

**SITE-SPECIFIC FINAL REPORT
MILITARY MUNITIONS RESPONSE PROGRAM
NON-TIME CRITICAL REMOVAL ACTION**

**Firing-in-Buttress (MRS SR002)
Hancock Field Air National Guard Base
Syracuse, New York**

FINAL

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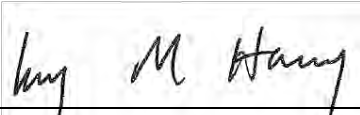
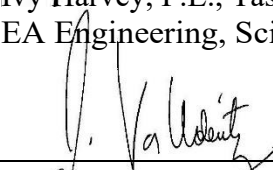


July 2020

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FINAL

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July 2020

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LIST OF ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
AAR	After Action Report
AM	Action Memorandum
ANG	Air National Guard
bgs	Below ground surface
CA	Cost analysis
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CSE	Comprehensive Site Evaluation
DDESB	Department of Defense Explosives Safety Board
DFW	Definable feature of work
DoD	Department of Defense
EA	EA Engineering, Science, and Technology, Inc., PBC
EE	Engineering Evaluation
EM	Engineer Manual
EPA	United States Environmental Protection Agency
ESS	Explosive Safety Submission
FIB	Firing-in-Buttress
ft	Foot (feet)
HEAT	High explosive anti-tank
HFD	Hazard fragment distance
in.	Inch(es)
ISO	Industry standard objects
IVS	Instrument verification strip
lb	Pound(s)
LOD	Limit of detection
MC	Munitions constituents
MD	Munitions debris
MDAS	Material documented as safe
MEC	Munitions and explosives of concern
MFR	Memorandum for Record
mg/kg	Milligram(s) per kilogram
mm	Millimeter(s)
MMRP	Military Munitions Response Program
MPPEH	Material potentially presenting an explosive hazard

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

MRA	Munitions response area
MRS	Munitions response site
MS	Matrix spike
NCP	National Oil and Hazard Substance Contingency Plan
NFA	No further action
NTCRA	Non-Time Critical Removal Action
NYSDEC	New York State Department of Environmental Conservation
OESS	Ordnance and Explosives Safety Specialist
PBC	Public Benefit Corporation
PM	Project Manager
QA	Quality assurance
QC	Quality control
RA	Remedial action
SAA	Small arms ammunition
SCO	Soil Cleanup Objective
Sky	Sky Research, Inc.
SO	Safety Officer
SSFR	Site-Specific Final Report
SUXOS	Senior UXO Supervisor
USACE	United States Army of Corps of Engineer
USAF	United States Air Force
UXO	Unexploded ordnance
UXOQCS	UXO Quality Control Specialist
UXOSO	UXO Safety Officer
XRF	X-ray fluorescence

1. INTRODUCTION

This Site-Specific Final Report (SSFR) documents the Remedial Action (RA) completed at the Firing-in-Buttress (FIB) (SR002) Munition Response Site (MRS) at Hancock Field Air National Guard (ANG) Base in Syracuse, New York. The location of the FIB is shown on Figures 1-1 and 1-2.

1.1 AUTHORITY

This Non-Time Critical Removal Action (NTCRA) was completed by EA Engineering, P.C. and its affiliate EA Science and Technology (EA) for the United States Army Corps of Engineers (USACE)–Omaha District at Hancock Field ANG Base (Hancock Field) located in Syracuse, New York under Contract Number W9128F-13-D-0006, Delivery Order 0002.

The NTCRA was conducted in support of the ANG Military Munitions Response Program (MMRP) at Hancock Field. The goal of the ANG MMRP is to make munitions response areas (MRAs) and MRSs safe for re-use and to protect human health and the environment in the process. The ANG MMRP addresses issues related to munitions and explosives of concern (MEC), chemical warfare materiel, and munitions constituents (MC) associated with MRAs, as well as related hazardous substances, pollutants, and potential contaminants of concern found at locations other than operational ranges.

1.2 REGULATORY FRAMEWORK

The NTCRA represents ANG compliance with the Defense Environmental Restoration Program, which requires that environmental responses be performed by the Department of Defense (DoD) consistent with the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 United States Code 9601) requirements for investigation and cleanup. Although Hancock Field is not a National Priorities List site, work performed is to be consistent with United States Environmental Protection Agency (EPA) guidance (EPA 1993) under CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations [CFR], Part 300). CERCLA has no special provisions for dealing with explosive safety, and therefore, the provisions in the DoD's Ammunition and Explosives Safety Standards (DoD 6055.09) and USACE Engineer Manual (EM) 385-1-97 must be adhered to.

1.3 PURPOSE AND SCOPE

The purpose of the NTCRA was to achieve the removal action objectives (RAOs) documented in the Action Memorandum; to mitigate potential hazards to human health and the environment from MEC and munitions constituents and allow future residential use of the area by removing MEC, contaminated soil, and debris associated with the FIB at MRS SR002 on Hancock Field. The scope of work included demolition and removal of the FIB including all subsurface debris and MEC from the FIB interior, and confirmatory sampling to demonstrate the removal achieved the goal of removing residual contamination when compared to established Soil Cleanup Objectives (SCOs) for lead and copper in New York.

The project objective was met by completing activities in accordance with the approved Work Plan (EA 2019), which included an Explosives Safety Submission, Accident Prevention Plan, Site Safety and Health Plan, Activity Hazard Analyses, Environmental Protection Plan, Quality Control Plan, and Explosives Management Plan as appendices.

1.4 REPORT ORGANIZATION

This SSFR is organized into the following sections and appendices:

- **Chapter 1—Introduction:** Presents the introduction, including authority, regulatory framework, purpose and scope, and report organization.
- **Chapter 2—Installation Background:** Presents background information for the RA, including MRS description, environmental setting, and previous investigations.
- **Chapter 3—Project Activities and Operations:** Presents the approach and methods used for the RA including FIB and associated debris removal and confirmatory sampling. Also presents a summarized timeline of the site activities.
- **Chapter 4—Remedial Action Results:** Presents the RA results and conclusions for the FIB SR002 MRS.
- **Chapter 5—Quality Control/Quality Assurance:** Describes and summarizes the results of quality control (QC) and quality assurance (QA) activities.
- **Chapter 6—Exposure Data:** Presents the onsite exposure data for field personnel.
- **Chapter 7—Munitions Response Site Prioritization Protocol:** Presents the application of the Munitions Response Site Prioritization Protocol (MRSPP) update for the FIB SR002 MRS.
- **Chapter 8—References:** Presents the references used in developing the report.
- **Appendix A—Daily Reports:** Provides daily reports completed in the field summarizing overall progress, quality control (QC) and safety.
- **Appendix B—Asbestos Manifest.**
- **Appendix C—Laboratory Validation and Analytical Reports.**
- **Appendix D—Concrete Recycle and Railroad Timber Disposal Tickets.**
- **Appendix E—Material Documented as Safe (MDAS) Disposal Information.**

1.5 CERTIFICATION STATEMENT

I, Donald Conan, certify that I am currently a NYS registered Professional Engineer and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Donald Conan, P.E., P.G., Vice President
EA Engineering, P.C. and its affiliate EA Science and Technology

Date

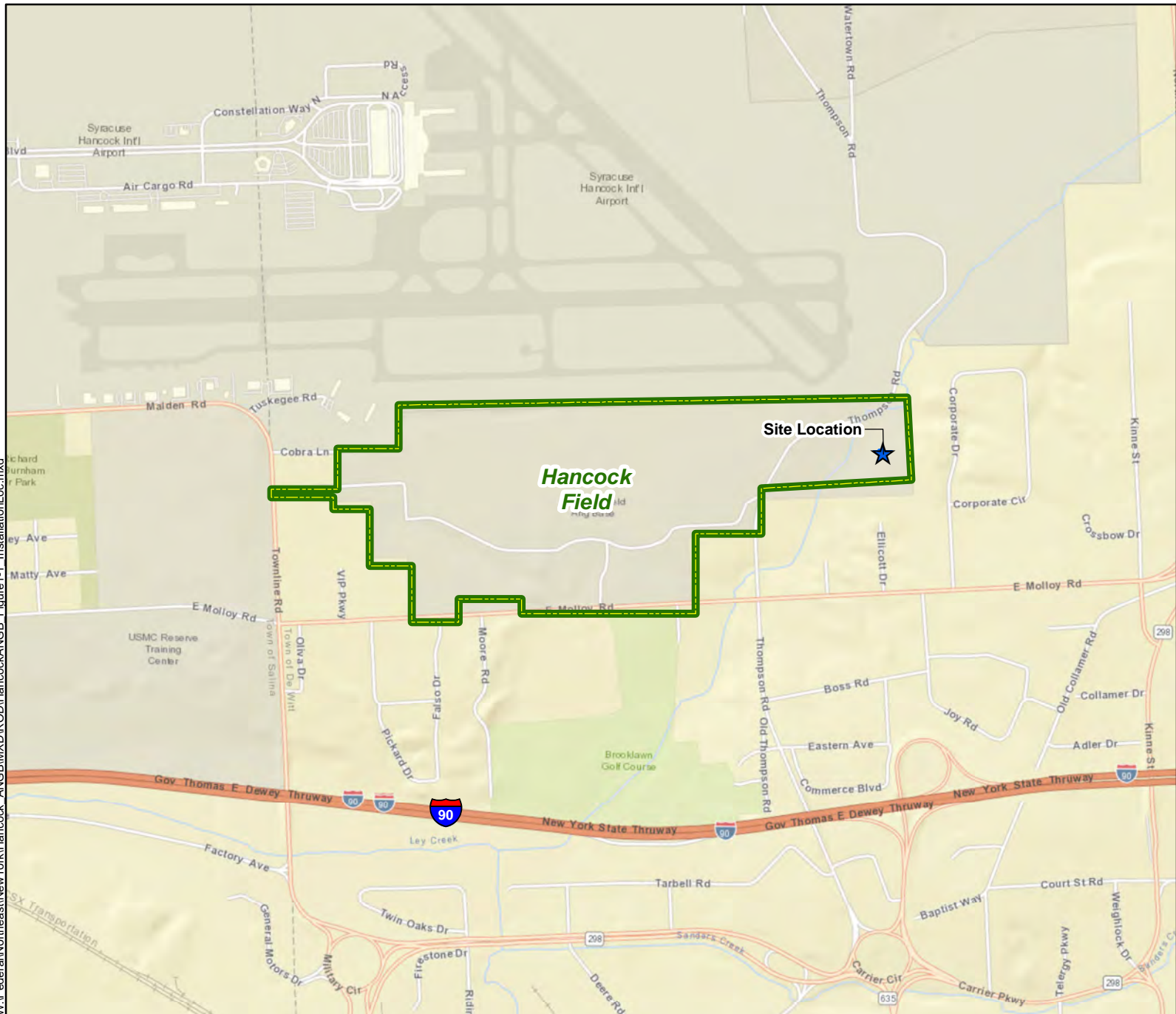


Donald Conan

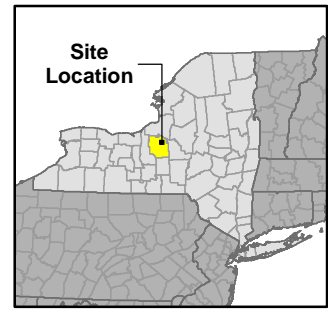
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VICINITY MAP



Legend

-  Installation Boundary

Data Sources:
ESRI 2012

Map Date: 2/17/2020

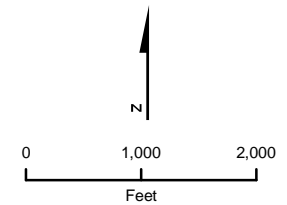
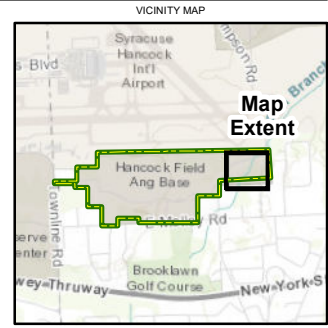
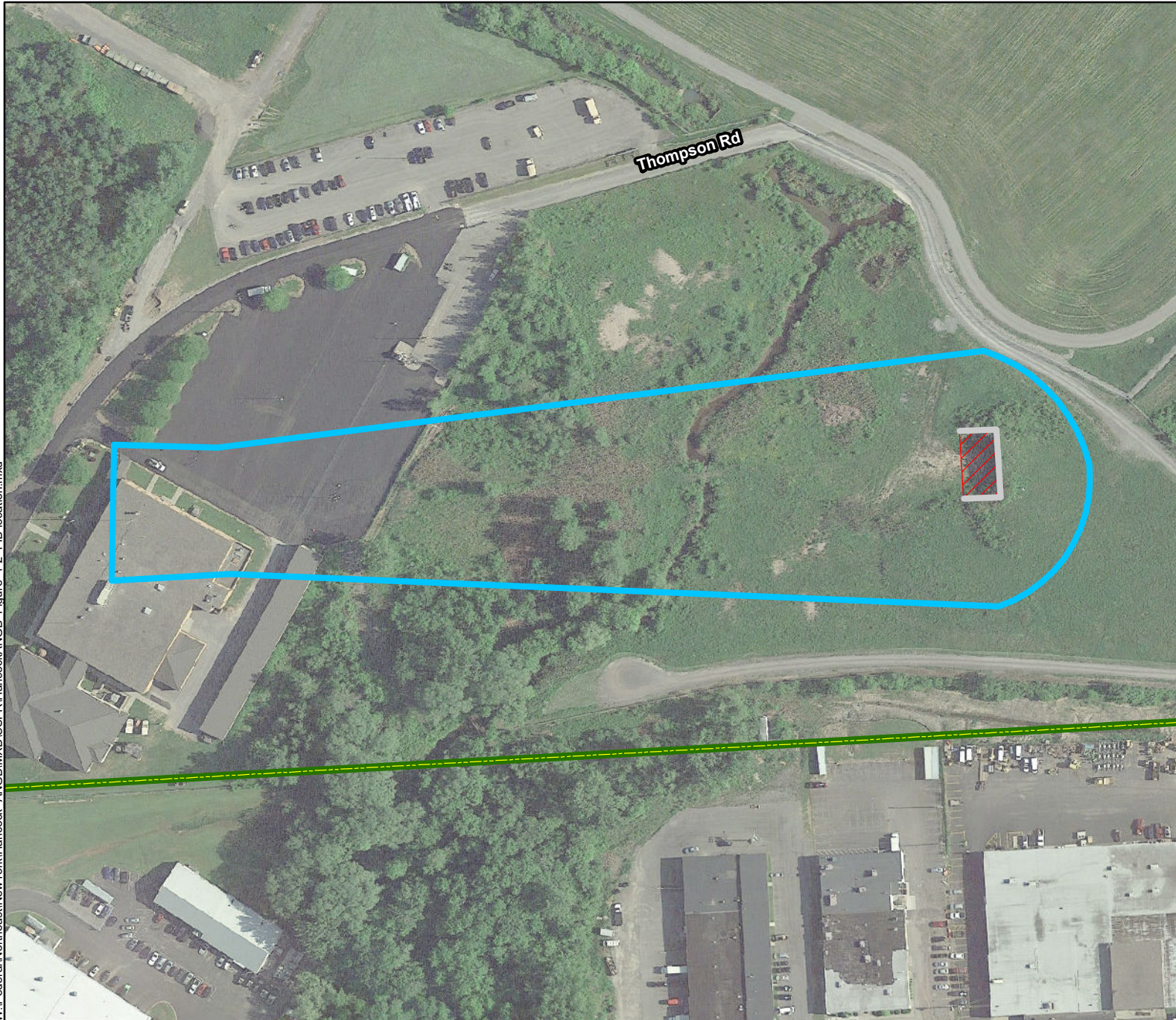


Figure 1-1
Installation Location
 Hancock Field Syracuse,
 New York

W:\Federal\Northeast\NewYork\Hancock ANGB\MXD\SSFR\Hancock\ANGB Figure 1-2 FIB location.mxd



- Legend**
- Firing-In Buttress Structure
 - ▨ MRS SR002
 - ▭ MRS SR002a
 - ▭ Installation Boundary

Data Sources:
Google Earth 2015

Map Date: 6/8/2020

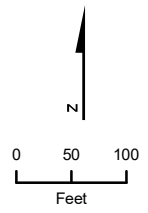


Figure 1-2
Firing-In-Butress
(MRS SR002)
Location Map
Hancock ANGB
Syracuse, New York

2. INSTALLATION BACKGROUND

This Chapter presents background information on the FIB SR002 MRS, including MRS description, environmental setting, and previous investigations.

