb	4.9215	240.8	10.7068
Se 196.026	-8.6728	ppb	3.8113	43.9	0.3739
Si 288.158	4589.46	ppb	10.9060	0.2	22308.6
Sn 189.925	4.4698	ppb	1.1070	24.8	1.1893
Sr 216.596	123.576	ppb	1.2449	1.0	531.818
Ti 334.941	0.0385	ppb	0.0544	141.2	-4.4476
Tl 190.794	-1.7468	ppb	4.8160	275.7	-10.9982
V 292.401	0.1329	ppb	0.0231	17.4	-0.5956
Zn 206.200	32.3824	ppb	2.0002	6.2	11.3902

680-161833-A-179-B (Samp) **12/19/2018, 12:33:24 PM** **Rack 1, Tube 22**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5144u	-0.2149u	-0.3579u
Al 308.215	9.1447	6.2285	9.0569
As 188.980	-1.9129u	7.9309	-4.5161u
B 249.678	14.8739	13.4897	14.5353
Ba 389.178	21.4237	20.5954	22.1793
Be 313.042	-0.0535u	-0.0592u	-0.0662u
Ca 370.602	35226	35210	35289
Cd 226.502	-0.0841u	-0.2834u	-0.3683u
Co 228.615	0.4564	1.1847	0.9089
Cr 267.716	-0.5344u	-0.5643u	-0.0898u
Cu 324.754	451.378	454.122	456.852
Fe 271.441	5.4757	-2.3604u	1.8652
K 766.491	2713.33	2721.15	2722.19
Mg 279.078	6918.96	6911.91	6930.79
Mn 257.610	0.4458	0.5592	0.6243
Mo 202.032	-0.3575u	-1.4296u	0.7182

Label	Replicates Concentration		
Na 330.237	12535.4	12613.4	12525.0
Ni 231.604	0.2356	2.7957	2.9822
Pb 220.353	1.0198	1.5447	-1.8559u
Sb 206.834	1.2479	-9.9551u	-8.8913u
Se 196.026	-7.4592u	-1.3637u	-12.3112u
Si 288.158	4541.22	4548.70	4545.44
Sn 189.925	1.5231	-0.1519u	-0.8267u
Sr 216.596	116.684	116.684	116.430
Ti 334.941	0.0525	-0.1243	-0.1737
Tl 190.794	0.8558	-6.9961u	-7.8387u
V 292.401	0.3421	0.6660	0.1995
Zn 206.200	120.689	116.738	122.171

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3624	ppb	0.1498	41.3	-42.9648
Al 308.215	8.1434	ppb	1.6589	20.4	182.711
As 188.980	0.5006	ppb	6.5651	1311.4	1.3797
B 249.678	14.2997	ppb	0.7216	5.0	-1.5816
Ba 389.178	21.3995	ppb	0.7922	3.7	180.336
Be 313.042	-0.0596	ppb	0.0064	10.7	-205.514
Ca 370.602	35242	ppb	42.04	0.1	80368
Cd 226.502	-0.2453	ppb	0.1459	59.5	8.0891
Co 228.615	0.8500	ppb	0.3677	43.3	-7.7578
Cr 267.716	-0.3962	ppb	0.2657	67.1	14.4215
Cu 324.754	454.117	ppb	2.7374	0.6	18118.7
Fe 271.441	1.6602	ppb	3.9221	236.2	29.0420
K 766.491	2718.89	ppb	4.8395	0.2	74369.5
Mg 279.078	6920.55	ppb	9.5403	0.1	10000.7
Mn 257.610	0.5431	ppb	0.0903	16.6	114.864
Mo 202.032	-0.3563	ppb	1.0739	301.4	3.4240
Na 330.237	12557.9	ppb	48.3211	0.4	388.444
Ni 231.604	2.0045	ppb	1.5347	76.6	0.5179
Pb 220.353	0.2362	ppb	1.8307	775.1	6.8156
Sb 206.834	-5.8661	ppb	6.1839	105.4	8.9960
Se 196.026	-7.0447	ppb	5.4855	77.9	0.6840
Si 288.158	4545.12	ppb	3.7496	0.1	22095.4
Sn 189.925	0.1815	ppb	1.2099	666.6	-0.2006
Sr 216.596	116.599	ppb	0.1467	0.1	502.357
Ti 334.941	-0.0818	ppb	0.1189	145.4	-20.8907
Tl 190.794	-4.6596	ppb	4.7951	102.9	-12.2107
V 292.401	0.4026	ppb	0.2391	59.4	3.3501
Zn 206.200	119.866	ppb	2.8082	2.3	42.8738

680-161833-A-272-B (Samp) **12/19/2018, 12:37:18 PM** **Rack 1, Tube 23**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1104	-0.2455u	0.3973
Al 308.215	9.0990	11.2585	13.2731
As 188.980	-4.4925u	-2.0889u	2.3300
B 249.678	19.1446	18.9404	19.7146
Ba 389.178	24.8866	23.4070	23.2907
Be 313.042	-0.0580u	-0.0723u	-0.0578u
Ca 370.602	35560	35542	35609

Label	Replicates Concentration		
Cd 226.502	-0.1013u	-0.1705u	-0.0654u
Co 228.615	1.1917	-0.2986u	1.1577
Cr 267.716	0.0267	-0.2031u	-0.1885u
Cu 324.754	386.521	389.155	389.423
Fe 271.441	109.288	111.276	105.415
K 766.491	2843.94	2850.38	2851.19
Mg 279.078	9358.63	9346.76	9362.50
Mn 257.610	3.1668	3.1985	3.2324
Mo 202.032	0.1624	-1.2908u	1.1235
Na 330.237	13545.2	13481.3	13633.5
Ni 231.604	4.9897	5.4710	3.8756
Pb 220.353	2.0007	2.7226	1.0638
Sb 206.834	-3.1953u	-8.6122u	-7.4575u
Se 196.026	-5.1828u	-7.0765u	9.0414
Si 288.158	4085.98	4088.52	4082.87
Sn 189.925	-2.3945u	-1.9926u	1.8477
Sr 216.596	114.613	117.221	116.155
Ti 334.941	-0.1946	-0.1396	-0.1108
Tl 190.794	0.7735	-2.0890u	-8.7710u
V 292.401	0.5548	0.1478	0.7734
Zn 206.200	395.321	392.941	401.138

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0874	ppb	0.3220	368.4	-26.3241
Al 308.215	11.2102	ppb	2.0875	18.6	190.414
As 188.980	-1.4171	ppb	3.4605	244.2	0.8737
B 249.678	19.2665	ppb	0.4013	2.1	31.7500
Ba 389.178	23.8614	ppb	0.8897	3.7	210.117
Be 313.042	-0.0627	ppb	0.0083	13.2	-208.118
Ca 370.602	35570	ppb	34.98	0.1	81117
Cd 226.502	-0.1124	ppb	0.0534	47.5	10.3484
Co 228.615	0.6836	ppb	0.8508	124.5	-8.5962
Cr 267.716	-0.1217	ppb	0.1287	105.8	20.8177
Cu 324.754	388.366	ppb	1.6036	0.4	15524.7
Fe 271.441	108.660	ppb	2.9809	2.7	117.162
K 766.491	2848.50	ppb	3.9733	0.1	77901.9
Mg 279.078	9355.96	ppb	8.2047	0.1	13509.1
Mn 257.610	3.1992	ppb	0.0328	1.0	417.281
Mo 202.032	-0.0017	ppb	1.2154	73156.3	4.2213
Na 330.237	13553.3	ppb	76.4215	0.6	414.070
Ni 231.604	4.7788	ppb	0.8184	17.1	4.3740
Pb 220.353	1.9290	ppb	0.8317	43.1	7.8087
Sb 206.834	-6.4217	ppb	2.8531	44.4	8.7452
Se 196.026	-1.0727	ppb	8.8100	821.3	1.8216
Si 288.158	4085.79	ppb	2.8276	0.1	19890.9
Sn 189.925	-0.8465	ppb	2.3419	276.7	-0.5336
Sr 216.596	115.996	ppb	1.3110	1.1	499.806
Ti 334.941	-0.1483	ppb	0.0425	28.7	-20.1790
Tl 190.794	-3.3622	ppb	4.8980	145.7	-11.6734
V 292.401	0.4920	ppb	0.3175	64.5	4.6428
Zn 206.200	396.467	ppb	4.2166	1.1	142.417

680-161833-A-273-B (Samp) **12/19/2018, 12:41:13 PM** **Rack 1, Tube 24**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5849	0.6614	0.0852
Al 308.215	55.8424	55.5091	54.6230
As 188.980	-1.4045u	3.3547	4.6885
B 249.678	12.8094	12.8989	12.4607
Ba 389.178	24.6611	23.3418	24.5744
Be 313.042	-0.0627u	-0.0653u	-0.0614u
Ca 370.602	32292	32300	32367
Cd 226.502	-0.5341u	-0.2395u	-0.2913u
Co 228.615	-0.6830u	-0.1945u	-0.6956u
Cr 267.716	-0.2853u	-0.2283u	-0.0861u
Cu 324.754	733.257	728.674	732.870
Fe 271.441	38.7077	42.3139	39.5588
K 766.491	2909.49	2909.87	2916.69
Mg 279.078	6280.69	6269.77	6291.33
Mn 257.610	9.4963	9.5561	9.5069
Mo 202.032	0.0270	-0.6654u	-1.4081u
Na 330.237	12327.3	12475.8	12500.6
Ni 231.604	3.2455	5.8131	6.2448
Pb 220.353	3.5794	0.5366	-1.9349u
Sb 206.834	-6.5858u	1.1703	-8.2154u
Se 196.026	8.1544	5.9232	-1.0883u
Si 288.158	4299.49	4302.24	4307.22
Sn 189.925	2.7572	1.9479	1.1532
Sr 216.596	109.712	111.586	111.300
Ti 334.941	0.2198	0.2285	0.2058
Tl 190.794	-1.0580u	1.7657	-1.0883u
V 292.401	-0.1074u	0.4554	-0.0903u
Zn 206.200	303.902	302.480	309.905

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4438	ppb	0.3129	70.5	-13.0437
Al 308.215	55.3248	ppb	0.6302	1.1	300.977
As 188.980	2.2129	ppb	3.2030	144.7	1.8316
B 249.678	12.7230	ppb	0.2315	1.8	-12.2336
Ba 389.178	24.1924	ppb	0.7380	3.1	210.709
Be 313.042	-0.0631	ppb	0.0020	3.2	-208.850
Ca 370.602	32320	ppb	41.30	0.1	73708
Cd 226.502	-0.3550	ppb	0.1573	44.3	6.3275
Co 228.615	-0.5244	ppb	0.2857	54.5	-14.6679
Cr 267.716	-0.1999	ppb	0.1026	51.3	19.0004
Cu 324.754	731.600	ppb	2.5419	0.3	29066.4
Fe 271.441	40.1935	ppb	1.8850	4.7	60.7175
K 766.491	2912.02	ppb	4.0530	0.1	79633.1
Mg 279.078	6280.60	ppb	10.7787	0.2	9078.72
Mn 257.610	9.5198	ppb	0.0319	0.3	1093.18
Mo 202.032	-0.6822	ppb	0.7177	105.2	2.6892
Na 330.237	12434.6	ppb	93.7170	0.8	384.792
Ni 231.604	5.1011	ppb	1.6214	31.8	4.8230
Pb 220.353	0.7271	ppb	2.7621	379.9	7.1040
Sb 206.834	-4.5436	ppb	5.0151	110.4	9.5899
Se 196.026	4.3298	ppb	4.8230	111.4	2.8517
Si 288.158	4302.98	ppb	3.9178	0.1	20933.3

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.9528	ppb	0.8020	41.1	0.3734
Sr 216.596	110.866	ppb	1.0096	0.9	478.122
Ti 334.941	0.2180	ppb	0.0115	5.3	12.7216
Tl 190.794	-0.1269	ppb	1.6391	1291.9	-10.3221
V 292.401	0.0859	ppb	0.3201	372.6	-1.2347
Zn 206.200	305.429	ppb	3.9407	1.3	109.654

680-161833-A-191-B (Samp) **12/19/2018, 12:45:06 PM** **Rack 1, Tube 25**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5322	-0.3297u	-0.8348u
Al 308.215	3.6734	5.4244	2.1954
As 188.980	-3.2552u	-4.3031u	-4.7219u
B 249.678	45.4675	47.0863	46.2857
Ba 389.178	25.2287	23.8041	25.4278
Be 313.042	-0.0723u	-0.0688u	-0.0620u
Ca 370.602	31751	31770	31815
Cd 226.502	-0.2545u	-0.2789u	-0.0352u
Co 228.615	-0.3703u	0.0683	-0.4157u
Cr 267.716	-0.4934u	-0.3322u	-0.2385u
Cu 324.754	702.077	695.027	698.642
Fe 271.441	7.7323	2.0294	11.4477
K 766.491	3420.11	3432.26	3434.10
Mg 279.078	6734.91	6713.65	6746.56
Mn 257.610	4.0443	4.1436	4.1581
Mo 202.032	-0.4533u	-0.1918u	0.5248
Na 330.237	12860.4	12720.1	12877.1
Ni 231.604	3.1254	5.0161	3.2711
Pb 220.353	-0.3455u	3.9066	2.3209
Sb 206.834	-8.4747u	-0.4376u	-16.1178u
Se 196.026	-1.9310u	1.1352	11.2278
Si 288.158	4158.17	4151.96	4166.69
Sn 189.925	6.7752	-4.4863u	2.0303
Sr 216.596	114.415	113.610	116.090
Ti 334.941	-0.0826	-0.1749	-0.2033u
Tl 190.794	-1.8823u	-4.2516u	1.1999
V 292.401	0.4031	0.5728	0.8452
Zn 206.200	651.056	637.634	646.018

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2107	ppb	0.6912	328.0	-37.3220
Al 308.215	3.7644	ppb	1.6164	42.9	171.755
As 188.980	-4.0934	ppb	0.7555	18.5	0.1673
B 249.678	46.2798	ppb	0.8094	1.7	213.690
Ba 389.178	24.8202	ppb	0.8856	3.6	218.117
Be 313.042	-0.0677	ppb	0.0053	7.8	-212.800
Ca 370.602	31779	ppb	32.95	0.1	72475
Cd 226.502	-0.1895	ppb	0.1342	70.8	8.9997
Co 228.615	-0.2392	ppb	0.2673	111.7	-13.2464
Cr 267.716	-0.3547	ppb	0.1289	36.3	15.3900
Cu 324.754	698.582	ppb	3.5255	0.5	27763.7
Fe 271.441	7.0698	ppb	4.7440	67.1	33.4566
K 766.491	3428.82	ppb	7.6032	0.2	93718.2

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6731.71	ppb	16.6867	0.2	9728.66
Mn 257.610	4.1153	ppb	0.0619	1.5	504.474
Mo 202.032	-0.0401	ppb	0.5064	1263.1	4.1362
Na 330.237	12819.2	ppb	86.2146	0.7	394.174
Ni 231.604	3.8042	ppb	1.0521	27.7	3.0203
Pb 220.353	1.9607	ppb	2.1488	109.6	7.8269
Sb 206.834	-8.3434	ppb	7.8409	94.0	7.8778
Se 196.026	3.4774	ppb	6.8850	198.0	2.6889
Si 288.158	4158.94	ppb	7.3935	0.2	20242.0
Sn 189.925	1.4397	ppb	5.6539	392.7	0.2072
Sr 216.596	114.705	ppb	1.2647	1.1	494.321
Ti 334.941	-0.1536	ppb	0.0631	41.1	-30.1711
Tl 190.794	-1.6447	ppb	2.7335	166.2	-10.9548
V 292.401	0.6070	ppb	0.2230	36.7	6.2620
Zn 206.200	644.903	ppb	6.7804	1.1	231.824

680-161833-A-190-B (Samp) **12/19/2018, 12:48:58 PM** **Rack 1, Tube 26**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4721u	0.5588	0.2052
Al 308.215	-0.4650u	1.9328	-1.1098u
As 188.980	2.0520	7.1936	6.2339
B 249.678	45.5353	45.7234	45.7164
Ba 389.178	26.8064	23.3682	25.1312
Be 313.042	-0.0694u	-0.0759u	-0.0664u
Ca 370.602	33061	33093	33069
Cd 226.502	0.0634	-0.2821u	-0.0975u
Co 228.615	-0.8410u	-0.1281u	0.2487
Cr 267.716	-0.2538u	-0.4796u	-0.3505u
Cu 324.754	617.344	625.544	628.037
Fe 271.441	-0.0740u	1.7564	-11.0305u
K 766.491	3550.24	3559.37	3561.50
Mg 279.078	6909.62	6897.68	6912.12
Mn 257.610	4.4663	4.3966	4.3650
Mo 202.032	-0.5846u	0.5378	0.1326
Na 330.237	13052.4	12905.4	13144.5
Ni 231.604	7.2780	6.8293	7.1276
Pb 220.353	-2.5228u	0.6511	1.2965
Sb 206.834	-10.8871u	-11.1873u	-9.0543u
Se 196.026	2.2178	-7.8412u	0.2836
Si 288.158	4156.26	4151.56	4162.51
Sn 189.925	0.3435	-0.1642u	1.5951
Sr 216.596	121.709	120.729	121.135
Ti 334.941	-0.2634u	-0.1506	-0.1694
Tl 190.794	-5.8659u	-2.3890u	1.0242
V 292.401	-0.3097u	0.1496	0.7630
Zn 206.200	1253.52	1263.14	1251.11

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0973	ppb	0.5239	538.5	-25.9310
Al 308.215	0.1194	ppb	1.6033	1343.3	162.606
As 188.980	5.1598	ppb	2.7339	53.0	2.6090
B 249.678	45.6584	ppb	0.1066	0.2	209.517

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	25.1020	ppb	1.7193	6.8	221.412
Be 313.042	-0.0706	ppb	0.0049	6.9	-215.012
Ca 370.602	33074	ppb	16.54	0.1	75428
Cd 226.502	-0.1054	ppb	0.1729	164.0	10.3660
Co 228.615	-0.2401	ppb	0.5534	230.5	-13.2519
Cr 267.716	-0.3613	ppb	0.1133	31.4	15.2316
Cu 324.754	623.642	ppb	5.5949	0.9	24807.1
Fe 271.441	-3.1160	ppb	6.9149	221.9	25.0662
K 766.491	3557.04	ppb	5.9790	0.2	97212.6
Mg 279.078	6906.47	ppb	7.7153	0.1	9980.42
Mn 257.610	4.4093	ppb	0.0518	1.2	537.453
Mo 202.032	0.0286	ppb	0.5684	1987.6	4.2912
Na 330.237	13034.1	ppb	120.631	0.9	398.537
Ni 231.604	7.0783	ppb	0.2284	3.2	7.5710
Pb 220.353	-0.1917	ppb	2.0444	1066.3	6.5652
Sb 206.834	-10.3762	ppb	1.1546	11.1	6.9665
Se 196.026	-1.7799	ppb	5.3376	299.9	1.6874
Si 288.158	4156.78	ppb	5.4942	0.1	20231.8
Sn 189.925	0.5915	ppb	0.9055	153.1	-0.0677
Sr 216.596	121.191	ppb	0.4925	0.4	521.698
Ti 334.941	-0.1945	ppb	0.0604	31.1	-34.4564
Tl 190.794	-2.4102	ppb	3.4451	142.9	-11.2733
V 292.401	0.2010	ppb	0.5382	267.8	0.3597
Zn 206.200	1255.92	ppb	6.3663	0.5	451.717

680-161833-A-178-B (Samp) **12/19/2018, 12:52:50 PM** **Rack 1, Tube 27**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2740u	-0.2412u	0.1661
Al 308.215	2.8689	5.9494	5.5915
As 188.980	2.7847	3.1437	1.1749
B 249.678	13.4374	13.3487	12.6040
Ba 389.178	22.4825	22.2846	21.9274
Be 313.042	-0.0887u	-0.0604u	-0.0787u
Ca 370.602	35931	35951	36043
Cd 226.502	-0.3109u	-0.1278u	-0.2013u
Co 228.615	0.1588	-0.5865u	0.7847
Cr 267.716	-0.0813u	-0.1077u	-0.2429u
Cu 324.754	315.241	318.357	316.389
Fe 271.441	4.5477	2.6513	-4.5844u
K 766.491	2626.17	2628.98	2632.63
Mg 279.078	7215.02	7191.10	7224.57
Mn 257.610	0.3683	0.4760	0.4863
Mo 202.032	-0.5001u	0.3927	0.0341
Na 330.237	13166.2	12948.4	13422.2
Ni 231.604	5.9643	6.6457	7.3335
Pb 220.353	2.0108	7.2419	0.8183
Sb 206.834	-7.7267u	-7.7124u	-9.0483u
Se 196.026	7.3105	-8.1253u	-7.4083u
Si 288.158	4593.21	4594.94	4592.31
Sn 189.925	4.4517	-1.1380u	5.6813
Sr 216.596	119.137	119.209	119.927
Ti 334.941	-0.0794	-0.1660	-0.1156

Label	Replicates Concentration		
Tl 190.794	-3.3104u	0.2277	4.4403
V 292.401	0.3930	0.5346	0.6837
Zn 206.200	117.725	120.347	125.763

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1163	ppb	0.2452	210.8	-33.8573
Al 308.215	4.8032	ppb	1.6847	35.1	174.349
As 188.980	2.3678	ppb	1.0485	44.3	1.8724
B 249.678	13.1300	ppb	0.4577	3.5	-9.4560
Ba 389.178	22.2315	ppb	0.2813	1.3	189.859
Be 313.042	-0.0759	ppb	0.0143	18.9	-218.962
Ca 370.602	35975	ppb	59.52	0.2	82039
Cd 226.502	-0.2133	ppb	0.0922	43.2	8.6111
Co 228.615	0.1190	ppb	0.6864	576.9	-11.4383
Cr 267.716	-0.1440	ppb	0.0867	60.2	20.2811
Cu 324.754	316.662	ppb	1.5759	0.5	12695.7
Fe 271.441	0.8715	ppb	4.8192	553.0	28.3625
K 766.491	2629.26	ppb	3.2393	0.1	71926.7
Mg 279.078	7210.23	ppb	17.2384	0.2	10418.1
Mn 257.610	0.4435	ppb	0.0654	14.7	105.394
Mo 202.032	-0.0244	ppb	0.4493	1838.0	4.1715
Na 330.237	13178.9	ppb	237.133	1.8	404.811
Ni 231.604	6.6478	ppb	0.6846	10.3	6.9719
Pb 220.353	3.3570	ppb	3.4168	101.8	8.6452
Sb 206.834	-8.1625	ppb	0.7672	9.4	7.9644
Se 196.026	-2.7410	ppb	8.7123	317.8	1.5039
Si 288.158	4593.49	ppb	1.3385	0.0	22327.5
Sn 189.925	2.9983	ppb	3.6345	121.2	0.7123
Sr 216.596	119.424	ppb	0.4371	0.4	514.251
Ti 334.941	-0.1204	ppb	0.0435	36.2	-24.4961
Tl 190.794	0.4526	ppb	3.8802	857.4	-10.0821
V 292.401	0.5371	ppb	0.1454	27.1	5.2906
Zn 206.200	121.278	ppb	4.0993	3.4	43.3820

680-161833-A-177-B (Samp) **12/19/2018, 12:56:43 PM** **Rack 1, Tube 28**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2312	-0.1255u	1.0625
Al 308.215	7.8599	9.7269	6.3822
As 188.980	2.1181	0.1488	-3.7973u
B 249.678	14.2496	13.8439	14.8440
Ba 389.178	22.2290	21.9219	24.0368
Be 313.042	-0.0678u	-0.0629u	-0.0772u
Ca 370.602	31671	31755	31777
Cd 226.502	-0.2405u	-0.5158u	-0.1297u
Co 228.615	0.2170	0.6237	-0.2121u
Cr 267.716	-0.0610u	-0.1832u	-0.0873u
Cu 324.754	850.610	845.941	842.640
Fe 271.441	-5.3688u	6.4032	-4.4159u
K 766.491	3458.28	3470.72	3478.11
Mg 279.078	6659.36	6677.86	6680.33
Mn 257.610	0.7313	0.7500	0.7572
Mo 202.032	-0.3244u	-1.0274u	-0.9342u

Label	Replicates Concentration		
Na 330.237	17921.6	18117.7	18053.3
Ni 231.604	3.8856	3.7212	1.6462
Pb 220.353	1.5329	-1.1839u	-3.3625u
Sb 206.834	-2.1960u	-2.3937u	-6.3252u
Se 196.026	-12.0376u	-2.2430u	7.9275
Si 288.158	4280.29	4290.62	4296.86
Sn 189.925	-2.7156u	6.2843	-0.3928u
Sr 216.596	104.887	107.371	105.408
Ti 334.941	-0.0091	-0.1941	-0.1787
Tl 190.794	0.2217	9.3599	-5.9968u
V 292.401	0.3967	0.4588	0.3709
Zn 206.200	85.6013	85.6251	84.3118

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3894	ppb	0.6096	156.6	-15.0514
Al 308.215	7.9896	ppb	1.6761	21.0	182.321
As 188.980	-0.5101	ppb	3.0123	590.5	1.1130
B 249.678	14.3125	ppb	0.5030	3.5	-1.4892
Ba 389.178	22.7292	ppb	1.1427	5.0	194.842
Be 313.042	-0.0693	ppb	0.0073	10.5	-214.291
Ca 370.602	31734	ppb	56.08	0.2	72373
Cd 226.502	-0.2953	ppb	0.1988	67.3	7.2542
Co 228.615	0.2095	ppb	0.4179	199.5	-10.9752
Cr 267.716	-0.1105	ppb	0.0643	58.2	21.0958
Cu 324.754	846.397	ppb	4.0044	0.5	33595.5
Fe 271.441	-1.1271	ppb	6.5389	580.1	26.7232
K 766.491	3469.03	ppb	10.0237	0.3	94814.2
Mg 279.078	6672.52	ppb	11.4617	0.2	9643.43
Mn 257.610	0.7462	ppb	0.0134	1.8	135.793
Mo 202.032	-0.7620	ppb	0.3818	50.1	2.5099
Na 330.237	18030.9	ppb	99.9105	0.6	532.758
Ni 231.604	3.0843	ppb	1.2482	40.5	2.0191
Pb 220.353	-1.0045	ppb	2.4526	244.2	6.0886
Sb 206.834	-3.6383	ppb	2.3290	64.0	9.9989
Se 196.026	-2.1177	ppb	9.9831	471.4	1.6226
Si 288.158	4289.26	ppb	8.3690	0.2	20867.3
Sn 189.925	1.0586	ppb	4.6722	441.3	0.0843
Sr 216.596	105.888	ppb	1.3100	1.2	457.102
Ti 334.941	-0.1273	ppb	0.1026	80.6	-27.4047
Tl 190.794	1.1949	ppb	7.7245	646.4	-9.7723
V 292.401	0.4088	ppb	0.0451	11.0	3.4527
Zn 206.200	85.1794	ppb	0.7515	0.9	30.3907

680-161833-A-189-B (Samp) **12/19/2018, 1:00:36 PM** **Rack 1, Tube 29**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2626u	-0.6422u	-0.8029u
Al 308.215	14.8852	7.3004	12.3166
As 188.980	-2.4357u	-2.4589u	-2.0978u
B 249.678	13.4902	13.4672	13.4390
Ba 389.178	26.9043	28.0473	27.6979
Be 313.042	-0.0580u	-0.0612u	-0.0725u
Ca 370.602	35643	35681	35842

Label	Replicates Concentration		
Cd 226.502	-0.5370u	-0.4261u	-0.1777u
Co 228.615	0.3083	-0.0784u	0.4292
Cr 267.716	-0.0829u	-0.0575u	-0.2102u
Cu 324.754	85.7903	87.3476	86.5551
Fe 271.441	-6.4795u	-2.1931u	15.0492
K 766.491	2548.60	2553.78	2562.29
Mg 279.078	7481.06	7490.20	7520.87
Mn 257.610	2.6015	2.6206	2.6153
Mo 202.032	-1.1199u	-0.3086u	-0.5402u
Na 330.237	14449.7	14368.6	14533.3
Ni 231.604	2.2215	3.7827	4.6005
Pb 220.353	0.3471	-0.8736u	-3.6296u
Sb 206.834	-11.1054u	-1.8592u	-5.8366u
Se 196.026	7.7930	-9.5013u	4.2817
Si 288.158	4579.29	4589.00	4589.74
Sn 189.925	6.5735	1.2994	9.0971
Sr 216.596	124.028	123.421	125.123
Ti 334.941	0.0425	0.0276	-0.0109
Tl 190.794	-11.2074u	1.5888	-3.8513u
V 292.401	0.0871	0.1379	0.3859
Zn 206.200	303.370	292.947	309.815

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5692	ppb	0.2774	48.7	-50.6622
Al 308.215	11.5007	ppb	3.8577	33.5	191.123
As 188.980	-2.3308	ppb	0.2021	8.7	0.6325
B 249.678	13.4655	ppb	0.0257	0.2	-7.1993
Ba 389.178	27.5498	ppb	0.5857	2.1	249.170
Be 313.042	-0.0639	ppb	0.0076	11.9	-209.110
Ca 370.602	35722	ppb	105.7	0.3	81463
Cd 226.502	-0.3803	ppb	0.1840	48.4	5.8863
Co 228.615	0.2197	ppb	0.2651	120.7	-10.9298
Cr 267.716	-0.1169	ppb	0.0818	70.0	20.9236
Cu 324.754	86.5643	ppb	0.7787	0.9	3617.52
Fe 271.441	2.1255	ppb	11.3956	536.1	29.4154
K 766.491	2554.89	ppb	6.9107	0.3	69899.9
Mg 279.078	7497.38	ppb	20.8521	0.3	10831.7
Mn 257.610	2.6125	ppb	0.0098	0.4	343.935
Mo 202.032	-0.6562	ppb	0.4179	63.7	2.7482
Na 330.237	14450.5	ppb	82.3498	0.6	437.920
Ni 231.604	3.5349	ppb	1.2087	34.2	2.6452
Pb 220.353	-1.3854	ppb	2.0372	147.0	5.8652
Sb 206.834	-6.2670	ppb	4.6381	74.0	8.8162
Se 196.026	0.8578	ppb	9.1414	1065.7	2.1897
Si 288.158	4586.01	ppb	5.8317	0.1	22291.9
Sn 189.925	5.6567	ppb	3.9789	70.3	1.5740
Sr 216.596	124.191	ppb	0.8630	0.7	534.419
Ti 334.941	0.0197	ppb	0.0276	139.9	-6.7341
Tl 190.794	-4.4900	ppb	6.4220	143.0	-12.1396
V 292.401	0.2036	ppb	0.1599	78.5	0.4467
Zn 206.200	302.044	ppb	8.5117	2.8	108.436

MB 680-551563/1-A (Samp) **12/19/2018, 1:04:29 PM** **Rack 1, Tube 30**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1543u	0.1548	-0.7136u
Al 308.215	0.0163	-3.0881u	-1.1550u
As 188.980	9.1315	0.7754	2.4407
B 249.678	0.2876	1.9012	0.2609
Ba 389.178	-0.1020u	0.4439	0.1337
Be 313.042	-0.0487u	-0.0615u	-0.0603u
Ca 370.602	9.860	5.330	11.20
Cd 226.502	-0.6611u	-0.1386u	-0.4011u
Co 228.615	-0.7557u	0.0228	0.8478
Cr 267.716	0.0900	-0.2222u	-0.1876u
Cu 324.754	1.2498	0.7586	1.2436
Fe 271.441	-8.6373u	-12.1303u	1.4894
K 766.491	1.7370	2.7513	2.5163
Mg 279.078	-4.4847u	-0.6165u	-6.9772u
Mn 257.610	-0.0375u	0.0019	-0.0618u
Mo 202.032	0.6895	-2.5710u	0.4718
Na 330.237	-266.604u	126.391	202.567
Ni 231.604	0.7401	1.3044	1.4413
Pb 220.353	-0.7536u	-1.9439u	3.5779
Sb 206.834	-2.4849u	2.6163	-3.4908u
Se 196.026	-9.2107u	-3.4920u	-8.8853u
Si 288.158	16.2286	14.6333	15.1129
Sn 189.925	1.1368	3.3421	0.7022
Sr 216.596	-0.0162u	0.3831	-0.1151u
Ti 334.941	0.0210	-0.1603u	-0.0059u
Tl 190.794	-0.3911u	2.4151	-3.2378u
V 292.401	-0.1688u	-0.0697u	0.2525
Zn 206.200	-0.1241u	-2.6897u	-0.4082u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2377	ppb	0.4402	185.2	-37.8158
Al 308.215	-1.4089	ppb	1.5677	111.3	158.750
As 188.980	4.1159	ppb	4.4227	107.5	2.3336
B 249.678	0.8166	ppb	0.9394	115.0	-92.3393
Ba 389.178	0.1586	ppb	0.2738	172.7	-62.3085
Be 313.042	-0.0568	ppb	0.0071	12.5	-208.073
Ca 370.602	8.798	ppb	3.077	35.0	57.32
Cd 226.502	-0.4003	ppb	0.2613	65.3	5.5438
Co 228.615	0.0383	ppb	0.8019	2092.9	-11.8433
Cr 267.716	-0.1066	ppb	0.1711	160.5	21.0449
Cu 324.754	1.0840	ppb	0.2818	26.0	245.019
Fe 271.441	-6.4261	ppb	7.0740	110.1	22.3433
K 766.491	2.3349	ppb	0.5310	22.7	331.859
Mg 279.078	-4.0261	ppb	3.2051	79.6	25.2930
Mn 257.610	-0.0325	ppb	0.0321	99.0	17.7735
Mo 202.032	-0.4699	ppb	1.8229	387.9	3.1682
Na 330.237	20.7846	ppb	251.783	1211.4	58.3053
Ni 231.604	1.1620	ppb	0.3717	32.0	-0.6524
Pb 220.353	0.2935	ppb	2.9060	990.3	6.8495
Sb 206.834	-1.1198	ppb	3.2744	292.4	11.1258
Se 196.026	-7.1960	ppb	3.2119	44.6	0.6551
Si 288.158	15.3249	ppb	0.8185	5.3	357.031

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.7270	ppb	1.4155	82.0	0.2987
Sr 216.596	0.0839	ppb	0.2638	314.2	10.0887
Ti 334.941	-0.0484	ppb	0.0978	202.1	-41.3092
Tl 190.794	-0.4046	ppb	2.8265	698.6	-10.4394
V 292.401	0.0046	ppb	0.2203	4751.8	-2.4222
Zn 206.200	-1.0740	ppb	1.4064	131.0	-0.6502

Cont Calib Verif (CCV) **12/19/2018, 1:08:24 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	514.084	507.737	509.792
Al 308.215	10246.6	10262.7	10262.3
As 188.980	537.164	535.337	533.623
B 249.678	533.321	535.512	535.764
Ba 389.178	480.207	479.208	482.064
Be 313.042	554.793	554.597	554.597
Ca 370.602	10236	10240	10223
Cd 226.502	530.508	529.692	528.670
Co 228.615	524.122	522.797	524.304
Cr 267.716	519.760	517.654	519.324
Cu 324.754	510.619	511.572	517.546
Fe 271.441	10302.6	10296.5	10304.2
K 766.491	10145.2	10153.1	10157.7
Mg 279.078	10679.9	10692.7	10658.2
Mn 257.610	512.353	511.520	512.369
Mo 202.032	510.607	511.582	510.015
Na 330.237	10695.6	10973.4	11184.1
Ni 231.604	521.864	515.767	515.657
Pb 220.353	504.267	506.127	495.612
Sb 206.834	508.920	505.828	505.272
Se 196.026	501.029	520.701	521.197
Si 288.158	5487.61	5483.19	5483.25
Sn 189.925	503.620	512.632	505.811
Sr 216.596	519.595	513.784	517.121
Ti 334.941	512.455	512.635	512.794
Tl 190.794	493.140	491.919	483.092
V 292.401	504.975	503.398	504.654
Zn 206.200	1042.43	1047.96	1051.24

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	510.538	ppb	3.2387	0.6	18890.8	102.10756
Al 308.215	10257.2	ppb	9.2263	0.1	25898.3	102.57206
As 188.980	535.375	ppb	1.7706	0.3	142.395	107.07493
B 249.678	534.865	ppb	1.3435	0.3	3492.16	106.97310
Ba 389.178	480.493	ppb	1.4491	0.3	5284.50	96.09861
Be 313.042	554.662	ppb	0.1132	0.0	460621	110.93240Q
Ca 370.602	10233	ppb	9.090	0.1	23367	102.32753
Cd 226.502	529.623	ppb	0.9210	0.2	8666.06	105.92470
Co 228.615	523.741	ppb	0.8228	0.2	2622.73	104.74815
Cr 267.716	518.913	ppb	1.1115	0.2	12071.5	103.78255
Cu 324.754	513.245	ppb	3.7546	0.7	20461.1	102.64906
Fe 271.441	10301.1	ppb	4.0489	0.0	8543.84	102.95966
K 766.491	10152.0	ppb	6.3067	0.1	276953	101.51975

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10677.0	ppb	17.4479	0.2	15404.4	106.76951
Mn 257.610	512.081	ppb	0.4854	0.1	56080.5	102.41618
Mo 202.032	510.735	ppb	0.7909	0.2	1154.60	102.14691
Na 330.237	10951.0	ppb	245.029	2.2	342.433	109.51012
Ni 231.604	517.763	ppb	3.5525	0.7	716.744	103.55259
Pb 220.353	502.002	ppb	5.6115	1.1	300.529	100.40041
Sb 206.834	506.673	ppb	1.9657	0.4	235.679	101.33469
Se 196.026	514.309	ppb	11.5037	2.2	100.023	102.86179
Si 288.158	5484.69	ppb	2.5367	0.0	26743.7	109.69370
Sn 189.925	507.354	ppb	4.7003	0.9	164.161	101.47084
Sr 216.596	516.834	ppb	2.9161	0.6	2184.25	103.36671
Ti 334.941	512.628	ppb	0.1697	0.0	61391.7	102.52562
Tl 190.794	489.384	ppb	5.4829	1.1	193.950	97.87676
V 292.401	504.342	ppb	0.8337	0.2	7279.05	100.86844
Zn 206.200	1047.21	ppb	4.4558	0.4	376.434	104.72086

Cont Calib Blank (CCB) **12/19/2018, 1:12:19 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0288	0.1586	0.1702
Al 308.215	0.1395	2.4463	0.6787
As 188.980	0.9965	-2.2085u	-3.2019u
B 249.678	5.3783	4.3883	3.2947
Ba 389.178	0.7681	1.6010	0.8338
Be 313.042	0.0059	0.0014	-0.0010u
Ca 370.602	-6.294u	-0.2333u	1.174
Cd 226.502	-0.1034u	-0.1642u	-0.2162u
Co 228.615	-0.0787u	-0.2464u	0.2905
Cr 267.716	0.1231	-0.3106u	-0.1192u
Cu 324.754	0.9070	1.5612	0.8723
Fe 271.441	8.9108	-1.1058u	0.2169
K 766.491	2.1696	3.0910	2.3136
Mg 279.078	2.8726	-0.7163u	-1.2736u
Mn 257.610	0.0984	0.0934	0.0415
Mo 202.032	-0.2114u	0.0745	0.4394
Na 330.237	14.0575	65.1797	-1.3008u
Ni 231.604	1.0354	0.2094	1.0903
Pb 220.353	2.1384	-3.5054u	1.9795
Sb 206.834	5.0855	-8.0528u	-12.8384u
Se 196.026	16.8652	4.3010	-0.3633u
Si 288.158	19.4633	18.3807	19.7885
Sn 189.925	5.4842	-2.1937u	-2.5122u
Sr 216.596	-1.6725u	-1.7392u	0.2816
Ti 334.941	0.2639	0.3690	0.1482
Tl 190.794	-0.5444u	-2.9789u	-0.8556u
V 292.401	0.0295	0.4689	0.3396
Zn 206.200	0.0582	0.8817	-0.8645u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1192	ppb	0.0785	65.9	-24.5848	0.11921
Al 308.215	1.0882	ppb	1.2067	110.9	165.036	1.08818
As 188.980	-1.4713	ppb	2.1941	149.1	0.8592	-1.47127
B 249.678	4.3538	ppb	1.0422	23.9	-68.5346	4.35378

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	1.0676	ppb	0.4631	43.4	-52.2102	1.06763
Be 313.042	0.0021	ppb	0.0035	166.4	-159.161	0.00211
Ca 370.602	-1.784	ppb	3.968	222.4	33.20	-1.78432
Cd 226.502	-0.1613	ppb	0.0564	35.0	9.4498	-0.16126
Co 228.615	-0.0115	ppb	0.2747	2384.5	-12.1017	-0.01152
Cr 267.716	-0.1022	ppb	0.2174	212.7	21.1477	-0.10221
Cu 324.754	1.1135	ppb	0.3881	34.9	246.204	1.11351
Fe 271.441	2.6740	ppb	5.4416	203.5	29.8454	2.67395
K 766.491	2.5247	ppb	0.4956	19.6	337.033	2.52473
Mg 279.078	0.2942	ppb	2.2502	764.7	31.5152	0.29425
Mn 257.610	0.0778	ppb	0.0315	40.5	29.8579	0.07776
Mo 202.032	0.1008	ppb	0.3262	323.6	4.4538	0.10081
Na 330.237	25.9789	ppb	34.8066	134.0	58.4402	25.97887
Ni 231.604	0.7783	ppb	0.4935	63.4	-1.1856	0.77834
Pb 220.353	0.2042	ppb	3.2135	1574.0	6.7968	0.20416
Sb 206.834	-5.2686	ppb	9.2807	176.2	9.2562	-5.26857
Se 196.026	6.9343	ppb	8.9110	128.5	3.3470	6.93431
Si 288.158	19.2108	ppb	0.7371	3.8	375.632	19.21084
Sn 189.925	0.2595	ppb	4.5276	1745.0	-0.1769	0.25946
Sr 216.596	-1.0434	ppb	1.1479	110.0	5.3227	-1.04338
Ti 334.941	0.2604	ppb	0.1104	42.4	-4.3188	0.26036
Tl 190.794	-1.4596	ppb	1.3249	90.8	-10.8792	-1.45963
V 292.401	0.2793	ppb	0.2258	80.8	1.4929	0.27935
Zn 206.200	0.0251	ppb	0.8736	3475.4	-0.2547	0.02514

LCS 680-551563/2-A (Samp) **12/19/2018, 1:16:11 PM** **Rack 1, Tube 31**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	501.830	506.786	504.820
Al 308.215	10197.3	10179.6	10171.9
As 188.980	524.836	528.882	524.388
B 249.678	531.651	530.389	531.607
Ba 389.178	478.402	476.689	475.560
Be 313.042	551.283	550.449	549.435
Ca 370.602	10175	10168	10140
Cd 226.502	525.922	524.780	525.109
Co 228.615	520.182	519.964	518.572
Cr 267.716	514.619	513.266	514.984
Cu 324.754	507.835	510.504	510.338
Fe 271.441	10273.0	10220.3	10200.3
K 766.491	10056.5	10039.4	10041.7
Mg 279.078	10616.0	10588.6	10577.3
Mn 257.610	509.711	509.196	508.235
Mo 202.032	508.921	506.454	507.614
Na 330.237	10530.8	11011.2	10566.3
Ni 231.604	516.226	516.125	511.435
Pb 220.353	508.910	494.027	499.125
Sb 206.834	509.634	502.721	498.397
Se 196.026	531.823	514.007	520.274
Si 288.158	5441.29	5434.41	5424.09
Sn 189.925	503.045	508.874	519.396
Sr 216.596	514.921	513.770	512.021
Ti 334.941	508.346	507.518	507.233

Label	Replicates Concentration		
Tl 190.794	480.750	488.728	489.836
V 292.401	501.255	499.796	498.953
Zn 206.200	1050.80	1051.03	1042.63

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	504.479	ppb	2.4959	0.5	18666.2
Al 308.215	10182.9	ppb	13.0596	0.1	25712.0
As 188.980	526.036	ppb	2.4754	0.5	139.932
B 249.678	531.216	ppb	0.7164	0.1	3467.66
Ba 389.178	476.884	ppb	1.4311	0.3	5244.33
Be 313.042	550.389	ppb	0.9255	0.2	457071
Ca 370.602	10161	ppb	18.57	0.2	23203
Cd 226.502	525.271	ppb	0.5879	0.1	8594.94
Co 228.615	519.573	ppb	0.8737	0.2	2601.75
Cr 267.716	514.290	ppb	0.9053	0.2	11964.2
Cu 324.754	509.559	ppb	1.4954	0.3	20315.6
Fe 271.441	10231.2	ppb	37.5558	0.4	8485.97
K 766.491	10045.9	ppb	9.3259	0.1	274060
Mg 279.078	10594.0	ppb	19.9014	0.2	15284.8
Mn 257.610	509.047	ppb	0.7488	0.1	55748.3
Mo 202.032	507.663	ppb	1.2345	0.2	1147.68
Na 330.237	10702.8	ppb	267.688	2.5	335.921
Ni 231.604	514.595	ppb	2.7372	0.5	712.346
Pb 220.353	500.687	ppb	7.5637	1.5	299.762
Sb 206.834	503.584	ppb	5.6681	1.1	234.311
Se 196.026	522.034	ppb	9.0373	1.7	101.495
Si 288.158	5433.26	ppb	8.6584	0.2	26496.3
Sn 189.925	510.438	ppb	8.2869	1.6	165.161
Sr 216.596	513.570	ppb	1.4604	0.3	2170.52
Ti 334.941	507.699	ppb	0.5781	0.1	60801.2
Tl 190.794	486.438	ppb	4.9570	1.0	192.719
V 292.401	500.002	ppb	1.1647	0.2	7216.31
Zn 206.200	1048.15	ppb	4.7848	0.5	376.775

LLCS 680-551563/3-A (Samp) **12/19/2018, 1:20:05 PM** **Rack 1, Tube 32**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2058	0.2070	0.5661
Al 308.215	3.4958	5.9733	2.3676
As 188.980	4.7538	0.6726	3.3861
B 249.678	12.7322	11.8005	12.1028
Ba 389.178	2.2944	1.1638	0.8368
Be 313.042	0.1240	0.1141	0.1033
Ca 370.602	88.10	88.16	87.92
Cd 226.502	0.0865	-0.1278u	-0.5157u
Co 228.615	-0.4157u	0.5863	0.4069
Cr 267.716	0.1711	0.4210	0.1444
Cu 324.754	1.0940	1.3966	1.0628
Fe 271.441	20.3470	19.4418	19.1455
K 766.491	20.9959	19.7268	20.0981
Mg 279.078	18.9006	23.1585	16.4740
Mn 257.610	7.2925	7.3274	7.2845
Mo 202.032	0.3347	-0.2259u	1.0431

Label	Replicates Concentration		
Na 330.237	175.372	16.9120	-60.0056u
Ni 231.604	1.9762	2.8703	1.5543
Pb 220.353	-3.8820u	0.7360	0.2169
Sb 206.834	-3.7424u	-11.7613u	-6.6856u
Se 196.026	-6.7977u	-11.4938u	3.6162
Si 288.158	16.6385	16.9443	15.6939
Sn 189.925	6.3757	1.1977	0.6990
Sr 216.596	1.0625	-0.7302u	-0.8867u
Ti 334.941	0.5073	0.5480	0.4678
Tl 190.794	-0.1747u	0.6196	1.9437
V 292.401	0.3815	0.1011	0.3978
Zn 206.200	5.1088	9.3036	8.7044

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3263	ppb	0.2077	63.6	-16.9013
Al 308.215	3.9456	ppb	1.8445	46.7	172.202
As 188.980	2.9375	ppb	2.0773	70.7	2.0225
B 249.678	12.2118	ppb	0.4753	3.9	-15.6555
Ba 389.178	1.4317	ppb	0.7648	53.4	-48.1457
Be 313.042	0.1138	ppb	0.0104	9.1	-66.3847
Ca 370.602	88.06	ppb	0.1227	0.1	238.1
Cd 226.502	-0.1857	ppb	0.3052	164.4	9.0652
Co 228.615	0.1925	ppb	0.5343	277.6	-11.0747
Cr 267.716	0.2455	ppb	0.1526	62.1	29.2371
Cu 324.754	1.1844	ppb	0.1844	15.6	249.012
Fe 271.441	19.6448	ppb	0.6260	3.2	43.8213
K 766.491	20.2736	ppb	0.6525	3.2	820.765
Mg 279.078	19.5110	ppb	3.3838	17.3	59.1178
Mn 257.610	7.3014	ppb	0.0228	0.3	819.744
Mo 202.032	0.3840	ppb	0.6359	165.6	5.0915
Na 330.237	44.0928	ppb	120.020	272.2	58.9006
Ni 231.604	2.1336	ppb	0.6720	31.5	0.6980
Pb 220.353	-0.9764	ppb	2.5297	259.1	6.1052
Sb 206.834	-7.3964	ppb	4.0564	54.8	8.3012
Se 196.026	-4.8918	ppb	7.7332	158.1	1.0947
Si 288.158	16.4256	ppb	0.6518	4.0	362.349
Sn 189.925	2.7575	ppb	3.1434	114.0	0.6326
Sr 216.596	-0.1848	ppb	1.0830	586.1	8.9368
Ti 334.941	0.5077	ppb	0.0401	7.9	25.3707
Tl 190.794	0.7962	ppb	1.0702	134.4	-9.9377
V 292.401	0.2935	ppb	0.1668	56.8	1.6791
Zn 206.200	7.7056	ppb	2.2688	29.4	2.5093

680-161833-A-238-D (Samp) **12/19/2018, 1:23:59 PM** **Rack 1, Tube 33**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0625	0.0870	0.4045
Al 308.215	28.9631	26.4757	29.1339
As 188.980	10.4426	2.1717	-1.2940u
B 249.678	14.9838	16.4196	14.7959
Ba 389.178	25.9646	23.8976	24.5124
Be 313.042	-0.0500u	-0.0610u	-0.0607u
Ca 370.602	37231	37162	37106

Label	Replicates Concentration		
Cd 226.502	-0.2353u	0.2078	-0.5713u
Co 228.615	-1.0082u	0.4255	0.9395
Cr 267.716	-0.4896u	-0.2377u	-0.3320u
Cu 324.754	51.8906	53.4711	52.2635
Fe 271.441	70.9391	64.1206	76.0100
K 766.491	2771.86	2773.46	2773.79
Mg 279.078	7395.68	7406.68	7407.33
Mn 257.610	15.0083	15.0934	15.2029
Mo 202.032	0.0850	-0.0870u	-0.5474u
Na 330.237	13865.1	13562.1	13852.0
Ni 231.604	1.7288	2.1006	4.0561
Pb 220.353	4.4738	0.6733	5.2861
Sb 206.834	-9.3398u	-7.2111u	-7.1414u
Se 196.026	2.5121	-8.1075u	8.4850
Si 288.158	4554.87	4557.66	4559.98
Sn 189.925	-2.2725u	1.0428	2.8204
Sr 216.596	125.133	124.936	123.763
Ti 334.941	0.6240	0.6048	0.5195
Tl 190.794	-2.7854u	-1.6133u	-0.1643u
V 292.401	1.0623	0.6701	0.5556
Zn 206.200	58.8169	55.9857	59.3541

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1847	ppb	0.1907	103.3	-22.7043
Al 308.215	28.1909	ppb	1.4878	5.3	232.990
As 188.980	3.7734	ppb	6.0300	159.8	2.2434
B 249.678	15.3998	ppb	0.8882	5.8	5.7584
Ba 389.178	24.7915	ppb	1.0614	4.3	218.486
Be 313.042	-0.0572	ppb	0.0063	11.0	-203.307
Ca 370.602	37166	ppb	62.76	0.2	84755
Cd 226.502	-0.1996	ppb	0.3907	195.8	8.8857
Co 228.615	0.1189	ppb	1.0094	848.7	-11.4339
Cr 267.716	-0.3531	ppb	0.1273	36.0	15.4700
Cu 324.754	52.5418	ppb	0.8262	1.6	2275.23
Fe 271.441	70.3566	ppb	5.9661	8.5	85.5964
K 766.491	2773.04	ppb	1.0309	0.0	75845.3
Mg 279.078	7403.23	ppb	6.5484	0.1	10695.9
Mn 257.610	15.1015	ppb	0.0975	0.6	1709.01
Mo 202.032	-0.1831	ppb	0.3270	178.6	3.8130
Na 330.237	13759.7	ppb	171.263	1.2	420.251
Ni 231.604	2.6285	ppb	1.2502	47.6	1.3858
Pb 220.353	3.4777	ppb	2.4625	70.8	8.7169
Sb 206.834	-7.8974	ppb	1.2496	15.8	8.0817
Se 196.026	0.9632	ppb	8.4040	872.5	2.2108
Si 288.158	4557.50	ppb	2.5583	0.1	22155.0
Sn 189.925	0.5302	ppb	2.5849	487.5	-0.0875
Sr 216.596	124.611	ppb	0.7402	0.6	536.217
Ti 334.941	0.5827	ppb	0.0556	9.5	60.3798
Tl 190.794	-1.5210	ppb	1.3130	86.3	-10.9009
V 292.401	0.7627	ppb	0.2657	34.8	8.5625
Zn 206.200	58.0523	ppb	1.8097	3.1	20.6283

680-161833-A-238-Dsd (Samp) **12/19/2018, 1:27:53 PM** **Rack 1, Tube 34**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4737u	-0.2285u	0.5366
Al 308.215	6.8497	5.2272	5.3151
As 188.980	4.1650	-2.6907u	1.7635
B 249.678	4.2114	4.6725	4.0159
Ba 389.178	5.0797	5.1714	4.5734
Be 313.042	-0.0668u	-0.0732u	-0.0628u
Ca 370.602	7507	7522	7516
Cd 226.502	-0.2148u	-0.2505u	0.4152
Co 228.615	0.0362	0.0056	-0.4171u
Cr 267.716	-0.4550u	-0.4427u	-0.6674u
Cu 324.754	12.0250	10.8284	11.1016
Fe 271.441	15.7576	16.8845	8.0756
K 766.491	543.672	545.889	544.649
Mg 279.078	1497.99	1503.49	1495.80
Mn 257.610	3.1591	3.2414	3.2260
Mo 202.032	0.1177	0.5038	-1.2246u
Na 330.237	2667.53	2754.67	2745.26
Ni 231.604	0.6276	1.2312	3.1360
Pb 220.353	4.1870	0.1141	-1.3487u
Sb 206.834	-7.7759u	-9.5656u	-5.4788u
Se 196.026	-19.0416u	-6.0204u	5.9149
Si 288.158	934.836	939.917	933.648
Sn 189.925	3.5919	7.1764	-2.6659u
Sr 216.596	24.5364	25.7169	23.9461
Ti 334.941	0.2175	0.0955	0.0773
Tl 190.794	-6.2508u	-3.4323u	-2.3867u
V 292.401	0.3354	0.2356	-0.1433u
Zn 206.200	13.7774	12.8353	12.0541

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0552	ppb	0.5270	955.2	-31.1598
Al 308.215	5.7973	ppb	0.9124	15.7	176.828
As 188.980	1.0793	ppb	3.4787	322.3	1.5324
B 249.678	4.2999	ppb	0.3371	7.8	-68.9067
Ba 389.178	4.9415	ppb	0.3221	6.5	-7.7213
Be 313.042	-0.0676	ppb	0.0053	7.8	-216.031
Ca 370.602	7515	ppb	7.671	0.1	17167
Cd 226.502	-0.0167	ppb	0.3744	2243.5	11.8201
Co 228.615	-0.1251	ppb	0.2534	202.5	-12.6690
Cr 267.716	-0.5217	ppb	0.1263	24.2	11.4390
Cu 324.754	11.3183	ppb	0.6270	5.5	648.810
Fe 271.441	13.5726	ppb	4.7938	35.3	38.8102
K 766.491	544.737	ppb	1.1110	0.2	15114.6
Mg 279.078	1499.09	ppb	3.9587	0.3	2190.63
Mn 257.610	3.2088	ppb	0.0437	1.4	379.579
Mo 202.032	-0.2010	ppb	0.9072	451.3	3.7736
Na 330.237	2722.49	ppb	47.8220	1.8	129.477
Ni 231.604	1.6649	ppb	1.3092	78.6	0.0468
Pb 220.353	0.9842	ppb	2.8686	291.5	7.2544
Sb 206.834	-7.6068	ppb	2.0487	26.9	8.2125
Se 196.026	-6.3823	ppb	12.4822	195.6	0.8104
Si 288.158	936.134	ppb	3.3302	0.4	4776.27

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	2.7008	ppb	4.9813	184.4	0.6146
Sr 216.596	24.7331	ppb	0.9017	3.6	114.226
Ti 334.941	0.1301	ppb	0.0762	58.6	-14.6299
Tl 190.794	-4.0233	ppb	1.9987	49.7	-11.9462
V 292.401	0.1426	ppb	0.2525	177.1	-0.4406
Zn 206.200	12.8890	ppb	0.8629	6.7	4.3749

680-161833-A-238-Dpd (Samp) **12/19/2018, 1:31:47 PM** **Rack 1, Tube 35**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3708u	0.0381	0.1873
Al 308.215	28.8519	30.8842	30.3629
As 188.980	-0.4573u	5.1005	-3.0529u
B 249.678	13.6976	13.6383	13.2754
Ba 389.178	22.9860	23.4726	24.2776
Be 313.042	-0.0454u	-0.0550u	-0.0494u
Ca 370.602	36959	37007	37045
Cd 226.502	-0.2274u	-0.2088u	-0.2519u
Co 228.615	1.8357	0.1012	0.3287
Cr 267.716	-0.1605u	-0.0583u	0.0041
Cu 324.754	607.734	603.497	605.402
Fe 271.441	67.0745	74.0463	62.0490
K 766.491	2756.09	2754.66	2758.52
Mg 279.078	7338.09	7328.41	7350.11
Mn 257.610	15.1648	15.1533	15.3833
Mo 202.032	-1.2205u	-0.3308u	-1.6595u
Na 330.237	13833.8	13947.0	13532.8
Ni 231.604	1.8930	4.0996	0.5243
Pb 220.353	281.160	277.381	284.729
Sb 206.834	-7.5547u	-5.4477u	-12.4942u
Se 196.026	9.7114	2.4429	8.9456
Si 288.158	4516.97	4515.80	4522.95
Sn 189.925	-1.5688u	4.9690	2.6550
Sr 216.596	124.033	122.900	124.101
Ti 334.941	0.7231	0.6008	0.5694
Tl 190.794	0.8274	2.6487	-8.6810u
V 292.401	0.5273	0.4201	1.2681
Zn 206.200	56.8923	54.7748	58.1388

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0485	ppb	0.2889	596.3	-31.3422
Al 308.215	30.0330	ppb	1.0556	3.5	237.585
As 188.980	0.5301	ppb	4.1654	785.8	1.3877
B 249.678	13.5371	ppb	0.2286	1.7	-6.7804
Ba 389.178	23.5788	ppb	0.6523	2.8	204.962
Be 313.042	-0.0499	ppb	0.0048	9.7	-197.197
Ca 370.602	37004	ppb	43.40	0.1	84385
Cd 226.502	-0.2294	ppb	0.0216	9.4	8.4013
Co 228.615	0.7552	ppb	0.9427	124.8	-8.2167
Cr 267.716	-0.0715	ppb	0.0831	116.2	22.0071
Cu 324.754	605.544	ppb	2.1219	0.4	24093.0
Fe 271.441	67.7233	ppb	6.0249	8.9	83.4606
K 766.491	2756.42	ppb	1.9498	0.1	75392.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	7338.87	ppb	10.8723	0.1	10603.2
Mn 257.610	15.2338	ppb	0.1296	0.9	1723.16
Mo 202.032	-1.0703	ppb	0.6770	63.3	1.8143
Na 330.237	13771.2	ppb	214.083	1.6	420.552
Ni 231.604	2.1723	ppb	1.8039	83.0	0.7510
Pb 220.353	281.090	ppb	3.6745	1.3	171.455
Sb 206.834	-8.4989	ppb	3.6169	42.6	7.8252
Se 196.026	7.0333	ppb	3.9938	56.8	3.3672
Si 288.158	4518.57	ppb	3.8328	0.1	21968.0
Sn 189.925	2.0184	ppb	3.3151	164.2	0.3948
Sr 216.596	123.678	ppb	0.6746	0.5	532.294
Ti 334.941	0.6311	ppb	0.0812	12.9	65.9502
Tl 190.794	-1.7350	ppb	6.0840	350.7	-10.9888
V 292.401	0.7385	ppb	0.4617	62.5	8.3144
Zn 206.200	56.6020	ppb	1.7007	3.0	20.1064

680-161833-A-238-E M (Samp) **12/19/2018, 1:35:42 PM** **Rack 1, Tube 36**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1989u	0.0785	-0.0436u
Al 308.215	25.9732	28.4555	28.2318
As 188.980	2.7750	-1.2205u	-2.8008u
B 249.678	13.0775	14.5510	15.2113
Ba 389.178	24.9112	25.2540	25.4397
Be 313.042	-0.0452u	-0.0454u	-0.0504u
Ca 370.602	36889	36962	37033
Cd 226.502	-0.2453u	-0.1736u	-0.1534u
Co 228.615	0.3546	-0.1338u	0.0951
Cr 267.716	-0.3861u	-0.1732u	-0.5374u
Cu 324.754	606.175	605.464	607.121
Fe 271.441	72.3350	66.4090	65.8845
K 766.491	2744.89	2752.97	2757.51
Mg 279.078	7306.27	7332.28	7341.71
Mn 257.610	15.2722	15.2489	15.3114
Mo 202.032	-0.3823u	0.4810	-1.0210u
Na 330.237	14039.2	13727.4	13592.6
Ni 231.604	-0.6181u	3.1182	0.6426
Pb 220.353	287.798	282.437	281.445
Sb 206.834	-4.9106u	-11.9199u	-15.5268u
Se 196.026	-4.1398u	0.3993	13.9540
Si 288.158	4495.82	4502.02	4509.57
Sn 189.925	-2.9890u	1.4081	-4.6511u
Sr 216.596	124.124	124.634	126.026
Ti 334.941	0.5521	0.5094	0.7496
Tl 190.794	-5.8646u	-1.2005u	1.2691
V 292.401	0.3620	0.7860	0.1924
Zn 206.200	56.1082	58.2078	59.7425

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0547	ppb	0.1391	254.4	-31.5785
Al 308.215	27.5535	ppb	1.3732	5.0	231.376
As 188.980	-0.4155	ppb	2.8738	691.7	1.1380
B 249.678	14.2799	ppb	1.0924	7.7	-1.7809

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	25.2016	ppb	0.2681	1.1	222.966
Be 313.042	-0.0470	ppb	0.0029	6.2	-194.880
Ca 370.602	36961	ppb	71.94	0.2	84288
Cd 226.502	-0.1907	ppb	0.0483	25.3	9.0328
Co 228.615	0.1053	ppb	0.2444	232.1	-11.4991
Cr 267.716	-0.3656	ppb	0.1830	50.1	15.1822
Cu 324.754	606.253	ppb	0.8314	0.1	24121.0
Fe 271.441	68.2095	ppb	3.5824	5.3	83.8281
K 766.491	2751.79	ppb	6.3937	0.2	75266.2
Mg 279.078	7326.75	ppb	18.3538	0.3	10585.7
Mn 257.610	15.2775	ppb	0.0315	0.2	1727.89
Mo 202.032	-0.3074	ppb	0.7538	245.2	3.5330
Na 330.237	13786.4	ppb	229.081	1.7	420.954
Ni 231.604	1.0476	ppb	1.9008	181.4	-0.8115
Pb 220.353	283.893	ppb	3.4181	1.2	173.099
Sb 206.834	-10.7858	ppb	5.3982	50.0	6.7896
Se 196.026	3.4045	ppb	9.4138	276.5	2.6759
Si 288.158	4502.47	ppb	6.8871	0.2	21890.9
Sn 189.925	-2.0773	ppb	3.1308	150.7	-0.9325
Sr 216.596	124.928	ppb	0.9845	0.8	537.563
Ti 334.941	0.6037	ppb	0.1281	21.2	62.6327
Tl 190.794	-1.9320	ppb	3.6226	187.5	-11.0721
V 292.401	0.4468	ppb	0.3057	68.4	3.9906
Zn 206.200	58.0195	ppb	1.8245	3.1	20.6165

680-161833-A-238-F M (Samp) **12/19/2018, 1:39:36 PM** **Rack 1, Tube 37**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1651	0.0221	-0.1487u
Al 308.215	34.6211	28.3714	30.0042
As 188.980	1.1423	3.9886	-0.3302u
B 249.678	14.1203	14.8445	14.7417
Ba 389.178	25.7760	24.8358	23.8477
Be 313.042	-0.0531u	-0.0576u	-0.0556u
Ca 370.602	37144	36879	36906
Cd 226.502	-0.2681u	0.0013	-0.4049u
Co 228.615	-0.0060u	-0.0111u	0.2657
Cr 267.716	-0.5305u	-0.2453u	-0.4643u
Cu 324.754	605.354	607.071	607.736
Fe 271.441	70.6742	73.1082	81.5751
K 766.491	2769.01	2739.59	2752.97
Mg 279.078	7378.28	7308.71	7315.68
Mn 257.610	15.4111	15.3506	15.3527
Mo 202.032	0.0129	-0.7903u	-0.9356u
Na 330.237	13941.7	13693.4	13862.8
Ni 231.604	2.3856	3.2650	2.0579
Pb 220.353	276.432	276.880	276.059
Sb 206.834	-14.9158u	-7.5921u	-20.3568u
Se 196.026	-9.3179u	-13.6636u	6.1006
Si 288.158	4503.98	4506.10	4510.46
Sn 189.925	3.3492	-2.7918u	-3.6825u
Sr 216.596	125.507	124.303	124.299
Ti 334.941	0.4906	0.6309	0.5701

Label	Replicates Concentration		
Tl 190.794	-4.4172u	0.4216	-0.3540u
V 292.401	0.6452	0.2445	0.5878
Zn 206.200	55.9764	58.0572	56.6443

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0128	ppb	0.1571	1223.0	-29.0781
Al 308.215	30.9989	ppb	3.2414	10.5	240.008
As 188.980	1.6002	ppb	2.1955	137.2	1.6700
B 249.678	14.5688	ppb	0.3918	2.7	0.1541
Ba 389.178	24.8198	ppb	0.9642	3.9	218.731
Be 313.042	-0.0554	ppb	0.0022	4.0	-201.797
Ca 370.602	36976	ppb	145.8	0.4	84322
Cd 226.502	-0.2239	ppb	0.2067	92.3	8.4996
Co 228.615	0.0829	ppb	0.1583	191.1	-11.6061
Cr 267.716	-0.4134	ppb	0.1492	36.1	14.0732
Cu 324.754	606.720	ppb	1.2293	0.2	24139.5
Fe 271.441	75.1192	ppb	5.7219	7.6	89.5128
K 766.491	2753.86	ppb	14.7288	0.5	75322.5
Mg 279.078	7334.22	ppb	38.3119	0.5	10596.5
Mn 257.610	15.3715	ppb	0.0343	0.2	1738.17
Mo 202.032	-0.5710	ppb	0.5109	89.5	2.9390
Na 330.237	13832.6	ppb	126.857	0.9	422.168
Ni 231.604	2.5695	ppb	0.6242	24.3	1.3038
Pb 220.353	276.457	ppb	0.4108	0.1	168.740
Sb 206.834	-14.2883	ppb	6.4054	44.8	5.2243
Se 196.026	-5.6270	ppb	10.3862	184.6	0.9553
Si 288.158	4506.84	ppb	3.3049	0.1	21911.7
Sn 189.925	-1.0417	ppb	3.8286	367.5	-0.5969
Sr 216.596	124.703	ppb	0.6963	0.6	536.613
Ti 334.941	0.5639	ppb	0.0704	12.5	57.8644
Tl 190.794	-1.4499	ppb	2.5989	179.2	-10.8715
V 292.401	0.4925	ppb	0.2167	44.0	4.7024
Zn 206.200	56.8926	ppb	1.0624	1.9	20.2110

680-161833-A-241-D (Samp) **12/19/2018, 1:43:28 PM** **Rack 1, Tube 38**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0677u	0.3527	0.1935
Al 308.215	3.2038	4.4726	8.2726
As 188.980	1.5972	1.4095	-2.9364u
B 249.678	19.8259	20.5591	19.8215
Ba 389.178	31.8262	31.1905	30.7204
Be 313.042	-0.0759u	-0.0807u	-0.0898u
Ca 370.602	41431	41535	41533
Cd 226.502	0.0499	-0.1902u	-0.3983u
Co 228.615	0.5925	0.4699	1.0466
Cr 267.716	-0.4477u	-0.0225u	-0.4164u
Cu 324.754	928.502	919.101	920.919
Fe 271.441	-5.2349u	0.0066	-3.0041u
K 766.491	3482.89	3488.17	3490.01
Mg 279.078	7843.72	7859.94	7868.46
Mn 257.610	2.4406	2.4775	2.4712
Mo 202.032	-0.4657u	-0.5122u	0.7993