2.1 MUNITIONS RESPONSE SITE DESCRIPTION AND HISTORY

Hancock Field, as shown in Figure 1-1, is located south of and adjacent to the Syracuse-Hancock International Airport, approximately 5 miles north of the City of Syracuse in Onondaga County, New York.

The FIB MRS SR002 located at Hancock Field, encompasses approximately 0.1 acre of land (Figure 1-2) and included the FIB structure and the soil contained within the structure. The structure was comprised of concrete with an interior and front face covered in wood timbers. The exterior was covered with grass sod and vegetation. The opening of the structure was approximately 15 feet (ft) high and 80 ft wide. The inside of the wooden structure contained the soil impact berm.

2.1.1 Installation Mission and Operational History

2.1.1.1 Installation Mission

The installation's mission is to maintain well-trained and well-equipped units available for prompt mobilization during war and to provide assistance during national emergencies (i.e., natural disasters or civil disturbances). During peacetime, the combat-ready and support units are assigned to most United States Air Force (USAF) major commands to carry out missions compatible with training, mobilization readiness, and humanitarian and contingency operations. Mission-related activities include vehicle, aircraft, and runway maintenance; fueling operations; and military training operations (USACE-Omaha District 2013).

2.1.1.2 Installation History

In 1942, Hancock Field, formerly Mattydale Bomber Base, was constructed along with three 5,500-ft runways. The facility was built to serve as a staging and storage area for repairing and re-outfitting B-17 and B-24 aircraft used in World War II. The Base was also used by the First Concentration Command, later known as the Air Service Command, to assemble and test B-24 aircraft. In 1946, the City of Syracuse took control of the Mattydale Bomber Base, and in 1948, the Base was dedicated as a commercial airfield. The Clarence E. Hancock Airport opened in September 1949, attaining international airport status in 1970. Over the last few decades, both the mission and physical size of the Hancock Field (military) installation have been reduced from the initial World War II capacity. Much of the airbase, including the runways, was converted to civilian use as the Syracuse Hancock International Airport (USACE-Omaha District 2013).

Currently, Hancock Field is home to the 174th Attack Wing of the New York ANG. The 174th Attack Wing began as the 138th Fighter Squadron on 28 October 1947. In 1962, the 138th Fighter Squadron was officially renamed the 147th Tactical Fighter Group. In 1979, there was a status

change from Tactical Fighter Group to Tactical Fighter Wing. In 1992, the Tactical Fighter Wing was redesignated the 174th Fighter Wing. In 2012, the 174th Fighter Wing was renamed as the 174th Attack Wing. Aircraft historically utilized by the unit include the P-47D Thunderbolt, F-84B Thunderjet, F-86H Sabre, A-10A Thunderbolt II, and F-16A Fighting Falcon (USACE-Omaha District 2013).

The installation currently encompasses approximately 357 acres and consists of several buildings and operational facilities. It is divided into two tracts of land: Tract II and Tract III. Tract III encompasses approximately 270 acres and includes MRS SR002. Both tracts are owned by the USAF (fee-owned) with a license to New York State for ANG use. The City of Syracuse owns the land bordering Tract II and the land north of Tract III (USACE–Omaha District 2013).

2.1.2 Summary of Historical Military Munitions Related Activities

The intended use of the FIB was as a backstop and safety berm to clear jammed rounds from aircraft gun systems. It was also used by F-86 aircraft for test firings of gun systems and boresight alignment, which reportedly included the use of small arms ammunition (SAA) of various caliber (up to 0.50-caliber). Based on the MD observed in the FIB, aircraft may have also fired 20-millimeter (mm) target practice projectiles and 3.5-inch (in.) rockets. The FIB has been inactive since 1976 (USACE–Omaha District 2013).

2.1.3 Regional Climate

The climate at Hancock Field is mild during summer and very cold during winter with abundant precipitation. Monthly mean high temperature ranges from 31 degrees Fahrenheit (°F) in January to 82°F in July. Monthly mean low temperature ranges from 15°F in January to 60°F in July. Average annual precipitation is approximately 38.3 in. Annual mean snowfall is approximately 107.1 in. (USACE–Omaha District 2013).

2.1.4 Topography

Hancock Field is located within the Ontario-Mohawk Lowland Region of the Central Lowland Physiographic Province. This province has a relatively flat topography created by glacial erosion and deposition during the Wisconsin Glaciation. The installation is part of an area of flat lowlands situated between Lake Ontario and the Onondaga Escarpment in Syracuse, New York. Topography across the installation rises gradually from approximately 385 ft above mean sea level at the southeast end of the installation to approximately 425 ft above mean sea level at the west-northwest part of the installation (USACE–Omaha District 2013).

2.1.5 Soil

Soils at Hancock Field are composed of silts with varying amounts of clay and fine to medium sand. Specifically, soils within the wood structure at the FIB (MRS SR002) consist primarily of sandy soils. Subsurface soils beneath the berm consist of Ontario loam (EA and USACE 2016).

2.1.6 Geology and Hydrogeology

2.1.6.1 Geology

Hancock Field is located in an area of flat lowlands between Lake Ontario and the Onondaga Escarpment. Multiple layers underlie the Base, including unconsolidated lake sediments from 0 to 50 ft below ground surface (bgs), glacial till from 50 to 100 ft bgs, and sedimentary bedrock beneath the till. The lake sediments are composed of silts with varying amounts of clay and fine to medium sand. The glacial till is composed of gravel and large cobbles in a silty clay matrix. The sedimentary bedrock consists of shale and siltstone of the Vernon Formation (USACE–Omaha District 2013).

2.1.6.2 Hydrogeology

The lake sediments contain an unconfined, non-sole-source water table aquifer that is several feet bgs. Due to low yield resulting from low transmissivity, the aquifer is not a suitable source of potable water. A confined aquifer is found in the bedrock below the glacial till. The glacial till layer serves as a barrier to vertical groundwater migration between the overlying lake sediments and underlying sedimentary bedrock. There is a strong upward flow potential between the confined bedrock aquifer and the unconfined water table aquifer (USACE–Omaha District 2013).

Groundwater may be encountered 3 ft bgs at the FIB (MRS SR002) (USACE–Omaha District 2013).

2.1.7 Surface Water Hydrology

Hancock Field and its surrounding areas contain naturally occurring swamps and poorly drained areas. These natural lowlands and swamps have been drastically altered by development of this area into its current use as a transportation center and military facility. There are mapped wetlands located in the southern and eastern areas of the installation. In general, surface drainage near the FIB (MRS SR002) is south-southeast toward the North Branch of Ley Creek (USACE–Omaha District 2013).

2.1.8 Current and Future Land Use

2.1.8.1 Surrounding Land Use and Populations

Hancock Field, located in Onondaga County, is approximately 5 miles from downtown Syracuse, New York. Hancock Field is bordered on the north by airport property owned by the City of Syracuse, and to the east, south, and west by commercial/industrial developments. The Base is bordered to the south by East Malloy Road. Across East Malloy Road is the former Brooklawn golf course and several small commercial properties (New York State Department of Environmental Conservation [NYSDEC] 2014). There are approximately 600 persons per square mile in Onondaga County (United States Census Bureau 2015).

2.1.8.2 Current Land Use

Currently, the FIB (MRS SR002) is vacant. The area immediately around the MRS is gently sloped with dense vegetation.

2.1.8.3 Future Land Use

Future land use of the MRS may include residential use.

2.2 PREVIOUS INVESTIGATIONS AT SR002

Previous investigations and RAs conducted at Hancock Field include the following:

- Modified Comprehensive Site Evaluation (CSE) Phase I (Innovative Technical Solutions, Inc. and Shaw Environmental, Inc. 2009)
- CSE Phase II (Sky Research, Inc. [Sky] 2012)
- NTCRA for Lead Soil Removal at MRSs SR001 and SR002 (ANG 2016)
- NTCRA SSFR for MRSs SR001 and SR002 (ANG 2016)
- USACE site visit of SR002 (Schneider and Kochevko 2015).

The above investigations and RAs are described in the following paragraphs.

2.2.1 Modified Comprehensive Site Evaluation Phase I

In support of the MMRP at Hancock Field, a CSE Phase I was completed in 2009 to identify potential MRAs, evaluate actual or potential releases of MC to the environment, and to evaluate associated targets of concern. The CSE Phase I investigated 10 potential MRAs at Hancock Field, including the FIB (SR002) MRA. Based on the findings of the CSE Phase I, it was determined that there was no evidence of MC releases that would warrant immediate action. However, a potential for environmental impacts from MC was identified. No further action (NFA) or transfer to the Formerly Used Defense Sites Program was recommended for the remaining 8 MRAs.

The CSE Phase I identified lead, copper, and iron as the primary MCs of concern. Additionally, a 3.5 in. high explosive anti-tank (HEAT) M28A2 rocket was identified at the FIB, which resulted in explosives being included as contaminants of concern. It was recommended that a CSE Phase II be conducted to assess the potential for environmental release of MC (USACE–Omaha District 2013).

2.2.2 Comprehensive Site Evaluation Phase II

Based on the recommendations from the CSE Phase I, a CSE Phase II was conducted in 2010. The objectives of the CSE Phase II were to determine whether releases of MC to the environment had

occurred and determine if there was a need for an emergency response and/or whether other munitions response actions were necessary. The CSE Phase II activities were conducted between 8 and 17 September 2010, and included visual surveys, ex situ X-ray fluorescence (XRF) sampling of surface and subsurface soil, a human health risk assessment, and an ecological risk assessment (Sky 2012).

Evidence of small arms use was observed during the visual inspection at MRA SR002, including blank 5.56-mm casings, plastic small arms 5.56-mm magazine, and 0.50-caliber steel cores. In addition to the small arms identified during the visual inspection, 20-mm target practice MD and a rocket spacer were observed (Sky 2012). Although the CSE Phase I identified explosives as a contaminant of concern due to the identification of the 3.5-in. HEAT rocket, samples were not analyzed for explosives during the CSE Phase II because no other evidence of MEC was observed. The CSE Phase II indicated that significant evidence of MEC use was not identified during the visual survey and that the rocket found at the FIB did not constitute a significant enough source to warrant sampling (Sky 2012). XRF samples were collected and analyzed for lead.

Based on the results of the CSE Phase II, MRA SR002 was divided into two MRSs. Further munitions response was recommended for approximately 0.1 acre, designated as MRS SR002. It also recommended NFA for approximately 5.7 acres, designated as MRS SR002a (Figure 1-2) (USACE– Omaha District 2013).

2.2.3 Non-Time Critical Removal Action for Lead in Soil at MRSs SR001 and SR002

A NTCRA to remove high lead and copper concentrations from soil in the Shooting-In Buttress (SR001) MRS and FIB (MRS SR002) was completed between 16 June and 22 August 2014. Soils identified with lead concentrations exceeding 400 milligrams per kilogram (mg/kg) and/or copper concentrations exceeding 270 mg/kg were excavated for offsite disposal. During the NTCRA, approximately 2,710 tons of soil were excavated, stabilized, and transported offsite for disposal at Seneca Meadows Landfill as non-hazardous waste. Additionally, 234 tons of soil from MRS SR002 were excavated, stabilized, and sifted for MD, prior to offsite disposal as non-hazardous waste. No MEC were identified during the NTCRA. However, approximately 600 lb of M55A2 20-mm target practice projectiles and a ballistic nose cone from a 3.5-in. HEAT rocket were recovered. All MD discovered during the NTCRA was inspected and certified as material documented as safe (MDAS) and transported offsite for recycling. Three confirmatory incremental soil samples were collected, each of which were below the NYSDEC Residential SCO for copper and lead. (ANG 2016).

2.2.4 Non-Time Critical Removal Action Site-Specific Final Report for MRSs SR001 and SR002

Upon completion of the NTCRA for lead in soil, the MEC Hazard Assessment Tool was completed to assess the potential exposure hazard to MEC at the FIB (MRS SR002). The NTCRA SSFR for MRS SR002 concluded that since no MEC were identified at MRS during the NTCRA, it confirmed historical conclusions that only small arms and 20-mm target practice projectiles (both determined to be inert) were used at the MRS. Therefore, there is no potential explosive hazard associated with MEC (ANG 2016).