Label	Replicates Concentration		
Na 330.237	14858.8	14530.7	14673.4
Ni 231.604	12.0819	13.0071	11.0884
Pb 220.353	-5.2352u	-4.6124u	-2.3116u
Sb 206.834	-9.4687u	-11.4340u	-6.7302u
Se 196.026	-7.5428u	0.6783	-1.5150u
Si 288.158	3928.45	3931.34	3926.17
Sn 189.925	-0.6413u	0.0340	-2.6662u
Sr 216.596	142.452	140.918	142.078
Ti 334.941	-0.0782	-0.1209	-0.0662
Tl 190.794	-4.4517u	-1.0481u	-0.9788u
V 292.401	0.4391	0.4962	0.2368
Zn 206.200	769.060	767.137	762.315

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1595	ppb	0.2122	133.1	-23.7242
Al 308.215	5.3163	ppb	2.6377	49.6	175.628
As 188.980	0.0234	ppb	2.5650	10953.5	1.2537
B 249.678	20.0688	ppb	0.4246	2.1	37.2586
Ba 389.178	31.2457	ppb	0.5550	1.8	290.543
Be 313.042	-0.0821	ppb	0.0071	8.6	-223.296
Ca 370.602	41500	ppb	59.71	0.1	94633
Cd 226.502	-0.1795	ppb	0.2243	124.9	9.1593
Co 228.615	0.7030	ppb	0.3038	43.2	-8.4986
Cr 267.716	-0.2955	ppb	0.2369	80.2	16.7727
Cu 324.754	922.840	ppb	4.9868	0.5	36611.5
Fe 271.441	-2.7441	ppb	2.6304	95.9	25.4245
K 766.491	3487.02	ppb	3.6998	0.1	95304.4
Mg 279.078	7857.37	ppb	12.5655	0.2	11350.3
Mn 257.610	2.4631	ppb	0.0197	0.8	329.374
Mo 202.032	-0.0595	ppb	0.7441	1250.5	4.0927
Na 330.237	14687.6	ppb	164.486	1.1	443.145
Ni 231.604	12.0592	ppb	0.9596	8.0	14.4921
Pb 220.353	-4.0530	ppb	1.5400	38.0	4.3013
Sb 206.834	-9.2110	ppb	2.3625	25.6	7.4933
Se 196.026	-2.7931	ppb	4.2570	152.4	1.4941
Si 288.158	3928.65	ppb	2.5919	0.1	19136.6
Sn 189.925	-1.0912	ppb	1.4052	128.8	-0.6128
Sr 216.596	141.816	ppb	0.7998	0.6	608.801
Ti 334.941	-0.0884	ppb	0.0287	32.5	-18.4163
Tl 190.794	-2.1595	ppb	1.9854	91.9	-11.1684
V 292.401	0.3907	ppb	0.1363	34.9	3.1576
Zn 206.200	766.170	ppb	3.4749	0.5	275.466

680-161833-A-241-E M (Samp) **12/19/2018, 1:47:21 PM** **Rack 1, Tube 39**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.9680u	-0.3279u	-0.2865u
Al 308.215	8.9836	11.0243	9.4970
As 188.980	2.3464	1.0366	-3.1545u
B 249.678	20.8683	20.4484	20.4768
Ba 389.178	29.7320	31.5377	30.1959
Be 313.042	-0.0629u	-0.0556u	-0.0526u
Ca 370.602	41277	41339	41285

Label	Replicates Concentration		
Cd 226.502	-0.2034u	-0.0458u	-0.4432u
Co 228.615	-0.4876u	0.6008	-1.1610u
Cr 267.716	-0.0546u	-0.1382u	-0.4094u
Cu 324.754	1471.31	1461.26	1463.82
Fe 271.441	13.2389	-0.9248u	8.3665
K 766.491	3465.20	3476.40	3481.85
Mg 279.078	7809.29	7819.87	7802.58
Mn 257.610	2.5001	2.5679	2.4998
Mo 202.032	-1.0899u	-1.0268u	-0.3270u
Na 330.237	14901.6	14629.3	14452.7
Ni 231.604	13.3311	12.2747	11.7527
Pb 220.353	273.398	278.469	272.128
Sb 206.834	-4.7917u	1.0180	-8.9310u
Se 196.026	5.9575	-23.1807u	-7.2486u
Si 288.158	3903.52	3903.16	3899.91
Sn 189.925	6.0972	3.6107	1.4880
Sr 216.596	140.339	141.538	141.646
Ti 334.941	-0.0919	-0.1323	-0.0234
Tl 190.794	0.0370	7.4311	1.2409
V 292.401	0.3709	0.0590	0.0486
Zn 206.200	763.428	772.175	772.778

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5275	ppb	0.3821	72.4	-49.1824
Al 308.215	9.8349	ppb	1.0615	10.8	186.944
As 188.980	0.0762	ppb	2.8735	3772.5	1.2676
B 249.678	20.5978	ppb	0.2347	1.1	40.8140
Ba 389.178	30.4886	ppb	0.9377	3.1	282.097
Be 313.042	-0.0570	ppb	0.0053	9.3	-202.447
Ca 370.602	41300	ppb	33.43	0.1	94179
Cd 226.502	-0.2308	ppb	0.2001	86.7	8.3291
Co 228.615	-0.3493	ppb	0.8890	254.5	-13.7911
Cr 267.716	-0.2007	ppb	0.1854	92.4	18.9744
Cu 324.754	1465.46	ppb	5.2208	0.4	58019.8
Fe 271.441	6.8936	ppb	7.1958	104.4	33.3068
K 766.491	3474.48	ppb	8.4879	0.2	94962.7
Mg 279.078	7810.58	ppb	8.7146	0.1	11282.9
Mn 257.610	2.5226	ppb	0.0392	1.6	335.670
Mo 202.032	-0.8146	ppb	0.4234	52.0	2.3915
Na 330.237	14661.2	ppb	226.180	1.5	442.457
Ni 231.604	12.4528	ppb	0.8041	6.5	15.0403
Pb 220.353	274.665	ppb	3.3548	1.2	167.688
Sb 206.834	-4.2349	ppb	4.9978	118.0	9.7287
Se 196.026	-8.1573	ppb	14.5903	178.9	0.4722
Si 288.158	3902.20	ppb	1.9909	0.1	19010.3
Sn 189.925	3.7320	ppb	2.3070	61.8	0.9502
Sr 216.596	141.174	ppb	0.7256	0.5	606.103
Ti 334.941	-0.0825	ppb	0.0551	66.7	-17.8645
Tl 190.794	2.9030	ppb	3.9673	136.7	-9.0611
V 292.401	0.1595	ppb	0.1831	114.8	-0.1790
Zn 206.200	769.461	ppb	5.2329	0.7	276.650

680-161833-A-241-F M (Samp) **12/19/2018, 1:51:13 PM** **Rack 1, Tube 40**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1516u	0.4816	0.0547
Al 308.215	15.6020	15.7946	14.3883
As 188.980	3.0947	1.8962	-2.9316u
B 249.678	19.7394	20.1220	21.6556
Ba 389.178	30.3942	29.7721	29.7960
Be 313.042	-0.0572u	-0.0584u	-0.0627u
Ca 370.602	41278	41360	41423
Cd 226.502	-0.5211u	-0.1691u	-0.0598u
Co 228.615	-1.0613u	-0.3572u	0.0195
Cr 267.716	0.0332	-0.2607u	-0.5532u
Cu 324.754	1477.03	1483.97	1486.45
Fe 271.441	17.4074	3.2044	3.4187
K 766.491	3473.60	3480.50	3484.66
Mg 279.078	7819.48	7814.03	7835.83
Mn 257.610	2.8470	2.8943	2.9281
Mo 202.032	-0.7396u	0.7050	0.9100
Na 330.237	14230.3	14709.7	14693.5
Ni 231.604	12.4913	10.2302	12.2328
Pb 220.353	277.700	274.504	275.104
Sb 206.834	-16.2910u	-14.8005u	-12.8402u
Se 196.026	-9.9348u	-4.9535u	19.7396
Si 288.158	3919.46	3926.88	3923.25
Sn 189.925	5.2956	3.7340	-9.8906u
Sr 216.596	140.612	141.198	141.563
Ti 334.941	0.3170	0.2899	0.3676
Tl 190.794	0.9713	-6.0994u	1.4116
V 292.401	0.4466	0.7291	0.3728
Zn 206.200	761.541	766.112	766.365

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1282	ppb	0.3230	251.9	-24.8783
Al 308.215	15.2616	ppb	0.7624	5.0	200.573
As 188.980	0.6864	ppb	3.1901	464.8	1.4286
B 249.678	20.5057	ppb	1.0141	4.9	40.1961
Ba 389.178	29.9874	ppb	0.3525	1.2	276.551
Be 313.042	-0.0594	ppb	0.0029	4.9	-204.485
Ca 370.602	41354	ppb	72.69	0.2	94301
Cd 226.502	-0.2500	ppb	0.2411	96.4	8.0140
Co 228.615	-0.4663	ppb	0.5486	117.6	-14.3846
Cr 267.716	-0.2603	ppb	0.2932	112.7	17.5912
Cu 324.754	1482.48	ppb	4.8820	0.3	58691.2
Fe 271.441	8.0102	ppb	8.1390	101.6	34.2148
K 766.491	3479.59	ppb	5.5847	0.2	95101.8
Mg 279.078	7823.11	ppb	11.3446	0.1	11300.9
Mn 257.610	2.8898	ppb	0.0407	1.4	375.890
Mo 202.032	0.2918	ppb	0.8991	308.1	4.8841
Na 330.237	14544.5	ppb	272.258	1.9	439.381
Ni 231.604	11.6514	ppb	1.2376	10.6	13.9268
Pb 220.353	275.769	ppb	1.6988	0.6	168.335
Sb 206.834	-14.6439	ppb	1.7308	11.8	5.0538
Se 196.026	1.6171	ppb	15.8909	982.7	2.3344
Si 288.158	3923.19	ppb	3.7088	0.1	19110.9

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.2870	ppb	8.3536	2910.8	-0.3522
Sr 216.596	141.124	ppb	0.4799	0.3	605.878
Ti 334.941	0.3248	ppb	0.0394	12.1	30.9758
Tl 190.794	-1.2388	ppb	4.2151	340.2	-10.7864
V 292.401	0.5161	ppb	0.1880	36.4	4.9466
Zn 206.200	764.673	ppb	2.7146	0.4	274.927

Cont Calib Verif (CCV) **12/19/2018, 1:55:08 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	516.744	510.182	510.420
Al 308.215	10270.9	10250.1	10254.4
As 188.980	541.673	544.808	533.906
B 249.678	536.373	537.842	538.838
Ba 389.178	478.126	476.949	478.452
Be 313.042	558.358	557.922	557.457
Ca 370.602	10245	10249	10216
Cd 226.502	532.300	533.683	533.620
Co 228.615	523.382	522.796	523.533
Cr 267.716	521.167	520.457	520.495
Cu 324.754	520.646	515.481	518.609
Fe 271.441	10330.2	10350.0	10330.0
K 766.491	10210.1	10212.8	10186.6
Mg 279.078	10733.0	10728.1	10717.6
Mn 257.610	512.495	512.201	512.106
Mo 202.032	511.033	512.646	510.383
Na 330.237	11069.0	10555.5	10799.7
Ni 231.604	525.410	519.159	524.146
Pb 220.353	510.787	509.648	511.763
Sb 206.834	509.057	502.314	489.761
Se 196.026	526.743	513.359	519.896
Si 288.158	5510.94	5509.45	5492.64
Sn 189.925	511.943	506.270	501.257
Sr 216.596	516.200	517.382	516.979
Ti 334.941	512.957	512.752	512.154
Tl 190.794	489.829	493.135	484.869
V 292.401	503.713	504.468	502.939
Zn 206.200	1043.52	1050.01	1038.28

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	512.448	ppb	3.7216	0.7	18961.6	102.48970
Al 308.215	10258.5	ppb	11.0104	0.1	25901.5	102.58450
As 188.980	540.129	ppb	5.6127	1.0	143.649	108.02577
B 249.678	537.684	ppb	1.2399	0.2	3511.10	107.53684
Ba 389.178	477.843	ppb	0.7906	0.2	5255.14	95.56853
Be 313.042	557.912	ppb	0.4505	0.1	463322	111.58247Q
Ca 370.602	10237	ppb	17.76	0.2	23376	102.36868
Cd 226.502	533.201	ppb	0.7808	0.1	8724.48	106.64017
Co 228.615	523.237	ppb	0.3897	0.1	2620.19	104.64740
Cr 267.716	520.707	ppb	0.3995	0.1	12113.2	104.14131
Cu 324.754	518.245	ppb	2.6018	0.5	20658.4	103.64909
Fe 271.441	10336.7	ppb	11.4694	0.1	8573.15	103.31570
K 766.491	10203.1	ppb	14.4206	0.1	278347	102.03128

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10726.3	ppb	7.8722	0.1	15475.4	107.26260
Mn 257.610	512.267	ppb	0.2032	0.0	56101.2	102.45345
Mo 202.032	511.354	ppb	1.1653	0.2	1155.99	102.27074
Na 330.237	10808.1	ppb	256.844	2.4	338.655	108.08077
Ni 231.604	522.905	ppb	3.3055	0.6	723.891	104.58102
Pb 220.353	510.733	ppb	1.0588	0.2	305.647	102.14655
Sb 206.834	500.377	ppb	9.7931	2.0	232.858	100.07546
Se 196.026	519.999	ppb	6.6927	1.3	101.107	103.99988
Si 288.158	5504.34	ppb	10.1654	0.2	26838.0	110.08688Q
Sn 189.925	506.490	ppb	5.3465	1.1	163.881	101.29805
Sr 216.596	516.854	ppb	0.6007	0.1	2184.30	103.37075
Ti 334.941	512.621	ppb	0.4173	0.1	61391.0	102.52412
Tl 190.794	489.277	ppb	4.1602	0.9	193.904	97.85549
V 292.401	503.707	ppb	0.7647	0.2	7269.74	100.74133
Zn 206.200	1043.94	ppb	5.8773	0.6	375.255	104.39355

Cont Calib Blank (CCB) **12/19/2018, 1:59:02 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0388	0.1977	1.0671
Al 308.215	3.8895	4.1234	2.5202
As 188.980	0.2501	2.3605	1.3536
B 249.678	5.8369	4.4086	4.4216
Ba 389.178	0.5109	-0.8055u	-0.1893u
Be 313.042	-0.0048u	0.0247	0.0062
Ca 370.602	0.2403	2.890	-2.265u
Cd 226.502	-0.1014u	-0.2649u	-0.3520u
Co 228.615	-0.2813u	-0.9120u	-0.6207u
Cr 267.716	0.0222	-0.3563u	-0.2462u
Cu 324.754	0.3930	1.0911	0.9015
Fe 271.441	10.5266	5.7986	1.1639
K 766.491	4.0049	4.0022	2.4959
Mg 279.078	-3.8972u	-0.0273u	-3.4054u
Mn 257.610	0.1417	0.1231	0.1546
Mo 202.032	-0.3469u	1.8146	-0.8315u
Na 330.237	31.9673	291.514	-11.1422u
Ni 231.604	0.8891	2.9171	2.5784
Pb 220.353	-3.6476u	-4.5622u	3.0418
Sb 206.834	-2.7580u	-10.8172u	-10.4001u
Se 196.026	-10.5783u	-7.9117u	-2.2226u
Si 288.158	21.5351	20.2342	19.3789
Sn 189.925	-2.6678u	-1.6054u	0.2099
Sr 216.596	0.2690	-0.5284u	0.4004
Ti 334.941	0.3934	0.2692	0.3312
Tl 190.794	-0.0181u	1.5208	1.2454
V 292.401	0.0419	0.6122	-0.7048u
Zn 206.200	4.5730	1.2867	-0.4625u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.4346	ppb	0.5536	127.4	-12.9023	0.43457
Al 308.215	3.5110	ppb	0.8661	24.7	171.097	3.51104
As 188.980	1.3214	ppb	1.0556	79.9	1.5961	1.32138
B 249.678	4.8890	ppb	0.8209	16.8	-64.9356	4.88900

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	-0.1613	ppb	0.6587	408.3	-65.8541	-0.16133
Be 313.042	0.0087	ppb	0.0149	171.5	-153.669	0.00870
Ca 370.602	0.2884	ppb	2.577	893.6	37.92	0.28842
Cd 226.502	-0.2395	ppb	0.1272	53.1	8.1764	-0.23945
Co 228.615	-0.6047	ppb	0.3157	52.2	-15.0802	-0.60468
Cr 267.716	-0.1934	ppb	0.1947	100.7	19.0315	-0.19343
Cu 324.754	0.7952	ppb	0.3610	45.4	233.640	0.79520
Fe 271.441	5.8297	ppb	4.6814	80.3	32.4128	5.82969
K 766.491	3.5010	ppb	0.8704	24.9	363.641	3.50100
Mg 279.078	-2.4433	ppb	2.1067	86.2	27.5700	-2.44331
Mn 257.610	0.1398	ppb	0.0158	11.3	36.6215	0.13976
Mo 202.032	0.2121	ppb	1.4089	664.4	4.7044	0.21206
Na 330.237	104.113	ppb	163.719	157.3	60.5008	104.11315
Ni 231.604	2.1282	ppb	1.0864	51.0	0.6910	2.12820
Pb 220.353	-1.7227	ppb	4.1514	241.0	5.6675	-1.72267
Sb 206.834	-7.9918	ppb	4.5374	56.8	8.0394	-7.99176
Se 196.026	-6.9042	ppb	4.2680	61.8	0.7107	-6.90422
Si 288.158	20.3827	ppb	1.0858	5.3	381.116	20.38274
Sn 189.925	-1.3544	ppb	1.4551	107.4	-0.7000	-1.35445
Sr 216.596	0.0470	ppb	0.5026	1068.6	9.9285	0.04704
Ti 334.941	0.3313	ppb	0.0621	18.7	4.1576	0.33127
Tl 190.794	0.9160	ppb	0.8206	89.6	-9.8904	0.91603
V 292.401	-0.0169	ppb	0.6605	3905.0	-2.7819	-0.01691
Zn 206.200	1.7991	ppb	2.5565	142.1	0.3837	1.79906

680-161833-A-240-B (Samp) **12/19/2018, 2:02:55 PM** **Rack 1, Tube 41**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1846u	0.0333	-0.0554u
Al 308.215	44.4674	38.4664	38.6853
As 188.980	0.8301	0.2908	-1.4525u
B 249.678	15.8179	15.3399	15.6871
Ba 389.178	26.1840	27.1252	27.3655
Be 313.042	-0.0351u	-0.0429u	-0.0526u
Ca 370.602	37713	37834	37818
Cd 226.502	-0.2241u	-0.1243u	-0.2743u
Co 228.615	-0.6439u	-0.0819u	0.8269
Cr 267.716	-0.1446u	-0.0686u	-0.3068u
Cu 324.754	57.0406	56.8780	55.9630
Fe 271.441	157.897	151.773	145.664
K 766.491	2855.37	2858.24	2855.74
Mg 279.078	7523.81	7545.43	7545.08
Mn 257.610	22.3640	22.2551	22.4293
Mo 202.032	-0.8856u	-1.3655u	1.3368
Na 330.237	14310.9	14198.4	14155.6
Ni 231.604	1.1758	4.0192	3.8486
Pb 220.353	6.5662	3.2460	1.3987
Sb 206.834	-0.2339u	-7.9378u	-0.8792u
Se 196.026	8.5764	18.7021	-5.2975u
Si 288.158	4647.38	4653.27	4659.68
Sn 189.925	-2.7264u	0.3931	-2.3384u
Sr 216.596	128.249	127.840	126.358
Ti 334.941	0.9611	0.8503	0.7676

Label	Replicates Concentration		
Tl 190.794	-1.2315u	-8.7327u	7.9480
V 292.401	0.7789	0.0431	0.2053
Zn 206.200	217.582	205.871	219.512

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0689	ppb	0.1096	159.0	-32.1160
Al 308.215	40.5397	ppb	3.4033	8.4	263.930
As 188.980	-0.1105	ppb	1.1930	1079.2	1.2187
B 249.678	15.6150	ppb	0.2470	1.6	7.1194
Ba 389.178	26.8916	ppb	0.6245	2.3	241.955
Be 313.042	-0.0435	ppb	0.0088	20.2	-191.867
Ca 370.602	37788	ppb	65.73	0.2	86173
Cd 226.502	-0.2076	ppb	0.0764	36.8	8.8236
Co 228.615	0.0337	ppb	0.7422	2200.2	-11.8535
Cr 267.716	-0.1733	ppb	0.1217	70.2	19.6729
Cu 324.754	56.6272	ppb	0.5809	1.0	2436.43
Fe 271.441	151.778	ppb	6.1167	4.0	152.660
K 766.491	2856.45	ppb	1.5651	0.1	78118.6
Mg 279.078	7538.11	ppb	12.3856	0.2	10890.1
Mn 257.610	22.3495	ppb	0.0880	0.4	2502.18
Mo 202.032	-0.3047	ppb	1.4417	473.1	3.5377
Na 330.237	14221.6	ppb	80.2122	0.6	432.075
Ni 231.604	3.0145	ppb	1.5947	52.9	1.9223
Pb 220.353	3.7370	ppb	2.6185	70.1	8.8697
Sb 206.834	-3.0170	ppb	4.2738	141.7	10.2740
Se 196.026	7.3270	ppb	12.0485	164.4	3.4236
Si 288.158	4653.44	ppb	6.1510	0.1	22615.2
Sn 189.925	-1.5572	ppb	1.7001	109.2	-0.7639
Sr 216.596	127.482	ppb	0.9949	0.8	548.369
Ti 334.941	0.8596	ppb	0.0971	11.3	94.0038
Tl 190.794	-0.6721	ppb	8.3544	1243.1	-10.5479
V 292.401	0.3424	ppb	0.3866	112.9	2.4950
Zn 206.200	214.322	ppb	7.3815	3.4	76.8666

680-161833-A-36-B (Samp) **12/19/2018, 2:06:48 PM** **Rack 1, Tube 42**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2278u	-0.1082u	0.2917
Al 308.215	17.1802	20.9151	16.9926
As 188.980	5.1802	-0.7678u	1.6739
B 249.678	13.8815	14.3284	13.3689
Ba 389.178	25.1674	25.0173	24.2441
Be 313.042	-0.0589u	-0.0766u	-0.0669u
Ca 370.602	38137	38112	38139
Cd 226.502	0.1095	0.0706	0.0121
Co 228.615	0.0034	0.0414	-0.2459u
Cr 267.716	0.1731	-0.1612u	0.3655
Cu 324.754	154.230	154.858	154.843
Fe 271.441	-13.4808u	5.8971	3.0319
K 766.491	2699.03	2698.79	2698.16
Mg 279.078	7313.21	7310.73	7318.69
Mn 257.610	0.6995	0.8611	0.8905
Mo 202.032	-0.5194u	-0.9706u	0.5164

Label	Replicates Concentration		
Na 330.237	14351.6	14291.9	14285.7
Ni 231.604	0.8969	2.6937	0.7863
Pb 220.353	4.3880	5.2041	3.6364
Sb 206.834	0.6702	-4.1200u	-7.5690u
Se 196.026	-6.4662u	29.1562	-7.7165u
Si 288.158	4591.16	4576.32	4579.28
Sn 189.925	0.7619	-1.3441u	0.4114
Sr 216.596	125.688	126.612	124.503
Ti 334.941	-0.0073	-0.1241	-0.1626
Tl 190.794	6.2183	-2.9364u	3.9058
V 292.401	0.0299	0.4419	1.2114
Zn 206.200	160.272	165.188	168.356

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0148	ppb	0.2721	1841.1	-30.1180
Al 308.215	18.3626	ppb	2.2125	12.0	208.336
As 188.980	2.0288	ppb	2.9898	147.4	1.7829
B 249.678	13.8596	ppb	0.4801	3.5	-4.5441
Ba 389.178	24.8096	ppb	0.4954	2.0	218.576
Be 313.042	-0.0675	ppb	0.0089	13.1	-211.639
Ca 370.602	38130	ppb	14.98	0.0	86951
Cd 226.502	0.0641	ppb	0.0490	76.5	13.1379
Co 228.615	-0.0671	ppb	0.1561	232.8	-12.3714
Cr 267.716	0.1258	ppb	0.2665	211.8	26.5528
Cu 324.754	154.644	ppb	0.3582	0.2	6303.48
Fe 271.441	-1.5172	ppb	10.4593	689.4	26.3846
K 766.491	2698.66	ppb	0.4494	0.0	73818.1
Mg 279.078	7314.21	ppb	4.0764	0.1	10567.8
Mn 257.610	0.8170	ppb	0.1028	12.6	146.764
Mo 202.032	-0.3246	ppb	0.7624	234.9	3.4954
Na 330.237	14309.7	ppb	36.3435	0.3	434.511
Ni 231.604	1.4590	ppb	1.0708	73.4	-0.2394
Pb 220.353	4.4095	ppb	0.7841	17.8	9.2622
Sb 206.834	-3.6729	ppb	4.1378	112.7	9.9806
Se 196.026	4.9912	ppb	20.9368	419.5	2.9770
Si 288.158	4582.25	ppb	7.8549	0.2	22273.8
Sn 189.925	-0.0569	ppb	1.1284	1983.0	-0.2777
Sr 216.596	125.601	ppb	1.0575	0.8	540.392
Ti 334.941	-0.0980	ppb	0.0809	82.5	-21.4729
Tl 190.794	2.3959	ppb	4.7605	198.7	-9.2727
V 292.401	0.5611	ppb	0.5997	106.9	5.6507
Zn 206.200	164.605	ppb	4.0735	2.5	58.9745

680-161833-A-249-B (Samp) **12/19/2018, 2:10:42 PM** **Rack 1, Tube 43**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5331u	-0.3248u	-0.3246u
Al 308.215	11.1059	8.4315	11.6311
As 188.980	-2.8669u	-3.9823u	0.9608
B 249.678	13.7060	15.3006	12.5736
Ba 389.178	24.8864	24.0096	24.0361
Be 313.042	-0.0796u	-0.0778u	-0.0612u
Ca 370.602	35954	35981	35973

Label	Replicates Concentration		
Cd 226.502	-0.3384u	-0.3911u	-0.5452u
Co 228.615	0.5239	0.7129	-0.1583u
Cr 267.716	-0.2150u	-0.2152u	-0.3204u
Cu 324.754	241.507	244.968	246.150
Fe 271.441	6.3841	1.3283	3.8106
K 766.491	2612.26	2613.96	2622.99
Mg 279.078	7495.58	7520.10	7526.30
Mn 257.610	1.3461	1.4392	1.4853
Mo 202.032	-0.8648u	-0.9780u	0.0922
Na 330.237	14074.6	14130.4	14138.1
Ni 231.604	0.4620	1.7717	3.5035
Pb 220.353	4.2946	3.6560	-1.3859u
Sb 206.834	-7.9419u	-9.0288u	-5.4642u
Se 196.026	2.3342	-12.1216u	-13.4268u
Si 288.158	4557.09	4549.49	4553.95
Sn 189.925	-1.1194u	2.3552	-1.2852u
Sr 216.596	121.219	122.912	122.302
Ti 334.941	0.0100	0.0208	-0.0823
Tl 190.794	0.4556	-2.5510u	-3.7784u
V 292.401	0.8598	0.7398	0.2408
Zn 206.200	308.123	316.979	318.961

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3942	ppb	0.1203	30.5	-44.1642
Al 308.215	10.3895	ppb	1.7159	16.5	188.353
As 188.980	-1.9628	ppb	2.5926	132.1	0.7296
B 249.678	13.8601	ppb	1.3700	9.9	-4.5409
Ba 389.178	24.3107	ppb	0.4988	2.1	213.236
Be 313.042	-0.0729	ppb	0.0101	13.9	-216.506
Ca 370.602	35969	ppb	14.03	0.0	82027
Cd 226.502	-0.4249	ppb	0.1075	25.3	5.1571
Co 228.615	0.3595	ppb	0.4582	127.5	-10.2277
Cr 267.716	-0.2502	ppb	0.0608	24.3	17.8224
Cu 324.754	244.209	ppb	2.4131	1.0	9837.12
Fe 271.441	3.8410	ppb	2.5280	65.8	30.8288
K 766.491	2616.40	ppb	5.7665	0.2	71576.3
Mg 279.078	7513.99	ppb	16.2431	0.2	10855.6
Mn 257.610	1.4235	ppb	0.0709	5.0	214.026
Mo 202.032	-0.5835	ppb	0.5879	100.8	2.9120
Na 330.237	14114.4	ppb	34.6201	0.2	429.042
Ni 231.604	1.9124	ppb	1.5256	79.8	0.3902
Pb 220.353	2.1882	ppb	3.1117	142.2	7.9599
Sb 206.834	-7.4783	ppb	1.8269	24.4	8.2706
Se 196.026	-7.7381	ppb	8.7472	113.0	0.5520
Si 288.158	4553.51	ppb	3.8170	0.1	22135.7
Sn 189.925	-0.0164	ppb	2.0556	12496.7	-0.2646
Sr 216.596	122.144	ppb	0.8578	0.7	525.774
Ti 334.941	-0.0172	ppb	0.0566	330.1	-11.0820
Tl 190.794	-1.9579	ppb	2.1784	111.3	-11.0853
V 292.401	0.6135	ppb	0.3283	53.5	6.3956
Zn 206.200	314.687	ppb	5.7711	1.8	112.986

680-161833-A-236-B (Samp) **12/19/2018, 2:14:35 PM** **Rack 1, Tube 44**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3627u	-0.1547u	-0.3332u
Al 308.215	31.7357	32.7176	32.1873
As 188.980	-2.9351u	-3.1753u	5.9733
B 249.678	12.8651	13.1153	14.2904
Ba 389.178	25.1445	24.8384	25.7891
Be 313.042	-0.0673u	-0.0483u	-0.0686u
Ca 370.602	37067	37194	37172
Cd 226.502	-0.1991u	-0.0285	0.2291
Co 228.615	-0.4095u	-0.2228u	0.5196
Cr 267.716	-0.2872u	0.1168	-0.3909u
Cu 324.754	536.268	537.439	541.612
Fe 271.441	610.556	629.267	629.252
K 766.491	2810.80	2823.60	2819.73
Mg 279.078	7261.77	7291.34	7281.52
Mn 257.610	13.0069	13.2209	13.1841
Mo 202.032	-0.6717u	-0.8505u	-1.7560u
Na 330.237	13202.6	13185.8	13478.8
Ni 231.604	3.6443	3.3530	4.2857
Pb 220.353	2.1157	0.0333	2.0516
Sb 206.834	-6.5410u	-10.1222u	-1.4750u
Se 196.026	-2.0394u	5.2323	8.8975
Si 288.158	4437.16	4433.29	4439.60
Sn 189.925	-1.8952u	1.6699	3.3418
Sr 216.596	122.863	122.522	123.341
Ti 334.941	0.1023	0.2181	0.4915
Tl 190.794	1.2192	0.5075	-4.3076u
V 292.401	-0.1420u	0.3617	1.0373
Zn 206.200	434.628	437.730	435.724

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2836	ppb	0.1125	39.7	-40.1800
Al 308.215	32.2135	ppb	0.4915	1.5	243.071
As 188.980	-0.0457	ppb	5.2140	11402.8	1.2368
B 249.678	13.4236	ppb	0.7610	5.7	-8.1064
Ba 389.178	25.2573	ppb	0.4853	1.9	223.710
Be 313.042	-0.0614	ppb	0.0113	18.5	-206.703
Ca 370.602	37144	ppb	68.20	0.2	84704
Cd 226.502	0.0005	ppb	0.2156	44168.9	12.5863
Co 228.615	-0.0375	ppb	0.4915	1308.9	-12.1964
Cr 267.716	-0.1871	ppb	0.2682	143.4	19.3764
Cu 324.754	538.440	ppb	2.8089	0.5	21445.7
Fe 271.441	623.025	ppb	10.7981	1.7	540.794
K 766.491	2818.04	ppb	6.5623	0.2	77071.9
Mg 279.078	7278.21	ppb	15.0595	0.2	10515.8
Mn 257.610	13.1373	ppb	0.1144	0.9	1494.13
Mo 202.032	-1.0927	ppb	0.5813	53.2	1.7552
Na 330.237	13289.1	ppb	164.554	1.2	406.963
Ni 231.604	3.7610	ppb	0.4772	12.7	2.9600
Pb 220.353	1.4002	ppb	1.1842	84.6	7.5021
Sb 206.834	-6.0461	ppb	4.3448	71.9	8.9322
Se 196.026	4.0302	ppb	5.5667	138.1	2.7931
Si 288.158	4436.69	ppb	3.1860	0.1	21574.8

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.0388	ppb	2.6749	257.5	0.0773
Sr 216.596	122.909	ppb	0.4118	0.3	529.163
Ti 334.941	0.2706	ppb	0.1998	73.8	22.5816
Tl 190.794	-0.8603	ppb	3.0066	349.5	-10.6471
V 292.401	0.4190	ppb	0.5917	141.2	3.7604
Zn 206.200	436.028	ppb	1.5730	0.4	156.655

680-161833-A-268-B (Samp) **12/19/2018, 2:18:29 PM** **Rack 1, Tube 45**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3696	-0.6869u	0.0370
Al 308.215	8.2898	6.3058	4.4972
As 188.980	-4.2057u	4.4539	-2.4706u
B 249.678	14.6373	14.1656	14.6120
Ba 389.178	24.7475	24.3797	25.4038
Be 313.042	-0.0540u	-0.0648u	-0.0701u
Ca 370.602	32142	32100	32160
Cd 226.502	-0.2354u	-0.2241u	0.0442
Co 228.615	0.4224	-0.5350u	0.8563
Cr 267.716	-0.4044u	-0.4306u	-0.5778u
Cu 324.754	745.956	747.457	748.311
Fe 271.441	0.8636	11.3783	1.3647
K 766.491	3001.69	2986.37	2944.45
Mg 279.078	6409.92	6397.32	6403.10
Mn 257.610	2.8461	2.8658	2.9711
Mo 202.032	-0.7523u	-0.8507u	0.2759
Na 330.237	11840.3	12365.7	12257.0
Ni 231.604	5.9230	6.0784	6.1655
Pb 220.353	-5.7156u	-2.8452u	-5.5927u
Sb 206.834	-7.6426u	-5.7785u	-11.8557u
Se 196.026	10.4506	0.3546	0.2000
Si 288.158	4330.77	4318.72	4326.83
Sn 189.925	-0.8985u	3.0157	-1.5288u
Sr 216.596	107.819	108.069	108.287
Ti 334.941	-0.0813	-0.0707	-0.0629
Tl 190.794	-3.5062u	-3.0536u	-8.2827u
V 292.401	0.3137	0.2869	0.5715
Zn 206.200	510.984	517.649	509.533

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0934	ppb	0.5402	578.1	-32.9528
Al 308.215	6.3643	ppb	1.8970	29.8	178.254
As 188.980	-0.7408	ppb	4.5816	618.5	1.0521
B 249.678	14.4716	ppb	0.2654	1.8	-0.4279
Ba 389.178	24.8437	ppb	0.5188	2.1	218.051
Be 313.042	-0.0630	ppb	0.0082	13.1	-208.759
Ca 370.602	32134	ppb	30.94	0.1	73285
Cd 226.502	-0.1384	ppb	0.1582	114.3	9.8345
Co 228.615	0.2479	ppb	0.7119	287.2	-10.7882
Cr 267.716	-0.4709	ppb	0.0935	19.9	12.6852
Cu 324.754	747.241	ppb	1.1920	0.2	29683.5
Fe 271.441	4.5355	ppb	5.9313	130.8	31.3856
K 766.491	2977.50	ppb	29.6316	1.0	81417.9

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6403.45	ppb	6.3053	0.1	9255.78
Mn 257.610	2.8944	ppb	0.0672	2.3	369.384
Mo 202.032	-0.4424	ppb	0.6240	141.1	3.2300
Na 330.237	12154.3	ppb	277.339	2.3	376.960
Ni 231.604	6.0556	ppb	0.1228	2.0	6.1489
Pb 220.353	-4.7178	ppb	1.6229	34.4	3.9118
Sb 206.834	-8.4256	ppb	3.1134	37.0	7.8457
Se 196.026	3.6684	ppb	5.8741	160.1	2.7251
Si 288.158	4325.44	ppb	6.1414	0.1	21040.8
Sn 189.925	0.1961	ppb	2.4621	1255.5	-0.1960
Sr 216.596	108.058	ppb	0.2343	0.2	466.234
Ti 334.941	-0.0716	ppb	0.0093	12.9	-21.5062
Tl 190.794	-4.9475	ppb	2.8972	58.6	-12.3304
V 292.401	0.3907	ppb	0.1572	40.2	3.1728
Zn 206.200	512.722	ppb	4.3282	0.8	184.255

680-161833-A-212-B (Samp) **12/19/2018, 2:22:24 PM** **Rack 1, Tube 46**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2674	0.1102	-0.4671u
Al 308.215	5.2815	5.7132	5.8008
As 188.980	2.6757	0.6999	-2.8015u
B 249.678	15.4279	15.2022	15.4507
Ba 389.178	26.4749	27.3191	27.3199
Be 313.042	-0.0576u	-0.0720u	-0.0729u
Ca 370.602	35381	35502	35486
Cd 226.502	0.0566	-0.6631u	-0.1613u
Co 228.615	0.0335	0.6458	0.4187
Cr 267.716	-0.0582u	-0.4050u	-0.4193u
Cu 324.754	1084.21	1107.92	1094.18
Fe 271.441	-17.6831u	7.7609	-7.3962u
K 766.491	3149.33	3160.82	3165.05
Mg 279.078	7105.80	7118.22	7136.32
Mn 257.610	2.3131	2.3835	2.4087
Mo 202.032	-0.0692u	-0.4362u	-0.3250u
Na 330.237	13683.8	13441.5	13667.1
Ni 231.604	4.2148	5.9116	4.1852
Pb 220.353	-3.8424u	-2.1243u	2.8027
Sb 206.834	0.4922	-1.8752u	-12.3782u
Se 196.026	-0.5309u	4.3848	-3.1402u
Si 288.158	4114.92	4120.01	4117.29
Sn 189.925	2.1719	0.6951	-0.6940u
Sr 216.596	123.313	121.617	123.292
Ti 334.941	-0.0965	-0.1098	-0.1917
Tl 190.794	1.5824	1.5092	-3.0286u
V 292.401	0.6025	0.5811	0.8954
Zn 206.200	453.888	447.014	460.904

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0299	ppb	0.3868	1295.2	-30.6578
Al 308.215	5.5985	ppb	0.2780	5.0	176.343
As 188.980	0.1914	ppb	2.7738	1449.4	1.2981
B 249.678	15.3603	ppb	0.1373	0.9	5.5591

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	27.0380	ppb	0.4877	1.8	243.118
Be 313.042	-0.0675	ppb	0.0086	12.7	-212.027
Ca 370.602	35456	ppb	65.31	0.2	80857
Cd 226.502	-0.2560	ppb	0.3691	144.2	7.9125
Co 228.615	0.3660	ppb	0.3096	84.6	-10.1944
Cr 267.716	-0.2942	ppb	0.2045	69.5	16.7993
Cu 324.754	1095.44	ppb	11.9061	1.1	43421.1
Fe 271.441	-5.7728	ppb	12.7995	221.7	22.9033
K 766.491	3158.40	ppb	8.1357	0.3	86348.0
Mg 279.078	7120.11	ppb	15.3463	0.2	10288.2
Mn 257.610	2.3684	ppb	0.0495	2.1	315.414
Mo 202.032	-0.2768	ppb	0.1882	68.0	3.6030
Na 330.237	13597.5	ppb	135.344	1.0	415.125
Ni 231.604	4.7705	ppb	0.9883	20.7	4.3627
Pb 220.353	-1.0547	ppb	3.4493	327.0	6.0592
Sb 206.834	-4.5871	ppb	6.8504	149.3	9.5691
Se 196.026	0.2379	ppb	3.8210	1606.1	2.0716
Si 288.158	4117.41	ppb	2.5479	0.1	20043.0
Sn 189.925	0.7244	ppb	1.4332	197.9	-0.0246
Sr 216.596	122.741	ppb	0.9735	0.8	528.286
Ti 334.941	-0.1326	ppb	0.0516	38.9	-26.2912
Tl 190.794	0.0210	ppb	2.6413	12571.3	-10.2607
V 292.401	0.6930	ppb	0.1756	25.3	7.5667
Zn 206.200	453.936	ppb	6.9449	1.5	163.099

680-161833-A-201-B (Samp) **12/19/2018, 2:26:18 PM** **Rack 1, Tube 47**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6302u	-0.1016u	-0.4355u
Al 308.215	15.0622	11.6586	13.1439
As 188.980	-4.2825u	0.1432	-2.5972u
B 249.678	13.8896	12.7653	12.8921
Ba 389.178	27.8860	27.9716	27.2136
Be 313.042	-0.0752u	-0.0560u	-0.0718u
Ca 370.602	35600	35711	35657
Cd 226.502	0.0148	0.0188	-0.3236u
Co 228.615	0.5180	-0.2875u	0.1610
Cr 267.716	-0.0865u	-0.0433u	-0.6756u
Cu 324.754	63.8248	64.7598	64.6650
Fe 271.441	9.7637	13.6822	7.5112
K 766.491	2572.26	2576.34	2572.33
Mg 279.078	7487.05	7500.14	7504.60
Mn 257.610	2.4432	2.4473	2.3670
Mo 202.032	-0.3060u	-1.0588u	-0.5585u
Na 330.237	14443.2	14264.8	14588.4
Ni 231.604	12.0407	10.4238	12.1013
Pb 220.353	-6.8290u	-6.6512u	-6.5695u
Sb 206.834	-9.4192u	-5.9540u	-7.2565u
Se 196.026	9.0256	-4.2273u	-8.9288u
Si 288.158	4616.38	4628.35	4623.57
Sn 189.925	1.4946	-2.4089u	-7.5672u
Sr 216.596	125.442	123.243	124.343
Ti 334.941	-0.0131	0.0434	-0.0452

Label	Replicates Concentration		
Tl 190.794	6.4618	1.5039	-3.0252u
V 292.401	0.2535	0.4892	-0.0533u
Zn 206.200	562.552	555.107	545.021

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3891	ppb	0.2674	68.7	-43.9837
Al 308.215	13.2882	ppb	1.7064	12.8	195.608
As 188.980	-2.2455	ppb	2.2337	99.5	0.6550
B 249.678	13.1823	ppb	0.6158	4.7	-9.1102
Ba 389.178	27.6904	ppb	0.4151	1.5	250.739
Be 313.042	-0.0676	ppb	0.0102	15.1	-212.220
Ca 370.602	35656	ppb	55.19	0.2	81313
Cd 226.502	-0.0967	ppb	0.1965	203.2	10.5192
Co 228.615	0.1305	ppb	0.4036	309.2	-11.3787
Cr 267.716	-0.2684	ppb	0.3533	131.6	17.4027
Cu 324.754	64.4165	ppb	0.5146	0.8	2743.71
Fe 271.441	10.3190	ppb	3.1228	30.3	36.1431
K 766.491	2573.64	ppb	2.3332	0.1	70410.9
Mg 279.078	7497.26	ppb	9.1188	0.1	10831.5
Mn 257.610	2.4192	ppb	0.0452	1.9	322.839
Mo 202.032	-0.6411	ppb	0.3832	59.8	2.7822
Na 330.237	14432.2	ppb	162.072	1.1	436.892
Ni 231.604	11.5219	ppb	0.9515	8.3	13.7461
Pb 220.353	-6.6832	ppb	0.1327	2.0	2.7596
Sb 206.834	-7.5433	ppb	1.7503	23.2	8.2411
Se 196.026	-1.3768	ppb	9.3104	676.2	1.7639
Si 288.158	4622.77	ppb	6.0268	0.1	22467.8
Sn 189.925	-2.8272	ppb	4.5454	160.8	-1.1755
Sr 216.596	124.343	ppb	1.0996	0.9	535.000
Ti 334.941	-0.0050	ppb	0.0449	899.2	-9.6656
Tl 190.794	1.6469	ppb	4.7451	288.1	-9.5843
V 292.401	0.2298	ppb	0.2720	118.4	0.8246
Zn 206.200	554.227	ppb	8.7988	1.6	199.191

680-161833-A-200-B (Samp) **12/19/2018, 2:30:13 PM** **Rack 1, Tube 48**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7243	0.6337	-0.6132u
Al 308.215	2.5091	3.6891	2.9264
As 188.980	-2.0473u	7.3023	5.0025
B 249.678	46.1361	46.5004	46.7243
Ba 389.178	24.9194	23.0210	24.1466
Be 313.042	-0.0818u	-0.0682u	-0.0696u
Ca 370.602	31883	31900	31908
Cd 226.502	-0.4610u	0.0331	-0.3929u
Co 228.615	0.0430	-0.0404u	0.4507
Cr 267.716	-0.8317u	-0.2764u	-0.7466u
Cu 324.754	724.136	722.069	715.713
Fe 271.441	-5.5963u	11.3535	2.3944
K 766.491	3524.94	3520.09	3531.60
Mg 279.078	6809.24	6813.00	6821.87
Mn 257.610	3.8290	3.9342	3.8270
Mo 202.032	-1.5927u	-1.0743u	0.6038

Label	Replicates Concentration		
Na 330.237	12892.2	13077.1	13437.1
Ni 231.604	4.3562	3.9673	4.9047
Pb 220.353	1.4774	-0.7951u	0.6583
Sb 206.834	-2.4107u	-9.1555u	0.3281
Se 196.026	-5.2645u	-6.8447u	-10.7912u
Si 288.158	4195.80	4179.97	4184.64
Sn 189.925	-3.1052u	1.3761	-2.3341u
Sr 216.596	115.497	114.870	115.963
Ti 334.941	-0.0723	-0.2611u	-0.1306
Tl 190.794	0.7325	-5.4736u	5.2642
V 292.401	0.4006	0.5051	0.2314
Zn 206.200	790.089	778.328	796.838

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2483	ppb	0.7474	301.1	-20.3134
Al 308.215	3.0415	ppb	0.5984	19.7	169.924
As 188.980	3.4191	ppb	4.8718	142.5	2.1499
B 249.678	46.4536	ppb	0.2969	0.6	214.862
Ba 389.178	24.0290	ppb	0.9547	4.0	209.415
Be 313.042	-0.0732	ppb	0.0075	10.2	-217.333
Ca 370.602	31897	ppb	12.82	0.0	72745
Cd 226.502	-0.2736	ppb	0.2678	97.9	7.6259
Co 228.615	0.1511	ppb	0.2628	173.9	-11.2737
Cr 267.716	-0.6182	ppb	0.2990	48.4	9.2730
Cu 324.754	720.639	ppb	4.3897	0.6	28633.9
Fe 271.441	2.7172	ppb	8.4795	312.1	29.8922
K 766.491	3525.54	ppb	5.7793	0.2	96354.2
Mg 279.078	6814.70	ppb	6.4823	0.1	9848.22
Mn 257.610	3.8634	ppb	0.0613	1.6	477.333
Mo 202.032	-0.6877	ppb	1.1481	166.9	2.6772
Na 330.237	13135.5	ppb	277.131	2.1	402.208
Ni 231.604	4.4094	ppb	0.4710	10.7	3.8610
Pb 220.353	0.4469	ppb	1.1509	257.5	6.9396
Sb 206.834	-3.7460	ppb	4.8808	130.3	9.9465
Se 196.026	-7.6335	ppb	2.8465	37.3	0.5721
Si 288.158	4186.80	ppb	8.1351	0.2	20375.7
Sn 189.925	-1.3544	ppb	2.3959	176.9	-0.6983
Sr 216.596	115.444	ppb	0.5482	0.5	497.460
Ti 334.941	-0.1547	ppb	0.0966	62.5	-30.0183
Tl 190.794	0.1744	ppb	5.3906	3091.5	-10.1965
V 292.401	0.3790	ppb	0.1381	36.4	3.0197
Zn 206.200	788.418	ppb	9.3677	1.2	283.472

680-161833-A-222-B (Samp) **12/19/2018, 2:34:06 PM** **Rack 1, Tube 49**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4746	0.0075u	-0.2707u
Al 308.215	7.6970	5.3616	4.6732
As 188.980	4.7829	-1.4121u	0.0835
B 249.678	14.5601	14.1037	14.8426
Ba 389.178	26.2064	27.5323	25.9682
Be 313.042	-0.0524u	-0.0587u	-0.0673u
Ca 370.602	31087	31175	31212

Label	Replicates Concentration		
Cd 226.502	-0.1329u	-0.2771u	0.0812
Co 228.615	0.3761	-0.9506u	0.3925
Cr 267.716	-0.0711u	-0.4731u	-0.4558u
Cu 324.754	487.034	485.423	489.579
Fe 271.441	-3.0608u	8.4798	0.4152
K 766.491	3341.16	3345.09	3353.05
Mg 279.078	6407.62	6426.57	6411.11
Mn 257.610	2.0089	1.9996	1.9744
Mo 202.032	-0.4066u	-0.4447u	-1.6591u
Na 330.237	13156.4	13216.2	13180.9
Ni 231.604	5.0001	5.2013	3.5414
Pb 220.353	5.8283	10.6921	9.6404
Sb 206.834	-5.3992u	-7.9007u	3.0553
Se 196.026	-18.8225u	-14.3869u	11.1825
Si 288.158	4095.40	4103.65	4103.25
Sn 189.925	-1.7295u	3.3256	3.1744
Sr 216.596	106.385	106.350	106.832
Ti 334.941	-0.0699	-0.1572	-0.0607
Tl 190.794	1.2308	-2.2277u	3.6082
V 292.401	0.4494	1.1413	0.2076
Zn 206.200	1271.10	1289.24	1285.06

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0704	ppb	0.3766	534.7	-26.8728
Al 308.215	5.9106	ppb	1.5849	26.8	177.114
As 188.980	1.1514	ppb	3.2326	280.7	1.5515
B 249.678	14.5022	ppb	0.3728	2.6	-0.2157
Ba 389.178	26.5690	ppb	0.8427	3.2	237.208
Be 313.042	-0.0595	ppb	0.0075	12.6	-205.972
Ca 370.602	31158	ppb	64.01	0.2	71060
Cd 226.502	-0.1096	ppb	0.1803	164.5	10.2987
Co 228.615	-0.0607	ppb	0.7708	1270.3	-12.3355
Cr 267.716	-0.3333	ppb	0.2272	68.2	15.8753
Cu 324.754	487.346	ppb	2.0955	0.4	19429.7
Fe 271.441	1.9447	ppb	5.9204	304.4	29.2431
K 766.491	3346.44	ppb	6.0573	0.2	91472.8
Mg 279.078	6415.10	ppb	10.0869	0.2	9272.58
Mn 257.610	1.9943	ppb	0.0179	0.9	271.028
Mo 202.032	-0.8368	ppb	0.7124	85.1	2.3414
Na 330.237	13184.5	ppb	30.0846	0.2	402.429
Ni 231.604	4.5809	ppb	0.9059	19.8	4.1000
Pb 220.353	8.7203	ppb	2.5591	29.3	11.7895
Sb 206.834	-3.4148	ppb	5.7412	168.1	10.0985
Se 196.026	-7.3423	ppb	16.1955	220.6	0.6274
Si 288.158	4100.77	ppb	4.6512	0.1	19963.0
Sn 189.925	1.5902	ppb	2.8759	180.9	0.2559
Sr 216.596	106.523	ppb	0.2687	0.3	459.766
Ti 334.941	-0.0959	ppb	0.0533	55.5	-24.3985
Tl 190.794	0.8704	ppb	2.9346	337.1	-9.9072
V 292.401	0.5994	ppb	0.4846	80.8	6.2489
Zn 206.200	1281.80	ppb	9.4994	0.7	461.029

680-161833-A-213-B (Samp) **12/19/2018, 2:37:59 PM** **Rack 1, Tube 50**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0683	-0.0506u	-0.3080u
Al 308.215	11.6036	16.2467	9.2106
As 188.980	3.5643	-0.1425u	-3.7433u
B 249.678	13.6680	12.6578	12.5661
Ba 389.178	26.2987	25.3555	25.8814
Be 313.042	-0.0555u	-0.0767u	-0.0679u
Ca 370.602	35835	35825	35873
Cd 226.502	-0.2253u	-0.2798u	0.0989
Co 228.615	-0.4630u	0.2522	-0.7618u
Cr 267.716	-0.3986u	-0.2026u	-0.7125u
Cu 324.754	710.272	712.655	719.423
Fe 271.441	4.2245	1.3864	10.8714
K 766.491	2536.07	2535.59	2535.27
Mg 279.078	7643.69	7664.10	7658.65
Mn 257.610	3.2282	3.2859	3.2548
Mo 202.032	0.5722	-0.1968u	-1.7391u
Na 330.237	14713.1	14950.5	15200.5
Ni 231.604	4.8013	3.7162	3.7035
Pb 220.353	1.8023	-0.4053u	-0.4538u
Sb 206.834	-15.8828u	-15.1813u	-7.5410u
Se 196.026	1.1163	-8.5734u	13.2316
Si 288.158	4625.53	4637.78	4629.16
Sn 189.925	-2.5849u	11.4376	2.0467
Sr 216.596	125.490	123.624	123.260
Ti 334.941	0.0405	0.0483	0.0733
Tl 190.794	0.5648	-0.0390u	-3.0785u
V 292.401	0.3082	0.6046	1.0258
Zn 206.200	331.905	335.395	326.497

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0968	ppb	0.1924	198.8	-33.1481
Al 308.215	12.3536	ppb	3.5775	29.0	193.274
As 188.980	-0.1072	ppb	3.6539	3409.9	1.2193
B 249.678	12.9640	ppb	0.6115	4.7	-10.5777
Ba 389.178	25.8452	ppb	0.4727	1.8	230.413
Be 313.042	-0.0667	ppb	0.0107	16.0	-211.354
Ca 370.602	35844	ppb	25.17	0.1	81742
Cd 226.502	-0.1354	ppb	0.2047	151.2	9.8856
Co 228.615	-0.3242	ppb	0.5210	160.7	-13.6631
Cr 267.716	-0.4379	ppb	0.2572	58.7	13.4753
Cu 324.754	714.117	ppb	4.7472	0.7	28376.6
Fe 271.441	5.4941	ppb	4.8683	88.6	32.1520
K 766.491	2535.64	ppb	0.4026	0.0	69375.2
Mg 279.078	7655.48	ppb	10.5671	0.1	11059.4
Mn 257.610	3.2563	ppb	0.0289	0.9	415.124
Mo 202.032	-0.4546	ppb	1.1770	258.9	3.2024
Na 330.237	14954.7	ppb	243.725	1.6	451.144
Ni 231.604	4.0737	ppb	0.6302	15.5	3.3948
Pb 220.353	0.3144	ppb	1.2888	409.9	6.8619
Sb 206.834	-12.8684	ppb	4.6270	36.0	5.8574
Se 196.026	1.9248	ppb	10.9250	567.6	2.3930
Si 288.158	4630.82	ppb	6.2927	0.1	22506.7

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	3.6331	ppb	7.1446	196.7	0.9182
Sr 216.596	124.124	ppb	1.1963	1.0	534.139
Ti 334.941	0.0540	ppb	0.0172	31.8	-2.0555
Tl 190.794	-0.8509	ppb	1.9526	229.5	-10.6243
V 292.401	0.6462	ppb	0.3606	55.8	6.9024
Zn 206.200	331.266	ppb	4.4835	1.4	118.952

Cont Calib Verif (CCV) **12/19/2018, 2:41:54 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	514.847	508.138	513.574
Al 308.215	10300.8	10315.6	10306.3
As 188.980	540.223	541.285	548.415
B 249.678	538.082	539.055	540.390
Ba 389.178	477.600	477.791	478.600
Be 313.042	557.926	558.300	558.027
Ca 370.602	10229	10245	10234
Cd 226.502	530.954	531.105	529.964
Co 228.615	522.845	524.373	525.263
Cr 267.716	519.985	519.023	520.471
Cu 324.754	519.421	518.152	519.123
Fe 271.441	10312.2	10306.0	10284.2
K 766.491	10234.1	10252.0	10240.0
Mg 279.078	10709.2	10742.9	10724.8
Mn 257.610	512.313	513.241	512.776
Mo 202.032	511.655	511.209	511.367
Na 330.237	11036.6	10791.5	11024.2
Ni 231.604	521.360	522.621	520.307
Pb 220.353	503.268	495.219	510.446
Sb 206.834	507.651	523.092	504.501
Se 196.026	526.016	519.653	543.326
Si 288.158	5510.63	5508.97	5499.66
Sn 189.925	503.830	501.735	514.423
Sr 216.596	512.570	516.244	517.593
Ti 334.941	510.903	511.078	510.556
Tl 190.794	491.931	498.924	491.836
V 292.401	504.836	503.994	503.602
Zn 206.200	1055.19	1063.05	1051.38

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	512.186	ppb	3.5631	0.7	18951.9	102.43726
Al 308.215	10307.5	ppb	7.4816	0.1	26024.5	103.07530
As 188.980	543.308	ppb	4.4546	0.8	144.488	108.66152
B 249.678	539.176	ppb	1.1585	0.2	3521.17	107.83516
Ba 389.178	477.997	ppb	0.5309	0.1	5256.85	95.59948
Be 313.042	558.084	ppb	0.1935	0.0	463464	111.61684Q
Ca 370.602	10236	ppb	8.137	0.1	23375	102.36269
Cd 226.502	530.674	ppb	0.6197	0.1	8683.21	106.13483
Co 228.615	524.160	ppb	1.2226	0.2	2624.84	104.83205
Cr 267.716	519.826	ppb	0.7370	0.1	12092.7	103.96523
Cu 324.754	518.899	ppb	0.6639	0.1	20684.1	103.77971
Fe 271.441	10300.8	ppb	14.7194	0.1	8543.59	102.95653
K 766.491	10242.0	ppb	9.1158	0.1	279407	102.42023

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10725.6	ppb	16.8520	0.2	15474.5	107.25613
Mn 257.610	512.777	ppb	0.4636	0.1	56156.8	102.55532
Mo 202.032	511.410	ppb	0.2263	0.0	1156.12	102.28205
Na 330.237	10950.8	ppb	138.051	1.3	342.417	109.50761
Ni 231.604	521.429	ppb	1.1586	0.2	721.840	104.28589
Pb 220.353	502.978	ppb	7.6175	1.5	301.102	100.59552
Sb 206.834	511.748	ppb	9.9497	1.9	237.965	102.34959
Se 196.026	529.665	ppb	12.2514	2.3	102.949	105.93300
Si 288.158	5506.42	ppb	5.9122	0.1	26847.5	110.12845Q
Sn 189.925	506.663	ppb	6.8018	1.3	163.937	101.33257
Sr 216.596	515.469	ppb	2.5997	0.5	2178.46	103.09379
Ti 334.941	510.846	ppb	0.2654	0.1	61178.5	102.16914
Tl 190.794	494.230	ppb	4.0649	0.8	195.969	98.84608
V 292.401	504.144	ppb	0.6306	0.1	7276.21	100.82877
Zn 206.200	1056.54	ppb	5.9524	0.6	379.792	105.65403

Cont Calib Blank (CCB) **12/19/2018, 2:45:48 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0664u	0.5390	-0.4391u
Al 308.215	3.1192	5.3581	0.3772
As 188.980	-0.0810u	-4.3187u	0.8994
B 249.678	4.2489	5.3064	4.3406
Ba 389.178	1.3546	1.3426	1.1751
Be 313.042	0.0171	0.0192	0.0030
Ca 370.602	-5.446u	-2.805u	-3.892u
Cd 226.502	-0.1133u	-0.2229u	-0.3214u
Co 228.615	-0.1060u	0.3667	0.6535
Cr 267.716	0.0869	-0.2336u	-0.2619u
Cu 324.754	1.7630	1.3645	1.2454
Fe 271.441	-2.5966u	-8.1577u	4.1983
K 766.491	3.6154	3.3869	3.8587
Mg 279.078	1.0829	-2.4061u	-1.3191u
Mn 257.610	0.1600	0.1437	0.0398
Mo 202.032	0.4741	-0.8251u	-0.8804u
Na 330.237	355.865	254.923	58.0540
Ni 231.604	2.3213	0.8029	0.9233
Pb 220.353	2.1749	-6.9396u	-3.6218u
Sb 206.834	-6.7808u	-7.7454u	-13.5228u
Se 196.026	4.4915	-9.8238u	6.8473
Si 288.158	23.4671	20.4189	20.2665
Sn 189.925	-2.4182u	-4.8389u	3.6813
Sr 216.596	-0.0068u	0.1259	-0.7245u
Ti 334.941	0.4674	0.1795	0.1984
Tl 190.794	1.2258	-3.7185u	-5.4726u
V 292.401	-0.0806u	0.0695	0.1490
Zn 206.200	-0.4289u	-1.5259u	0.7475

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0112	ppb	0.4937	4423.5	-28.5953	0.01116
Al 308.215	2.9515	ppb	2.4947	84.5	169.687	2.95152
As 188.980	-1.1668	ppb	2.7733	237.7	0.9396	-1.16677
B 249.678	4.6320	ppb	0.5858	12.6	-66.6607	4.63197

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	1.2908	ppb	0.1003	7.8	-49.7376	1.29077
Be 313.042	0.0131	ppb	0.0088	67.1	-149.985	0.01311
Ca 370.602	-4.048	ppb	1.327	32.8	28.04	-4.04789
Cd 226.502	-0.2192	ppb	0.1041	47.5	8.5033	-0.21918
Co 228.615	0.3048	ppb	0.3836	125.9	-10.5016	0.30475
Cr 267.716	-0.1362	ppb	0.1938	142.3	20.3605	-0.13619
Cu 324.754	1.4577	ppb	0.2711	18.6	259.768	1.45766
Fe 271.441	-2.1854	ppb	6.1883	283.2	25.8486	-2.18535
K 766.491	3.6203	ppb	0.2360	6.5	366.893	3.62032
Mg 279.078	-0.8808	ppb	1.7853	202.7	29.8211	-0.88076
Mn 257.610	0.1145	ppb	0.0652	57.0	33.8644	0.11449
Mo 202.032	-0.4105	ppb	0.7665	186.7	3.3020	-0.41048
Na 330.237	222.947	ppb	151.458	67.9	63.6324	222.94716
Ni 231.604	1.3492	ppb	0.8440	62.6	-0.3924	1.34917
Pb 220.353	-2.7955	ppb	4.6131	165.0	5.0385	-2.79552
Sb 206.834	-9.3497	ppb	3.6461	39.0	7.4338	-9.34966
Se 196.026	0.5050	ppb	9.0222	1786.5	2.1222	0.50504
Si 288.158	21.3842	ppb	1.8055	8.4	385.896	21.38418
Sn 189.925	-1.1919	ppb	4.3905	368.4	-0.6473	-1.19190
Sr 216.596	-0.2018	ppb	0.4575	226.7	8.8892	-0.20181
Ti 334.941	0.2818	ppb	0.1610	57.1	-1.7654	0.28177
Tl 190.794	-2.6551	ppb	3.4735	130.8	-11.3767	-2.65510
V 292.401	0.0460	ppb	0.1166	253.5	-1.8457	0.04600
Zn 206.200	-0.4025	ppb	1.1369	282.5	-0.4086	-0.40247

680-161833-A-246-B (Samp) **12/19/2018, 2:51:12 PM** **Rack 1, Tube 51**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1321u	-0.8089u	-0.3321u
Al 308.215	12.3891	12.7103	7.7982
As 188.980	0.7439	4.8100	-1.4163u
B 249.678	15.4132	14.5818	14.2384
Ba 389.178	27.7184	27.1657	28.8144
Be 313.042	-0.0254u	-0.0588u	-0.0498u
Ca 370.602	36718	36714	36783
Cd 226.502	-0.1810u	-0.0086u	0.1555
Co 228.615	-0.2352u	-0.7369u	-0.0933u
Cr 267.716	0.0026	-0.1753u	-0.1786u
Cu 324.754	452.830	458.455	453.923
Fe 271.441	9.9843	14.6064	4.0896
K 766.491	2637.41	2641.47	2645.88
Mg 279.078	7499.02	7493.35	7505.19
Mn 257.610	2.2950	2.4105	2.4406
Mo 202.032	0.4668	-0.4545u	-0.3988u
Na 330.237	14048.2	14160.4	14455.4
Ni 231.604	8.7963	7.7543	7.2109
Pb 220.353	2.0215	-3.7301u	-1.4980u
Sb 206.834	-4.9393u	-13.5826u	-8.4347u
Se 196.026	-2.8418u	11.9320	-0.6121u
Si 288.158	4526.79	4533.28	4536.00
Sn 189.925	-3.5732u	3.4131	-0.1384u
Sr 216.596	121.048	122.570	122.234
Ti 334.941	0.0248	0.0556	0.0399

Label	Replicates Concentration		
Tl 190.794	1.8496	-2.5335u	-8.0325u
V 292.401	0.5354	0.4080	0.2147
Zn 206.200	229.292	224.493	231.365

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4244	ppb	0.3477	81.9	-45.2846
Al 308.215	10.9658	ppb	2.7480	25.1	189.791
As 188.980	1.3792	ppb	3.1614	229.2	1.6115
B 249.678	14.7445	ppb	0.6040	4.1	1.4085
Ba 389.178	27.8995	ppb	0.8391	3.0	253.058
Be 313.042	-0.0447	ppb	0.0173	38.7	-192.935
Ca 370.602	36738	ppb	38.59	0.1	83779
Cd 226.502	-0.0114	ppb	0.1682	1478.8	11.9100
Co 228.615	-0.3551	ppb	0.3381	95.2	-13.8205
Cr 267.716	-0.1171	ppb	0.1037	88.5	20.9180
Cu 324.754	455.069	ppb	2.9825	0.7	18156.3
Fe 271.441	9.5601	ppb	5.2712	55.1	35.4879
K 766.491	2641.58	ppb	4.2382	0.2	72262.6
Mg 279.078	7499.19	ppb	5.9180	0.1	10834.3
Mn 257.610	2.3820	ppb	0.0769	3.2	318.775
Mo 202.032	-0.1289	ppb	0.5166	400.9	3.9363
Na 330.237	14221.4	ppb	210.325	1.5	432.055
Ni 231.604	7.9205	ppb	0.8057	10.2	8.7413
Pb 220.353	-1.0689	ppb	2.8997	271.3	6.0509
Sb 206.834	-8.9855	ppb	4.3479	48.4	7.5956
Se 196.026	2.8260	ppb	7.9644	281.8	2.5646
Si 288.158	4532.02	ppb	4.7325	0.1	22032.3
Sn 189.925	-0.0995	ppb	3.4933	3510.2	-0.2915
Sr 216.596	121.951	ppb	0.7998	0.7	524.916
Ti 334.941	0.0401	ppb	0.0154	38.3	-4.2689
Tl 190.794	-2.9055	ppb	4.9516	170.4	-11.4808
V 292.401	0.3860	ppb	0.1615	41.8	3.0974
Zn 206.200	228.383	ppb	3.5247	1.5	81.9270

680-161833-A-270-B (Samp) **12/19/2018, 2:55:05 PM** **Rack 1, Tube 52**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0697u	0.4196	0.7203
Al 308.215	8.0094	10.8189	6.1442
As 188.980	6.4226	-0.8030u	0.4376
B 249.678	13.3900	13.2817	13.1262
Ba 389.178	24.2820	25.8969	24.9989
Be 313.042	-0.0572u	-0.0589u	-0.0596u
Ca 370.602	35714	35692	35724
Cd 226.502	-0.2277u	-0.6217u	-0.0947u
Co 228.615	0.1488	0.2397	-0.3983u
Cr 267.716	-0.1051u	-0.2398u	-0.0365u
Cu 324.754	592.774	595.444	589.563
Fe 271.441	19.1151	9.2891	3.4694
K 766.491	2536.38	2533.47	2540.20
Mg 279.078	7673.78	7682.90	7679.05
Mn 257.610	1.7194	1.7033	1.7671
Mo 202.032	-0.1724u	0.3117	-1.5364u

Label	Replicates Concentration		
Na 330.237	14892.9	15161.2	14631.9
Ni 231.604	10.8816	13.0663	11.2513
Pb 220.353	-1.3311u	3.1345	-3.5914u
Sb 206.834	1.0674	-9.3275u	-5.5292u
Se 196.026	3.6549	21.3753	-7.7034u
Si 288.158	4609.19	4607.34	4618.51
Sn 189.925	-1.4217u	-3.3427u	2.5760
Sr 216.596	122.502	123.225	121.986
Ti 334.941	0.0443	-0.0701	0.1253
Tl 190.794	6.5343	-3.6338u	-0.5062u
V 292.401	0.3264	0.5136	0.4530
Zn 206.200	335.042	329.327	335.362