2.2.5 United States Army Corps of Engineers Site Visit of SR002

A site visit, documented as a Memorandum for Record (MFR) dated 28 April 2015, was conducted by USACE-Omaha District to inspect the MRS and evaluate the potential of the MRS to contain MEC following completion of the 2014 NTCRA. During the site visit, it was confirmed that the soil inside the FIB structure contained 20-mm target practice projectiles and 0.50-caliber expended small arms. Based on the analog magnetometer survey conducted during the site visit, the MFR concluded that it is unlikely that an intact 3.5-in. rocket or warhead is present inside the FIB structure, and that the wooden structure can be expected to contain 20-mm target practice projectiles, 0.50-caliber projectiles, and fragmentation from 3.5-in. rockets. The MFR recommended the MRS be classified as a low probability site regarding the potential to encounter MEC (Schneider and Kochefko 2015).

2.3 ENGINEERING EVALUATION/COST ANALYSIS

An engineering evaluation (EE)/cost analysis (CA) (USACE–Omaha District 2016) for Hancock Field was developed to identify the objectives of the RA; evaluate the effectiveness, implementability, and cost of various alternatives that may satisfy these objectives; and identify the recommended action for the FIB (MRS SR002).

The RA alternative recommended by the EE/CA, presented as Alternative 3, was a NTCRA to remove all debris associated with the FIB at MRS SR002. This recommendation was based on results of screening and detailed analysis of alternatives presented in the EE/CA. Although the MRS is considered industrial, the alternative allows for unlimited use/unrestricted exposure for human health.

2.4 ACTION MEMORANDUM

Subsequent to the EE/CA, an Action Memorandum (AM) (ANG 2018) was developed to present the selected alternative for the MRS at Hancock Field. The purpose of the AM is to request and document approval of the selected NTCRA (removal of all debris associated with the FIB).

The AM concluded that the conditions at Hancock Field meet the NCP criteria for a NTCRA and recommend the approval of a NTCRA.

2.5 STREAMLINED RISK EVALUATION

An investigation of potential MEC and MC contamination at the FIB (SR002) MRA was completed during the CSE Phase I and II investigations. During the CSE Phase I, a 3.5-in. rocket (HEAT, M28A2) was found embedded in the FIB structure. During the CSE Phase II, survey teams observed MD consisting of one spacer from a 3.5-in. rocket (HEAT, M28A2) and 20-mm target practice debris in soil directly in front of the revetment. While sampling in the FIB revetment 0.50-caliber debris was also identified. Although 20-mm target practice projectiles (that contain no high explosives) were observed at the MRS, the FIB (MRS SR002) was historically used as a boresight range. It was determined unlikely that 20-mm high explosives were ever used at this MRS and would; therefore, not be present in the subsurface. During the MFR site visit, it

was confirmed that soil inside the FIB structure contained 20-mm target practice projectiles and 0.50-caliber projectiles. It was determined unlikely that an intact 3.5-in. rocket or warhead is present inside the FIB structure, and that the wooden structure can be expected to contain 20-mm target practice projectiles, 0.50-caliber projectiles, and fragmentation from 3.5-in. rockets (USACE–Omaha District 2013).

2.5.1 Munitions and Explosives Concern Exposure Pathway Analysis Conclusions

During the CSE Phase II, and later during the 2014 NTCRA and USACE site visit of SR002, no MEC were identified on the surface of the impact berm. Therefore, surface MEC exposure pathways for all receptors, including construction worker, trespasser, and future resident, are incomplete. Based on the MD observed from the 3.5-in. rocket, subsurface MEC exposure pathways for the construction worker and future resident are potentially complete. The subsurface MEC exposure pathways for the trespasser are incomplete because a trespasser would not likely access the subsurface (USACE–Omaha District 2013).

2.5.2 Munitions Constituents Exposure Pathway Analysis Conclusions

Evidence of small caliber munitions and MC-contaminated soil was identified at MRS SR002 during the CSE Phase I and II investigations. The CSE Phase I identified lead, copper, and iron as the primary MC of concern. Additionally, since a 3.5-in. rocket was identified at the FIB, explosives were included as contaminants of concern. During the CSE Phase II, lead soil concentrations were utilized to delineate the extent of contamination. Samples were not analyzed for explosives during the CSE Phase II because significant evidence of MEC use was not identified during the visual survey and the rocket found at the FIB did not constitute a significant enough source to warrant sampling. Three samples exceeded the modified screening level for lead of 261 mg/kg; these samples were located within and at the center of the FIB. A screening level human health risk assessment and screening level ecological risk assessment indicated that lead concentrations were not likely to present a significant human health risk under a residential land use scenario. However, the assessment concluded that lead was present at concentrations that exceeded the ecological risk screening criterion intended to be protective of soil invertebrates, plants, and wildlife.

2.6 REMOVAL ACTION OBJECTIVES

Removal action objectives for this project included (1) Reduction of current and future human health risks associated with potential MEC exposure from soil and debris inside the FIB structure and (2) to allow for future residential use.

Potential MEC/MD (including SAA) at the FIB (MRS SR002) included 20-mm target practice projectiles, 3.5-in. HEAT, M28A2 rockets and rocket fragments, and up to 0.50-caliber small arms projectiles. No MC contamination was expected due to previous NTCRA soil excavation conducted at the MRS; however, confirmatory soil samples were collected to document and demonstrate that soil remaining at the FIB is below the established SCOs for residential use.

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3. PROJECT ACTIVITIES AND OPERATIONS

This chapter describes the approach and methods used to complete RA activities at the MRS. The main work activities completed at the MRS area were:

- Surface debris, vegetation, and soil removal
- Soil sifting
- Mag/dig surface and subsurface anomalies
- Soil sampling, stabilization, and disposal
- Wood removal, inspection, and disposal
- Demolition of FIB structure
- Site restoration
- Material management and disposal.

3.1 GENERAL

Work generally occurred Monday through Friday, 10 hours per day. Work areas and progress were communicated daily with the onsite USACE Ordnance and Explosives Safety Specialist (OESS) and weekly with the USACE Technical Manager.

A fieldwork kickoff meeting for RA activities was held via conference call on 8 March 2019 with the Project Delivery Team, including USACE, ANG, and EA personnel to discuss upcoming field activities and relocation of an existing security camera located at the FIB that would be impacted by the RA. A site visit was conducted on 15 March 2019 and attended by personnel from Hancock ANG, EA, and EA's primary subcontractor, Paragon Environmental. A new location for the security camera outside of the RA field activities was proposed and confirmation was received allowing mobilization on 1 April 2019 or after. Seven field personnel and the Project Manager mobilized to the site on 4 April 2019 to participate in onsite training on data collection, safety, and QC procedures.

Site safety briefings were held at the beginning of each workday. QC and safety reports were prepared daily. Senior Unexploded Ordnance Supervisor (SUXOS) reports, containing a QC and safety summary were prepared and submitted daily to USACE, as provided in Appendix A – Daily Reports¹.

During surface clearance activities, and in accordance with the DDESB-approved ESS (EA 2016), an exclusion zone was established at the hazard fragment distance (HFD) of 73 ft for non-essential personnel based on the 20 mm Mk1 HEI Projectile and team separation distances of 14 and 73 ft for non-mechanized and mechanized operations, respectively in accordance with the approved ESS.

¹No MEC operations were conducted on 17 April and 18 April 2019 so there are no SUXOS reports for these dates.

3.2 SITE MANAGEMENT

A two-person site management team was used for the RA, consisting of SUXOS and dual-hatted Unexploded Ordnance Quality Control Specialist (UXOQCS)/Safety Officer (SO). The EA Project Manager (PM) served as the senior management authority and as the primary site operations point-of-contact for USACE. The SUXOS managed soil and vegetation removal and surface clearance crews, inspection, debris removal, and reported to the PM. To maintain independent project communications, the UXOQCS/SO reported to the EA Program QC Manager for QC-related issues and the EA Program Health and Safety Manager for safety-related issues.

Key subcontractors used for the RA were:

- Paragon Environmental Construction, Inc.; vegetation, soil and debris removal
- Environmental Data Systems, Inc.; third-party Level IV data validation
- Demil Metals, Inc.; MD Processing and Recycling.

3.3 SURFACE DEBRIS, VEGETATION, AND SOIL REMOVAL

A surface unexploded ordnance (UXO) sweep/inspection and debris removal were completed over 100 percent of the accessible areas on and surrounding the FIB structure and designated support areas to remove all visible debris prior to soil removal and FIB demolition.

Vegetation and soil were removed from the top and sides of the FIB structure exterior using hand and power tools and a tracked excavator (Kobelco SK350 with 2-in. Plexiglas shielding) and stockpiled in the location selected by the Hancock ANG Base Environmental Manager. Soil removal was conducted using an excavator and one equipment operator to assess the construction and condition, and to facilitate demolition of the FIB. Soil was not excavated below grade, excavation consisted of removal, sifting, and stockpiling of soil from within the FIB structure.

The impact berm soil located within the FIB was removed with an excavator (Kobelco 350) and two equipment operators, and direct loaded into the portable trommel screening unit (sifter, Revolver Screening Systems Model RT508 with remote kill switch).

During removal of soil from the floor of the FIB, asbestos-lined piping was uncovered on 11 April 2019 near the end of the workday. Environmental Contracting and Construction Services, a company certified in New York for asbestos abatement, was subcontracted to mitigate asbestos piping on 12 April 2019. The removal statement and disposal information associated with the asbestos removal is provided in Appendix B – Asbestos Manifest.

3.4 SOIL SIFTING

Soils removed from the FIB berm were transferred to the sifter using the shielded excavator and processed through the sifter with a terminal size of 0.5 in. Material smaller than 0.5 in. fell through the screen while larger materials were retained either within the rotary trommel screen or by the larger pre-screen to remove larger debris prior to entering the 0.5-in. rotary screen. Only shielded personnel were allowed access to the established exclusion zone while the sifter was operating. A

remote kill switch was available and manned by a UXO Technician during operation in the event of an unintended detonation or other safety-related reason for the sifter to be shut down.

Soil passing through the sifter was segregated from soil/debris retained on the sifter screen and both were managed in separate stockpiles. Retained materials (equal/greater than 0.5 in. in size) were spread to depths between 0.5 and 1.0 ft and checked with a magnetometer (Schonstedt GA-52Cx) periodically when enough materials were generated to do so, typically twice daily depending upon sifter volume. Material that passed through the sifter (less than 0.5 in. in size) were checked daily by the UXOQCS/SO using a hand screen.

3.5 MAG AND DIG SURFACE/SUBSURFACE ANOMALIES

A UXO sweep of the berm banks was conducted by the UXO Team (one UXO Technician 1 and one UXO Technician 3) prior to soil disturbance using magnetometers (Schonstedt GA-52Cx). Previous soil removal at the FIB MRS SR002 was conducted by others in the remainder of the MRS.

Following berm removal, a magnetometer search was conducted of the FIB surface including the wooden timbers inside the FIB and soil floor. A systematic, magnetometer-assisted inspection was conducted of the wooden timber surface. Anomalies detected within the wooden timbers were clearly marked using spray paint for further investigation, identification and removal from the timbers once removed from the structure. Confirmed surficial MEC/MD was removed prior to demolishing the FIB structure.

Anomalies (all ferrous metal) on and under the surface of the FIB soil floor were also identified and removed by conducting a clearance using magnetometers. Clearance lanes were bounded with rope and then swept using the magnetometers. Anomalies identified were dug upon discovery using manual methods (hand shovel) until the entire floor of the FIB was cleared to the depth of detection of the instruments.

3.6 SOIL SAMPLING, STABILIZATION, AND DISPOSAL

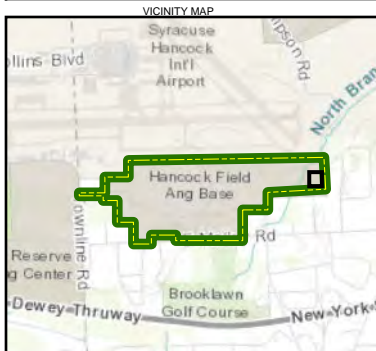
Soil samples were collected from the floor of the FIB and from the FIB berm material that had been stockpiled and sifted for MD on 15 April 2019. Prior to collecting laboratory confirmation samples from the FIB floor, field screening samples were analyzed using an XRF (Niton Model XL3t) analyzer to quantify lead and copper concentrations in field samples. The floor of the FIB was subdivided into 10 equal grids approximately 16 ft long and 12.5 ft wide (Figure 3-1). Grab samples were collected from the center of each grid and analyzed using the XRF unit. Each sample was re-homogenized (mixed) and analyzed another two times, for a total of three analyses for each of the 10 samples. No lead or copper were detected in any of the 10 FIB floor samples.

Based on XRF results, confirmation samples were then collected from each grid area and submitted under chain-of-custody for lead and copper analysis by EPA Method SW-846 6010C Metals Sample IDs included: FIB-01, FIB-02, FIB-03, FIB-04, FIB-05, FIB-06, FIB-07, FIB-08, FIB-09, and FIB-10. The duplicate QC samples were split from sample FIB-02. The matrix spike (MS)/matrix spike duplicated QC sample was split from FIB-10. Samples were packaged with

two samples collected on 12 April 2019: Stockpile-01 (screened material less than 0.5 in.) and Stockpile-02 (screened material greater than 0.5 in.).



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Legend
 12.5' x 16' Sampling Grid

Figure 3-1
FIB Floor Confirmation Sampling Grid
 Hancock Field
 Syracuse, New York

Map Date: 5/16/2019
 Source: Google 2019
 Projection: WGS 1984 UTM Zone 18N



No soil stabilization or disposal was required as all confirmatory laboratory samples reported results below the NYSDEC Residential SCOs (NYSDEC 2006). Refer to Section 4.0 for discussion of analytical results and Appendix C for laboratory reports.

3.7 WOOD REMOVAL, INSPECTION, AND DISPOSAL

The wood timbers covering the exterior and lining the interior of the FIB were removed using the shielded excavator. Once separated from the concrete exterior, timbers were stockpiled for inspection by the UXO Team. The UXO Team inspected each timber piece visually and scanned them with a magnetometer to locate metallic debris including embedded projectiles. Once marked, suspected metallic debris was removed with hand tools and a chainsaw (Stihl Model MS211). Each debris item removed from the timbers was considered material potentially presenting an explosive hazard (MPPEH), requiring inspection, verification and certification for disposal in accordance with the approved ESS. When a timber piece was clear of MPPEH, it was cut to a length of 4 ft. or less to meet the disposal facility's (Seneca Meadows Landfill) requirement.

One sample of the timber material was collected on 12 April 2019. The sample was a composite collected by removing weathered pieces of wood from several timber. The composite sample was submitted to the contract laboratory for total lead and copper analysis by EPA Method 6010C. This was the only departure from the work plan at the site. The work plan stated that the wood sample would be analyzed using TCLP for lead; however, the total sample results were below the NYSDEC Residential SCOs; and was therefore, accepted by the landfill.