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3567	ppb	0.3987	111.8	-16.3331
Al 308.215	8.3242	ppb	2.3532	28.3	183.163
As 188.980	2.0190	ppb	3.8637	191.4	1.7804
B 249.678	13.2659	ppb	0.1326	1.0	-8.5458
Ba 389.178	25.0593	ppb	0.8091	3.2	221.714
Be 313.042	-0.0585	ppb	0.0012	2.1	-204.616
Ca 370.602	35710	ppb	16.58	0.0	81436
Cd 226.502	-0.3147	ppb	0.2741	87.1	6.9590
Co 228.615	-0.0033	ppb	0.3451	10542.3	-12.0455
Cr 267.716	-0.1271	ppb	0.1035	81.4	20.6874
Cu 324.754	592.594	ppb	2.9449	0.5	23582.1
Fe 271.441	10.6246	ppb	7.9079	74.4	36.4020
K 766.491	2536.68	ppb	3.3764	0.1	69403.6
Mg 279.078	7678.57	ppb	4.5787	0.1	11092.7
Mn 257.610	1.7299	ppb	0.0332	1.9	248.359
Mo 202.032	-0.4657	ppb	0.9583	205.8	3.1774
Na 330.237	14895.3	ppb	264.701	1.8	449.578
Ni 231.604	11.7331	ppb	1.1694	10.0	14.0394
Pb 220.353	-0.5960	ppb	3.4227	574.3	6.3281
Sb 206.834	-4.5964	ppb	5.2599	114.4	9.5697
Se 196.026	5.7756	ppb	14.6549	253.7	3.1265
Si 288.158	4611.68	ppb	5.9879	0.1	22415.0
Sn 189.925	-0.7294	ppb	3.0195	414.0	-0.4956
Sr 216.596	122.571	ppb	0.6224	0.5	527.509
Ti 334.941	0.0331	ppb	0.0981	296.0	-4.4719
Tl 190.794	0.7981	ppb	5.2080	652.6	-9.9376
V 292.401	0.4310	ppb	0.0955	22.2	3.7885
Zn 206.200	333.244	ppb	3.3957	1.0	119.664

680-161833-A-180-B (Samp) **12/19/2018, 2:58:57 PM** **Rack 1, Tube 53**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0085u	0.2614	0.1149
Al 308.215	5.6133	9.3594	6.1611
As 188.980	-1.8560u	-2.4662u	-0.0940u
B 249.678	13.0206	13.8390	13.0991
Ba 389.178	22.9131	22.7072	24.3810
Be 313.042	-0.0613u	-0.0744u	-0.0790u
Ca 370.602	36005	36036	36057

Label	Replicates Concentration		
Cd 226.502	-0.0811u	-0.4351u	-0.0209u
Co 228.615	-0.9560u	0.6463	0.4348
Cr 267.716	-0.5706u	-0.5245u	-0.0413u
Cu 324.754	934.271	937.663	943.595
Fe 271.441	4.6157	-1.0664u	-9.9515u
K 766.491	2582.16	2587.93	2592.61
Mg 279.078	7500.83	7512.69	7523.78
Mn 257.610	0.4299	0.5050	0.5070
Mo 202.032	-0.8064u	1.1783	-0.4486u
Na 330.237	14521.1	14466.7	14757.4
Ni 231.604	1.9342	4.1342	5.0188
Pb 220.353	0.2362	-4.7084u	-7.2295u
Sb 206.834	8.2366	-8.3805u	-6.1379u
Se 196.026	-6.7065u	-3.0098u	-11.3237u
Si 288.158	4626.66	4638.72	4637.09
Sn 189.925	1.1519	3.1613	3.5006
Sr 216.596	120.535	120.201	119.783
Ti 334.941	-0.0839	-0.2137	-0.1663
Tl 190.794	-2.6810u	-4.5356u	-2.5972u
V 292.401	1.2469	0.4433	0.1182
Zn 206.200	183.932	192.121	195.519

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1226	ppb	0.1351	110.2	-25.0032
Al 308.215	7.0446	ppb	2.0233	28.7	179.977
As 188.980	-1.4720	ppb	1.2318	83.7	0.8590
B 249.678	13.3196	ppb	0.4515	3.4	-8.1755
Ba 389.178	23.3338	ppb	0.9127	3.9	202.395
Be 313.042	-0.0716	ppb	0.0092	12.8	-215.439
Ca 370.602	36033	ppb	25.79	0.1	82171
Cd 226.502	-0.1790	ppb	0.2238	125.0	9.1666
Co 228.615	0.0417	ppb	0.8705	2087.2	-11.8337
Cr 267.716	-0.3788	ppb	0.2932	77.4	14.8406
Cu 324.754	938.510	ppb	4.7193	0.5	37229.7
Fe 271.441	-2.1341	ppb	7.3420	344.0	25.8845
K 766.491	2587.57	ppb	5.2325	0.2	70790.4
Mg 279.078	7512.43	ppb	11.4805	0.2	10853.4
Mn 257.610	0.4807	ppb	0.0440	9.1	110.936
Mo 202.032	-0.0256	ppb	1.0578	4133.6	4.1690
Na 330.237	14581.7	ppb	154.555	1.1	441.630
Ni 231.604	3.6957	ppb	1.5884	43.0	2.8691
Pb 220.353	-3.9006	ppb	3.7979	97.4	4.3906
Sb 206.834	-2.0939	ppb	9.0165	430.6	10.6798
Se 196.026	-7.0133	ppb	4.1655	59.4	0.6900
Si 288.158	4634.16	ppb	6.5468	0.1	22522.8
Sn 189.925	2.6046	ppb	1.2695	48.7	0.5849
Sr 216.596	120.173	ppb	0.3768	0.3	517.429
Ti 334.941	-0.1546	ppb	0.0657	42.5	-27.5569
Tl 190.794	-3.2713	ppb	1.0957	33.5	-11.6332
V 292.401	0.6028	ppb	0.5811	96.4	6.2019
Zn 206.200	190.524	ppb	5.9564	3.1	68.3022

680-161833-A-229-B (Samp) **12/19/2018, 3:02:50 PM** **Rack 1, Tube 54**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1513	-0.4623u	0.5416
Al 308.215	11.6264	12.6518	14.6201
As 188.980	8.6539	4.0676	2.8268
B 249.678	13.2260	14.4038	13.9593
Ba 389.178	24.0777	22.2162	21.3327
Be 313.042	-0.0654u	-0.0541u	-0.0762u
Ca 370.602	34878	34979	35124
Cd 226.502	-0.0813u	0.1601	-0.7602u
Co 228.615	-0.3368u	-0.6696u	-0.7856u
Cr 267.716	-0.1779u	-0.2643u	-0.5337u
Cu 324.754	421.622	418.455	421.689
Fe 271.441	22.9421	5.6224	16.1839
K 766.491	3003.07	3010.27	3032.17
Mg 279.078	6630.26	6652.98	6677.00
Mn 257.610	3.6256	3.4429	3.5975
Mo 202.032	-0.5029u	-1.2426u	-0.6663u
Na 330.237	12701.3	12541.8	13151.5
Ni 231.604	3.1485	4.0072	3.3615
Pb 220.353	-5.0761u	-1.9868u	1.3380
Sb 206.834	-9.4116u	-6.6988u	-5.4624u
Se 196.026	-3.3769u	-13.8970u	13.3102
Si 288.158	4282.68	4295.52	4285.59
Sn 189.925	-6.0596u	-2.9894u	0.2910
Sr 216.596	121.322	120.698	122.366
Ti 334.941	-0.0508	-0.1766	-0.0177
Tl 190.794	-0.8750u	1.2958	-0.8046u
V 292.401	0.7197	0.6293	0.2661
Zn 206.200	411.401	405.753	405.801

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0769	ppb	0.5061	658.3	-26.6909
Al 308.215	12.9661	ppb	1.5214	11.7	194.812
As 188.980	5.1827	ppb	3.0694	59.2	2.6152
B 249.678	13.8630	ppb	0.5947	4.3	-4.5301
Ba 389.178	22.5422	ppb	1.4012	6.2	192.763
Be 313.042	-0.0652	ppb	0.0111	17.0	-210.234
Ca 370.602	34994	ppb	123.7	0.4	79803
Cd 226.502	-0.2271	ppb	0.4771	210.1	8.3908
Co 228.615	-0.5973	ppb	0.2330	39.0	-15.0402
Cr 267.716	-0.3253	ppb	0.1855	57.0	16.0747
Cu 324.754	420.589	ppb	1.8480	0.4	16795.9
Fe 271.441	14.9161	ppb	8.7292	58.5	39.8964
K 766.491	3015.17	ppb	15.1542	0.5	82444.5
Mg 279.078	6653.42	ppb	23.3694	0.4	9615.88
Mn 257.610	3.5553	ppb	0.0984	2.8	442.923
Mo 202.032	-0.8040	ppb	0.3886	48.3	2.4152
Na 330.237	12798.2	ppb	316.151	2.5	394.152
Ni 231.604	3.5057	ppb	0.4472	12.8	2.6058
Pb 220.353	-1.9083	ppb	3.2078	168.1	5.5590
Sb 206.834	-7.1910	ppb	2.0201	28.1	8.4000
Se 196.026	-1.3212	ppb	13.7196	1038.4	1.7746
Si 288.158	4287.93	ppb	6.7285	0.2	20860.8

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.9193	ppb	3.1759	108.8	-1.2055
Sr 216.596	121.462	ppb	0.8429	0.7	522.886
Ti 334.941	-0.0817	ppb	0.0839	102.7	-21.8196
Tl 190.794	-0.1280	ppb	1.2335	964.0	-10.3237
V 292.401	0.5384	ppb	0.2401	44.6	5.3164
Zn 206.200	407.652	ppb	3.2469	0.8	146.442

680-161833-A-237-B (Samp) **12/19/2018, 3:06:43 PM** **Rack 1, Tube 55**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3303u	0.1388	-0.1015u
Al 308.215	12.6142	16.6287	10.1773
As 188.980	-0.8555u	-2.2384u	1.6914
B 249.678	13.7204	13.1997	13.0490
Ba 389.178	22.5421	21.8622	24.0135
Be 313.042	-0.0784u	-0.0643u	-0.0602u
Ca 370.602	33674	33656	33808
Cd 226.502	-0.2784u	0.0069	-0.1389u
Co 228.615	1.1107	-0.3066u	0.5313
Cr 267.716	0.1926	-0.0908u	0.0167
Cu 324.754	310.101	308.246	309.275
Fe 271.441	22.8234	30.7758	30.4152
K 766.491	3016.05	3032.58	2948.57
Mg 279.078	6562.59	6564.82	6577.88
Mn 257.610	2.8496	2.8489	2.9941
Mo 202.032	0.2054	-0.8174u	0.3411
Na 330.237	12065.9	12342.2	12374.5
Ni 231.604	2.2415	2.4827	5.6546
Pb 220.353	0.8972	3.0859	0.4086
Sb 206.834	-7.5198u	-6.8396u	-8.1451u
Se 196.026	15.4278	8.7353	-4.4442u
Si 288.158	4310.46	4296.65	4303.11
Sn 189.925	1.6514	0.5257	-3.0916u
Sr 216.596	113.585	111.763	113.138
Ti 334.941	-0.0165	-0.0464	0.0210
Tl 190.794	-0.8535u	-1.4321u	5.7347
V 292.401	0.5992	-0.0546u	0.7477
Zn 206.200	791.862	773.343	783.083

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0977	ppb	0.2346	240.2	-33.1353
Al 308.215	13.1401	ppb	3.2577	24.8	195.247
As 188.980	-0.4675	ppb	1.9934	426.4	1.1241
B 249.678	13.3230	ppb	0.3523	2.6	-8.1806
Ba 389.178	22.8059	ppb	1.0997	4.8	195.602
Be 313.042	-0.0676	ppb	0.0096	14.1	-212.432
Ca 370.602	33713	ppb	83.11	0.2	76884
Cd 226.502	-0.1368	ppb	0.1426	104.3	9.8778
Co 228.615	0.4451	ppb	0.7126	160.1	-9.8003
Cr 267.716	0.0395	ppb	0.1431	362.4	24.5369
Cu 324.754	309.207	ppb	0.9295	0.3	12401.6
Fe 271.441	28.0048	ppb	4.4908	16.0	50.7153
K 766.491	2999.07	ppb	44.5035	1.5	82005.5

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6568.43	ppb	8.2618	0.1	9493.46
Mn 257.610	2.8975	ppb	0.0836	2.9	370.554
Mo 202.032	-0.0903	ppb	0.6333	701.2	4.0228
Na 330.237	12260.9	ppb	169.649	1.4	379.169
Ni 231.604	3.4596	ppb	1.9047	55.1	2.5411
Pb 220.353	1.4639	ppb	1.4258	97.4	7.5355
Sb 206.834	-7.5015	ppb	0.6529	8.7	8.2587
Se 196.026	6.5729	ppb	10.1109	153.8	3.2784
Si 288.158	4303.41	ppb	6.9134	0.2	20935.7
Sn 189.925	-0.3048	ppb	2.4782	813.0	-0.3583
Sr 216.596	112.829	ppb	0.9496	0.8	486.414
Ti 334.941	-0.0139	ppb	0.0338	242.1	-14.0318
Tl 190.794	1.1497	ppb	3.9812	346.3	-9.7919
V 292.401	0.4308	ppb	0.4269	99.1	3.7152
Zn 206.200	782.763	ppb	9.2633	1.2	281.437

680-161833-A-251-B (Samp) **12/19/2018, 3:10:37 PM** **Rack 1, Tube 56**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1594u	0.3804	-0.3129u
Al 308.215	12.9610	10.8133	7.6058
As 188.980	4.4645	-2.5159u	-0.7532u
B 249.678	15.8679	15.9231	15.3895
Ba 389.178	23.6540	21.5085	24.2592
Be 313.042	-0.0725u	-0.0763u	-0.0651u
Ca 370.602	34614	34516	34591
Cd 226.502	-0.0770u	-0.3138u	-0.1959u
Co 228.615	0.4280	0.1400	0.2904
Cr 267.716	-0.4235u	-0.0067u	-0.2820u
Cu 324.754	439.323	433.380	430.874
Fe 271.441	20.3625	19.1332	25.3527
K 766.491	2986.87	2988.84	3065.96
Mg 279.078	6989.32	6975.89	6994.36
Mn 257.610	1.2966	1.4276	1.4110
Mo 202.032	-1.9110u	-0.8287u	-1.6814u
Na 330.237	12641.3	12987.2	12895.0
Ni 231.604	0.5852	3.5185	5.4845
Pb 220.353	-2.5524u	-2.6812u	-5.0846u
Sb 206.834	-15.8334u	-5.8509u	-11.5354u
Se 196.026	10.6848	-2.7042u	3.1274
Si 288.158	4315.61	4305.90	4304.33
Sn 189.925	5.0349	-3.5475u	-2.5222u
Sr 216.596	116.009	116.212	115.842
Ti 334.941	-0.1013	-0.1756	-0.0343
Tl 190.794	1.7353	3.1609	1.2377
V 292.401	0.6392	0.3476	0.5461
Zn 206.200	199.252	191.742	194.227

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0307	ppb	0.3641	1187.7	-30.6664
Al 308.215	10.4600	ppb	2.6951	25.8	188.511
As 188.980	0.3984	ppb	3.6299	911.1	1.3529
B 249.678	15.7268	ppb	0.2935	1.9	8.0058

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	23.1405	ppb	1.4454	6.2	199.731
Be 313.042	-0.0713	ppb	0.0057	7.9	-215.268
Ca 370.602	34574	ppb	51.21	0.1	78845
Cd 226.502	-0.1956	ppb	0.1184	60.5	8.9158
Co 228.615	0.2861	ppb	0.1441	50.3	-10.5844
Cr 267.716	-0.2374	ppb	0.2119	89.3	18.1130
Cu 324.754	434.525	ppb	4.3398	1.0	17345.8
Fe 271.441	21.6161	ppb	3.2938	15.2	45.4552
K 766.491	3013.89	ppb	45.1075	1.5	82409.5
Mg 279.078	6986.52	ppb	9.5510	0.1	10095.8
Mn 257.610	1.3784	ppb	0.0713	5.2	206.530
Mo 202.032	-1.4737	ppb	0.5703	38.7	0.9061
Na 330.237	12841.1	ppb	179.109	1.4	395.755
Ni 231.604	3.1961	ppb	2.4655	77.1	2.1745
Pb 220.353	-3.4394	ppb	1.4262	41.5	4.6615
Sb 206.834	-11.0732	ppb	5.0073	45.2	6.6711
Se 196.026	3.7027	ppb	6.7130	181.3	2.7315
Si 288.158	4308.62	ppb	6.1090	0.1	20960.5
Sn 189.925	-0.3449	ppb	4.6872	1358.9	-0.3712
Sr 216.596	116.021	ppb	0.1852	0.2	499.923
Ti 334.941	-0.1037	ppb	0.0706	68.1	-23.2845
Tl 190.794	2.0446	ppb	0.9982	48.8	-9.4188
V 292.401	0.5110	ppb	0.1489	29.2	5.0057
Zn 206.200	195.074	ppb	3.8258	2.0	69.9395

680-161833-A-250-B (Samp) **12/19/2018, 3:14:31 PM** **Rack 1, Tube 57**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1701u	0.0015u	-0.4379u
Al 308.215	5.7340	3.7660	1.9882
As 188.980	-3.5895u	-1.0505u	-2.1877u
B 249.678	44.5614	45.0650	44.6787
Ba 389.178	24.0493	23.0271	23.5385
Be 313.042	-0.0706u	-0.0633u	-0.0686u
Ca 370.602	31254	31262	31304
Cd 226.502	-0.0745u	-0.4300u	-0.1151u
Co 228.615	0.3420	0.0289	0.0237
Cr 267.716	-0.2263u	-0.1975u	-0.1501u
Cu 324.754	626.422	631.116	631.880
Fe 271.441	5.0237	-4.1496u	16.5715
K 766.491	3689.92	3698.17	3709.36
Mg 279.078	6664.58	6669.85	6676.49
Mn 257.610	3.7846	3.7540	3.7598
Mo 202.032	0.3499	0.9779	-0.6297u
Na 330.237	12888.3	12955.3	12848.7
Ni 231.604	4.9088	3.3669	4.1969
Pb 220.353	5.7742	-0.0749u	5.1978
Sb 206.834	-7.4063u	-10.4864u	-9.7579u
Se 196.026	7.2995	-5.2102u	2.1586
Si 288.158	4054.84	4056.59	4056.46
Sn 189.925	0.2999	3.7938	-0.7560u
Sr 216.596	112.346	112.130	114.037
Ti 334.941	-0.1835	-0.1405	-0.0737

Label	Replicates Concentration		
Tl 190.794	-2.2929u	5.5538	-3.9369u
V 292.401	-0.2178u	0.5610	0.6058
Zn 206.200	838.628	835.094	837.571

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2022	ppb	0.2215	109.6	-36.9965
Al 308.215	3.8294	ppb	1.8737	48.9	171.906
As 188.980	-2.2759	ppb	1.2718	55.9	0.6469
B 249.678	44.7684	ppb	0.2635	0.6	203.518
Ba 389.178	23.5383	ppb	0.5111	2.2	203.829
Be 313.042	-0.0675	ppb	0.0038	5.6	-212.745
Ca 370.602	31273	ppb	26.81	0.1	71323
Cd 226.502	-0.2066	ppb	0.1946	94.2	8.7197
Co 228.615	0.1315	ppb	0.1823	138.6	-11.3802
Cr 267.716	-0.1913	ppb	0.0385	20.1	19.1810
Cu 324.754	629.806	ppb	2.9554	0.5	25050.3
Fe 271.441	5.8152	ppb	10.3832	178.6	32.4406
K 766.491	3699.15	ppb	9.7578	0.3	101086
Mg 279.078	6670.31	ppb	5.9692	0.1	9640.20
Mn 257.610	3.7661	ppb	0.0162	0.4	465.998
Mo 202.032	0.2327	ppb	0.8102	348.1	4.7509
Na 330.237	12897.5	ppb	53.8759	0.4	395.848
Ni 231.604	4.1575	ppb	0.7717	18.6	3.5110
Pb 220.353	3.6324	ppb	3.2235	88.7	8.8067
Sb 206.834	-9.2169	ppb	1.6098	17.5	7.4878
Se 196.026	1.4160	ppb	6.2878	444.1	2.2961
Si 288.158	4055.96	ppb	0.9765	0.0	19748.1
Sn 189.925	1.1126	ppb	2.3813	214.0	0.1011
Sr 216.596	112.837	ppb	1.0444	0.9	486.432
Ti 334.941	-0.1326	ppb	0.0553	41.7	-27.8709
Tl 190.794	-0.2253	ppb	5.0720	2250.9	-10.3634
V 292.401	0.3163	ppb	0.4631	146.4	2.0453
Zn 206.200	837.098	ppb	1.8140	0.2	300.991

680-161833-A-248-B (Samp) **12/19/2018, 3:18:25 PM** **Rack 1, Tube 58**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7458	-0.1421u	-0.2274u
Al 308.215	3.2409	4.3241	5.6583
As 188.980	0.6294	-3.9988u	-3.6072u
B 249.678	38.5997	38.0623	37.6430
Ba 389.178	22.9549	24.0178	23.9285
Be 313.042	-0.0753u	-0.0771u	-0.0719u
Ca 370.602	31917	31864	31929
Cd 226.502	0.2087	-0.4630u	0.0677
Co 228.615	0.2911	-0.1228u	-0.1698u
Cr 267.716	-0.1813u	-0.6905u	-0.4225u
Cu 324.754	783.289	781.830	785.044
Fe 271.441	3.7040	-1.0970u	-3.3558u
K 766.491	3942.22	3930.84	3941.87
Mg 279.078	6780.35	6767.82	6770.69
Mn 257.610	3.5112	3.5262	3.4769
Mo 202.032	0.3203	0.9430	-1.1094u

Label	Replicates Concentration		
Na 330.237	13003.7	12772.3	12821.0
Ni 231.604	6.9855	5.4175	7.3943
Pb 220.353	5.3737	0.4148	2.4792
Sb 206.834	-10.6505u	-3.6872u	-12.5899u
Se 196.026	17.2821	5.0272	-4.8976u
Si 288.158	4030.96	4017.96	4019.10
Sn 189.925	1.1543	-5.2098u	5.1118
Sr 216.596	115.893	114.727	115.366
Ti 334.941	-0.1702	-0.2594u	-0.1824
Tl 190.794	4.4000	1.4425	-2.6075u
V 292.401	0.4275	0.8828	0.8218
Zn 206.200	1164.35	1160.95	1176.30

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1254	ppb	0.5390	429.6	-24.8634
Al 308.215	4.4077	ppb	1.2109	27.5	173.363
As 188.980	-2.3256	ppb	2.5665	110.4	0.6338
B 249.678	38.1017	ppb	0.4795	1.3	158.646
Ba 389.178	23.6337	ppb	0.5896	2.5	204.990
Be 313.042	-0.0748	ppb	0.0027	3.6	-218.648
Ca 370.602	31903	ppb	34.98	0.1	72759
Cd 226.502	-0.0622	ppb	0.3542	569.5	11.0729
Co 228.615	-0.0005	ppb	0.2536	50091.1	-12.0426
Cr 267.716	-0.4314	ppb	0.2547	59.0	13.6035
Cu 324.754	783.388	ppb	1.6093	0.2	31109.6
Fe 271.441	-0.2496	ppb	3.6054	1444.5	27.4415
K 766.491	3938.31	ppb	6.4727	0.2	107604
Mg 279.078	6772.95	ppb	6.5624	0.1	9788.08
Mn 257.610	3.5048	ppb	0.0253	0.7	437.931
Mo 202.032	0.0513	ppb	1.0523	2051.5	4.3422
Na 330.237	12865.6	ppb	121.981	0.9	394.274
Ni 231.604	6.5991	ppb	1.0435	15.8	6.9046
Pb 220.353	2.7559	ppb	2.4910	90.4	8.2929
Sb 206.834	-8.9759	ppb	4.6816	52.2	7.5968
Se 196.026	5.8039	ppb	11.1102	191.4	3.1321
Si 288.158	4022.67	ppb	7.1977	0.2	19588.1
Sn 189.925	0.3521	ppb	5.2074	1479.1	-0.1453
Sr 216.596	115.329	ppb	0.5841	0.5	496.938
Ti 334.941	-0.2040	ppb	0.0484	23.7	-36.0499
Tl 190.794	1.0783	ppb	3.5179	326.2	-9.8202
V 292.401	0.7107	ppb	0.2471	34.8	7.7959
Zn 206.200	1167.20	ppb	8.0636	0.7	419.789

MB 680-552361/1-A (Samp) **12/19/2018, 3:22:19 PM** **Rack 1, Tube 59**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2555	0.0483	-0.6275u
Al 308.215	11.5439	12.3488	10.6489
As 188.980	4.6211	-0.1627u	-0.9882u
B 249.678	0.7307	0.7481	2.1672
Ba 389.178	-0.1039u	-0.0387u	1.6620
Be 313.042	-0.0592u	-0.0618u	-0.0763u
Ca 370.602	19.61	17.86	14.92

Label	Replicates Concentration		
Cd 226.502	-0.1897u	-0.1503u	-0.3104u
Co 228.615	-1.1136u	0.5526	-0.6091u
Cr 267.716	-0.0421u	0.4099	-0.0249u
Cu 324.754	2.0946	2.0364	2.0373
Fe 271.441	30.6496	34.2447	35.7261
K 766.491	11.9766	11.9092	12.5380
Mg 279.078	-3.6860u	-1.2915u	2.2003
Mn 257.610	0.2026	0.1549	0.1835
Mo 202.032	-0.9491u	0.4107	0.7930
Na 330.237	257.091	48.2824	-14.5498u
Ni 231.604	3.9196	0.9896	-1.0874u
Pb 220.353	-2.1109u	-6.3708u	5.7304
Sb 206.834	-7.1121u	-6.8651u	-4.3153u
Se 196.026	3.3145	7.9676	11.8901
Si 288.158	22.5415	25.0911	21.4627
Sn 189.925	9.9086	11.6392	18.3153
Sr 216.596	0.4757	-0.6530u	0.3035
Ti 334.941	0.2563	0.1975	0.2637
Tl 190.794	-3.4320u	-8.5829u	1.3255
V 292.401	0.0915	-0.0183u	-0.1526u
Zn 206.200	0.7318	-4.2575u	0.4364

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1079	ppb	0.4618	427.9	-33.0136
Al 308.215	11.5139	ppb	0.8504	7.4	191.161
As 188.980	1.1567	ppb	3.0285	261.8	1.5527
B 249.678	1.2153	ppb	0.8244	67.8	-89.6860
Ba 389.178	0.5065	ppb	1.0013	197.7	-58.4326
Be 313.042	-0.0658	ppb	0.0092	14.0	-215.562
Ca 370.602	17.46	ppb	2.372	13.6	77.02
Cd 226.502	-0.2168	ppb	0.0834	38.5	8.5636
Co 228.615	-0.3900	ppb	0.8544	219.1	-14.0060
Cr 267.716	0.1143	ppb	0.2562	224.1	26.1787
Cu 324.754	2.0561	ppb	0.0333	1.6	283.398
Fe 271.441	33.5401	ppb	2.6105	7.8	55.2390
K 766.491	12.1413	ppb	0.3452	2.8	599.125
Mg 279.078	-0.9257	ppb	2.9601	319.8	29.7533
Mn 257.610	0.1803	ppb	0.0240	13.3	41.0874
Mo 202.032	0.0848	ppb	0.9156	1079.1	4.4175
Na 330.237	96.9413	ppb	142.208	146.7	60.3046
Ni 231.604	1.2739	ppb	2.5156	197.5	-0.4963
Pb 220.353	-0.9171	ppb	6.1383	669.3	6.1396
Sb 206.834	-6.0975	ppb	1.5484	25.4	8.8872
Se 196.026	7.7241	ppb	4.2930	55.6	3.4974
Si 288.158	23.0317	ppb	1.8632	8.1	394.608
Sn 189.925	13.2877	ppb	4.4392	33.4	4.0452
Sr 216.596	0.0421	ppb	0.6081	1444.2	9.9123
Ti 334.941	0.2392	ppb	0.0363	15.2	-6.8633
Tl 190.794	-3.5631	ppb	4.9555	139.1	-11.7568
V 292.401	-0.0265	ppb	0.1223	462.1	-2.9350
Zn 206.200	-1.0298	ppb	2.7992	271.8	-0.6343

LCS 680-552361/2-A (Samp) **12/19/2018, 3:26:14 PM** **Rack 1, Tube 60**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	44.2575	44.5020	43.6850
Al 308.215	4828.11	4830.23	4818.75
As 188.980	105.550	97.8147	101.560
B 249.678	197.806	198.883	199.558
Ba 389.178	89.2036	90.6463	89.2009
Be 313.042	52.5380	52.5145	52.5598
Ca 370.602	4793	4784	4801
Cd 226.502	50.5191	50.7316	50.3693
Co 228.615	49.1208	50.0858	48.8261
Cr 267.716	99.3218	99.5600	99.5949
Cu 324.754	99.5458	99.6179	99.5903
Fe 271.441	4892.81	4880.81	4903.61
K 766.491	7627.34	7625.33	7627.16
Mg 279.078	5027.43	5024.56	5028.07
Mn 257.610	486.155	486.005	485.918
Mo 202.032	95.3440	97.5525	95.8037
Na 330.237	5350.72	5283.57	5227.21
Ni 231.604	99.2269	98.8715	96.7983
Pb 220.353	470.175	474.728	471.828
Sb 206.834	41.3916	51.2447	43.0176
Se 196.026	104.266	93.0069	110.005
Si 288.158	17.3139	17.6849	14.3787
Sn 189.925	102.292	106.892	109.250
Sr 216.596	98.0475	96.2952	96.6345
Ti 334.941	96.4200	96.3593	96.3604
Tl 190.794	35.7662	33.9031	44.9418
V 292.401	94.8625	95.0042	94.7140
Zn 206.200	100.156	104.621	108.363

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	44.1482	ppb	0.4193	0.9	1606.96
Al 308.215	4825.70	ppb	6.1048	0.1	12263.8
As 188.980	101.641	ppb	3.8680	3.8	28.0505
B 249.678	198.749	ppb	0.8838	0.4	1235.10
Ba 389.178	89.6836	ppb	0.8337	0.9	938.213
Be 313.042	52.5374	ppb	0.0227	0.0	43482.4
Ca 370.602	4793	ppb	8.585	0.2	10964
Cd 226.502	50.5400	ppb	0.1821	0.4	841.134
Co 228.615	49.3443	ppb	0.6589	1.3	236.250
Cr 267.716	99.4922	ppb	0.1486	0.1	2334.71
Cu 324.754	99.5847	ppb	0.0364	0.0	4133.72
Fe 271.441	4892.41	ppb	11.4062	0.2	4060.60
K 766.491	7626.61	ppb	1.1140	0.0	208126
Mg 279.078	5026.69	ppb	1.8680	0.0	7266.09
Mn 257.610	486.026	ppb	0.1198	0.0	53190.4
Mo 202.032	96.2334	ppb	1.1653	1.2	220.935
Na 330.237	5287.17	ppb	61.8356	1.2	196.286
Ni 231.604	98.2989	ppb	1.3116	1.3	134.295
Pb 220.353	472.244	ppb	2.3048	0.5	283.452
Sb 206.834	45.2179	ppb	5.2823	11.7	31.3560
Se 196.026	102.426	ppb	8.6470	8.4	21.5703
Si 288.158	16.4592	ppb	1.8113	11.0	389.431

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	106.145	ppb	3.5384	3.3	34.1384
Sr 216.596	96.9924	ppb	0.9293	1.0	418.549
Ti 334.941	96.3799	ppb	0.0347	0.0	11524.3
Tl 190.794	38.2037	ppb	5.9093	15.5	5.7013
V 292.401	94.8602	ppb	0.1452	0.2	1367.62
Zn 206.200	104.380	ppb	4.1089	3.9	37.2718

Cont Calib Verif (CCV) **12/19/2018, 3:30:10 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	510.209	506.198	513.193
Al 308.215	10317.0	10317.1	10323.1
As 188.980	525.654	536.587	541.487
B 249.678	546.232	543.756	545.176
Ba 389.178	475.017	476.415	474.702
Be 313.042	561.826	560.666	560.204
Ca 370.602	10250	10220	10243
Cd 226.502	533.111	532.478	532.861
Co 228.615	526.701	525.960	524.514
Cr 267.716	519.857	519.115	519.178
Cu 324.754	518.815	517.758	523.005
Fe 271.441	10313.4	10312.3	10316.7
K 766.491	10285.8	10260.8	10261.5
Mg 279.078	10811.6	10790.1	10798.0
Mn 257.610	513.196	512.586	512.707
Mo 202.032	514.303	511.477	510.250
Na 330.237	11304.1	11022.6	10561.4
Ni 231.604	521.040	524.134	524.396
Pb 220.353	510.137	498.566	493.495
Sb 206.834	519.013	508.041	504.709
Se 196.026	517.605	520.593	533.227
Si 288.158	5523.55	5511.25	5500.39
Sn 189.925	512.975	505.802	506.546
Sr 216.596	516.544	515.772	512.537
Ti 334.941	512.284	511.020	510.844
Tl 190.794	485.189	487.660	492.188
V 292.401	506.763	503.626	503.029
Zn 206.200	1062.02	1065.57	1052.37

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	509.867	ppb	3.5096	0.7	18865.9	101.97331
Al 308.215	10319.1	ppb	3.4996	0.0	26053.4	103.19070
As 188.980	534.576	ppb	8.1054	1.5	142.184	106.91518
B 249.678	545.055	ppb	1.2421	0.2	3560.73	109.01094
Ba 389.178	475.378	ppb	0.9115	0.2	5227.86	95.07561
Be 313.042	560.899	ppb	0.8359	0.1	465803	112.17975Q
Ca 370.602	10237	ppb	15.85	0.2	23378	102.37494
Cd 226.502	532.817	ppb	0.3186	0.1	8718.20	106.56333
Co 228.615	525.725	ppb	1.1123	0.2	2632.70	105.14500
Cr 267.716	519.383	ppb	0.4116	0.1	12082.4	103.87667
Cu 324.754	519.859	ppb	2.7754	0.5	20722.0	103.97188
Fe 271.441	10314.1	ppb	2.3195	0.0	8554.66	103.08967
K 766.491	10269.3	ppb	14.2485	0.1	280152	102.69350

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10799.9	ppb	10.8731	0.1	15581.5	107.99915
Mn 257.610	512.830	ppb	0.3232	0.1	56163.0	102.56598
Mo 202.032	512.010	ppb	2.0784	0.4	1157.47	102.40196
Na 330.237	10962.7	ppb	374.978	3.4	342.712	109.62691
Ni 231.604	523.190	ppb	1.8667	0.4	724.284	104.63802
Pb 220.353	500.733	ppb	8.5303	1.7	299.784	100.14653
Sb 206.834	510.588	ppb	7.4843	1.5	237.435	102.11752
Se 196.026	523.808	ppb	8.2928	1.6	101.833	104.76168
Si 288.158	5511.73	ppb	11.5838	0.2	26873.3	110.23462Q
Sn 189.925	508.441	ppb	3.9440	0.8	164.513	101.68819
Sr 216.596	514.951	ppb	2.1255	0.4	2176.25	102.99020
Ti 334.941	511.383	ppb	0.7858	0.2	61243.0	102.27654
Tl 190.794	488.345	ppb	3.5494	0.7	193.520	97.66909
V 292.401	504.473	ppb	2.0056	0.4	7280.92	100.89455
Zn 206.200	1059.99	ppb	6.8340	0.6	381.033	105.99880

Cont Calib Blank (CCB) **12/19/2018, 3:34:04 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3143	-0.0225u	-0.2624u
Al 308.215	7.0489	3.6514	6.5915
As 188.980	4.5215	6.8793	-3.3001u
B 249.678	5.2107	5.0355	4.4770
Ba 389.178	2.2783	1.2741	1.7485
Be 313.042	0.0293	0.0180	0.0331
Ca 370.602	0.4269	-6.170u	-1.445u
Cd 226.502	-0.3727u	-0.1950u	0.0695
Co 228.615	-0.1104u	-0.1320u	-1.5860u
Cr 267.716	-0.2458u	-0.0630u	-0.0506u
Cu 324.754	1.2332	1.2272	1.4388
Fe 271.441	5.9429	8.2380	12.1400
K 766.491	3.8270	3.4638	4.4762
Mg 279.078	3.4163	4.0394	4.1284
Mn 257.610	0.0398	0.1854	0.1707
Mo 202.032	1.1812	-0.8871u	-0.5746u
Na 330.237	172.151	90.7509	172.824
Ni 231.604	1.4186	0.4444	0.6528
Pb 220.353	-4.0532u	1.5493	-8.1874u
Sb 206.834	-9.0519u	-4.6647u	-2.8735u
Se 196.026	-0.7317u	-3.3535u	-5.9636u
Si 288.158	20.4756	20.2571	18.7251
Sn 189.925	6.5206	-1.3934u	-2.2348u
Sr 216.596	-0.9036u	0.7509	0.3667
Ti 334.941	0.2229	0.2507	0.2669
Tl 190.794	0.3090	-15.3795u	-4.1976u
V 292.401	-0.3842u	-0.3181u	0.0969
Zn 206.200	4.1839	0.8692	-2.6392u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0098	ppb	0.2897	2952.6	-28.6487	0.00981
Al 308.215	5.7639	ppb	1.8437	32.0	176.738	5.76395
As 188.980	2.7002	ppb	5.3285	197.3	1.9600	2.70024
B 249.678	4.9077	ppb	0.3832	7.8	-64.8109	4.90772

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	1.7670	ppb	0.5023	28.4	-44.4458	1.76695
Be 313.042	0.0268	ppb	0.0078	29.2	-138.624	0.02681
Ca 370.602	-2.396	ppb	3.400	141.9	31.79	-2.39609
Cd 226.502	-0.1661	ppb	0.2225	134.0	9.3754	-0.16608
Co 228.615	-0.6094	ppb	0.8458	138.8	-15.1049	-0.60945
Cr 267.716	-0.1198	ppb	0.1093	91.2	20.7415	-0.11982
Cu 324.754	1.2997	ppb	0.1205	9.3	253.545	1.29971
Fe 271.441	8.7736	ppb	3.1331	35.7	34.8261	8.77361
K 766.491	3.9223	ppb	0.5129	13.1	375.124	3.92234
Mg 279.078	3.8614	ppb	0.3880	10.0	36.6510	3.86136
Mn 257.610	0.1320	ppb	0.0802	60.8	35.8007	0.13197
Mo 202.032	-0.0935	ppb	1.1149	1192.3	4.0160	-0.09351
Na 330.237	145.242	ppb	47.1916	32.5	61.5832	145.24176
Ni 231.604	0.8386	ppb	0.5130	61.2	-1.1010	0.83860
Pb 220.353	-3.5637	ppb	4.8868	137.1	4.5883	-3.56374
Sb 206.834	-5.5300	ppb	3.1788	57.5	9.1429	-5.53005
Se 196.026	-3.3496	ppb	2.6160	78.1	1.3878	-3.34960
Si 288.158	19.8193	ppb	0.9538	4.8	378.462	19.81929
Sn 189.925	0.9642	ppb	4.8304	501.0	0.0514	0.96416
Sr 216.596	0.0713	ppb	0.8659	1214.3	10.0435	0.07131
Ti 334.941	0.2468	ppb	0.0222	9.0	-5.9330	0.24682
Tl 190.794	-6.4227	ppb	8.0775	125.8	-12.9473	-6.42269
V 292.401	-0.2018	ppb	0.2608	129.3	-5.4614	-0.20179
Zn 206.200	0.8046	ppb	3.4120	424.1	0.0259	0.80460

680-162297-A-1-A (Samp) **12/19/2018, 3:37:57 PM** **Rack 2, Tube 1**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0162u	0.8404	-0.0278u
Al 308.215	6347.86	6342.79	6339.56
As 188.980	21.8860	12.6248	15.6701
B 249.678	16.6278	14.7145	15.8716
Ba 389.178	49.9535	50.9170	50.2487
Be 313.042	0.5577	0.5334	0.5310
Ca 370.602	2243	2240	2248
Cd 226.502	-0.1517	-0.1856	-0.2002
Co 228.615	7.6300	6.7078	7.8266
Cr 267.716	22.2525	22.7381	22.6585
Cu 324.754	8.4461	9.0400	8.7113
Fe 271.441	21403.7	21465.2	21524.8
K 766.491	1824.83	1823.46	1826.54
Mg 279.078	2462.14	2460.12	2459.50
Mn 257.610	227.677	228.097	227.721
Mo 202.032	0.3674	0.5879	-0.7385u
Na 330.237	391.442	226.198	310.586
Ni 231.604	12.1213	7.4556	9.3065
Pb 220.353	114.227	115.990	109.254
Sb 206.834	-3.5143u	-13.5142u	1.3904
Se 196.026	6.2011	-7.8933u	-19.3291u
Si 288.158	1162.18	1166.59	1169.16
Sn 189.925	17.9621	20.3838	21.4225
Sr 216.596	35.3115	34.7017	35.9420
Ti 334.941	513.440	514.790	516.104

Label	Replicates Concentration		
Tl 190.794	-3.1577u	3.5686	-4.6237u
V 292.401	28.4416	29.1425	28.5644
Zn 206.200	163.381	163.575	171.628

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2763	ppb	0.4890	177.0	-23.8309
Al 308.215	6343.41	ppb	4.1840	0.1	16065.3
As 188.980	16.7270	ppb	4.7202	28.2	5.7029
B 249.678	15.7380	ppb	0.9636	6.1	-13.6007
Ba 389.178	50.3731	ppb	0.4936	1.0	504.369
Be 313.042	0.5407	ppb	0.0148	2.7	289.283
Ca 370.602	2244	ppb	4.227	0.2	5122
Cd 226.502	-0.1791	ppb	0.0249	13.9	26.0459
Co 228.615	7.3881	ppb	0.5973	8.1	30.7219
Cr 267.716	22.5497	ppb	0.2604	1.2	550.402
Cu 324.754	8.7325	ppb	0.2975	3.4	551.610
Fe 271.441	21464.6	ppb	60.5502	0.3	17707.5
K 766.491	1824.94	ppb	1.5431	0.1	50005.7
Mg 279.078	2460.59	ppb	1.3804	0.1	3571.94
Mn 257.610	227.832	ppb	0.2309	0.1	24972.6
Mo 202.032	0.0723	ppb	0.7108	983.5	4.0463
Na 330.237	309.409	ppb	82.6283	26.7	62.8443
Ni 231.604	9.6278	ppb	2.3494	24.4	11.1054
Pb 220.353	113.157	ppb	3.4928	3.1	72.9502
Sb 206.834	-5.2127	ppb	7.5960	145.7	9.8109
Se 196.026	-7.0071	ppb	12.7881	182.5	0.6440
Si 288.158	1165.98	ppb	3.5280	0.3	5905.04
Sn 189.925	19.9228	ppb	1.7757	8.9	6.1955
Sr 216.596	35.3184	ppb	0.6201	1.8	164.294
Ti 334.941	514.778	ppb	1.3318	0.3	61620.0
Tl 190.794	-1.4043	ppb	4.3685	311.1	-11.5462
V 292.401	28.7161	ppb	0.3743	1.3	422.165
Zn 206.200	166.195	ppb	4.7064	2.8	59.5690

680-162297-A-1-Asd (Samp) **12/19/2018, 3:41:51 PM** **Rack 2, Tube 2**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5916	-0.1837u	-0.0478u
Al 308.215	1344.69	1341.06	1335.95
As 188.980	5.5179	2.2419	1.3473
B 249.678	4.7990	4.8882	4.3488
Ba 389.178	10.9833	11.0944	10.4460
Be 313.042	0.0608	0.0724	0.0734
Ca 370.602	472.7	468.2	463.8
Cd 226.502	-0.2761u	-0.0607	-0.2415u
Co 228.615	2.1192	1.8408	2.1742
Cr 267.716	4.8733	4.2071	4.3332
Cu 324.754	3.1902	1.9484	2.6878
Fe 271.441	4547.71	4536.76	4524.05
K 766.491	382.880	381.006	379.785
Mg 279.078	518.943	516.395	516.775
Mn 257.610	48.0732	47.8331	47.6599
Mo 202.032	-0.9682u	0.0264u	-0.2235u

Label	Replicates Concentration		
Na 330.237	65.8871	153.719	-22.2759u
Ni 231.604	4.0055	3.2209	3.4613
Pb 220.353	25.8510	21.1348	27.8490
Sb 206.834	-3.6496u	-10.1701u	-4.8683u
Se 196.026	-5.5394u	-15.0353u	-1.8365u
Si 288.158	257.321	256.733	258.357
Sn 189.925	0.6992	3.1944	5.4435
Sr 216.596	7.6766	7.8530	8.3578
Ti 334.941	108.738	107.670	107.694
Tl 190.794	-8.5779u	-0.5219u	4.5552
V 292.401	6.1225	5.8314	6.6850
Zn 206.200	36.6716	34.9168	41.2494

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1201	ppb	0.4140	344.8	-25.6281
Al 308.215	1340.57	ppb	4.3938	0.3	3523.12
As 188.980	3.0357	ppb	2.1957	72.3	2.0574
B 249.678	4.6787	ppb	0.2892	6.2	-70.9307
Ba 389.178	10.8413	ppb	0.3468	3.2	58.2377
Be 313.042	0.0689	ppb	0.0070	10.1	-103.434
Ca 370.602	468.2	ppb	4.462	1.0	1098
Cd 226.502	-0.1928	ppb	0.1157	60.0	12.5028
Co 228.615	2.0448	ppb	0.1787	8.7	-0.5777
Cr 267.716	4.4712	ppb	0.3539	7.9	128.034
Cu 324.754	2.6088	ppb	0.6247	23.9	306.203
Fe 271.441	4536.17	ppb	11.8415	0.3	3764.00
K 766.491	381.223	ppb	1.5591	0.4	10658.2
Mg 279.078	517.371	ppb	1.3744	0.3	775.600
Mn 257.610	47.8554	ppb	0.2075	0.4	5262.31
Mo 202.032	-0.3884	ppb	0.5174	133.2	3.2792
Na 330.237	65.7768	ppb	87.9975	133.8	58.8469
Ni 231.604	3.5626	ppb	0.4020	11.3	2.6819
Pb 220.353	24.9449	ppb	3.4476	13.8	21.2874
Sb 206.834	-6.2294	ppb	3.4668	55.7	8.9417
Se 196.026	-7.4704	ppb	6.8080	91.1	0.5928
Si 288.158	257.471	ppb	0.8224	0.3	1524.57
Sn 189.925	3.1124	ppb	2.3732	76.3	0.7476
Sr 216.596	7.9624	ppb	0.3536	4.4	44.4991
Ti 334.941	108.034	ppb	0.6098	0.6	12903.9
Tl 190.794	-1.5149	ppb	6.6226	437.2	-11.0475
V 292.401	6.2130	ppb	0.4340	7.0	89.3354
Zn 206.200	37.6126	ppb	3.2695	8.7	13.2772

680-162297-A-1-Apds (Samp) **12/19/2018, 3:45:44 PM** **Rack 2, Tube 3**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	54.4515	54.2120	54.6678
Al 308.215	11544.6	11546.8	11554.0
As 188.980	132.187	134.134	122.963
B 249.678	233.773	234.887	235.016
Ba 389.178	145.868	146.238	147.736
Be 313.042	57.7704	57.7896	57.8153
Ca 370.602	7361	7389	7372

Label	Replicates Concentration		
Cd 226.502	55.2391	55.2279	55.8134
Co 228.615	61.5935	60.2002	61.2474
Cr 267.716	128.929	129.347	130.052
Cu 324.754	116.859	116.675	115.960
Fe 271.441	26210.3	26233.9	26219.8
K 766.491	10137.1	10145.0	10143.4
Mg 279.078	7826.68	7836.57	7841.80
Mn 257.610	751.029	751.689	751.978
Mo 202.032	106.811	107.840	104.619
Na 330.237	5538.58	5881.86	5581.45
Ni 231.604	115.331	116.498	116.326
Pb 220.353	631.430	639.792	634.600
Sb 206.834	61.2861	51.5959	44.4513
Se 196.026	104.250	98.8623	114.832
Si 288.158	1136.73	1137.25	1140.62
Sn 189.925	127.238	122.759	124.624
Sr 216.596	141.467	140.370	141.571
Ti 334.941	607.874	607.799	607.688
Tl 190.794	41.9251	41.9410	37.1433
V 292.401	132.900	132.899	132.349
Zn 206.200	269.356	273.910	267.703

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.4438	ppb	0.2280	0.4	1983.60
Al 308.215	11548.5	ppb	4.9067	0.0	29118.2
As 188.980	129.762	ppb	5.9676	4.6	35.5097
B 249.678	234.559	ppb	0.6831	0.3	1454.57
Ba 389.178	146.614	ppb	0.9893	0.7	1579.77
Be 313.042	57.7918	ppb	0.0225	0.0	47848.2
Ca 370.602	7374	ppb	14.01	0.2	16819
Cd 226.502	55.4268	ppb	0.3349	0.6	937.719
Co 228.615	61.0137	ppb	0.7255	1.2	300.417
Cr 267.716	129.443	ppb	0.5674	0.4	3033.44
Cu 324.754	116.498	ppb	0.4750	0.4	4805.92
Fe 271.441	26221.3	ppb	11.8514	0.0	21629.0
K 766.491	10141.8	ppb	4.1790	0.0	276677
Mg 279.078	7835.02	ppb	7.6780	0.1	11307.4
Mn 257.610	751.565	ppb	0.4865	0.1	82265.7
Mo 202.032	106.424	ppb	1.6451	1.5	243.549
Na 330.237	5667.30	ppb	187.049	3.3	203.251
Ni 231.604	116.051	ppb	0.6299	0.5	158.955
Pb 220.353	635.274	ppb	4.2216	0.7	378.955
Sb 206.834	52.4444	ppb	8.4494	16.1	35.0478
Se 196.026	105.982	ppb	8.1247	7.7	22.2046
Si 288.158	1138.20	ppb	2.1114	0.2	5800.03
Sn 189.925	124.874	ppb	2.2496	1.8	40.2081
Sr 216.596	141.136	ppb	0.6655	0.5	610.146
Ti 334.941	607.787	ppb	0.0935	0.0	72777.4
Tl 190.794	40.3365	ppb	2.7654	6.9	5.9234
V 292.401	132.716	ppb	0.3174	0.2	1924.16
Zn 206.200	270.323	ppb	3.2144	1.2	97.0109

680-162297-A-1-B MS (Samp) **12/19/2018, 3:49:37 PM** **Rack 2, Tube 4**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	43.8126	43.6635	43.4577
Al 308.215	12392.5	12364.7	12372.2
As 188.980	127.398	108.631	114.459
B 249.678	214.477	215.306	214.025
Ba 389.178	154.816	155.426	152.947
Be 313.042	54.3295	54.3483	54.2966
Ca 370.602	7267	7279	7294
Cd 226.502	51.6645	51.4295	51.8204
Co 228.615	57.0914	57.7025	57.5585
Cr 267.716	126.397	126.634	126.455
Cu 324.754	110.922	109.271	108.139
Fe 271.441	27034.4	27006.6	27020.6
K 766.491	9555.67	9544.45	9532.00
Mg 279.078	7643.64	7642.74	7643.30
Mn 257.610	728.673	728.612	728.310
Mo 202.032	98.1663	96.0953	99.0004
Na 330.237	5233.94	5008.63	5212.07
Ni 231.604	110.775	112.327	109.793
Pb 220.353	612.874	604.766	604.762
Sb 206.834	43.2806	50.3731	38.5616
Se 196.026	105.006	95.0002	104.080
Si 288.158	1612.29	1619.44	1617.46
Sn 189.925	116.223	107.463	113.453
Sr 216.596	159.039	157.565	159.327
Ti 334.941	720.371	721.393	720.336
Tl 190.794	31.3726	40.1843	38.4602
V 292.401	126.615	125.845	126.388
Zn 206.200	287.152	272.934	276.262

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	43.6446	ppb	0.1782	0.4	1582.87
Al 308.215	12376.5	ppb	14.3680	0.1	31193.5
As 188.980	116.829	ppb	9.6053	8.2	32.1003
B 249.678	214.603	ppb	0.6497	0.3	1319.43
Ba 389.178	154.396	ppb	1.2915	0.8	1666.18
Be 313.042	54.3248	ppb	0.0262	0.0	44968.3
Ca 370.602	7280	ppb	13.55	0.2	16605
Cd 226.502	51.6381	ppb	0.1968	0.4	876.497
Co 228.615	57.4508	ppb	0.3195	0.6	283.691
Cr 267.716	126.495	ppb	0.1238	0.1	2965.18
Cu 324.754	109.444	ppb	1.3993	1.3	4527.67
Fe 271.441	27020.5	ppb	13.9231	0.1	22287.1
K 766.491	9544.04	ppb	11.8413	0.1	260384
Mg 279.078	7643.23	ppb	0.4581	0.0	11031.2
Mn 257.610	728.531	ppb	0.1944	0.0	79749.6
Mo 202.032	97.7540	ppb	1.4958	1.5	224.006
Na 330.237	5151.54	ppb	124.253	2.4	189.435
Ni 231.604	110.965	ppb	1.2778	1.2	151.890
Pb 220.353	607.468	ppb	4.6821	0.8	362.627
Sb 206.834	44.0717	ppb	5.9454	13.5	31.3820
Se 196.026	101.362	ppb	5.5288	5.5	21.3197
Si 288.158	1616.40	ppb	3.6895	0.2	8098.25

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	112.380	ppb	4.4775	4.0	36.1591
Sr 216.596	158.644	ppb	0.9454	0.6	684.474
Ti 334.941	720.700	ppb	0.6002	0.1	86298.5
Tl 190.794	36.6724	ppb	4.6700	12.7	4.3556
V 292.401	126.283	ppb	0.3955	0.3	1832.23
Zn 206.200	278.783	ppb	7.4365	2.7	100.058

680-162297-A-1-C MSD (Samp) **12/19/2018, 3:53:30 PM** **Rack 2, Tube 5**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	44.1612	43.6382	43.4992
Al 308.215	12197.6	12189.4	12194.9
As 188.980	119.961	119.817	113.829
B 249.678	217.321	216.434	215.733
Ba 389.178	129.078	130.272	129.452
Be 313.042	54.4839	54.5038	54.4393
Ca 370.602	7429	7423	7421
Cd 226.502	52.0342	51.7964	51.8793
Co 228.615	58.9166	60.1990	59.3809
Cr 267.716	125.796	126.027	125.876
Cu 324.754	110.314	111.105	109.712
Fe 271.441	27007.0	26998.9	26987.5
K 766.491	9613.69	9622.70	9616.06
Mg 279.078	7652.41	7642.61	7639.14
Mn 257.610	728.418	728.353	728.199
Mo 202.032	96.4967	98.7382	98.1727
Na 330.237	5385.83	5420.03	5263.69
Ni 231.604	109.547	109.792	110.871
Pb 220.353	599.202	608.074	596.688
Sb 206.834	38.5769	55.7277	46.2345
Se 196.026	98.9430	97.2986	93.2552
Si 288.158	1633.28	1634.35	1632.44
Sn 189.925	111.637	117.566	116.335
Sr 216.596	138.543	137.513	139.109
Ti 334.941	683.520	683.097	682.914
Tl 190.794	36.4191	38.1019	34.3730
V 292.401	127.762	126.807	126.806
Zn 206.200	276.482	274.229	269.876

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	43.7662	ppb	0.3491	0.8	1587.51
Al 308.215	12194.0	ppb	4.1905	0.0	30736.1
As 188.980	117.869	ppb	3.4998	3.0	32.3748
B 249.678	216.496	ppb	0.7960	0.4	1332.21
Ba 389.178	129.601	ppb	0.6107	0.5	1390.97
Be 313.042	54.4757	ppb	0.0330	0.1	45093.7
Ca 370.602	7424	ppb	4.183	0.1	16934
Cd 226.502	51.9033	ppb	0.1207	0.2	880.801
Co 228.615	59.4989	ppb	0.6493	1.1	293.636
Cr 267.716	125.900	ppb	0.1171	0.1	2951.31
Cu 324.754	110.377	ppb	0.6990	0.6	4564.47
Fe 271.441	26997.8	ppb	9.8433	0.0	22268.5
K 766.491	9617.48	ppb	4.6705	0.0	262385

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	7644.72	ppb	6.8822	0.1	11033.4
Mn 257.610	728.323	ppb	0.1121	0.0	79726.0
Mo 202.032	97.8025	ppb	1.1657	1.2	224.116
Na 330.237	5356.52	ppb	82.1871	1.5	194.902
Ni 231.604	110.070	ppb	0.7042	0.6	150.644
Pb 220.353	601.321	ppb	5.9814	1.0	359.033
Sb 206.834	46.8464	ppb	8.5918	18.3	32.6277
Se 196.026	96.4989	ppb	2.9270	3.0	20.3934
Si 288.158	1633.35	ppb	0.9575	0.1	8178.37
Sn 189.925	115.179	ppb	3.1292	2.7	37.0664
Sr 216.596	138.388	ppb	0.8093	0.6	598.909
Ti 334.941	683.177	ppb	0.3109	0.0	81804.9
Tl 190.794	36.2980	ppb	1.8674	5.1	4.2036
V 292.401	127.125	ppb	0.5516	0.4	1844.29
Zn 206.200	273.529	ppb	3.3583	1.2	98.1671

680-162297-A-2-A (Samp) **12/19/2018, 3:57:24 PM** **Rack 2, Tube 6**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4121	0.1766	-0.8785u
Al 308.215	8274.87	8279.17	8283.59
As 188.980	21.4376	16.4938	17.9877
B 249.678	18.0537	17.1574	17.5256
Ba 389.178	123.638	122.234	121.987
Be 313.042	0.9221	0.9224	0.9182
Ca 370.602	1736	1743	1733
Cd 226.502	0.9945	0.9127	0.7658
Co 228.615	9.3947	10.1498	10.5168
Cr 267.716	25.6441	25.8024	26.0629
Cu 324.754	105.027	104.763	105.596
Fe 271.441	25237.8	25205.7	25234.7
K 766.491	1729.27	1729.49	1734.35
Mg 279.078	2753.37	2749.22	2746.58
Mn 257.610	234.654	234.795	235.005
Mo 202.032	-0.5614u	1.5485	1.5285
Na 330.237	432.045	411.542u	138.389u
Ni 231.604	11.9032	10.9323	14.4631
Pb 220.353	1229.96	1242.22	1225.04
Sb 206.834	4.8359	-5.3988u	11.0786
Se 196.026	-2.6251u	-11.5515u	-3.3876u
Si 288.158	1236.96	1241.47	1239.33
Sn 189.925	14.9687	13.1991	17.8472
Sr 216.596	23.4432	24.8949	23.5739
Ti 334.941	512.269	511.478	512.216
Tl 190.794	-0.3717u	-3.3405u	1.8908u
V 292.401	50.7464	49.1067	50.7439
Zn 206.200	3646.12	3672.99	3659.37

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0966	ppb	0.6873	711.6	-38.3856
Al 308.215	8279.21	ppb	4.3629	0.1	20918.8
As 188.980	18.6397	ppb	2.5355	13.6	6.2149
B 249.678	17.5789	ppb	0.4505	2.6	-5.0252

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	122.619	ppb	0.8908	0.7	1307.74
Be 313.042	0.9209	ppb	0.0024	0.3	605.616
Ca 370.602	1737	ppb	5.364	0.3	3960
Cd 226.502	0.8910	ppb	0.1159	13.0	46.5628
Co 228.615	10.0204	ppb	0.5721	5.7	44.0533
Cr 267.716	25.8365	ppb	0.2115	0.8	627.078
Cu 324.754	105.129	ppb	0.4256	0.4	4355.51
Fe 271.441	25226.0	ppb	17.7114	0.1	20805.9
K 766.491	1731.03	ppb	2.8709	0.2	47446.2
Mg 279.078	2749.72	ppb	3.4248	0.1	3987.99
Mn 257.610	234.818	ppb	0.1765	0.1	25741.1
Mo 202.032	0.8385	ppb	1.2124	144.6	5.7085
Na 330.237	327.325	ppb	163.944	50.1	55.3977
Ni 231.604	12.4329	ppb	1.8240	14.7	15.0032
Pb 220.353	1232.41	ppb	8.8489	0.7	729.057
Sb 206.834	3.5052	ppb	8.3189	237.3	13.8058
Se 196.026	-5.8547	ppb	4.9482	84.5	0.8520
Si 288.158	1239.26	ppb	2.2559	0.2	6256.59
Sn 189.925	15.3383	ppb	2.3460	15.3	4.7097
Sr 216.596	23.9707	ppb	0.8031	3.4	117.273
Ti 334.941	511.987	ppb	0.4422	0.1	61286.9
Tl 190.794	-0.6071	ppb	2.6236	432.1	-11.3390
V 292.401	50.1990	ppb	0.9459	1.9	735.099
Zn 206.200	3659.49	ppb	13.4397	0.4	1316.74

680-162278-B-8-A (Samp) **12/19/2018, 4:01:17 PM** **Rack 2, Tube 7**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3002	0.0258	0.3427
Al 308.215	92.0065	89.2281	88.0264
As 188.980	4.2369	-3.0656u	-2.0020u
B 249.678	3.2842	2.3902	3.4186
Ba 389.178	1.7180	0.6077	-0.4164u
Be 313.042	0.0316	0.0250	0.0214
Ca 370.602	42.34	45.43	40.16
Cd 226.502	0.0042	-0.1055u	-0.0864u
Co 228.615	-1.1067u	-0.2366u	-0.2220u
Cr 267.716	0.2318	0.2707	0.3504
Cu 324.754	2.2503	2.3941	2.2175
Fe 271.441	206.925	203.728	202.999
K 766.491	41.8071	41.6429	41.6821
Mg 279.078	34.1671	33.8305	33.1389
Mn 257.610	2.8157	2.8575	2.8976
Mo 202.032	-0.7893u	-0.2132u	-0.5088u
Na 330.237	160.328	250.265	188.868
Ni 231.604	1.7086	-0.0258u	0.4996
Pb 220.353	10.0208	1.5473	7.3412
Sb 206.834	-4.0076u	1.8198	-6.1054u
Se 196.026	-7.5981u	-15.8806u	4.7153
Si 288.158	42.0829	41.5613	40.6774
Sn 189.925	8.7811	15.0213	11.7666
Sr 216.596	0.2262	1.5844	-0.0722u
Ti 334.941	7.9240	7.8369	7.7108

Label	Replicates Concentration		
Tl 190.794	2.5922	-2.5915u	1.4080
V 292.401	0.8581	0.3012	0.3262
Zn 206.200	27.8843	26.5947	25.7834

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2229	ppb	0.1720	77.2	-20.7943
Al 308.215	89.7537	ppb	2.0414	2.3	387.297
As 188.980	-0.2769	ppb	3.9451	1424.6	1.1748
B 249.678	3.0310	ppb	0.5590	18.4	-77.6458
Ba 389.178	0.6364	ppb	1.0675	167.7	-56.8989
Be 313.042	0.0260	ppb	0.0052	20.0	-139.260
Ca 370.602	42.64	ppb	2.648	6.2	134.3
Cd 226.502	-0.0626	ppb	0.0586	93.6	11.2224
Co 228.615	-0.5218	ppb	0.5066	97.1	-14.5798
Cr 267.716	0.2843	ppb	0.0605	21.3	30.1591
Cu 324.754	2.2873	ppb	0.0939	4.1	292.536
Fe 271.441	204.551	ppb	2.0883	1.0	196.080
K 766.491	41.7107	ppb	0.0857	0.2	1405.02
Mg 279.078	33.7122	ppb	0.5242	1.6	79.6064
Mn 257.610	2.8569	ppb	0.0409	1.4	334.216
Mo 202.032	-0.5038	ppb	0.2881	57.2	3.0885
Na 330.237	199.821	ppb	45.9579	23.0	62.9431
Ni 231.604	0.7275	ppb	0.8894	122.3	-1.2554
Pb 220.353	6.3031	ppb	4.3311	68.7	10.3711
Sb 206.834	-2.7644	ppb	4.1063	148.5	10.3964
Se 196.026	-6.2545	ppb	10.3635	165.7	0.8341
Si 288.158	41.4405	ppb	0.7105	1.7	483.343
Sn 189.925	11.8563	ppb	3.1211	26.3	3.5813
Sr 216.596	0.5795	ppb	0.8830	152.4	12.2451
Ti 334.941	7.8239	ppb	0.1072	1.4	901.558
Tl 190.794	0.4696	ppb	2.7163	578.5	-10.0825
V 292.401	0.4951	ppb	0.3145	63.5	4.7914
Zn 206.200	26.7541	ppb	1.0595	4.0	9.3646

x (Samp) **12/19/2018, 4:05:11 PM** **Rack 2, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	13.2577	12.7548	12.1304
Al 308.215	261.321	257.724	257.866
As 188.980	16.8167	24.7326	24.1428
B 249.678	131.481	132.860	133.401
Ba 389.178	11.8570	12.0524	12.5275
Be 313.042	5.4181	5.4383	5.4047
Ca 370.602	637.4	630.7	639.0
Cd 226.502	6.4885	6.4644	6.1745
Co 228.615	12.2508	12.3829	11.6485
Cr 267.716	12.5625	12.4516	12.9800
Cu 324.754	27.3885	26.6643	26.7932
Fe 271.441	56.5210	75.7813	66.1669
K 766.491	1250.03	1252.45	1253.38
Mg 279.078	661.663	667.223	668.894
Mn 257.610	13.2364	13.2544	13.2859
Mo 202.032	12.7177	11.2935	11.9625

Label	Replicates Concentration		
Na 330.237	1414.23	1374.59	1585.66
Ni 231.604	54.1886	52.7108	53.6726
Pb 220.353	11.9957	10.5055	13.4722
Sb 206.834	18.4940	16.8415	12.9005
Se 196.026	6.8652	7.0182	22.6268
Si 288.158	154.294	156.908	162.508
Sn 189.925	73.2820	75.4992	68.4663
Sr 216.596	12.8726	12.9538	12.5992
Ti 334.941	12.5070	12.5978	12.5496
Tl 190.794	32.0962	30.9986	33.6260
V 292.401	12.4098	12.4183	12.1435
Zn 206.200	24.7033	24.8653	31.8602

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	12.7143	ppb	0.5648	4.4	442.206
Al 308.215	258.970	ppb	2.0371	0.8	812.043
As 188.980	21.8974	ppb	4.4099	20.1	7.0223
B 249.678	132.581	ppb	0.9902	0.7	794.555
Ba 389.178	12.1456	ppb	0.3449	2.8	71.4688
Be 313.042	5.4203	ppb	0.0169	0.3	4341.70
Ca 370.602	635.7	ppb	4.408	0.7	1487
Cd 226.502	6.3758	ppb	0.1748	2.7	116.223
Co 228.615	12.0941	ppb	0.3915	3.2	48.7771
Cr 267.716	12.6647	ppb	0.2786	2.2	317.555
Cu 324.754	26.9487	ppb	0.3863	1.4	1265.67
Fe 271.441	66.1564	ppb	9.6302	14.6	82.8649
K 766.491	1251.96	ppb	1.7296	0.1	34389.3
Mg 279.078	665.927	ppb	3.7858	0.6	990.217
Mn 257.610	13.2589	ppb	0.0250	0.2	1474.58
Mo 202.032	11.9912	ppb	0.7125	5.9	31.2382
Na 330.237	1458.16	ppb	112.182	7.7	96.1053
Ni 231.604	53.5240	ppb	0.7500	1.4	72.1074
Pb 220.353	11.9911	ppb	1.4834	12.4	13.6953
Sb 206.834	16.0787	ppb	2.8737	17.9	18.7530
Se 196.026	12.1700	ppb	9.0561	74.4	4.3456
Si 288.158	157.903	ppb	4.1966	2.7	1049.70
Sn 189.925	72.4158	ppb	3.5956	5.0	23.2073
Sr 216.596	12.8085	ppb	0.1857	1.5	63.2478
Ti 334.941	12.5515	ppb	0.0455	0.4	1469.94
Tl 190.794	32.2403	ppb	1.3196	4.1	3.1728
V 292.401	12.3239	ppb	0.1562	1.3	175.355
Zn 206.200	27.1430	ppb	4.0861	15.1	9.5001

x (Samp) **12/19/2018, 4:09:05 PM** **Rack 2, Tube 9**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	13.0654	12.6709	13.1066
Al 308.215	252.590	255.603	255.454
As 188.980	13.3870	20.6091	26.4974
B 249.678	133.409	131.728	134.475
Ba 389.178	13.5002	13.7624	13.0176
Be 313.042	5.3546	5.3691	5.3790
Ca 370.602	634.0	627.3	629.8

Label	Replicates Concentration		
Cd 226.502	6.3810	6.4921	6.4890
Co 228.615	12.0293	12.8738	11.9879
Cr 267.716	12.7265	12.3333	12.4739
Cu 324.754	26.6603	26.6711	27.2979
Fe 271.441	63.0699	55.1963	67.5365
K 766.491	1239.88	1240.67	1238.72
Mg 279.078	653.385	655.325	660.822
Mn 257.610	12.8083	12.7945	12.9221
Mo 202.032	12.5987	12.9127	11.1648
Na 330.237	1370.46	1413.70	1309.21
Ni 231.604	51.6358	54.8145	52.1742
Pb 220.353	9.8202	14.6446	13.8955
Sb 206.834	20.4295	18.4104	13.5201
Se 196.026	33.1665	28.9633	36.0050
Si 288.158	155.677	154.960	153.978
Sn 189.925	57.6593	63.5409	68.7428
Sr 216.596	12.9718	13.3928	12.4697
Ti 334.941	12.4791	12.4459	12.3381
Tl 190.794	38.7434	27.5810	23.7769
V 292.401	12.8002	12.6408	12.4088
Zn 206.200	26.7544	24.3185	31.2833