3.8 DEMOLITION OF FIB STRUCTURE

The FIB structure was demolished using the Kobelco SK350 excavator with bucket and jaw attachment. Demolition began on 18 April 2019 and concluded on 25 April 2019. Concrete removed from the FIB structure was broken up using a Kobelco SK250 excavator with a jackhammer attachment, while rebar was removed using an oxy-acetylene torch.

Concrete and rebar were transported offsite to Hanson Aggregates to be recycled, while timbers were sent to Seneca Meadows Landfill upon approval of the waste characterization sample results. Weight tickets showing receipt at the receiving disposal facilities for all materials (concrete, rebar, timbers and MDAS) are included in Appendix D – Debris CONCRETE RECYCLE AND RAILROAD TIMBER DISPOSAL TICKETS and Appendix E – MDAS Disposal Information.

3.9 SITE RESTORATION

Soils removed from the FIB and associated berm were determined to be below UU/UE SCOs in New York; and were therefore, used for final grading. The Kobelco SK350 excavator and a Caterpillar Model D5-MXL bulldozer were used to place soil and bring the site to grade by matching the surrounding natural grade as reference. Grading was finalized on 1 May 2019 and all construction equipment demobilized.

The area was hydroseeded with 400 gallons of hydroseed, and the final site inspection was performed by Mr. Jason Preston, Environmental Specialist for Hancock ANG, on 2 May 2019.

4. REMEDIAL ACTION RESULTS

This chapter presents the RA results and conclusions for the FIB MRS SR002, describing the items recovered and removed. QC and QA activities and results are presented in Chapters 5 and 6, respectively.

4.1 RESULTS

No MEC was found during the NTCRA. MD in the form of 20 mm target practice projectiles and fragments were removed from soil and timbers, 42 pounds of MD was inspected, and certified as material documented as safe (MDAS). MD was combined with small arms ammunitions and shipped from the site to JFR Salvage Inc. for destruction. The Form 1348-1A, corresponding chain-of-custody and final inspection checklist are included in Appendix D.

All soil samples collected at the site returned results below the New York UU/UE SCOs for lead and copper (Tables 4-1 and 4-2).

Laboratory results indicated that the soil that had been excavated from the FIB and stockpiled onsite is unimpacted by MCs (Tables 4-1 and 4-2), so this material was used to regrade the area. Laboratory sampling results and corresponding third-party data validation reports are presented in Appendix C and summarized in Table 4-1.

The concrete buttress was removed, broken up to remove the reinforcement bar steel and 131.24 tons were transported to Hancock Aggregates in Syracuse, New York for recycling. Seventy-four pounds of reinforcement bar steel was sent to JFR Salvage Inc. for recycling. Weight tickets showing receipt at the recycling facilities are presented in Appendix D.

Timbers removed from the FIB structure were inspected and cleared of potential explosive hazards by UXO Technicians. Laboratory results from a composite sample from the timbers also returned results below the New York Residential SCOs. Timbers were cut to 4 ft in length to meet Seneca Meadows Landfill requirements and 65.77 tons were transported to the landfill as construction debris. Weight tickets and manifests showing receipt of the construction debris are presented in Appendix D.

4.2 POST-REMOVAL ECOLOGICAL RISK EVALUATION

The CSE Phase II included a Screening Level Ecological Risk Assessment, which concluded that unacceptable ecological risk related to MCs at MRS SR002 is unlikely and recommended no further ecological evaluation (Sky 2012). EA compared analytical results for soil samples collected at MRS SR002 to New York Protection of Ecological Resources SCOs, which are the screening levels used to assess ecological risk in the State of New York. All soil samples reported concentrations of lead and copper below Protection of Ecological Resources SCOs (Table 4-2). Due to this, further investigation of ecological risk is not warranted.

4.3 CONCLUSIONS

The objective of this NTCRA was met for the FIB SR002 MRS. Removal actions conducted at MRS SR002 to date have removed MC-contaminated soils, MD, and all components of the FIB structure (concrete and timbers) from the site, while failing to identify evidence of MEC. Final remedial action results, reported in Table 4-1 and 4-2, below, support UU/UE. Analytical results from the Pre-Berm and Range Floor areas addressed in the first NTCRA (ANG 2016) also reported lead and copper under UU/UE and no further response actions are recommended.

Table 4-1 Summary of Analytical Results

Sample ID	Date	Sample Depth	EPA Method 6010C (mg/kg)					Comment
			Lead			Copper		
			Result	LOD	Qual	Result	LOD	
FIB-BASE-01	4/15/19	0 – 6 in.	8.5	0.93		21	0.47	
FIB-BASE-02	4/15/19	0 – 6 in.	6.5	0.97		20	0.48	
FIB-BASE-03	4/15/19	0 – 6 in.	6.1	1.00		19	0.51	
FIB-BASE-04	4/15/19	0 – 6 in.	5.4	1.00		18	0.50	
FIB-BASE-05	4/15/19	0 – 6 in.	6.9	1.00		19	0.51	
FIB-BASE-06	4/15/19	0 – 6 in.	15	0.93		22	0.47	
FIB-BASE-07	4/15/19	0 – 6 in.	13	0.89		21	0.44	
FIB-BASE-08	4/15/19	0 – 6 in.	18	0.95		22	0.48	
FIB-BASE-09	4/15/19	0 – 6 in.	6.2	0.93		19	0.46	
FIB-BASE-10	4/15/19	0 – 6 in.	6.4	1.00		22	0.50	
STOCKPILE 01 ¹	4/12/19	N/A	10	0.97		19	0.49	
STOCKPILE 02 ¹	4/12/19	N/A	10	0.98		21	0.49	
FIB-DUP-01	4/12/19	0 – 6 in.	6.5	0.93		19	0.47	Duplicate of FIB-BASE-02

¹Stockpile samples were collected from the soil that was excavated from the FIB, sifted for MD, and stockpiled onsite. This material was eventually used to backfill the excavation of the former fire in buttress.
 Notes:
 No results were above the NYSDEC Residential SCOs for lead (400 mg/kg) or copper (270 mg/kg)
 No results were above the NYSDEC UU/UE SCO for lead (63 mg/kg) or copper (50 mg/kg)
 in. = Inch
 N/A = Not applicable
 Qual = Data qualifier (none added by contract laboratory)
 LOD = Limit of detection

**Table 4-2 Hancock Field FIB
 (MRS SR002) MC Concentrations**

Sample ID	LEAD Result (mg/kg)	COPPER Result (mg/kg)	Sample Depth
FIB-BASE-01	8.5	21	0 – 6 in.
FIB-BASE-02	6.5	20	0 – 6 in.
FIB-BASE-03	6.1	19	0 – 6 in.
FIB-BASE-04	5.4	18	0 – 6 in.
FIB-BASE-05	6.9	19	0 – 6 in.
FIB-BASE-06	15	22	0 – 6 in.
FIB-BASE-07	13	21	0 – 6 in.
FIB-BASE-08	18	22	0 – 6 in.
FIB-BASE-09	6.2	19	0 – 6 in.
FIB-BASE-10	6.4	22	0 – 6 in.
STOCKPILE 01 ¹	10	19	N/A
STOCKPILE 02 ¹	10	21	N/A
FIB-DUP-01	6.5	19	0 – 6 in.
	Cleanup Objective	Cleanup Objective	
NYSDEC - Restricted Use Soil Cleanup Objectives - Protection of Ecological Resources ²	63	50	

¹Stockpile samples were collected from the soil that was excavated from the FIB, sifted for MD, and stockpiled onsite. This material was eventually used to backfill the excavation of the former fire in buttress.
²From NYSDEC 6 NYCRR Part 375, Table 375-6.8(b): Restricted Use Soil Cleanup Objectives.
 Notes:
 FIB = Firing-in-Buttress
 ID = Identification
 in. = Inch
 mg/kg = Milligram(s) per kilogram
 N/A = Not applicable
 NYCRR = New York Codes, Rules, and Regulations
 NYSDEC = New York State Department of Environmental Conservation

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5. QUALITY CONTROL

This Chapter describes contractor QC activities and summarizes the results of these activities.

QC activities included conducting training and holding meetings; reviewing submittals; completing QC inspections; taking preventative, and if necessary, corrective actions; and documenting QC activities. QC was conducted in accordance with the QC procedures, responsibilities, pass/fail criteria, and actions to take in the event of failure, as outlined in the Final NTCRA Work Plan (EA 2019). All onsite QC was completed by the UXOQCS/SO.

5.1 GENERAL

Following mobilization of field personnel, and prior to beginning work onsite a briefing/training session was held for the RA on 4 April 2019 to review the site- and activity-specific details of the work plan, including QC and safety protocols.

At the beginning of each day, the UXOQCS/SO would emphasize key QC and safety items, based on the day's planned activities and any important observations from the day before. Daily QC and safety reports were completed by the UXOQCS/SO. Summaries of the QC and safety reports were included in the daily SUXOS reports submitted to USACE.

In addition to daily meetings with field personnel, weekly contractor QC meetings were held with field management staff to discuss action items, work completed/planned activities, QC, safety, and data management. Participants included the EA PM, SUXOS, UXOQCS/SO, and USACE OESS.

Field activities were segregated by the specific definable features of work (DFWs) associated with each element of the work at the FIB. The UXOQCS/SO was responsible for conducting initial, preparatory, and follow-up inspections of each DFW defined in the work plan; they are described in the following sections specific to each DFW.

5.2 INSTRUMENT VERIFICATION STRIP SETUP

The UXOQCS/SO observed installation and setup of the instrument verification strip (IVS) for the project using the 20 mm projectile as the reference munition. Two small industry standard objects (ISOs) were buried at a depth of 6 in. to the center of mass approximately 4 ft. apart. One ISO was buried horizontally while the other was placed vertically. Initial and daily instrument checks were conducted for all hand-held sensors used on the project and recorded by the UXOQCS/SO.

5.3 AIR MONITORS

The UXOQCS/SO setup upwind and downwind TSI DustTrak II dust/aerosol monitors to record airborne dust exposure during site operations. The UXOQCS/SO check/recorded background levels of dust daily each morning and monitored the recorded levels of dust on a daily basis. The TSI DustTrak II records dust levels once per minute while in operation. The downwind PM-10 particulate level was never greater than 100 $\mu\text{g}/\text{m}^3$ above background data, thus at no time was

there a reading that required a work stoppage or dust mitigation effort. Daily dust monitoring records are included in Appendix A.

5.4 PRE-SURVEY FIELD OPERATIONS

The UXOQCS/SO verified the qualification of all UXO Technician prior to conducting site-specific training. Pre-survey inspection of the two-person UXO Team was conducted, and they were observed while performing instrument tests in the IVS initially and each day of site operations. No failures were recorded of the UXO Team or the instruments.

5.5 INTRUSIVE OPERATIONS

Intrusive operations included removal of the berm soil and conducting sifting. The UXOQCS/SO conducted the initial phase inspection of UXO personnel and equipment utilized to verify qualifications and that appropriate equipment shielding was in place prior to use at the FIB structure. Daily inspections of personnel and equipment were conducted by the UXOQCS/SO to verify that only qualified personnel handled MEC/MD items and that clearance operations of sifting stockpiles were conducted. No deficiencies were reported during the course of the RA.

5.6 MECHANICAL SCREENING OF SOIL

Mechanical screening (sifting) of soil was conducted using the RSS RT508 portable trommel screen. The approved ESS required the sifter to have a remote kill switch located 75 ft or greater from the active screen and that no unshielded personnel be allowed inside that 75-ft exclusion zone while the sifter was in operation. The UXOQCS/SO verified the remote kill switch worked at the 75-ft distance. The UXOQCS/SO also conducted daily checks of the remote kill switch and performed inspections of the two stockpiles generated by the sifter. No deficiencies were reported during the course of the RA.

5.7 FIB STRUCTURE DEMOLITION

Demolition of the FIB structure included removal of concrete, wood timbers, and rebar. The UXOQCS/SO conducted an initial inspection of the equipment used to confirm adequate shielding was in place and verified the methods of demolition with the equipment operators. Daily inspections were conducted afterward. No deficiencies were reported during the course of the RA.

5.8 WOOD TIMBER REMOVAL

Wood timbers potentially containing MEC/MD were removed from the FIB structure. The UXO Team inspected the timbers prior to removal to mark suspected locations of embedded MEC/MD. After removal using excavators, timbers were systematically inspected on all sides to identify and remove any suspected MEC/MD, then cut to length. The UXOQCS/SO verified the removal process by conducting an initial inspection of the methods utilized by both the UXO Team and the equipment operators doing the inspection and removal, respectively. Daily inspections were also completed noting whether MEC/MD were found and that timbers were completely removed from the FIB structure. No deficiencies were found.

5.9 MATERIAL POTENTIALLY PRESENTING AN EXPLOSIVE HAZARD INSPECTION, CERTIFICATION, AND DISPOSAL

MPPEH recovered from the soil and timbers was stored onsite in accordance with the approved ESS. The UXOQCS/SO conducted an initial inspection of the process to ensure only UXO-qualified personnel handled MEC/MD and that it was inspected/verified/certified by the SUXOS and UXOQCS/SO. MPPEH certified as MDAS was stored and shipped in a 20 mm ammunition container. Following completion of the project, the container, identified as EA001, was sealed utilizing serialized seals (TBS102141 and TBS102144) for transport under chain-of-custody to Sims Metal Management for disposal. The UXOQCS/SO conducted daily inspections of the MDAS storage container and prepared the final paperwork for both the Form 1348-1A and chain-of-custody for transport. Reciprocal documentation of receipt and the certificate of destruction are provided in Appendix D.

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6. QUALITY ASSURANCE

QA activities included review of QC documentation and completing QA inspections to ensure compliance with the ESS and work plan. Inspections were completed by the USACE OESS in accordance with the Quality Assurance Surveillance Plan. No QA deficiencies or failures were found during the performance of the NTCRA.

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7. EXPOSURE DATA

This Chapter presents the onsite exposure data for the project during the period of RA field activities.

7.1 FIELD DURATION

RA field activities were conducted between 4 April 2019 and 2 May 2019.

7.2 CONTRACT INFORMATION

Contract Number: W9128F-13-D-0006

Task Order Number: DY02

Project Name and Location: Non-Time Critical Removal Action
Hancock Field ANG, Syracuse, New York

Munitions Response Site: FIB SR002

7.3 HOURS WORKED

Table 7-1 presents the total hours worked onsite by both the prime contractor and subcontractor personnel for each labor category in direct support of the task order during each reported month.

Table 7-1 Exposure Hours Summary

Personnel Category	2019		
	April	May	Cumulative
Project Manager	44	0	44
EA Site Manager/Sampler	78	7	85
SUXOS	141	0	141
UXOQCS/UXOSO	204	0	204
UXO Technician III	124	0	124
UXO Technician I	76	0	76
Laborer	152	9	161
Operators	275	2	277
TOTAL	1,094	18	1,112

7.4 LOST WORKDAY ACCIDENTS

No accidents or injuries occurred during the RA field activities; therefore, there were no lost workdays.

7.5 PROPERTY DAMAGE ACCIDENTS

No accidents occurred that resulted in damage to real, personal, or federal property that required repair or monetary compensation of \$2,000 or more during RA field activities.

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8. REFERENCES

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- United States Census Bureau. 2015. *State & County Quick Facts, Onondaga County, New York*. 2 December.
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Appendix A

Daily Reports*

*SUXOS Daily Reports and Quality Control Reports were not completed for 4/17/2019 and 4/18/2019 as all MEC operations were completed.

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Report Date: 4/4/2019

Project No: 6273502

Report No: 1



EA Engineering, Science, and Technology, Inc., PBC

QUALITY CONTROL DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	Areas Inspected	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE = Material Handling Equipment

QA/QC Grid/Transect Status

No QA/QC Data Collected

SS = Surface Sweep MG = Mag & Dig DG = DGM QC = Quality Control QA = Quality Assurance

SEED Results

No SEED Results Collected

OTHER INSPECTIONS:

1. Site equipment (screener, excavator, and magnetic locators) condition and maintenance.
2. All removed wooden timbers 100% inspected/QC using Schonstedt GA-52Cx locator.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

Report Date: 4/4/2019

Project No: 6273502

Report No: 1



ADDITIONAL NOTES:

Team discovered one each .50 caliber bullet.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/4/2019 9:06:24
PM

JD Marlowe

4/4/2019
9:13:45 PM

UXOQCS

SUXOS

Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/4/2019

Project No: 6273502

Report No: 1



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

1. Personnel credentials and certifications.
2. Site equipment (screener, excavator, and magnetic locators) condition and maintenance.
3. Fire extinguishers (one per vehicle and one for the sifting machine).

SUMMARY OF DEFICIENCIES:

None.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

Additional leather gloves and safety glasses purchased.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/4/2019 9:07:26 PM

JD Marlowe

4/4/2019 9:14:03 PM

UXOSO

SUXOS

Report Date: 4/4/2019

Project No: 6273502

Report No: 1



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/4/2019

Project No: 6273502

Report No: 1



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Mixture of sun and clouds.	40	27	31	0.00

GOVERNMENT PERSONNEL (Name/Organization):

J.P. Preston, SEO.

SITE VISITORS (Name/Organization):

None.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
Joe Vonuderitz	FIB	Project Manager / EA	9.5		PM Duties
J.D. Marlowe	FIB	SUXOS / EA	9.5		SUXOS Duties
Miguel Ferrier	FIB	UXOQCS/SO / EA	9.5		UXOQCS/SO Duties
Matt Jefferys	FIB	UXOTech3/ EA	9.5		Mag sweep of Buttress boards
Allison Biberich-Jefferys	FIB	UXOTech1/ EA	9.5		Mag sweep of Buttress Boards
Chris Sanson	FIB	Supervisor / Paragon	6.0		Supervisor Duties
Eddy Beeman	FIB	Operator / Paragon	9.0		Receive equipment, remove boards
Rick Emmons	FIB	Operator / Paragon	9.0		Receive equioment, remove boards

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt	UXOQCS	WHO178	7.0	Yes
Schonstedt	UXOTech3	WHO177	7.0	Yes

Report Date: 4/4/2019

Project No: 6273502

Report No: 1



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- All project site personnel received Hancock Field ANGB passes.
- Conducted site specific safety, UXO, security training at work site.
- Paragon received excavator, sifter unit, bobcat, and diesel fuel tank.
- Paragon installed erosion controls as per work plan.
- Paragon removed wooden boards off of front and right side of firing-in-buttruss, UXO Techs conducted magnetometer sweep of wooden boards, clearing them of MPPEH and allowing for disposal, 1 x .50 cal. bullet was located, removed and stored in a container for SAA.

Report Date: 4/4/2019

Project No: 6273502

Report No: 1



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

1. Site equipment (screener, excavator, and magnetic locators) condition and maintenance.
2. All removed wooden timbers 100% inspected/QC using Schonstedt GA-52Cx locator.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Team discovered one each .50 caliber bullet.

Report Date: 4/4/2019

Project No: 6273502

Report No: 1



SAFETY INSPECTIONS AND RESULTS:

Inspections

1. Personnel credentials and certifications.
2. Site equipment (screener, excavator, and magnetic locators) condition and maintenance.
3. Fire extinguishers (one per vehicle and one for the sifting machine).

Summary of Deficiencies

None.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Additional leather gloves and safety glasses purchased.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/4/2019 8:56:44 PM

SUXOS

Site Manager

Report Date: 4/5/2019

Project No: 6273502

Report No: 2



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Cloudy am, rain/snow in pm.	40	27	93	0.26

GOVERNMENT PERSONNEL (Name/Organization):

None.

SITE VISITORS (Name/Organization):

None.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
Joe Vonuderitz		Project Manager / EA	0.0		PM Duties
J.D. Marlowe		SUXOS / EA	0.0		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	0.0		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	0.0		Mag sweep of Buttress boards
Allison Biberich-Jefferys		UXOTech1/ EA	0.0		Mag sweep of Buttress Boards
Chris Sanson		Supervisor / Paragon	0.0		Supervisor Duties
Eddy Beeman		Operator / Paragon	0.0		Receive equipment, remove boards
Rick Emmons		Operator / Paragon	0.0		Receive equioment, remove boards

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	0.0	No
Schonstedt		WHO177	0.0	No

Report Date: 4/5/2019

Project No: 6273502

Report No: 2



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- No work was conducted at work site due to weather and soil conditions.
- No UXOQCS or UXOSO reports will be submitted.

Report Date: 4/5/2019

Project No: 6273502

Report No: 2



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

Summary of Deficiencies

Corrective Actions

Reinspection Results

Additional Notes

Report Date: 4/5/2019

Project No: 6273502

Report No: 2



SAFETY INSPECTIONS AND RESULTS:

Inspections

Summary of Deficiencies

Corrective Actions

Reinspection Results

Additional Notes

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/6/2019 3:09:32 PM

SUXOS

Site Manager

Daily Air Monitoring Log Sheet

Date: 04/08/2019

Air Monitor SN: R20416

Upwind	Time								
	0815	0902	1004	1056	1159	1258	1402	1455	1606
Readings (mg/m³)	-0.002	-0.001	-0.001	0.000	-0.000	-0.000	-0.000	-0.000	0.000
Remarks:									

Air Monitor SN: 044389

Downwind	Time								
	0817	0903	1004	1056	1159	1258	1402	1455	1606
Readings (mg/m³)	0.005	0.001	0.000	0.000	-0.000	-0.000	-0.000	-0.002	-0.001
Remarks:									

Report Date: 4/8/2019

Project No: 6273502

Report No: 3



EA Engineering, Science, and Technology, Inc., PBC

QUALITY CONTROL DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	Areas Inspected	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE = Material Handling Equipment

QA/QC Grid/Transect Status

No QA/QC Data Collected

SS = Surface Sweep MG = Mag & Dig DG = DGM QC = Quality Control QA = Quality Assurance

SEED Results

No SEED Results Collected

OTHER INSPECTIONS:

1/2" Dirt Pile inspected.
1/2"+ (Plus) Dirt Pile verified.
Dust monitors readings obtained upwind and downwind.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

Report Date: 4/8/2019

Project No: 6273502

Report No: 2



ADDITIONAL NOTES:

Installation of IVS. Both magnetic locators (2 each Schonstedt GA-52CX) verified.
Dust monitors checked every hour. Readings were within permissible exposure limits (<1 mg/m3).

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/8/2019 7:27:00
PM

JD Marlowe

4/8/2019
7:33:02 PM

UXOQCS

SUXOS

Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/8/2019

Project No: 6273502

Report No: 3



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	Pass
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

PPE: wet weather gear (top and bottom), hard hats, safety glasses, work shoes with toe protection, Hi-Vis vests.
Health & welfare: bottled water for drinking, latrine, dust monitors, first aid/trauma kit location.
Communications: Midland 2-Way radios.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

Dust monitors checked every hour. Readings were within permissible exposure limits (< 1 mg/m3).

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/8/2019 6:39:29 PM JD Marlowe

4/8/2019 7:27:21 PM

UXOSO

SUXOS

Report Date: 4/8/2019

Project No: 6273502

Report No: 2



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/8/2019

Project No: 6273502

Report No: 3



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Am rain, cloudy in pm	68	44	60	0.55

GOVERNMENT PERSONNEL (Name/Organization):

Scott Sawyer, USACE OESS, Omaha District.

SITE VISITORS (Name/Organization):

None.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
Joe Vonuderitz		Project Manager / EA	2.0		PM Duties
J.D. Marlowe		SUXOS / EA	10.0		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	10.0		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	10.0		Mag sweep debris pile
Allison Biberich-Jefferys		UXOTech1/ EA	10.0		Mag sweep debris pile
Eddy Beeman		Operator / Paragon	10.0		Excavate soils from FIB,load sifter
Rick Emmons		Operator / Paragon	10.0		Excavate soils from FIB,load sifter

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	9.0	Yes
Schonstedt		WHO177	9.0	Yes

Report Date: 4/8/2019

Project No: 6273502

Report No: 3



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- Conducted site safety/operations brief.
- USACE OESS Scott Sawyer on site.
- IVS was installed and magnetometers checked.
- Excavation of soils from the FIB began, running material through sifter unit, with UXO techs utilizing magnetometers, scanning debris piles and removing all metallic contacts.
- SUXOS and UXOQCS inspected 3 lbs. of MD (20mm TP) and 5 lbs. of NMRD (wire hangers) and placed MD in a secure container in MRS.
- Approximately 45 cu. yards was processed during the day's operations.
- QC and QA inspections carried on all processed material.

Report Date: 4/8/2019

Project No: 6273502

Report No: 3



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

1/2" Dirt Pile inspected.
1/2"+ (Plus) Dirt Pile verified.
Dust monitors readings obtained upwind and downwind.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Installation of IVS. Both magnetic locators (2 each Schonstedt GA-52CX) verified.
Dust monitors checked every hour. Readings were within permissible exposure limits (<1 mg/m3).

Report Date: 4/8/2019

Project No: 6273502

Report No: 3



SAFETY INSPECTIONS AND RESULTS:

Inspections

PPE: wet weather gear (top and bottom), hard hats, safety glasses, work shoes with toe protection, Hi-Vis vests.

Health & welfare: bottled water for drinking, latrine, dust monitors, first aid/trauma kit location.

Communications: Midland 2-Way radios.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Dust monitors checked every hour. Readings were within permissible exposure limits (< 1 mg/m³).

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/8/2019 7:24:08 PM

SUXOS

Site Manager

Daily Air Monitoring Log Sheet

Date: 04/09/2019

Air Monitor SN: R20416

Upwind	Time								
	0800	0944							
Readings (mg/m³)	-0.000	0.000							
Remarks: Air monitor removed and stored at 0950 due to severe weather.									

Air Monitor SN: 044389

Downwind	Time								
	0800	0948							
Readings (mg/m³)	0.002	-0.001							
Remarks: Air monitor removed and stored at 0950 due to severe weather.									

Report Date: 4/9/2019

Project No: 6273502

Report No: 4



EA Engineering, Science, and Technology, Inc., PBC

QUALITY CONTROL DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	Areas Inspected	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE = Material Handling Equipment

QA/QC Grid/Transect Status

No QA/QC Data Collected

SS = Surface Sweep MG = Mag & Dig DG = DGM QC = Quality Control QA = Quality Assurance

SEED Results

No SEED Results Collected

OTHER INSPECTIONS:

Inspected UXO team test both magnetic locators on the IVS.
1/2" dirt piles inspected. 1/2"+ (Plus) dirt piles verified.
Air monitors readings obtained upwind and downwind.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

Report Date: 4/9/2019

Project No: 6273502

Report No: 4



ADDITIONAL NOTES:

Air monitors' readings were within permissible exposure limits (< 1 mg/m³). Both air monitors removed and stored due to upcoming weather at 9:50 am (Weather Warning issued by Hancock ANGB at 9:40 am).

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/9/2019 5:57:15
PM

JD Marlowe

4/9/2019
7:11:20 PM

UXOQCS

SUXOS

Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/9/2019

Project No: 6273502

Report No: 4



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

PPE: Hearing protection for both operators.

Earth-Moving Machinery: Small excavator condition and maintenance inspected; operational fire extinguisher; plexiglass and 1/4" steel plate for fragmentation and blast protection.

SUMMARY OF DEFICIENCIES:

None.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

Rain and thunderstorms today.

Multiple lightning strikes within 10 miles from work site. Lightning hold observed 30 minutes after the last sign of lightning strike.

Monitor lightning strikes.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

JD Marlowe

Report Date: 4/9/2019

Project No: 6273502

Report No: 4



4/9/2019 6:00:09
PM

4/9/2019
7:11:50 PM

UXOSO

SUXOS

Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/9/2019

Project No: 6273502

Report No: 4



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Cloudy with mid-afternoon thunderstorms.	66	35	54	0.03

GOVERNMENT PERSONNEL (Name/Organization):

Scott Sawyer, USACE OESS, Omaha District.

SITE VISITORS (Name/Organization):

J.P. Preston, SEO.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
Joe Vonuderitz		Project Manager / EA	1.5		PM Duties
J.D. Marlowe		SUXOS / EA	10.0		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	10.0		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	10.0		Mag sweep debris pile
Allison Biberich-Jefferys		UXOTech1/ EA	10.0		Mag sweep debris pile
Eddy Beeman		Operator / Paragon	10.0		Excavate soils from FIB,load sifter
Rick Emmons		Operator / Paragon	10.0		Excavate soils from FIB,load sifter
Chris Sanson		Supervisor / Paragon	4.5		Supervisory duties

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	9.0	Yes
Schonstedt		WHO177	9.0	Yes

Report Date: 4/9/2019

Project No: 6273502

Report No: 4



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- Conducted site safety and operations brief, magnetometers checked through IVS.
- USACE OESS, Scott Sawyer on site.
- Paragon received second excavator for site.
- Paragon continued to excavate soil material from inside the FIB, running material through sifter unit with UXO techs utilizing magnetometers, conducting metallic anomaly removal of the debris pile.
- Production today suffered again due to the moisture content of the soils in the FIB, site weather conditions (lightning hold) and the footing of the excavators (sinking). Time was taken in the pm to reposition the excavators to allow operation in better footing conditions.
- Mid afternoon thunderstorms caused a site shut down for approx. 1.5 hours.
- Approx. 40 cubic yards of soils from the FIB was processed.
- SUXOS and UXOQCS inspected 1 lb. of MD. (20 mm projectiles) and 3 lbs. of NMRD. (metal hangers/metal can) then MD. was placed in a sealed container inside the MRS.
- QC and QA inspections carried out.