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	12.9477	ppb	0.2405	1.9	450.853
Al 308.215	254.549	ppb	1.6982	0.7	800.960
As 188.980	20.1645	ppb	6.5665	32.6	6.5651
B 249.678	133.204	ppb	1.3848	1.0	798.752
Ba 389.178	13.4267	ppb	0.3778	2.8	85.6761
Be 313.042	5.3676	ppb	0.0123	0.2	4297.88
Ca 370.602	630.4	ppb	3.424	0.5	1475
Cd 226.502	6.4540	ppb	0.0633	1.0	117.498
Co 228.615	12.2970	ppb	0.5000	4.1	49.8018
Cr 267.716	12.5112	ppb	0.1993	1.6	313.991
Cu 324.754	26.8765	ppb	0.3650	1.4	1262.81
Fe 271.441	61.9342	ppb	6.2480	10.1	79.4007
K 766.491	1239.75	ppb	0.9799	0.1	34056.8
Mg 279.078	656.511	ppb	3.8576	0.6	976.657
Mn 257.610	12.8416	ppb	0.0700	0.5	1428.90
Mo 202.032	12.2254	ppb	0.9318	7.6	31.7657
Na 330.237	1364.46	ppb	52.5019	3.8	93.6355
Ni 231.604	52.8748	ppb	1.7013	3.2	71.2048
Pb 220.353	12.7868	ppb	2.5963	20.3	14.1618
Sb 206.834	17.4533	ppb	3.5527	20.4	19.3716
Se 196.026	32.7116	ppb	3.5428	10.8	8.2589
Si 288.158	154.871	ppb	0.8532	0.6	1034.70
Sn 189.925	63.3143	ppb	5.5452	8.8	20.2577
Sr 216.596	12.9448	ppb	0.4622	3.6	63.8273
Ti 334.941	12.4210	ppb	0.0737	0.6	1454.28
Tl 190.794	30.0338	ppb	7.7789	25.9	2.2541
V 292.401	12.6166	ppb	0.1968	1.6	179.635
Zn 206.200	27.4521	ppb	3.5344	12.9	9.6113

x (Samp) **12/19/2018, 4:12:59 PM** **Rack 2, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	12.5746	13.1773	12.9204
Al 308.215	256.018	258.198	259.334
As 188.980	26.9061	21.4215	27.1365
B 249.678	132.496	134.230	134.581
Ba 389.178	12.4139	12.0093	11.4493
Be 313.042	5.3987	5.4442	5.4182
Ca 370.602	643.3	635.2	635.7
Cd 226.502	6.5243	6.3121	6.1578
Co 228.615	12.2152	13.6955	12.8533
Cr 267.716	12.7126	12.3915	12.8280
Cu 324.754	26.9828	27.1994	27.6572
Fe 271.441	67.8120	74.3285	75.4077
K 766.491	1253.75	1253.33	1250.72
Mg 279.078	668.273	660.920	657.946
Mn 257.610	13.3335	13.3928	13.2268
Mo 202.032	11.9227	12.8319	12.0309
Na 330.237	1624.50	1144.97	1268.72
Ni 231.604	53.4649	53.5832	51.8453
Pb 220.353	12.5125	5.7702	15.1867
Sb 206.834	18.5460	13.8158	25.9028
Se 196.026	27.0543	23.8396	24.6695
Si 288.158	155.095	154.186	152.196
Sn 189.925	67.4265	73.2990	59.8889
Sr 216.596	13.0763	13.5282	12.1927
Ti 334.941	12.6135	12.5218	12.5752
Tl 190.794	25.2442	37.5316	29.8810
V 292.401	12.4860	12.0664	12.3630
Zn 206.200	25.0383	24.2287	28.6713

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	12.8908	ppb	0.3024	2.3	448.740
Al 308.215	257.850	ppb	1.6852	0.7	809.223
As 188.980	25.1547	ppb	3.2351	12.9	7.8819
B 249.678	133.769	ppb	1.1162	0.8	802.544
Ba 389.178	11.9575	ppb	0.4844	4.1	69.3790
Be 313.042	5.4204	ppb	0.0228	0.4	4341.78
Ca 370.602	638.1	ppb	4.541	0.7	1492
Cd 226.502	6.3314	ppb	0.1840	2.9	115.506
Co 228.615	12.9213	ppb	0.7425	5.7	52.9456
Cr 267.716	12.6440	ppb	0.2262	1.8	317.077
Cu 324.754	27.2798	ppb	0.3443	1.3	1278.73
Fe 271.441	72.5161	ppb	4.1094	5.7	88.1446
K 766.491	1252.60	ppb	1.6379	0.1	34406.9
Mg 279.078	662.380	ppb	5.3158	0.8	985.105
Mn 257.610	13.3177	ppb	0.0841	0.6	1481.00
Mo 202.032	12.2618	ppb	0.4967	4.1	31.8477
Na 330.237	1346.07	ppb	248.946	18.5	93.1510
Ni 231.604	52.9645	ppb	0.9710	1.8	71.3288
Pb 220.353	11.1565	ppb	4.8525	43.5	13.2061
Sb 206.834	19.4215	ppb	6.0909	31.4	20.2571
Se 196.026	25.1878	ppb	1.6689	6.6	6.8256
Si 288.158	153.826	ppb	1.4830	1.0	1030.07

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	66.8715	ppb	6.7223	10.1	21.4105
Sr 216.596	12.9324	ppb	0.6793	5.3	63.7814
Ti 334.941	12.5701	ppb	0.0460	0.4	1472.16
Tl 190.794	30.8856	ppb	6.2050	20.1	2.6092
V 292.401	12.3051	ppb	0.2157	1.8	175.123
Zn 206.200	25.9794	ppb	2.3661	9.1	9.0813

Cont Calib Verif (CCV) **12/19/2018, 4:16:54 PM** **Rack S, Tube 10**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	515.534	517.713	514.908
Al 308.215	10369.0	10373.3	10379.6
As 188.980	544.276	536.400	543.062
B 249.678	545.731	548.073	547.493
Ba 389.178	476.554	475.571	475.777
Be 313.042	564.941	565.026	565.113
Ca 370.602	10289	10306	10285
Cd 226.502	535.255	535.323	535.204
Co 228.615	527.152	527.204	527.996
Cr 267.716	522.444	522.154	522.604
Cu 324.754	526.362	522.643	523.293
Fe 271.441	10354.8	10369.7	10371.0
K 766.491	10291.4	10308.9	10296.8
Mg 279.078	10855.1	10848.5	10847.4
Mn 257.610	514.885	515.240	515.036
Mo 202.032	515.284	513.100	515.189
Na 330.237	11316.8	11379.1	11134.4
Ni 231.604	528.899	526.774	526.675
Pb 220.353	502.902	504.207	501.823
Sb 206.834	523.706	500.997	507.104
Se 196.026	541.591	528.583	541.643
Si 288.158	5532.08	5533.38	5531.26
Sn 189.925	497.646	514.781	513.155
Sr 216.596	517.695	515.318	518.796
Ti 334.941	512.927	513.591	512.839
Tl 190.794	495.388	500.885	497.914
V 292.401	506.089	506.206	506.327
Zn 206.200	1057.66	1058.53	1061.36

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	516.052	ppb	1.4725	0.3	19095.1	103.21037
Al 308.215	10374.0	ppb	5.3144	0.1	26191.1	103.73963
As 188.980	541.246	ppb	4.2404	0.8	143.944	108.24922
B 249.678	547.099	ppb	1.2198	0.2	3574.44	109.41976
Ba 389.178	475.967	ppb	0.5185	0.1	5234.48	95.19350
Be 313.042	565.026	ppb	0.0861	0.0	469232	113.00526Q
Ca 370.602	10293	ppb	11.16	0.1	23504	102.93171
Cd 226.502	535.261	ppb	0.0599	0.0	8758.14	107.05217
Co 228.615	527.451	ppb	0.4732	0.1	2641.38	105.49013
Cr 267.716	522.401	ppb	0.2283	0.0	12152.5	104.48010
Cu 324.754	524.099	ppb	1.9864	0.4	20889.3	104.81984
Fe 271.441	10365.2	ppb	9.0335	0.1	8596.80	103.59987
K 766.491	10299.0	ppb	8.9888	0.1	280960	102.99020

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	10850.3	ppb	4.1541	0.0	15654.0	108.50304
Mn 257.610	515.054	ppb	0.1785	0.0	56406.5	103.01072
Mo 202.032	514.525	ppb	1.2344	0.2	1163.13	102.90495
Na 330.237	11276.8	ppb	127.162	1.1	350.976	112.76797Q
Ni 231.604	527.449	ppb	1.2561	0.2	730.202	105.48985
Pb 220.353	502.978	ppb	1.1938	0.2	301.099	100.59552
Sb 206.834	510.602	ppb	11.7516	2.3	237.432	102.12044
Se 196.026	537.272	ppb	7.5255	1.4	104.398	107.45444
Si 288.158	5532.24	ppb	1.0697	0.0	26972.3	110.64481Q
Sn 189.925	508.527	ppb	9.4587	1.9	164.542	101.70549
Sr 216.596	517.270	ppb	1.7777	0.3	2186.00	103.45393
Ti 334.941	513.119	ppb	0.4112	0.1	61451.2	102.62382
Tl 190.794	498.062	ppb	2.7513	0.6	197.567	99.61243
V 292.401	506.207	ppb	0.1190	0.0	7305.91	101.24141
Zn 206.200	1059.19	ppb	1.9356	0.2	380.743	105.91850

Cont Calib Blank (CCB) **12/19/2018, 4:20:49 PM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4937u	0.0597	-0.1337u
Al 308.215	2.5053	6.1098	3.6817
As 188.980	3.3954	-1.4309u	6.5032
B 249.678	5.9124	4.8920	4.4975
Ba 389.178	1.3876	1.3601	0.6840
Be 313.042	0.0234	0.0372	0.0364
Ca 370.602	4.491	1.637	-2.046u
Cd 226.502	-0.0985u	-0.4218u	-0.2093u
Co 228.615	0.7813	0.0834	-0.2206u
Cr 267.716	-0.3938u	0.1766	-0.0335u
Cu 324.754	0.8046	0.8242	0.9749
Fe 271.441	-0.3513u	3.2038	-4.1841u
K 766.491	3.5838	2.8137	4.1760
Mg 279.078	-1.9941u	-5.2136u	2.3311
Mn 257.610	0.1028	0.0876	0.1834
Mo 202.032	1.1941	0.0462	-0.7650u
Na 330.237	60.7456	-33.3262u	447.153
Ni 231.604	1.1870	3.1213	1.2050
Pb 220.353	-1.4214u	5.4490	-2.7040u
Sb 206.834	-12.9509u	-3.5399u	-10.9719u
Se 196.026	-8.6975u	-13.5196u	-0.6597u
Si 288.158	19.9187	21.3022	20.9012
Sn 189.925	0.3332	4.4532	-3.4030u
Sr 216.596	-0.5528u	-1.3690u	0.4610
Ti 334.941	0.3829	0.3429	0.3625
Tl 190.794	1.9651	2.3116	-7.6558u
V 292.401	-0.0084u	-0.2252u	0.2496
Zn 206.200	-4.0635u	0.9581	-0.9076u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1892	ppb	0.2808	148.4	-36.0207	-0.18921
Al 308.215	4.0989	ppb	1.8381	44.8	172.578	4.09893
As 188.980	2.8226	ppb	3.9979	141.6	1.9922	2.82256
B 249.678	5.1007	ppb	0.7302	14.3	-63.5061	5.10066

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	1.1439	ppb	0.3985	34.8	-51.3655	1.14387
Be 313.042	0.0323	ppb	0.0077	23.9	-134.077	0.03233
Ca 370.602	1.361	ppb	3.277	240.9	40.37	1.36064
Cd 226.502	-0.2432	ppb	0.1643	67.6	8.1116	-0.24320
Co 228.615	0.2147	ppb	0.5137	239.3	-10.9637	0.21470
Cr 267.716	-0.0835	ppb	0.2885	345.3	21.5826	-0.08355
Cu 324.754	0.8679	ppb	0.0932	10.7	236.518	0.86789
Fe 271.441	-0.4439	ppb	3.6948	832.4	27.2826	-0.44386
K 766.491	3.5245	ppb	0.6831	19.4	364.281	3.52451
Mg 279.078	-1.6255	ppb	3.7858	232.9	28.7477	-1.62555
Mn 257.610	0.1246	ppb	0.0515	41.3	34.9745	0.12461
Mo 202.032	0.1584	ppb	0.9844	621.4	4.5837	0.15842
Na 330.237	158.191	ppb	254.630	161.0	61.9273	158.19060
Ni 231.604	1.8378	ppb	1.1116	60.5	0.2867	1.83778
Pb 220.353	0.4412	ppb	4.3840	993.6	6.9356	0.44123
Sb 206.834	-9.1542	ppb	4.9618	54.2	7.5122	-9.15422
Se 196.026	-7.6256	ppb	6.4966	85.2	0.5732	-7.62560
Si 288.158	20.7074	ppb	0.7118	3.4	382.691	20.70737
Sn 189.925	0.4612	ppb	3.9296	852.1	-0.1116	0.46115
Sr 216.596	-0.4869	ppb	0.9168	188.3	7.6587	-0.48695
Ti 334.941	0.3628	ppb	0.0200	5.5	7.9383	0.36278
Tl 190.794	-1.1263	ppb	5.6573	502.3	-10.7404	-1.12635
V 292.401	0.0053	ppb	0.2377	4467.5	-2.4989	0.00532
Zn 206.200	-1.3377	ppb	2.5383	189.8	-0.7451	-1.33767

x (Samp) **12/19/2018, 4:26:13 PM** **Rack 2, Tube 11**

Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	12.3273	12.4221	12.2890
Al 308.215	246.657	247.331	241.144
As 188.980	24.8468	13.4635	22.0074
B 249.678	131.789	130.710	126.668
Ba 389.178	11.6281	11.5576	11.9810
Be 313.042	5.3245	5.2138	5.1023
Ca 370.602	623.1	616.4	606.2
Cd 226.502	6.2005	6.2277	5.9085
Co 228.615	11.7730	12.5458	12.3968
Cr 267.716	12.4807	12.1737	11.8611
Cu 324.754	26.1045	26.5728	26.2722
Fe 271.441	61.9540	60.5582	52.0400
K 766.491	1219.98	1203.58	1178.83
Mg 279.078	643.354	642.216	625.156
Mn 257.610	12.8375	12.7261	12.6023
Mo 202.032	12.0080	12.1490	11.9558
Na 330.237	1428.63	1364.38	1474.60
Ni 231.604	51.6157	52.5779	46.8549
Pb 220.353	10.5710	9.3496	10.1446
Sb 206.834	14.3301	21.6540	18.6589
Se 196.026	35.4631	29.9703	21.0038
Si 288.158	153.530	149.865	149.447
Sn 189.925	71.7436	72.2479	66.0487
Sr 216.596	12.4303	12.1514	12.1399
Ti 334.941	12.3529	12.1722	11.8863

Label	Replicates Concentration		
Tl 190.794	37.2913	31.9876	31.3609
V 292.401	12.2668	11.5088	11.6511
Zn 206.200	28.5966	25.3297	26.4801

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	12.3461	ppb	0.0685	0.6	428.560
Al 308.215	245.044	ppb	3.3944	1.4	777.113
As 188.980	20.1059	ppb	5.9251	29.5	6.5496
B 249.678	129.722	ppb	2.6997	2.1	775.321
Ba 389.178	11.7222	ppb	0.2269	1.9	66.7381
Be 313.042	5.2135	ppb	0.1111	2.1	4169.87
Ca 370.602	615.2	ppb	8.505	1.4	1440
Cd 226.502	6.1122	ppb	0.1770	2.9	111.915
Co 228.615	12.2385	ppb	0.4100	3.3	49.5022
Cr 267.716	12.1718	ppb	0.3098	2.5	306.112
Cu 324.754	26.3165	ppb	0.2373	0.9	1240.73
Fe 271.441	58.1841	ppb	5.3665	9.2	76.2927
K 766.491	1200.80	ppb	20.7114	1.7	32995.0
Mg 279.078	636.909	ppb	10.1937	1.6	948.421
Mn 257.610	12.7220	ppb	0.1176	0.9	1415.72
Mo 202.032	12.0376	ppb	0.0999	0.8	31.3430
Na 330.237	1422.53	ppb	55.3638	3.9	95.1662
Ni 231.604	50.3495	ppb	3.0644	6.1	67.6954
Pb 220.353	10.0217	ppb	0.6199	6.2	12.5411
Sb 206.834	18.2143	ppb	3.6821	20.2	19.7106
Se 196.026	28.8124	ppb	7.2989	25.3	7.5161
Si 288.158	150.947	ppb	2.2462	1.5	1015.92
Sn 189.925	70.0134	ppb	3.4428	4.9	22.4287
Sr 216.596	12.2405	ppb	0.1644	1.3	60.8693
Ti 334.941	12.1372	ppb	0.2352	1.9	1420.22
Tl 190.794	33.5466	ppb	3.2581	9.7	3.7167
V 292.401	11.8089	ppb	0.4029	3.4	167.884
Zn 206.200	26.8021	ppb	1.6571	6.2	9.3775

cri (Samp) **12/19/2018, 4:31:31 PM** **Rack 2, Tube 12**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.1960	11.5809	11.7309
Al 308.215	233.667	236.229	234.624
As 188.980	21.0881	26.4792	14.3181
B 249.678	122.269	123.708	123.902
Ba 389.178	12.2233	10.4268	10.4547
Be 313.042	4.9924	4.9646	4.9728
Ca 370.602	585.2	589.5	576.1
Cd 226.502	5.8081	6.0133	5.5450
Co 228.615	12.4186	11.1082	11.5347
Cr 267.716	11.4317	11.9096	11.4062
Cu 324.754	25.7959	25.2376	24.4915
Fe 271.441	68.9387	64.5329	59.4530
K 766.491	1144.18	1143.80	1141.26
Mg 279.078	611.200	606.686	604.485
Mn 257.610	12.1051	12.1081	12.1993
Mo 202.032	12.0409	11.5579	10.3030

Label	Replicates Concentration		
Na 330.237	1534.44	1225.71	1046.80
Ni 231.604	49.1219	50.4470	49.6914
Pb 220.353	9.0133	12.7499	8.7356
Sb 206.834	21.5129	13.9444	21.9596
Se 196.026	27.8083	26.9577	24.1489
Si 288.158	145.122	145.876	145.703
Sn 189.925	65.7247	62.9097	64.4749
Sr 216.596	11.8161	11.6365	11.7451
Ti 334.941	11.4712	11.6014	11.4161
Tl 190.794	30.0955	24.9736	22.2663
V 292.401	11.2832	11.8197	11.2656
Zn 206.200	26.1619	26.5979	23.6135

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.5026	ppb	0.2760	2.4	397.294
Al 308.215	234.840	ppb	1.2948	0.6	751.509
As 188.980	20.6285	ppb	6.0936	29.5	6.6877
B 249.678	123.293	ppb	0.8920	0.7	732.037
Ba 389.178	11.0349	ppb	1.0293	9.3	59.0779
Be 313.042	4.9766	ppb	0.0143	0.3	3973.07
Ca 370.602	583.6	ppb	6.847	1.2	1368
Cd 226.502	5.7888	ppb	0.2347	4.1	106.637
Co 228.615	11.6872	ppb	0.6683	5.7	46.7323
Cr 267.716	11.5825	ppb	0.2835	2.4	292.430
Cu 324.754	25.1750	ppb	0.6545	2.6	1195.68
Fe 271.441	64.3082	ppb	4.7469	7.4	81.3151
K 766.491	1143.08	ppb	1.5878	0.1	31422.0
Mg 279.078	607.457	ppb	3.4232	0.6	906.001
Mn 257.610	12.1375	ppb	0.0535	0.4	1351.65
Mo 202.032	11.3006	ppb	0.8971	7.9	29.6825
Na 330.237	1268.98	ppb	246.683	19.4	91.1258
Ni 231.604	49.7534	ppb	0.6647	1.3	66.8674
Pb 220.353	10.1663	ppb	2.2418	22.1	12.6263
Sb 206.834	19.1390	ppb	4.5042	23.5	20.1305
Se 196.026	26.3050	ppb	1.9151	7.3	7.0383
Si 288.158	145.567	ppb	0.3949	0.3	989.521
Sn 189.925	64.3698	ppb	1.4104	2.2	20.5998
Sr 216.596	11.7325	ppb	0.0904	0.8	58.7434
Ti 334.941	11.4962	ppb	0.0951	0.8	1343.36
Tl 190.794	25.7784	ppb	3.9762	15.4	0.4807
V 292.401	11.4562	ppb	0.3150	2.7	162.838
Zn 206.200	25.4578	ppb	1.6120	6.3	8.8940

C12212018A

Method: Initial Method Operator: Admin Date of Analysis: 21 Dec 2018 15:53:04

Sample ID	Extended ID	Mean	Units	Date
0.0		-187	ug/L	21 Dec 2018 15:53:07
0.2		363	ug/L	21 Dec 2018 15:57:03
0.4		798	ug/L	21 Dec 2018 16:01:02
1.0		1983	ug/L	21 Dec 2018 16:05:01
3.0		6304	ug/L	21 Dec 2018 16:08:59
5.0		10224	ug/L	21 Dec 2018 16:12:56

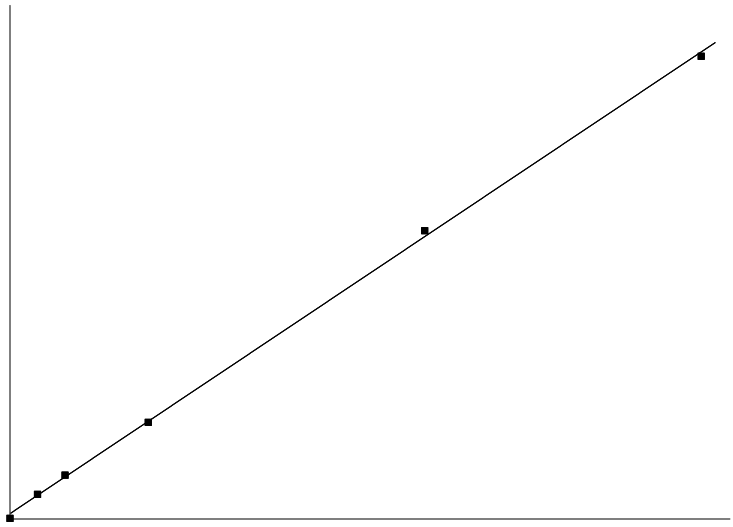
10224 µ Abs

A:0.0000e+000

B:4.8094e-004

C:3.8185e-002

R:0.9997413



Conc 5.0000

ICV		3.1188	ug/L	21 Dec 2018 16:16:54
ICB		0.0181	ug/L	21 Dec 2018 16:20:51
CRA		0.2190	ug/L	21 Dec 2018 16:24:48
CCV		(L)1.5633	ug/L	21 Dec 2018 16:28:46
CCB		0.0382	ug/L	21 Dec 2018 16:32:44
CCV		2.6380	ug/L	21 Dec 2018 16:34:17
CCB		0.0295	ug/L	21 Dec 2018 16:38:14
mb 680-552438/1-a	(PFP)	0.0292	ug/L	21 Dec 2018 16:42:10
lcs 680-552438/2-a	(PFP)	2.3142	ug/L	21 Dec 2018 16:46:07
lb 680-552038/1-d	(PFP)	0.0177	ug/L	21 Dec 2018 16:50:04
680-161625-a-1-g	(PFP)	0.0206	ug/L	21 Dec 2018 16:54:01
680-161625-a-1-j ms	(PFP)	0.8099	ug/L	21 Dec 2018 16:57:58
680-161625-a-1-k msd	(PFP)	0.0372	ug/L	21 Dec 2018 17:01:55
680-161637-a-1-e	(PFP)	0.0382	ug/L	21 Dec 2018 17:05:50
CCV		2.6377	ug/L	21 Dec 2018 17:28:14
CCB		0.0077	ug/L	21 Dec 2018 17:32:12
680-161637-a-1-e	(PFP)	0.0194	ug/L	21 Dec 2018 17:36:08
680-161865-a-1-d	(PFP)	0.0143	ug/L	21 Dec 2018 17:40:05
mb 680-552429/13-a	(PFP)	0.0230	ug/L	21 Dec 2018 17:44:03
lcs 680-552429/14-a	(PFP)	2.3058	ug/L	21 Dec 2018 17:48:00
680-161876-f-1-a	(PFP)	0.0196	ug/L	21 Dec 2018 17:51:58
680-161556-a-1-c	(PFP)	0.6121	ug/L	21 Dec 2018 17:55:56
680-161556-a-3-g	(PFP)	0.0290	ug/L	21 Dec 2018 17:59:55
680-161556-a-3-h ms	(PFP)	0.6955	ug/L	21 Dec 2018 18:03:51
680-161556-a-3-i msd	(PFP)	0.8221	ug/L	21 Dec 2018 18:07:48
680-161556-a-7-c	(PFP)	0.0201	ug/L	21 Dec 2018 18:11:45
CCV		2.6314	ug/L	21 Dec 2018 18:15:42
CCB		0.0225	ug/L	21 Dec 2018 18:19:40
680-161826-i-4-c	(PFP)	0.0274	ug/L	21 Dec 2018 18:23:37
680-161556-a-8-c	(PFP)	0.0390	ug/L	21 Dec 2018 18:27:33
mb 680-552590/1-a	(PFP)	0.0374	ug/L	21 Dec 2018 18:31:30
lcs 680-552590/2-a	(PFP)	2.3475	ug/L	21 Dec 2018 18:35:27
llcs 680-552590/3-a	(PFP)	0.1906	ug/L	21 Dec 2018 18:39:24
680-162195-b-2-c	(PFP)	0.0379	ug/L	21 Dec 2018 18:43:21
680-162195-b-2-d ms	(PFP)	0.8410	ug/L	21 Dec 2018 18:47:19
680-162195-b-2-e msd	(PFP)	0.9486	ug/L	21 Dec 2018 18:51:17
680-161850-c-1-c	(PFP)	0.0383	ug/L	21 Dec 2018 18:55:16
680-161850-c-2-h	(PFP)	0.0435	ug/L	21 Dec 2018 18:59:14
CCV		2.5926	ug/L	21 Dec 2018 19:03:10
CCB		0.0177	ug/L	21 Dec 2018 19:07:08
680-161850-c-3-c	(PFP)	0.0399	ug/L	21 Dec 2018 19:11:05

Sample ID	Extended ID	Mean	Units	Date
680-161911-e-1-h	(PFP)	0.1219	ug/L	21 Dec 2018 19:15:02
680-161911-e-2-d	(PFP)	0.0340	ug/L	21 Dec 2018 19:18:59
680-161911-c-3-d	(PFP)	0.0247	ug/L	21 Dec 2018 19:22:56
680-161911-b-4-d	(PFP)	0.0388	ug/L	21 Dec 2018 19:26:53
680-162286-c-1-c	(PFP)	0.3304	ug/L	21 Dec 2018 19:30:50
680-162073-c-1-c	(PFP)	0.0462	ug/L	21 Dec 2018 19:34:47
680-162067-a-1-c	(PFP)	0.0483	ug/L	21 Dec 2018 19:38:44
680-162088-c-1-b	(PFP)	0.0555	ug/L	21 Dec 2018 19:42:42
680-162071-a-1-c	(PFP)	0.0499	ug/L	21 Dec 2018 19:46:40
CCV		2.6837	ug/L	21 Dec 2018 19:50:39
CCB		0.0366	ug/L	21 Dec 2018 19:54:37
490-164835-c-1-c	(PFP)	0.0436	ug/L	21 Dec 2018 19:58:34
490-164701-f-1-n	(PFP)	0.0517	ug/L	21 Dec 2018 20:02:30
490-164701-f-1-o ms	(PFP)	0.7469	ug/L	21 Dec 2018 20:06:27
490-164701-f-1-p msd	(PFP)	0.8846	ug/L	21 Dec 2018 20:10:24
680-162055-e-1-c	(PFP)	0.0656	ug/L	21 Dec 2018 20:14:21
mb 680-552696/13-a	(PFP)	0.0257	ug/L	21 Dec 2018 20:18:18
lcs 680-552696/14-a	(PFP)	2.3507	ug/L	21 Dec 2018 20:22:15
lb 680-552422/1-b	(PFP)	0.0252	ug/L	21 Dec 2018 20:26:12
680-162131-a-1-b	(PFP)	0.0281	ug/L	21 Dec 2018 20:30:10
680-162131-a-1-e ms	(PFP)	0.7788	ug/L	21 Dec 2018 20:34:07
CCV		2.6189	ug/L	21 Dec 2018 20:38:05
CCB		0.0047	ug/L	21 Dec 2018 20:42:02
680-162131-a-1-f msd	(PFP)	0.8502	ug/L	21 Dec 2018 20:45:58
lb 680-552490/1-b	(PFP)	0.0337	ug/L	21 Dec 2018 20:49:57
680-161792-a-1-d	(PFP)	0.0196	ug/L	21 Dec 2018 20:53:55
680-161792-a-1-g ms	(PFP)	0.7073	ug/L	21 Dec 2018 20:57:53
680-161792-a-1-h msd	(PFP)	0.7567	ug/L	21 Dec 2018 21:01:50
680-161792-a-2-d	(PFP)	0.0359	ug/L	21 Dec 2018 21:05:47
680-161792-a-3-d	(PFP)	0.0476	ug/L	21 Dec 2018 21:09:44
680-161795-a-1-d	(PFP)	0.7104	ug/L	21 Dec 2018 21:13:42
680-162117-a-8-h	(PFP)	0.0359	ug/L	21 Dec 2018 21:17:39
680-162117-a-10-d	(PFP)	0.0218	ug/L	21 Dec 2018 21:21:36
CCV		2.6314	ug/L	21 Dec 2018 21:25:34
CCB		0.0308	ug/L	21 Dec 2018 21:29:30
680-162117-c-19-b	(PFP)	0.0388	ug/L	21 Dec 2018 21:33:27
680-162117-a-31-c	(PFP)	0.0263	ug/L	21 Dec 2018 21:37:25
680-162117-a-37-c	(PFP)	0.0428	ug/L	21 Dec 2018 21:41:23
680-162117-b-45-b	(PFP)	0.0323	ug/L	21 Dec 2018 21:45:21
680-162117-a-52-e	(PFP)	0.0406	ug/L	21 Dec 2018 21:49:20
680-162279-a-8-b	(PFP)	0.0334	ug/L	21 Dec 2018 21:53:17
680-162208-a-1-b	(PFP)	0.0390	ug/L	21 Dec 2018 21:57:15
lb 680-204786/1-a	(PFP)	0.0359	ug/L	21 Dec 2018 22:01:12
660-91363-e-1-h	(PFP)	0.0367	ug/L	21 Dec 2018 22:05:10
660-91363-e-1-k ms	(PFP)	0.6936	ug/L	21 Dec 2018 22:09:08
CCV		2.5660	ug/L	21 Dec 2018 22:13:05
CCB		0.0217	ug/L	21 Dec 2018 22:17:03
660-91363-e-1-l msd	(PFP)	0.7420	ug/L	21 Dec 2018 22:20:59
660-91363-e-2-h	(PFP)	0.0335	ug/L	21 Dec 2018 22:24:56
660-91363-e-3-g	(PFP)	0.0252	ug/L	21 Dec 2018 22:28:53
mb 680-552619/1-a	(PFP)	0.0318	ug/L	21 Dec 2018 22:32:51
lcs 680-552619/2-a	(PFP)	2.3890	ug/L	21 Dec 2018 22:36:48
680-161933-i-5-c	(PFP)	0.0319	ug/L	21 Dec 2018 22:40:46
680-161933-i-1-e	(PFP)	0.0361	ug/L	21 Dec 2018 22:44:45
680-161933-i-3-c	(PFP)	0.0382	ug/L	21 Dec 2018 22:48:42
680-161556-a-5-c	(PFP)	0.0382	ug/L	21 Dec 2018 22:52:40
680-161556-a-2-c	(PFP)	0.0451	ug/L	21 Dec 2018 22:56:37
CCV		2.6731	ug/L	21 Dec 2018 23:00:35
CCB		0.0305	ug/L	21 Dec 2018 23:04:32
490-164741-g-2-c	(PFP)	0.0823	ug/L	21 Dec 2018 23:08:28
490-164741-g-3-c	(PFP)	0.0387	ug/L	21 Dec 2018 23:12:25
490-164741-g-4-g	(PFP)	0.0212	ug/L	21 Dec 2018 23:16:23
490-164741-g-4-h ms	(PFP)	0.7319	ug/L	21 Dec 2018 23:20:21
490-164741-g-4-i msd	(PFP)	0.8502	ug/L	21 Dec 2018 23:24:19
490-164741-g-5-c	(PFP)	0.0257	ug/L	21 Dec 2018 23:28:16
680-161556-a-4-c	(PFP)	0.0324	ug/L	21 Dec 2018 23:32:13
680-162184-b-3-g	(PFP)	0.0484	ug/L	21 Dec 2018 23:36:11
680-162184-b-3-h ms	(PFP)	0.8939	ug/L	21 Dec 2018 23:40:10
680-162184-b-3-i msd	(PFP)	0.8765	ug/L	21 Dec 2018 23:44:08

C12212018A

Method: Initial Method Operator: Admin Date of Analysis: 21 Dec 2018 15:53:04

Sample ID	Extended ID	Mean	Units	Date
CCV		2.6590	ug/L	21 Dec 2018 23:48:06
CCB		0.0364	ug/L	21 Dec 2018 23:52:04
680-162184-d-2-c	(PFP)	0.0420	ug/L	21 Dec 2018 23:56:00
680-162184-d-4-c	(PFP)	0.0300	ug/L	21 Dec 2018 23:59:58
680-162184-d-12-c	(PFP)	0.0343	ug/L	22 Dec 2018 00:03:56
680-162184-b-13-c	(PFP)	0.0369	ug/L	22 Dec 2018 00:07:54
680-162184-d-9-c	(PFP)	0.0427	ug/L	22 Dec 2018 00:11:52
680-162184-b-10-c	(PFP)	0.0480	ug/L	22 Dec 2018 00:15:50
680-162184-d-16-d	(PFP)	0.0214	ug/L	22 Dec 2018 00:19:48
680-162184-b-14-g	(PFP)	0.0903	ug/L	22 Dec 2018 00:23:45
mb 680-552831/1-a	(PFP)	0.0377	ug/L	22 Dec 2018 00:27:43
lcs 680-552831/2-a	(PFP)	2.5697	ug/L	22 Dec 2018 00:31:41
CCV		(H)2.8163	ug/L	22 Dec 2018 00:35:40
CCB		0.0236	ug/L	22 Dec 2018 00:39:38
660-91333-i-1-a	(PFP)	0.0427	ug/L	22 Dec 2018 00:43:35
680-162184-a-3-g	(PFP)	0.0194	ug/L	22 Dec 2018 00:47:33
680-162184-a-3-h ms	(PFP)	0.8024	ug/L	22 Dec 2018 00:51:31
680-162184-a-3-i msd	(PFP)	0.7647	ug/L	22 Dec 2018 00:55:29
680-162184-c-4-c	(PFP)	0.0353	ug/L	22 Dec 2018 00:59:27
680-162184-a-14-c	(PFP)	0.0348	ug/L	22 Dec 2018 01:03:25
680-162184-c-2-c	(PFP)	0.0377	ug/L	22 Dec 2018 01:07:23
680-162184-c-12-c	(PFP)	0.0347	ug/L	22 Dec 2018 01:11:21
680-162184-a-18-c	(PFP)	0.0383	ug/L	22 Dec 2018 01:15:19
680-162184-c-9-c	(PFP)	0.0337	ug/L	22 Dec 2018 01:19:17
CCV		(H)2.7796	ug/L	22 Dec 2018 01:23:15
CCB		0.0217	ug/L	22 Dec 2018 01:27:13
680-162184-a-10-c	(PFP)	0.0444	ug/L	22 Dec 2018 01:31:09
680-162184-c-16-c	(PFP)	0.0343	ug/L	22 Dec 2018 01:35:07
680-162184-a-13-c	(PFP)	0.0197	ug/L	22 Dec 2018 01:39:06
660-91323-g-7-d	(PFP)	0.0441	ug/L	22 Dec 2018 01:43:03
660-91323-g-6-d	(PFP)	0.0401	ug/L	22 Dec 2018 01:47:01
660-91323-g-5-d	(PFP)	0.0408	ug/L	22 Dec 2018 01:51:00
660-91323-g-4-d	(PFP)	0.0411	ug/L	22 Dec 2018 01:54:58
680-162094-i-14-c	(PFP)	0.0268	ug/L	22 Dec 2018 01:58:57
680-162238-a-74-b	(PFP)	0.2862	ug/L	22 Dec 2018 02:02:54
680-162238-a-76-b	(PFP)	1.9895	ug/L	22 Dec 2018 02:06:52
CCV		(H)2.8548	ug/L	22 Dec 2018 02:10:51
CCB		0.0670	ug/L	22 Dec 2018 02:14:48
680-162238-a-80-b	(PFP)	0.0391	ug/L	22 Dec 2018 02:18:45
680-162238-a-81-b	(PFP)	0.0295	ug/L	22 Dec 2018 02:22:43
mb 680-552786/1-a	(PFP)	0.0315	ug/L	22 Dec 2018 02:26:41
lcs 680-552786/2-a	(PFP)	0.0382	ug/L	22 Dec 2018 02:29:52
CCV		(H)2.8277	ug/L	22 Dec 2018 08:20:21
CCB		0.0382	ug/L	22 Dec 2018 08:24:19
CCV		(H)2.8552	ug/L	22 Dec 2018 08:28:35
CCB		0.0382	ug/L	22 Dec 2018 08:32:32

C12222018A

Method: Initial Method Operator: Admin Date of Analysis: 22 Dec 2018 08:40:01

Sample ID	Extended ID	Mean	Units	Date
0.0		-111	ug/L	22 Dec 2018 08:41:02
0.2		346	ug/L	22 Dec 2018 08:44:58
0.4		794	ug/L	22 Dec 2018 08:48:57
1.0		2020	ug/L	22 Dec 2018 08:52:54
3.0		6163	ug/L	22 Dec 2018 08:56:52
5.0		9779	ug/L	22 Dec 2018 09:00:49

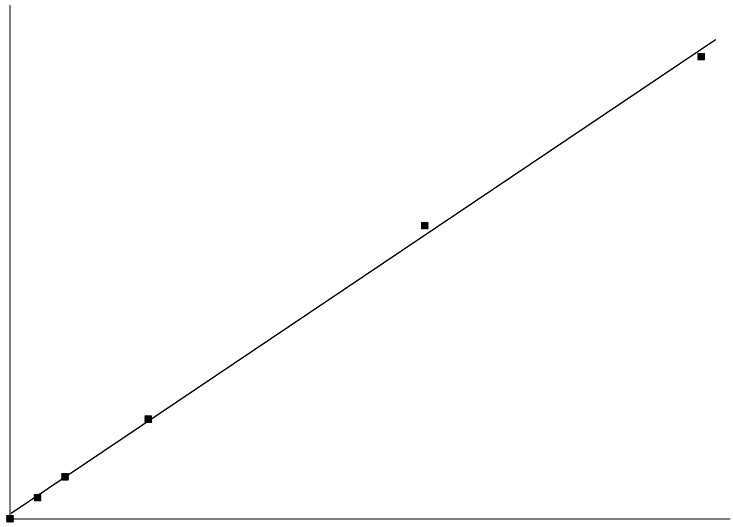
9779 µ Abs

A:0.0000e+000

B:5.0296e-004

C:8.1202e-003

R:0.9994895



Conc 5.0000

ICV		(H)3.2264	ug/L	22 Dec 2018 09:04:46
ICB		0.0081	ug/L	22 Dec 2018 09:08:43
ICV		3.1396	ug/L	22 Dec 2018 09:10:28
ICB		-0.0231	ug/L	22 Dec 2018 09:14:24
CRA		0.1929	ug/L	22 Dec 2018 09:18:20
CCV		(H)2.7511	ug/L	22 Dec 2018 09:22:19
CCB		0.0081	ug/L	22 Dec 2018 09:26:16
CCV		2.6232	ug/L	22 Dec 2018 09:28:47
CCB		-0.0358	ug/L	22 Dec 2018 09:32:44
680-162184-d-2-c	(PFP)	-0.0078	ug/L	22 Dec 2018 09:36:40
680-162184-d-4-c	(PFP)	-0.0103	ug/L	22 Dec 2018 09:40:38
680-162184-d-12-c	(PFP)	-0.0269	ug/L	22 Dec 2018 09:44:36
680-162184-b-13-c	(PFP)	-0.0016	ug/L	22 Dec 2018 09:48:34
680-162184-d-9-c	(PFP)	0.0091	ug/L	22 Dec 2018 09:52:32
680-162184-b-10-c	(PFP)	0.0163	ug/L	22 Dec 2018 09:56:30
680-162184-d-16-d	(PFP)	0.0054	ug/L	22 Dec 2018 10:00:28
680-162184-b-14-g	(PFP)	0.0613	ug/L	22 Dec 2018 10:04:26
mb 680-552831/1-a	(PFP)	0.0115	ug/L	22 Dec 2018 10:08:24
lcs 680-552831/2-a	(PFP)	2.5405	ug/L	22 Dec 2018 10:12:22
CCV		2.4966	ug/L	22 Dec 2018 10:16:21
CCB		0.0101	ug/L	22 Dec 2018 10:20:19
660-91333-i-1-a	(PFP)	0.0168	ug/L	22 Dec 2018 10:24:15
680-162184-a-3-g	(PFP)	0.0002	ug/L	22 Dec 2018 10:28:13
680-162184-a-3-h ms	(PFP)	0.7280	ug/L	22 Dec 2018 10:32:11
680-162184-a-3-i msd	(PFP)	0.7227	ug/L	22 Dec 2018 10:36:09
680-162184-c-4-c	(PFP)	0.0033	ug/L	22 Dec 2018 10:40:07
680-162184-a-14-c	(PFP)	0.0091	ug/L	22 Dec 2018 10:44:05
680-162184-c-2-c	(PFP)	-0.0247	ug/L	22 Dec 2018 10:48:03
680-162184-c-12-c	(PFP)	-0.0070	ug/L	22 Dec 2018 10:52:01
680-162184-a-18-c	(PFP)	0.0090	ug/L	22 Dec 2018 10:55:59
680-162184-c-9-c	(PFP)	0.0103	ug/L	22 Dec 2018 10:59:57
CCV		2.4389	ug/L	22 Dec 2018 11:03:55
CCB		-0.0041	ug/L	22 Dec 2018 11:07:54
680-162184-a-10-c	(PFP)	0.0185	ug/L	22 Dec 2018 11:11:49
680-162184-c-16-c	(PFP)	-0.0091	ug/L	22 Dec 2018 11:15:47
680-162184-a-13-c	(PFP)	0.0039	ug/L	22 Dec 2018 11:19:46
660-91323-g-7-d	(PFP)	0.0235	ug/L	22 Dec 2018 11:23:44
660-91323-g-6-d	(PFP)	0.0204	ug/L	22 Dec 2018 11:27:42
660-91323-g-5-d	(PFP)	0.0292	ug/L	22 Dec 2018 11:31:41
660-91323-g-4-d	(PFP)	0.0096	ug/L	22 Dec 2018 11:35:38
680-162094-i-14-c	(PFP)	[illegible]	ug/L	22 Dec 2018 11:39:36

C12222018A

Method: Initial Method Operator: Admin Date of Analysis: 22 Dec 2018 08:40:01

Sample ID	Extended ID	Mean	Units	Date
680-162238-a-74-b	(PFP)	0.2075	ug/L	22 Dec 2018 11:43:34
680-162238-a-76-b	(PFP)	1.6181	ug/L	22 Dec 2018 11:47:32
CCV		2.4772	ug/L	22 Dec 2018 11:51:30
CCB		0.0023	ug/L	22 Dec 2018 11:55:28
680-162238-a-80-b	(PFP)	0.0093	ug/L	22 Dec 2018 11:59:23
680-162238-a-81-b	(PFP)	-0.0034	ug/L	22 Dec 2018 12:03:21
mb 680-552786/1-a	(PFP)	0.0125	ug/L	22 Dec 2018 12:07:19
lcs 680-552786/2-a	(PFP)	0.0036	ug/L	22 Dec 2018 12:11:17
lb 680-204834/1-a	(PFP)	0.0093	ug/L	22 Dec 2018 12:15:16
660-91217-a-1-h	(PFP)	0.0066	ug/L	22 Dec 2018 12:19:13
660-91217-a-1-i ms	(PFP)	0.8342	ug/L	22 Dec 2018 12:23:11
660-91217-a-1-j msd	(PFP)	0.6787	ug/L	22 Dec 2018 12:27:09
660-91216-a-1-h	(PFP)	-0.0125	ug/L	22 Dec 2018 12:31:07
660-91219-a-1-f	(PFP)	0.0053	ug/L	22 Dec 2018 12:35:05
CCV		2.4113	ug/L	22 Dec 2018 12:39:03
CCB		0.0101	ug/L	22 Dec 2018 12:43:00
660-91218-a-1-f	(PFP)	-0.0108	ug/L	22 Dec 2018 12:46:56
CCV		2.4688	ug/L	22 Dec 2018 12:50:54
CCB		0.0086	ug/L	22 Dec 2018 12:54:52
CCV		2.3384	ug/L	22 Dec 2018 13:18:22
CCB		-0.0019	ug/L	22 Dec 2018 13:22:19
lcs 680-552786/2-a	(PFP)	2.5146	ug/L	22 Dec 2018 13:26:15
CCV		2.4374	ug/L	22 Dec 2018 13:30:12
CCB		0.0051	ug/L	22 Dec 2018 13:34:09

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 551751 Batch Start Date: 12/14/18 15:34 Batch Analyst: Boyuk, Brian J

Batch Method: 3005A Batch End Date: 12/15/18 11:41

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	MS_Ag_LCS_SPK 00077	MS_LCS1_WK 00077	
MB 680-551751/1		3005A, 6010C			50 mL	50 mL			
LCS 680-551751/2		3005A, 6010C			50 mL	50 mL	0.5 mL	0.5 mL	
680-162184-B-18	SW-1	3005A, 6010C	D	<2 SU	50 mL	50 mL			
680-162184-B-3	MW-15D	3005A, 6010C	D	<2 SU	50 mL	50 mL			
680-162184-B-3 MS	MW-15D	3005A, 6010C	D	<2 SU	50 mL	50 mL	0.5 mL	0.5 mL	
680-162184-B-3 MSD	MW-15D	3005A, 6010C	D	<2 SU	50 mL	50 mL	0.5 mL	0.5 mL	
680-162184-D-2	MW-15S	3005A, 6010C	D	<2 SU	50 mL	50 mL			
680-162184-D-4	MW-16S	3005A, 6010C	D	<2 SU	50 mL	50 mL			
680-162184-D-9	MW-24S	3005A, 6010C	D	<2 SU	50 mL	50 mL			
680-162184-B-10	MW-24D	3005A, 6010C	D	<2 SU	50 mL	50 mL			

Batch Notes	
Temperature - Corrected - End	97 Degrees C
Temperature - Corrected - Start	97 Degrees C
Digestion End Time	12/15/2018 11:11
Digestion Start Time	12/15/2018 05:30
Digestion Unit ID	hb5
Hydrochloric Acid ID	5789251
Nitric Acid ID	5751240
pH Indicator ID	202015
Pipette/Syringe/Dispenser ID	me12
Thermometer ID	4969205
Digestion Tube/Cup ID	5799745
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 551755 Batch Start Date: 12/14/18 15:44 Batch Analyst: Boyuk, Brian J

Batch Method: 3005A Batch End Date: 12/15/18 10:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	MS_Ag_LCS_SPK 00077	MS_LCS1_WK 00077	
MB 680-551755/1		3005A, 6010C			50 mL	50 mL			
LCS 680-551755/2		3005A, 6010C			50 mL	50 mL	0.5 mL	0.5 mL	
680-162184-B-14	METDUP_20181211	3005A, 6010C	D	<2 SU	50 mL	50 mL			
680-162184-B-14 MS	METDUP_20181211	3005A, 6010C	D	<2 SU	50 mL	50 mL	0.5 mL	0.5 mL	
680-162184-B-14 MSD	METDUP_20181211	3005A, 6010C	D	<2 SU	50 mL	50 mL	0.5 mL	0.5 mL	
680-162184-D-12	MW-26S	3005A, 6010C	D	<2 SU	50 mL	50 mL			
680-162184-B-13	MW-26D	3005A, 6010C	D	<2 SU	50 mL	50 mL			

Batch Notes	
Temperature - Corrected - End	97 Degrees C
Temperature - Corrected - Start	97 Degrees C
Digestion End Time	12/15/2018 10:29
Digestion Start Time	12/15/2018 05:30
Digestion Unit ID	hb5
Hydrochloric Acid ID	5789251
Nitric Acid ID	5751240
pH Indicator ID	202015
Pipette/Syringe/Dispenser ID	me12
Thermometer ID	4969205
Digestion Tube/Cup ID	5799745
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 551774 Batch Start Date: 12/14/18 17:07 Batch Analyst: Bland, Brian C

Batch Method: 3010A Batch End Date: 12/15/18 14:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	MS_Ag_LCS_SPK 00077	MS_LCS1_WK 00077	MS_LCS2_wk 00240
MB 680-551774/1		3010A, 6010C			50 mL	50 mL			
LCS 680-551774/2		3010A, 6010C			50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL
680-162184-A-3	MW-15D	3010A, 6010C	T	<2 SU	50 mL	50 mL			
680-162184-A-3 MS	MW-15D	3010A, 6010C	T	<2 SU	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL
680-162184-A-3 MSD	MW-15D	3010A, 6010C	T	<2 SU	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL
680-162184-C-2	MW-15S	3010A, 6010C	T	<2 SU	50 mL	50 mL			
680-162184-C-4	MW-16S	3010A, 6010C	T	<2 SU	50 mL	50 mL			
680-162184-C-9	MW-24S	3010A, 6010C	T	<2 SU	50 mL	50 mL			
680-162184-A-10	MW-24D	3010A, 6010C	T	<2 SU	50 mL	50 mL			
680-162184-C-12	MW-26S	3010A, 6010C	T	<2 SU	50 mL	50 mL			
680-162184-A-13	MW-26D	3010A, 6010C	T	<2 SU	50 mL	50 mL			
680-162184-A-14	METDUP_20181211	3010A, 6010C	T	<2 SU	50 mL	50 mL			
680-162184-A-18	SW-1	3010A, 6010C	T	<2 SU	50 mL	50 mL			

Batch Notes	
Temperature - Corrected - End	97 Degrees C
Temperature - Corrected - Start	97 Degrees C
Digestion End Time	12/15/2018 14:29
Digestion Start Time	12/15/2018 10:00
Digestion Unit ID	hb13
Hydrochloric Acid ID	5789251
Nitric Acid ID	5751240
pH Indicator ID	202015
Pipette/Syringe/Dispenser ID	me12
Thermometer ID	4969205
Digestion Tube/Cup ID	5799745
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 Degrees C

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 551774 Batch Start Date: 12/14/18 17:07 Batch Analyst: Bland, Brian C

Batch Method: 3010A Batch End Date: 12/15/18 14:54

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 551775 Batch Start Date: 12/14/18 17:07 Batch Analyst: Bland, Brian C

Batch Method: 3010A Batch End Date: 12/15/18 14:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	MS_Ag_LCS_SPK 00077	MS_LCS1_WK 00077	MS_LCS2_wk 00240
MB 680-551775/1		3010A, 6010C			50 mL	50 mL			
LCS 680-551775/2		3010A, 6010C			50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL
680-162184-C-16	EQUIP BLANK	3010A, 6010C	T	<2 SU	50 mL	50 mL			

Batch Notes	
Temperature - Corrected - End	97 Degrees C
Temperature - Corrected - Start	97 Degrees C
Digestion End Time	12/15/2018 14:29
Digestion Start Time	12/15/2018 10:00
Digestion Unit ID	hb13
Hydrochloric Acid ID	5789251
Nitric Acid ID	5751240
pH Indicator ID	202015
Pipette/Syringe/Dispenser ID	me12
Thermometer ID	4969205
Digestion Tube/Cup ID	5799745
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 551782 Batch Start Date: 12/14/18 17:30 Batch Analyst: Bland, Brian C

Batch Method: 3005A Batch End Date: 12/15/18 14:54

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	MS_Ag_LCS_SPK 00077	MS_LCS1_WK 00077	MS_LCS2_wk 00240
MB 680-551782/1		3005A, 6010C			50 mL	50 mL			
LCS 680-551782/2		3005A, 6010C			50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL
680-162184-D-16	EQUIP BLANK	3005A, 6010C	D	<2 SU	50 mL	50 mL			
680-162184-D-16 MS	EQUIP BLANK	3005A, 6010C	D	<2 SU	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL
680-162184-D-16 MSD	EQUIP BLANK	3005A, 6010C	D	<2 SU	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL

Batch Notes	
Temperature - Corrected - End	97 Degrees C
Temperature - Corrected - Start	97 Degrees C
Digestion End Time	12/15/2018 14:00
Digestion Start Time	12/15/2018 10:00
Digestion Unit ID	hb5
Hydrochloric Acid ID	5789251
Nitric Acid ID	5751240
pH Indicator ID	202015
Pipette/Syringe/Dispenser ID	me12
Thermometer ID	4969205
Digestion Tube/Cup ID	5799745
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552619 Batch Start Date: 12/20/18 12:16 Batch Analyst: Panhorst, Philip E

Batch Method: 7470A Batch End Date: 12/20/18 18:27

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Hg_Int_Cal 00177		
MB 680-552619/1		7470A, 7470A		<2 SU	50 mL	50 mL			
LCS 680-552619/2		7470A, 7470A		<2 SU	50 mL	50 mL	0.25 mL		
680-162184-B-3	MW-15D	7470A, 7470A	D	<2 SU	50 mL	50 mL			
680-162184-B-3 MS	MW-15D	7470A, 7470A	D	<2 SU	50 mL	50 mL	0.1 mL		
680-162184-B-3 MSD	MW-15D	7470A, 7470A	D	<2 SU	50 mL	50 mL	0.1 mL		
680-162184-D-2	MW-15S	7470A, 7470A	D	<2 SU	50 mL	50 mL			
680-162184-D-4	MW-16S	7470A, 7470A	D	<2 SU	50 mL	50 mL			
680-162184-D-12	MW-26S	7470A, 7470A	D	<2 SU	50 mL	50 mL			
680-162184-B-13	MW-26D	7470A, 7470A	D	<2 SU	50 mL	50 mL			
680-162184-D-9	MW-24S	7470A, 7470A	D	<2 SU	50 mL	50 mL			
680-162184-B-10	MW-24D	7470A, 7470A	D	<2 SU	50 mL	50 mL			
680-162184-D-16	EQUIP BLANK	7470A, 7470A	D	<2 SU	50 mL	50 mL			
680-162184-B-14	METDUP_20181211	7470A, 7470A	D	<2 SU	50 mL	50 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552619 Batch Start Date: 12/20/18 12:16 Batch Analyst: Panhorst, Philip E

Batch Method: 7470A Batch End Date: 12/20/18 18:27

Batch Notes	
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	93 Degrees C
Digestion End Time	1516
Digestion Start Time	1316
Digestion Unit ID	10
Sulfuric Acid ID	5845724
Nitric Acid ID	5840662
Hydroxylamine ID	5862548
Potassium Persulfate ID	5866877
Potassium Permanganate ID	5866483
Analyst ID - Spike Analyst	PFP
Thermometer ID	MEPREP10
Digestion Tube/Cup ID	5863309
Temperature - Uncorrected - End	92 Degrees C
Temperature - Uncorrected - Start	92 Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552696 Batch Start Date: 12/20/18 17:12 Batch Analyst: Panhorst, Philip E

Batch Method: 7470A Batch End Date: 12/21/18 12:47

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	hg_icvint 00172	Hg_Int_Cal 00177		
ICV 680-552696/7		7470A, 7470A		50 mL	50 mL	0.15 mL			
ICB 680-552696/8		7470A, 7470A		50 mL	50 mL				
CRA 680-552696/9		7470A, 7470A		50 mL	50 mL		0.02 mL		
CCV 680-552696/11		7470A, 7470A		50 mL	50 mL		0.25 mL		
CCB 680-552696/12		7470A, 7470A		50 mL	50 mL				

Batch Notes	
Temperature - Corrected - End	92,93 Degrees C
Temperature - Corrected - Start	92,93 Degrees C
Digestion End Time	1205
Digestion Start Time	1005
Digestion Unit ID	8,10
Sulfuric Acid ID	5845724
Nitric Acid ID	5840662
Hydroxylamine ID	5862548
Potassium Persulfate ID	5866877
Potassium Permanganate ID	5866483
pH Indicator ID	202015
Pipette/Syringe/Dispenser ID	ME01,ME10,ME15
Analyst ID - Spike Analyst	PFP
Thermometer ID	MEPREP10
Digestion Tube/Cup ID	5788782
Temperature - Uncorrected - End	91,92 Degrees C
Temperature - Uncorrected - Start	91,92 Degrees C

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552831 Batch Start Date: 12/21/18 13:16 Batch Analyst: Panhorst, Philip E

Batch Method: 7470A Batch End Date: 12/21/18 19:22

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Hg_Int_Cal 00177		
MB 680-552831/1		7470A, 7470A		<2 SU	50 mL	50 mL			
LCS 680-552831/2		7470A, 7470A		<2 SU	50 mL	50 mL	0.25 mL		
680-162184-A-3	MW-15D	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-A-3 MS	MW-15D	7470A, 7470A	T	<2 SU	50 mL	50 mL	0.1 mL		
680-162184-A-3 MSD	MW-15D	7470A, 7470A	T	<2 SU	50 mL	50 mL	0.1 mL		
680-162184-C-4	MW-16S	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-A-14	METDUP_20181211	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-C-2	MW-15S	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-C-12	MW-26S	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-A-18	SW-1	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-C-9	MW-24S	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-A-10	MW-24D	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-C-16	EQUIP BLANK	7470A, 7470A	T	<2 SU	50 mL	50 mL			
680-162184-A-13	MW-26D	7470A, 7470A	T	<2 SU	50 mL	50 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 552831 Batch Start Date: 12/21/18 13:16 Batch Analyst: Panhorst, Philip E

Batch Method: 7470A Batch End Date: 12/21/18 19:22

Batch Notes	
Temperature - Corrected - End	94 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion End Time	1851
Digestion Start Time	1651
Digestion Unit ID	10
Sulfuric Acid ID	5845724
Nitric Acid ID	5840662
Hydroxylamine ID	5862548
Potassium Persulfate ID	5866877
Potassium Permanganate ID	5866483
Analyst ID - Spike Analyst	PFP
Thermometer ID	MEPREP10
Digestion Tube/Cup ID	5863309
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	93 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 553787 Batch Start Date: 12/31/18 09:52 Batch Analyst: Panhorst, Philip E

Batch Method: 7470A Batch End Date: 12/31/18 16:02

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	hg_icvint 00173	Hg_Int_Cal 00178	
ICV 680-553787/7		7470A, 7470A		<2 SU	50 mL	50 mL	0.15 mL		
ICB 680-553787/8		7470A, 7470A		<2 SU	50 mL	50 mL			
CRA 680-553787/9		7470A, 7470A		<2 SU	50 mL	50 mL		0.02 mL	
CCV 680-553787/11		7470A, 7470A		<2 SU	50 mL	50 mL		0.25 mL	
CCB 680-553787/12		7470A, 7470A		<2 SU	50 mL	50 mL			

Batch Notes	
Temperature - Corrected - End	95,94 Degrees C
Temperature - Corrected - Start	95,94 Degrees C
Digestion End Time	1334
Digestion Start Time	1134
Digestion Unit ID	10,8
Sulfuric Acid ID	5845724
Nitric Acid ID	5840662
Hydroxylamine ID	5862548
Potassium Persulfate ID	5866877
Potassium Permanganate ID	5872671
pH Indicator ID	5846231/5706640/5783162
Pipette/Syringe/Dispenser ID	ME3,ME15
Analyst ID - Spike Analyst	PFP
Thermometer ID	MEPREP10
Digestion Tube/Cup ID	5863309
Temperature - Uncorrected - End	94,93 Degrees C
Temperature - Uncorrected - Start	94,93 Degrees C

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Savannah Job No.: 680-162184-1

SDG No.:

Batch Number: 553794 Batch Start Date: 12/31/18 10:53 Batch Analyst: Panhorst, Philip E

Batch Method: 7470A Batch End Date: 12/31/18 17:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Hg_Int_Cal 00178		
MB 680-553794/1		7470A, 7470A		<2 SU	50 mL	50 mL			
LCS 680-553794/2		7470A, 7470A		<2 SU	50 mL	50 mL	0.25 mL		
680-162184-B-18	SW-1	7470A, 7470A	D	<2 SU	50 mL	50 mL			

Batch Notes	
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	93 Degrees C
Digestion End Time	1449
Digestion Start Time	1249
Digestion Unit ID	9
Sulfuric Acid ID	5845724
Nitric Acid ID	5840662
Hydroxylamine ID	5876814
Potassium Persulfate ID	5866877
Potassium Permanganate ID	5872671
pH Indicator ID	5846231/5706640/5783162
Pipette/Syringe/Dispenser ID	ME3,ME15
Analyst ID - Spike Analyst	PFP
Thermometer ID	MEPREP10
Digestion Tube/Cup ID	5863309
Temperature - Uncorrected - End	92 Degrees C
Temperature - Uncorrected - Start	92 Degrees C

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Subcontract Data

Shipping and Receiving Documents

TestAmerica Savannah
5102 LaRoche Avenue

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Chain of Custody Record

286526

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0113)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Andrew Musetto	Site Contact: Katie Angel	Date: 12/12/18	COC No:
Company Name: Antea Group	Tel/Fax: 484-723-8016	Lab Contact:	Carrier:	1 of 3 COCs
Address: 535 Route 38 Suite 203	Analysis Turnaround Time			Sampler:
City/State/Zip: Cherry Hill, NJ 08002	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 484-723-8016	TAT if different from Below STD			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Hercules Dyno - Port Ewen, NY	☐ 1 week			
Site: Ashland Port Ewen	☐ 2 days			Job / SDG No.:
PO# ASHFWE18-4001	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	6010C Total & Dissolved	7470A Mercury	8260B VOCs	1,4-dioxane	Sample Specific Notes:
MW-3	12/11/18	1453	G	GW	3	N	N			X		*Dissolved metals sample were field filtered. Sample bottles are marked as "field filtered" for dissolved metals analysis.
MW-15S	12/11/18	1300	G	GW	4	Y	N	X	X		X	
MW-15D	12/11/18	1350	G	GW	2	Y	N	X	X			
MW-16S	12/11/18	1545	G	GW	4	Y	N	X	X		X	
MW-21R	12/11/18	1323	G	GW	5	N	N			X	X	
MW-21D	12/11/18	1237	G	GW	3	N	N			X		
MW-22D	12/11/18	1621	G	GW	3	N	N			X		
MW-22R	12/11/18	1043	G	GW	5	N	N			X	X	
MW-24S	12/12/18	1308	G	GW	4	Y	N	X	X		X	
MW-24D	12/12/18	1355	G	GW	2	Y	N	X	X			
MW-25S	12/12/18	1223	G	GW	5	N	N			X	X	
MW-26S	12/12/18	1105	G	GW	4	Y	N	X	X		X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 2 4 4 2

680-162184 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Send EDD package to AGDataView.US@anteagroup.com

3.6; 2.8; 4.9, 3.3, 4.5

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: CH-1125

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	12/12/18	12/12/18 1500			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TASAV	Date/Time: 12/14/18 949

TestAmerica Savannah
5102 LaRoche Avenue

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Chain of Custody Record

286525

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Andrew Musetto	Site Contact: Katie Dingh	Date: 12/12/18	COC No:
Company Name: Antea Group	Tel/Fax: 484-723-8016	Lab Contact:	Carrier:	2 of 3 COCs
Address: 535 Route 38, Suite 203	Analysis Turnaround Time			Sampler:
City/State/Zip: Cherry Hill, NJ 08002	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 484-723-8016	TAT if different from Below STD			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Hercules Dyno-Port Ewen	☐ 1 week			
Site: Ashland Port Ewen	☐ 2 days			Job / SDG No.:
PO# ASHPEWE18	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260C Total & Dissolved Metals*	7470A Mercury	8260B VOCs	1,4-dioxane	Sample Specific Notes:
MW-26D	12/12/18	1152	G	GW	2	Y	N	X	X		X	*Dissolved metals samples were field filtered. Sample bottles are marked as "field filtered" for dissolved metal analysis.
MW-15D MS	12/11/18	1350	G	GW	2	Y	Y	X	X		X	
MW-15D MSD	12/11/18	1350	G	GW	2	Y	Y	X	X		X	
MW-22R MS	12/12/18	1043	G	GW	3	N	Y			X		
MW-22~~D~~R MSD	12/12/18	1043	G	GW	3	N	Y			X		
METDUP-20181211	12/11/18	—	G	GW	3	Y	N	X	X			
VOCDUP-20181212	12/12/18	—	G	GW	3	N	N			X		
Equip Blank	12/11/18	1635	G	DI	4	Y	N	X	X		X	
Trip Blank	12/11/18	—	—	DI	2	N	N			X		
SW-1	12/12/18	1646	G	W	2	Y	N	X	X			
MW-10	12/12/18	1421	G	GW	2	N	N				X	
MW-11D	12/12/18	1559	G	GW	2	N	N				X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 4 4 2 1

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
Send EDD packages to AGDataViewUS@anteagroup.com 3.6, 2.8, 4.9, 3.3, 4.6

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd:_____ Corr'd:_____ Therm ID No.: CUS-K25

Relinquished by:	Company: Antea Group	Date/Time: 12/12/18 1540	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TASAV	Date/Time: 12/14/18 9:49

01/03/2019

TestAmerica Savannah
5102 LaRoche Avenue

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Chain of Custody Record

286521

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact			
Company Name: Antea Group	Project Manager: Andrew Mustill	Site Contact:	Date: 12/12/18
Address: 535 Route 38, Suite 203	Tel/Fax:	Lab Contact:	Carrier:
City/State/Zip: Cherry Hill, NJ 08002	Analysis Turnaround Time		
Phone: 484-723-8018	☐ CALENDAR DAYS ☐ WORKING DAYS		
Fax:	TAT if different from Below STD		
Project Name: Hercules Dyno	☐ 2 weeks		
Site:	☐ 1 week		
PO #	☐ 2 days		
	☐ 1 day		

COC No: 3 of 3 COCs
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	1,4-dioxane	Sample Specific Notes:
MW-15S MS	12/11/18	1200	G	GW	2	N	Y	X	
MW-15S MSD	12/11/18	1200	G	GW	2	N	Y	X	
PFASDUP_20181211	12/11/18	–	G	GW	2	N	N	X	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for_____ Months

Special Instructions/QC Requirements & Comments:

Send EDD package to AGDataViews.US@anteagroup.com

3.6, 2.8, 4.9, 3.3, 4.0

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____		Therm ID No.: GUN025
Relinquished by:	Company: Antea Group	Date/Time: 12/12/18 1800	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TASAV	Date/Time: 12/14/18 9:49

01/03/2019

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-547784.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: eddie.barnett@testamericainc.com	State of Origin: New York	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 680-162184-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/24/2018			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Hercules Dyno - Port Ewen, NY	Project #: 68001427			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_SIM_MS_ID/3510C (MOD) Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-15S (680-162184-2)	12/11/18	12:00 Eastern		Water			X	2	
MW-15S (680-162184-2MS)	12/11/18	12:00 Eastern	MS	Water			X	2	
MW-15S (680-162184-2MSD)	12/11/18	12:00 Eastern	MSD	Water			X	2	
MW-16S (680-162184-4)	12/11/18	15:45 Eastern		Water			X	2	
MW-21R (680-162184-5)	12/11/18	13:23 Eastern		Water			X	2	
MW-22R (680-162184-8)	12/12/18	10:43 Eastern		Water			X	2	
MW-24S (680-162184-9)	12/12/18	13:08 Eastern		Water			X	2	
MW-25S (680-162184-11)	12/12/18	12:23 Eastern		Water			X	2	
MW-26S (680-162184-12)	12/12/18	11:05 Eastern		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by: Date:	Time: Method of Shipment:
Relinquished by: Date/Time:	

01/03/2019

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Barnett, Eddie T	Carrier Tracking No(s):	COC No: 680-547784.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: eddie.barnett@testamericainc.com	State of Origin: New York	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 680-162184-1
Address: 10 Hazelwood Drive, ,	Due Date Requested: 12/24/2018			
City: Amherst	TAT Requested (days):			
State, Zip: NY, 14228-2298				
Phone: 716-691-2600(Tel) 716-691-7991(Fax)	PO #:			
Email:	WO #:			
Project Name: Hercules Dyno - Port Ewen, NY	Project #: 68001427			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_SIM_MS_ID/3510C (MOD) Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EQUIP BLANK (680-162184-16)	12/11/18	16:35 Eastern		Water			X	2	
MW-10 (680-162184-19)	12/12/18	14:21 Eastern		Water			X	2	
MW-11D (680-162184-20)	12/12/18	15:59 Eastern		Water			X	2	
PFASDUP-20181211 (680-162184-21)	12/11/18	Eastern		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by: Date:	Time: Method of Shipment:
Relinquished by: Date/Time:	

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-162184-1

Login Number: 162184
List Number: 1
Creator: Weston, Pamela

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ashland LLC

Job Number: 680-162184-1

Login Number: 162184
List Number: 2
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo
List Creation: 12/15/18 11:47 AM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
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	3.3, 4.2, 3.8 #1
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?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	