Report Date: 4/9/2019

Project No: 6273502

Report No: 4



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

Inspected UXO team test both magnetic locators on the IVS.
1/2" dirt piles inspected. 1/2"+ (Plus) dirt piles verified.
Air monitors readings obtained upwind and downwind.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Air monitors' readings were within permissible exposure limits (< 1 mg/m3). Both air monitors removed and stored due to upcoming weather at 9:50 am (Weather Warning issued by Hancock ANGB at 9:40 am).

Report Date: 4/9/2019

Project No: 6273502

Report No: 4



SAFETY INSPECTIONS AND RESULTS:

Inspections

PPE: Hearing protection for both operators.

Earth-Moving Machinery: Small excavator condition and maintenance inspected; operational fire extinguisher; plexiglass and 1/4" steel plate for fragmentation and blast protection.

Summary of Deficiencies

None.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Rain and thunderstorms today.

Multiple lightning strikes within 10 miles from work site. Lightning hold observed 30 minutes after the last sign of lightning strike.

Monitor lightning strikes.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/9/2019 7:10:30 PM

SUXOS

Site Manager

Daily Air Monitoring Log Sheet

Date: 04/10/2019

Air Monitor SN: 039355

Upwind	Time								
	0801	0948	1124	1250	1440	1642			
Readings (mg/m³)	0.000	0.000	0.000	0.000	0.000	0.000			
Remarks:									

Air Monitor SN: 039357

Downwind	Time								
	0801	0948	1124	1250	1440	1642			
Readings (mg/m³)	0.004	0.000	0.002	0.001	0.005	0.000			
Remarks:									

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Snow flurries in am, sun and clouds in pm.	45	30	40	0.00

GOVERNMENT PERSONNEL (Name/Organization):

Scott Sawyer, USACE OESS, Omaha District.

SITE VISITORS (Name/Organization):

J.P. Preston, SEO.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
Joe Vonuderitz		Project Manager / EA	0.0		PM Duties
J.D. Marlowe		SUXOS / EA	10.0		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	10.0		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	10.0		Mag sweep debris pile
Allison Biberich-Jefferys		UXOTech1/ EA	10.0		Mag sweep debris pile
Eddy Beeman		Site Supervisor / Paragon	10.0		Supervisor duties
Rick Emmons		Operator / Paragon	10.0		Load sifter
Randy Spink		Operator / Paragon	10.0		Excavate soils from FIB

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	9.0	Yes
Schonstedt		WHO177	9.0	Yes

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- Conducted site safety and operations brief, magnetometers checked through IVS.
- USACE OESS, Scott Sawyer on site.
- Paragon provided a second EMM operator to speed production, individual was given Site Specific/AHA/UXO briefing.
- Paragon continued to excavate soil material from inside the FIB, running material through sifter unit with UXO techs utilizing magnetometers, conducting metallic anomaly removal of the debris pile.
- Production today improved greatly, processing 120 cu. yds. of soils from inside the FIB.
- SUXOS and UXOQCS inspected 21 lb. of MD. (20 mm projectiles) and 17 lbs. of NMRD. (metal hangers/bolts/wire) then MD. was placed in a sealed container inside the MRS.
- QC and QA inspections carried out.

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

Inspected UXO team test both magnetic locators on the IVS.
1/2" dirt piles inspected.
1/2"+ (Plus) dirt piles verified.
Air monitors readings obtained upwind and downwind.
UXO team procedures.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Upwind/Downwind air monitors' readings were within permissible exposure limits (< 1 mg/m3).

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



SAFETY INSPECTIONS AND RESULTS:

Inspections

PPE: Inspected hearing protection, eye protection, leather gloves, steel toe boots, hard hat, and Hi-Vis vest for new Paragon operator.

Credentials/Certifications: Verified new Paragon operator's certificates (up-to-date).

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Provided initial safety briefing and UXO awareness training to MR. Spink, new Paragon operator.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/10/2019 7:20:45 PM

SUXOS

Site Manager

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

PPE: Inspected hearing protection, eye protection, leather gloves, steel toe boots, hard hat, and Hi-Vis vest for new Paragon operator.

Credentials/Certifications: Verified new Paragon operator's certificates (up-to-date).

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

Provided initial safety briefing and UXO awareness training to MR. Spink, new Paragon operator.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/10/2019 5:43:58 PM JD Marlowe

4/10/2019 7:21:37 PM

UXOSO

SUXOS

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Snow flurries in am, sun and clouds in pm.	45	30	40	0.00

GOVERNMENT PERSONNEL (Name/Organization):

Scott Sawyer, USACE OESS, Omaha District.

SITE VISITORS (Name/Organization):

J.P. Preston, SEO.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
Joe Vonuderitz		Project Manager / EA	0.0		PM Duties
J.D. Marlowe		SUXOS / EA	10.0		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	10.0		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	10.0		Mag sweep debris pile
Allison Biberich-Jefferys		UXOTech1/ EA	10.0		Mag sweep debris pile
Eddy Beeman		Site Supervisor / Paragon	10.0		Supervisor duties
Rick Emmons		Operator / Paragon	10.0		Load sifter
Randy Spink		Operator / Paragon	10.0		Excavate soils from FIB

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	9.0	Yes
Schonstedt		WHO177	9.0	Yes

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- Conducted site safety and operations brief, magnetometers checked through IVS.
- USACE OESS, Scott Sawyer on site.
- Paragon provided a second EMM operator to speed production, individual was given Site Specific/AHA/UXO briefing.
- Paragon continued to excavate soil material from inside the FIB, running material through sifter unit with UXO techs utilizing magnetometers, conducting metallic anomaly removal of the debris pile.
- Production today improved greatly, processing 120 cu. yds. of soils from inside the FIB.
- SUXOS and UXOQCS inspected 21 lb. of MD. (20 mm projectiles) and 17 lbs. of NMRD. (metal hangers/bolts/wire) then MD. was placed in a sealed container inside the MRS.
- QC and QA inspections carried out.

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

Inspected UXO team test both magnetic locators on the IVS.
1/2" dirt piles inspected.
1/2"+ (Plus) dirt piles verified.
Air monitors readings obtained upwind and downwind.
UXO team procedures.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Upwind/Downwind air monitors' readings were within permissible exposure limits (< 1 mg/m3).

Report Date: 4/10/2019

Project No: 6273502

Report No: 5



SAFETY INSPECTIONS AND RESULTS:

Inspections

PPE: Inspected hearing protection, eye protection, leather gloves, steel toe boots, hard hat, and Hi-Vis vest for new Paragon operator.

Credentials/Certifications: Verified new Paragon operator's certificates (up-to-date).

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Provided initial safety briefing and UXO awareness training to MR. Spink, new Paragon operator.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/10/2019 7:20:45 PM

SUXOS

Site Manager

Daily Air Monitoring Log Sheet

Date: 04/11/2019

Air Monitor SN: 039355

Upwind	Time								
	0851	1047	1238	1414	1544				
Readings (mg/m ³)	0.000	0.000	0.000	0.001	0.001				
Remarks:									

Air Monitor SN: 039357

Downwind	Time								
	0851	1047	1238	1414	1544				
Readings (mg/m ³)	0.003	0.000	0.000	-0.000	0.000				
Remarks:									

Report Date: 4/11/2019

Project No: 6273502

Report No: 6



EA Engineering, Science, and Technology, Inc., PBC

QUALITY CONTROL DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	Areas Inspected	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE = Material Handling Equipment

QA/QC Grid/Transect Status

No QA/QC Data Collected

SS = Surface Sweep MG = Mag & Dig DG = DGM QC = Quality Control QA = Quality Assurance

SEED Results

No SEED Results Collected

OTHER INSPECTIONS:

Inspected UXO team test both magnetic locators on the IVS.
1/2" dirt piles inspected.
1/2"+ (Plus) dirt piles verified.
Air monitors readings obtained upwind and downwind.
Inspected UXO team procedures.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

Report Date: 4/11/2019

Project No: 6273502

Report No: 6



REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

Upwind/Downwind air monitors' readings were within permissible exposure limits (< 1 mg/m3).

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/11/2019 4:57:11 PM

JD Marlowe

4/11/2019 6:31:18 PM

UXOQCS

SUXOS

Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/11/2019

Project No: 6273502

Report No: 6



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

None.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

None.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/11/2019 4:52:21 PM

JD Marlowe

4/11/2019 6:32:09 PM

UXOSO

SUXOS

Report Date: 4/11/2019

Project No: 6273502

Report No: 6



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/11/2019

Project No: 6273502

Report No: 6



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Mix sun and clouds, pm snow flurries.	44	28	51	0.01

GOVERNMENT PERSONNEL (Name/Organization):

Scott Sawyer, USACE OESS, Omaha District.

SITE VISITORS (Name/Organization):

J.P. Preston, SEO.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
J.D. Marlowe		SUXOS / EA	9.5		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	9.5		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	9.5		Mag sweep debris pile
Allison Biberich-Jefferys		UXOTech1/ EA	9.5		Mag sweep debris pile
Eddy Beeman		Supervisor / Paragon	9.5		Supervisor duties
Rick Emmons		Operator / Paragon	9.5		Load sifter unit
Chris Sanson		Supervisor / Paragon	1.5		Supervisory duties
Randy Spink		Operator / Paragon	9.5		Excavate soils from FIB

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	8.5	Yes
Schonstedt		WHO177	8.5	Yes

Report Date: 4/11/2019

Project No: 6273502

Report No: 6



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- Conducted site safety brief, magnetometers checked through IVS.
- Scott Sawyer, USACE OESS on site.
- Paragon continued to excavate soil material from inside the FIB, running material through sifter unit with UXO techs utilizing magnetometers, conducting metallic anomaly removal of the debris pile. Approx. 96 cu. yds. was processed.
- During the day's operations, 2 hrs. were lost to a hydraulic leak on sifter unit, and then operations were shut down and ended the day's work early due to uncovering a suspected asbestos pipe (approx. 6ft long x 12 in. dia.) with an additional pipe partially exposed in the remaining soils inside the FIB. Paragon will supply a NY State Asbestos certified operator next work day, to remove items from FIB and segregate items which would allow team to continue operations.
- SUXOS and UXOQCS inspected 10 lbs. of MD and 12 Lbs. of NMRD, MD was secured in a container within the MRS.
- QC and QA inspections were carried out.

Report Date: 4/11/2019

Project No: 6273502

Report No: 6



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

Inspected UXO team test both magnetic locators on the IVS.
1/2" dirt piles inspected.
1/2"+ (Plus) dirt piles verified.
Air monitors readings obtained upwind and downwind.
Inspected UXO team procedures.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Upwind/Downwind air monitors' readings were within permissible exposure limits (< 1 mg/m3).

Report Date: 4/11/2019

Project No: 6273502

Report No: 6



SAFETY INSPECTIONS AND RESULTS:

Inspections

None.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

None.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/11/2019 6:30:54 PM

SUXOS

Site Manager

Report Date: 4/12/2019

Project No: 6273502

Report No: 7



EA Engineering, Science, and Technology, Inc., PBC

QUALITY CONTROL DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	Areas Inspected	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE = Material Handling Equipment

QA/QC Grid/Transect Status

No QA/QC Data Collected

SS = Surface Sweep MG = Mag & Dig DG = DGM QC = Quality Control QA = Quality Assurance

SEED Results

No SEED Results Collected

OTHER INSPECTIONS:

Inspected UXO team test both magnetic locators on the IVS.
1/2" dirt piles inspected.
1/2"+ (Plus) dirt piles verified.
Inspected UXO team procedures.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

Report Date: 4/12/2019

Project No: 6273502

Report No: 7

N/A



ADDITIONAL NOTES:

Air monitors readings obtained upwind and downwind.

Upwind/Downwind air monitors' readings were within permissible exposure limits (< 1 mg/m3).

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/12/2019 6:05:55
PM

JD Marlowe

4/12/2019
7:44:26 PM

UXOQCS

SUXOS

Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/12/2019

Project No: 6273502

Report No: 7



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

PPE: Eye protection, work gloves, nitriles gloves, and Hi-Vis vest for EA Radiographic Technician.
XFR Machine: Exclusion area, and radiation dosimeter for operator.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

None.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/12/2019 6:06:48 PM

JD Marlowe

4/12/2019 7:44:45 PM

UXOSO

SUXOS

Report Date: 4/12/2019

Project No: 6273502

Report No: 7



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/12/2019

Project No: 6273502

Report No: 7



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Am sun, pm rain.	73	43	78	0.04

GOVERNMENT PERSONNEL (Name/Organization):

Scott Sawyer, USACE OESS, Omaha District.

SITE VISITORS (Name/Organization):

J.P. Preston, SEO.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
Joe Vonuderitz		Project Manager / EA	2.5		PM Duties
J.D. Marlowe		SUXOS / EA	10.0		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	10.0		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	9.0		Mag sweep debris pile
Allison Biberich-Jefferys		UXOTech1/ EA	9.0		Mag sweep debris pile
Eddy Beeman		Site Supervisor / Paragon	8.0		Supervisor duties
Rick Emmons		Operator / Paragon	10.0		Load sifter
Randy Spink		Operator / Paragon	10.0		Excavate soils from FIB
Mike Firenze		HAZMAT Team/ ECC	2.5		Over-pak asbestos pipe
Mike Kelly		HAZMAT team/ ECC	2.5		Over-pak asbestos pipe

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

Report Date: 4/12/2019

Project No: 6273502

Report No: 7



OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	9.0	Yes
Schonstedt		WHO177	9.0	Yes

SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Report Date: 4/12/2019

Project No: 6273502

Report No: 7



Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- Conducted site safety brief/operations brief to regular site personnel and UXO/APP/SSHO briefing to new site personnel (ECC), magnetometer functional check through IVS.
- Scott Sawyer, USACE OESS on-site.
- Paragon sub-contracted ECC for asbestos removal of concerned items that was reported previous work day, ECC dressed in Level C PPE, over packed two asbestos pipe sections in double 6 mil plastic and removed items off site under the direction of J.P Preston, Hancock ANGB, SEO.
- Paragon continued to excavate soil material from inside the FIB, running material through sifter unit with UXO techs utilizing magnetometers, conducting metallic anomaly removal of the debris pile. Approx. 82 cu. yds. was processed.
- Soils inside FIB have been removed, remaining work is to conduct magnetometer sweep of FIB floor, soil sampling/XRF plus removal of the remaining wooden boards inside FIB, and conduct UXO sweep of boards.
- SUXOS and UXOQCS inspected 1 lbs. of MD and 8 lbs. of NMRD, placed MD in a secured container inside the MRS.
- QC and QA inspections carried out.

Report Date: 4/12/2019

Project No: 6273502

Report No: 7



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

Inspected UXO team test both magnetic locators on the IVS.
1/2" dirt piles inspected.
1/2"+ (Plus) dirt piles verified.
Inspected UXO team procedures.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Air monitors readings obtained upwind and downwind.
Upwind/Downwind air monitors' readings were within permissible exposure limits (< 1 mg/m³).

Report Date: 4/12/2019

Project No: 6273502

Report No: 7



SAFETY INSPECTIONS AND RESULTS:

Inspections

PPE: Eye protection, work gloves, nitriles gloves, and Hi-Vis vest for EA Radiographic Technician.
XFR Machine: Exclusion area, and radiation dosimeter for operator.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

None.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/12/2019 7:48:56 PM

SUXOS

Site Manager

Report Date: 4/15/2019

Project No: 6273502

Report No: 8



EA Engineering, Science, and Technology, Inc., PBC

QUALITY CONTROL DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	Areas Inspected	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE = Material Handling Equipment

QA/QC Grid/Transect Status

No QA/QC Data Collected

SS = Surface Sweep MG = Mag & Dig DG = DGM QC = Quality Control QA = Quality Assurance

SEED Results

No SEED Results Collected

OTHER INSPECTIONS:

Inspected UXO team test both magnetic locators on the IVS.
Inspected UXO team's surface sweep technique.
Verified swept surface inside of FIB.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

Report Date: 4/15/2019

Project No: 6273502

Report No: 8



ADDITIONAL NOTES:

None.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/15/2019 4:05:43 PM

JD Marlowe

4/15/2019 4:08:09 PM

UXOQCS

SUXOS

Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/15/2019

Project No: 6273502

Report No: 8



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

Additional PPE: Wet weather gear and muck boots with toe protection.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

None.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/15/2019 3:36:23 PM

JD Marlowe

4/15/2019 4:08:30 PM

UXOSO

SUXOS

Report Date: 4/15/2019

Project No: 6273502

Report No: 8



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/15/2019

Project No: 6273502

Report No: 8



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Heavy am rain, lighter in pm.	58	38	86	0.34

GOVERNMENT PERSONNEL (Name/Organization):

None.

SITE VISITORS (Name/Organization):

None.

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
J.D. Marlowe		SUXOS / EA	7.0		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	7.0		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	4.0		Mag sweep FIB floor
Allison Biberich-Jefferys		UXOTech1/ EA	4.0		Mag sweep FIB floor
Randy Spink		Operator / Paragon	7.0		Remove boards from FIB
Steven Soldner		Field Tech / EA	1.5		XRF/Soil samples
Eddy Beeman		Supervisor / Paragon	1.5		Supervisor duties

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	3.0	Yes
Schonstedt		WHO177	3.0	Yes

Report Date: 4/15/2019

Project No: 6273502

Report No: 8



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- Conducted site safety/operations brief, magnetometer check through IVS.
- Due to previous evening's rainfall and wet soil conditions, dirt work was cancelled for the day.
- UXO team conducted magnetometer sub-surface sweep of FIB floor.
- EA field member conducted XRF and collected soil samples, XRF showed no detect for lead and copper.
- Paragon conducted removal of interior boards of FIB, during that action the upper hydraulic actuator on excavator arm was damaged. Excavator was removed from site for repair. Operations were shut down.
- SUXOS and UXOQCS inspected 1 lbs. of MD and 5 lbs. of NMRD. MD was placed in a sealed container in MRS.
- UXOQCS inspected FIB floor.

Report Date: 4/15/2019

Project No: 6273502

Report No: 8



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

Inspected UXO team test both magnetic locators on the IVS.
Inspected UXO team's surface sweep technique.
Verified swept surface inside of FIB.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

None.

Report Date: 4/15/2019

Project No: 6273502

Report No: 8



SAFETY INSPECTIONS AND RESULTS:

Inspections

Additional PPE: Wet weather gear and muck boots with toe protection.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

None.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/15/2019 3:51:03 PM

SUXOS

Site Manager

Report Date: 4/16/2019

Project No: 6273502

Report No: 9



EA Engineering, Science, and Technology, Inc., PBC

QUALITY CONTROL DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	Areas Inspected	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE = Material Handling Equipment

QA/QC Grid/Transect Status

No QA/QC Data Collected

SS = Surface Sweep MG = Mag & Dig DG = DGM QC = Quality Control QA = Quality Assurance

SEED Results

No SEED Results Collected

OTHER INSPECTIONS:

Inspected UXO team test both magnetic locators on the IVS.
Inspected UXO team's surface sweep technique. Verified swept surface inside of FIB.
Inspected the screener for any possible munition debris or scrap metal stuck inside the machine.
Verified that FIB entrance and interior dirt was clear from munition debris.
Verified that FIB interior removed wood timbers were clear from munition debris.
Inspected operator's demolition procedures on the concrete structure.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

Report Date: 4/16/2019

Project No: 6273502

Report No: 9



REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

Air monitors readings obtained upwind and downwind.
Upwind/Downwind air monitors' readings were within permissible exposure limits (< 1 mg/m3).

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/16/2019 6:33:32
PM

JD Marlowe

4/16/2019
6:48:27 PM

UXOQCS

SUXOS

Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/16/2019

Project No: 6273502

Report No: 9



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

PPE: Hearing protection for personnel conducting mechanical demolition of the FIB concrete structure.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

None.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/16/2019 6:37:23 PM

JD Marlowe

4/16/2019 6:48:42 PM

UXOSO

SUXOS

Report Date: 4/16/2019

Project No: 6273502

Report No: 9



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/16/2019

Project No: 6273502

Report No: 9



EA Engineering, Science, and Technology, Inc., PBC

SUXOS DAILY REPORT Hancock Air National Guard Base Firing-In-Buttress Syracuse, New York

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (in)
Sunny in am, clouds in pm.	52	34	28	0.00

GOVERNMENT PERSONNEL (Name/Organization):

None

SITE VISITORS (Name/Organization):

None

WORK PERFORMED BY CONTRACTOR/SUBCONTRACTORS:

Name	MRS	Title / Company	Hours	Grid/Transect Worked	Description of Work
J.D. Marlowe		SUXOS / EA	10.0		SUXOS Duties
Miguel Ferrier		UXOQCS/SO / EA	10.0		UXOQCS/SO Duties
Matt Jefferys		UXOTech3/ EA	6.0		Mag sweep soil/mag boards
Allison Biberich-Jefferys		UXOTech1/ EA	6.0		Mag sweep soil/mag boards
Randy Spink		Operator / Paragon	10.0		Jack hammer FIB
Eddy Beeman		Supervisor / Paragon	10.0		Supervisor duties
Rick Emmons		Operator / Paragon	5.5		Soil pile management
Joe Vonuderitz		Project Manager / EA	2.0		PM duties

SUXOS = Senior Unexploded Ordnance Supervisor UXOSO = Unexploded Ordnance Safety Officer
UXOQCS = Unexploded Ordnance Quality Control Specialist MRS = Munitions Response Site

OPERATING EQUIPMENT DATA (Not Hand Tools):

Equipment	User	Equipment ID/TAG	Hours Used	Equipment Check
Schonstedt		WHO178	4.0	Yes
Schonstedt		WHO177	4.0	Yes

Report Date: 4/16/2019

Project No: 6273502

Report No: 9



SUMMARY OF WORK PERFORMED:

Grid/Transect Status

No Grids Completed

SS = Surface Sweep MG = Mag & Dig DGM = Digital Geophysical Mapping Activities
DGI = Digital Geophysical Intrusive Activities

Grid/Transect Results

No Field Data Collected

NMRD = Non Munitions Related Debris NC = No Contact MEC = Munitions and Explosives of Concern MD = Munitions Debris
RRD = Range Related Debris MPPEH = Material Potentially Presenting an Explosive Hazard Wt = Weight lbs = Pounds

MEC Summary

No Munitions and Explosives of Concern (MEC) found

Demo Summary

No Demo Conducted

ADDITIONAL REMARKS:

- Conducted site safety/operations brief, magnetometers checked through IVS.
- Paragon spread <0.5 inch soil pile left from 12 Apr 2019 sifting operation, UXO Techs conducted magnetometer sweep of soils removing magnetic anomalies, UXOQCS conducted QC inspection, once completed Paragon moved soils to staging pile.
- Paragon removed wooden boards from inside FIB that were removed the previous day, UXO techs conducted magnetometer sweep, UXOQCS conducted QC inspection. Paragon moved items to stock pile.
- Paragon began jack hammering the frontal area of FIB, removing the metal edging, exposing rebar and interior boards. Boards will be UXO swept at a later date.
- Paragon moved sifter unit outside of work area, unit was cleaned, UXOQCS conducted inspection before sifter was removed off site.
- SUXOS and UXOQCS inspected 5 lbs. of MD and 15 lbs. of NMRD. MD was added to the collection of MD, then inspected and verified for a total of 42 lbs. (20mm) then placed in an container with seal ser. # 0007877/ser. #0007879 and DD Form 1348-1A/Chain of Custody will be completed.
- SUXOS, UXO Tech 3 and UXO Tech 1 will de-mob next work day leaving UXOQCS/SO on site.

Report Date: 4/16/2019

Project No: 6273502

Report No: 9



QUALITY CONTROL INSPECTIONS AND RESULTS:

Quality Assurance and Quality Control Grid/Transect Status

No QA/QC Inspections Conducted

QA = Quality Assurance QC = Quality Control

SEED Results

No SEED Results Collected

Inspections

Inspected UXO team test both magnetic locators on the IVS.
Inspected UXO team's surface sweep technique. Verified swept surface inside of FIB.
Inspected the screener for any possible munition debris or scrap metal stuck inside the machine.
Verified that FIB entrance and interior dirt was clear from munition debris.
Verified that FIB interior removed wood timbers were clear from munition debris.
Inspected operator's demolition procedures on the concrete structure.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

Air monitors readings obtained upwind and downwind.
Upwind/Downwind air monitors' readings were within permissible exposure limits (< 1 mg/m³).

Report Date: 4/16/2019

Project No: 6273502

Report No: 9



SAFETY INSPECTIONS AND RESULTS:

Inspections

PPE: Hearing protection for personnel conducting mechanical demolition of the FIB concrete structure.

Summary of Deficiencies

No deficiencies found.

Corrective Actions

N/A

Reinspection Results

N/A

Additional Notes

None.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.

JD Marlowe

4/16/2019 6:47:36 PM

SUXOS

Site Manager

Report Date: 4/17/2019

Project No: 6273502

Report No: 10



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

PPE: Hearing protection for personnel conducting mechanical demolition of the FIB concrete structure.
Field Equipment: Radios, air monitors, and magnetic locator.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

None.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/17/2019 6:14:32
PM

UXOSO

SUXOS

Report Date: 4/17/2019

Project No: 6273502

Report No: 10



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

Report Date: 4/18/2019

Project No: 6273502

Report No: 11



EA Engineering, Science, and Technology, Inc., PBC

SAFETY INSPECTION DAILY REPORT

Hancock Air National Guard Base Firing-In-Buttress

Syracuse, New York

INSPECTION RESULTS:

Item Description	Pass/Fail	Item Description	Pass/Fail
PPE	Pass	MSDS & Container Labeling per APP or SS	Pass
Compliance with Approved SOP	Pass	UXO/MEC Precautions Observed	Pass
Compliance with Approved Safety Plan	Pass	UXO/MEC Disposal Operations	N/A
Safety/Support Equipment	Pass	Motor Vehicles/MHE	Pass
On-site and Off-site Communications	Pass	First Aid Kit/Trauma Kit	Pass
Explosives/Ordnance Reference Materials	Pass		

SOP = Standard Operating Procedure UXO = Unexploded Ordnance PPE = Personal Protective Equipment
MEC = Munitions and Explosives of Concern MHE Material Handling Equipment

OTHER INSPECTIONS:

PPE: Helmet with face-shield, leather gloves, chaps, and earplugs for personnel employing chainsaw.
Field Equipment: Radios, air monitors, and magnetic locator.

SUMMARY OF DEFICIENCIES:

No deficiencies found.

CORRECTIVE ACTIONS RECOMMENDED:

N/A

REINSPECTION RESULTS:

N/A

ADDITIONAL NOTES:

None.

CONTRACTOR'S VERIFICATION:

I acknowledge that I have been briefed on the results of this inspection and will take corrective actions (if necessary).

Miguel Ferrer

4/18/2019 7:49:59
PM

UXOSO

SUXOS

Report Date: 4/18/2019

Project No: 6273502

Report No: 11



Note: Safety Inspections are to be conducted and documented on this form. This form will also be used to document the present status of the site/site operations, and will also be used to note the current status of deficiencies noted during daily inspections. Any daily inspection forms where deficiencies have been noted will be forwarded to the Site Manager and the Corporate QA/QC Manager.

SITE SUPERVISOR
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report Project Hancock Field,
Firing-In Buttress Report No: 003

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Cloudy Wind: SSE 15 mph	74	49	90	100%; 0.76" during day

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Ferrer - UXOQCS		10.0	Screening wood timbers removed from interior of Firing-In Buttress for munitions constituents (MC) and debris (MD); removal from timbers when feasible.
S. Soldner - Site Supervisor		10.0	
<u>Subcontractors</u>			
Paragon - E. Beeman - Foreman/Laborer		10.0	Demolition of FIB; spreading and stockpiling wood timbers.
R. Emmons - Operator		10.0	

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with bucket and jaw attachment	SK350	Paragon-owned		10.0 (includes fueling and decontamination time)

WORK PERFORMED TODAY:

0700 - EA - S. Soldner, M. Ferrer onsite; Paragon Environmental Construction (PEC) onsite - E. Beeman, R. Emmons onsite.

PEC completed removing interior and exterior wood timbers from FIB; timbers were stockpiled and spread by PEC as needed by EA personnel. EA inspected wood timbers visually and with SubSurface Instruments Waterproof Magnetic Locator ML-3S. Wood timbers were individually screened and separated into two stockpiles: no MC/MD observed and MC/MD observed. Surficial MC/MD observed in wood timbers was identified and removed via hand tools to the extent possible. MC/MD on the interior of wood timbers to be removed via cutting on 4/22.

MC/MD removed included inert .50 caliber practice rounds, 20 mm practice rounds, and munitions fragments. Material removed was certified as material documented as safe (MDAS) by M. Ferrer and containerized within a 55-gallon drum. Drum was closed and locked at all times except when MDAS was loaded into the drum. Approximately 4 pounds of MDAS was recovered.

Dustrak II particulate air monitors were not in use due to intermittent rainfall throughout day. There were no dust/particulate issues that required action.

All personnel offsite at 1700.

EA ENGINEERING, P.C.

**SITE SUPERVISOR
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York**

Report Daily Field Report

Project Hancock Field,
Firing-In Buttress

Report No: 003

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan.

REMARKS:

None.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Stephen Soldner

Site Supervisor
EA ENGINEERING

Photographs



Inspecting wood timbers via magnetic locator



Remaining wood pile to be inspected

**SITE SUPERVISOR
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York**

Report Daily Field Report Project Hancock Field,
Firing-In Buttress Report No: 004

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Cloudy Wind: SSE 15 mph	68	48	53	0

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Ferrer	UXOQCS	10.0	Screening wood timbers removed from interior of Firing-In Buttress for munitions constituents (MC) and debris (MD); removal from timbers via hand tools and chainsaw.
S. Soldner	Site Supervisor	10.0	
M. Jeffreys	UXO Tech III	10.0	
<u>Subcontractors</u>			
Paragon - E. Beeman	Foreman/Laborer	10.0	Demolition of FIB; removal of rebar; crushing of removed concrete.
R. Emmons	Operator	10.0	
R. Spinks	Operator	10.0	

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with jaw attachment	SK350	Paragon-owned		9.0 (fix hydraulic leak)
Excavator with jackhammer attachment	SK250			10.0 (includes fueling and decontamination time)

WORK PERFORMED TODAY:

0700 - EA - S. Soldner, M. Ferrer, M. Jeffreys, M. Wright, J. Vonuderitz onsite; Paragon Environmental Construction (PEC) onsite - E. Beeman, R. Emmons, R. Spinks onsite. J. Vonunderitz offsite 0800; M. Wright offsite 1200.

PEC used SK250 excavator to jackhammer interior concrete of the FIB. PEC used SK350 excavator to remove loose concrete and rebar and place in appropriate stockpiles. PEC used oxy-acetylene torch to cut and remove rebar from concrete.

EA sorted through wood timbers removed from the FIB. EA inspected wood timbers visually and with SubSurface Instruments Waterproof Magnetic Locator ML-3S. Surficial MC/MD observed in wood timbers was identified and removed via hand tools to the extent possible. MC/MD on the interior of wood timbers was identified and removed via Stihl MS211 chainsaw.

MC/MD removed included inert .50 caliber practice rounds, 20 mm practice rounds, and munitions fragments. Material removed was certified as material documented as safe (MDAS) by M. Ferrer and containerized within a 55-gallon drum. Drum was closed and locked at all times except when MDAS was loaded into the drum. Approximately 4 pounds of MDAS was recovered.

Dustrak II particulate air monitors were in use throughout day to measure fugitive dust generated by earthwork as designated by the work plan. One monitor was located upwind of the work area and one was located downwind of the work area. There were no dust/particulate issues that required action.

All personnel offsite at 1700.

EA ENGINEERING, P.C.

**SITE SUPERVISOR
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York**

Report Daily Field Report

Project Hancock Field,
Firing-In Buttress

Report No: 004

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

Performed a zero calibration on both air monitors at the start of the day.

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan. Chainsaw operator with face shield, hard hat, protective chaps, and heavy duty gloves. Torch operator with protective smock, hard hat, heavy duty gloves, and protective eye wear.

REMARKS:

None.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Stephen Soldner

**Site Supervisor
EA ENGINEERING**

Photographs



Jackhammer in use on concrete, removing via excavator



Preparing chainsaw for use in removing MC/MD

SITE SUPERVISOR
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report Project Hancock Field,
Firing-In Buttress Report No: 005

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Cloudy Wind: SSW 10 mph	78	44	40	50

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Ferrer	UXOQCS	10.0	Screening wood timbers removed from interior of Firing-In Buttress for munitions constituents (MC) and debris (MD); removal from timbers via hand tools and chainsaw.
S. Soldner	Site Supervisor	10.0	
M. Jeffreys	UXO Tech III	10.0	
<u>Subcontractors</u>			
Paragon - E. Beeman	Foreman/Laborer	10.0	Demolition of FIB; removal of rebar; crushing of removed concrete.
R. Emmons	Operator	10.0	
R. Spinks	Operator	10.0	

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with jaw attachment	SK350	Paragon-owned		10.0 (includes fueling and decontamination time)
Excavator with jackhammer attachment	SK250			

WORK PERFORMED TODAY:

0700 - EA - S. Soldner, M. Ferrer, M. Jeffreys onsite; Paragon Environmental Construction (PEC) onsite - E. Beeman, R. Emmons, R. Spinks onsite.

PEC used SK250 excavator to jackhammer interior concrete of the FIB. PEC used SK350 excavator to remove loose concrete and rebar and place in appropriate stockpiles. PEC completed removal of concrete/rebar associated with the FIB. PEC used oxy-acetylene torch to cut and remove rebar from concrete.

EA sorted through wood timbers removed from the FIB. EA inspected wood timbers visually and with SubSurface Instruments Waterproof Magnetic Locator ML-3S. Surficial MC/MD observed in wood timbers was identified and removed via hand tools to the extent possible. MC/MD on the interior of wood timbers was identified and removed via Stihl MS211 chainsaw.

MC/MD removed included inert .50 caliber practice rounds, 20 mm practice rounds, and munitions fragments. Material removed was certified as material documented as safe (MDAS) by M. Ferrer and containerized within a 55-gallon drum. Drum was closed and locked at all times except when MDAS was loaded into the drum. Approximately 3 pounds of MDAS was recovered.

Dustrak II particulate air monitors were not in use due to intermittent rainfall throughout day. There were no dust/particulate issues that required action.

All personnel offsite at 1700.

EA ENGINEERING, P.C.

**SITE SUPERVISOR
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York**

Report Daily Field Report

Project Hancock Field,
Firing-In Buttress

Report No: 005

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan. Chainsaw operator with face shield, hard hat, protective chaps, and heavy duty gloves. Torch operator with protective smock, hard hat, heavy duty gloves, and protective eye wear.

REMARKS:

None.

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Stephen Soldner

**Site Supervisor
EA ENGINEERING**

Photographs



Using chainsaw to cut wood timbers to facilitate removal of MC/MD



View of FIB looking north; removing remainder of bottom of FIB

SITE SUPERVISOR/SUXOS
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report: Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 006

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Overcast / Light Rain Wind: W 5 mph	45	43	68	40

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Ferrier	UXOQCS	10.0	Screening wood timbers removed from interior of Firing-In Buttress (FIB) for munition constituents (MC) and debris (MD); removal from timbers via hand tools and chainsaw.
M. Jefferys	UXO Tech III	10.0	
M. Wright	Site Supervisor	10.0	
<u>Subcontractors</u>			
Paragon - E. Beeman	Foreman/Laborer	10.0	Demolition of FIB; crushing of removed concrete and removal of rebar.
R. Emmons	Operator	10.0	
R. Spink	Operator	10.0	

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with jaws	SK350	Paragon-Owned		10.0
Excavator with hammer	SK250			

WORK PERFORMED TODAY:

0700 - EA - M. Ferrer, M. Jeffreys, M. Wright onsite; Paragon Environmental Construction (PEC) onsite - E. Beeman, R. Emmons, R. Spinks onsite.

PEC used SK250 excavator to jackhammer larger pieces of concrete from the FIB. PEC used SK350 excavator to remove loose concrete and rebar and place in appropriate stockpiles. PEC used oxy-acetylene torch to cut and remove rebar from concrete.

EA sorted through wood timbers removed from the FIB. EA inspected wood timbers visually and with SubSurface Instruments Waterproof Magnetic Locator ML-3S. Surficial MC/MD observed in wood timbers was identified and removed via hand tools to the extent possible. MC/MD on the interior of wood timbers was identified and removed via Stihl MS211 chainsaw.

MC/MD removed included inert .50 caliber practice rounds, 20 mm practice rounds, and munitions fragments. Material removed was certified as material documented as safe (MDAS) by M. Ferrer and containerized within a 55-gallon drum. Drum was closed and locked at all times except when MDAS was loaded into the drum. Approximately 2 pounds of MDAS was recovered.

All personnel offsite at 1700.

EA ENGINEERING, P.C.

SITE SUPERVISOR/SUXOS
DAILY REPORT
INTERIM REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 006

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan. Chainsaw operator with face shield, hard hat, protective chaps, and heavy duty gloves. Torch operator with protective smock, hard hat, heavy duty gloves, and protective eye wear.

REMARKS:

NONE

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Mike Wright
Site Supervisor
EA ENGINEERING, P;C.

Photographs



Separation of rebar and concrete using a cutting torch



Using a chainsaw to cut timbers for the removal of MC/MD

SITE SUPERVISOR/SUXOS
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field

Report No: 007

Firing-In Buttress

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Sunny Wind: E 10 mph	60	35	50	0

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Ferrier	UXOQCS	10.0	Screening wood timbers removed from interior of Firing-In Buttress (FIB) for munition constituents (MC) and debris (MD); removal from timbers via hand tools and chainsaw.
M. Jefferys	UXO Tech III	10.0	
M. Wright	Site Supervisor	10.0	
J. Monk	SUXOS	10.0	
<u>Subcontractors</u>			
Paragon - E. Beeman	Foreman/Laborer	10.0	Demolition of FIB; crushing of removed concrete and removal of rebar.
R. Emmons	Operator	10.0	
R. Spink	Operator	10.0	

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with jaws	SK350	Paragon-Owned		10.0
Excavator with crusher	SK250			

WORK PERFORMED TODAY:

0700 - EA - M. Ferrer, M. Jeffreys, M. Wright onsite; Paragon Environmental Construction (PEC) onsite - E. Beeman, R. Emmons, R. Spinks onsite. J. Monk onsite at 0845.

PEC used SK250 excavator to crush larger pieces of concrete from the FIB to separate rebar. PEC used SK350 excavator to remove loose concrete and rebar and place in appropriate stockpiles. PEC used oxy-acetylene torch to cut and remove rebar from concrete.

EA sorted through wood timbers removed from the FIB. EA inspected wood timbers visually and with SubSurface Instruments Waterproof Magnetic Locator ML-3S. Surficial MC/MD observed in wood timbers was identified and removed via hand tools to the extent possible. MC/MD on the interior of wood timbers was identified and removed via Stihl MS211 chainsaw. Timber inspection completed at 1430.

MC/MD removed included inert .50 caliber practice rounds, 20 mm practice rounds, and munitions fragments. Material removed was certified as material documented as safe (MDAS) by M. Ferrer and containerized within a 55-gallon drum. Drum was closed and locked at all times except when MDAS was loaded into the drum. Approximately 2 pounds of MDAS was recovered

Dustrak II particulate air monitors were in use throughout day to measure fugitive dust generated by earthwork as designated by the work plan. One monitor was located upwind of the work area and one was located downwind of the work area. There were no dust/particulate issues that required action.

All personnel offsite at 1700.

EA ENGINEERING, P.C.

SITE SUPERVISOR/SUXOS
DAILY REPORT
INTERIM REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 007

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan. Chainsaw operator with face shield, hard hat, protective chaps, and heavy duty gloves. Torch operator with protective smock, hard hat, heavy duty gloves, and protective eye wear.

REMARKS:

NONE

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Mike Wright
Site Supervisor
EA ENGINEERING, P;C.

Photographs



Using a chainsaw to cut timbers for the removal of MC/MD



Staging of concrete in preparation for removal

SITE SUPERVISOR/SUXOS
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 008

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Overcast/Rain Wind: E 15-20 mph	66	53	80	100

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Ferrier	UXOQCS	4.5	Pack and seal MD & MC into a steel ammo can for shipment; complete final UXO paperwork; M. Wright oversight of Paragon
J. Monk	SUXOS	4.5	
M. Wright	Site Supervisor	5.5	
<u>Subcontractors</u>			
Paragon - E. Beeman	Foreman/Laborer	5.5	Concrete, rebar, and timber staging for removal
R. Emmons	Operator	5.5	
R. Spink	Operator	5.5	

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with jaws	SK350	Paragon-Owned		5.5
Excavator with crusher	SK250			

WORK PERFORMED TODAY:

0700 - EA - M. Ferrer, J. Monk, M. Wright, J. Von Uderitz onsite; Paragon Environmental Construction (PEC) onsite - E. Beeman, R. Emmons, R. Spinks onsite.

PEC used SK250 excavator to crush larger pieces of timber to lengths of less than six feet. PEC used SK350 excavator to stage concrete, rebar, and timber and place in appropriate stockpiles. PEC used oxy-acetylene torch to cut and remove rebar from concrete.

EA packed and sealed MD & MC into a steel ammo can for shipment. Paperwork completed by J. Monk and M. Ferrier.

J. Monk and M. Ferrier offsite at 1130.

Remaining personnel offsite at 1230.

EA ENGINEERING, P.C.

SITE SUPERVISOR/SUXOS
DAILY REPORT
INTERIM REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 008

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan. Torch operator with protective smock, hard hat, heavy duty gloves, and protective eye wear.

REMARKS:

NONE

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Mike Wright
Site Supervisor
EA ENGINEERING, P;C.

Photographs



All demolition debris clear of demolition area



Timbers staged for removal to landfill

SITE SUPERVISOR/SUXOS
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field

Report No: 009

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Sunny Wind: NE 5 mph	52	31	90	30

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Wright	Site Supervisor	10.0	Oversight of Paragon for the staging and removal of demolition debris.
<u>Subcontractors</u>			
Paragon - E. Beeman	Foreman/Laborer	10.0	Load piles of concrete, rebar, and timber into dump trucks to be hauled offsite; began to grade the area of the former FIB.
R. Emmons	Operator	10.0	
R. Spink	Operator	9.0	
(3 Haulers)			

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with jaws	SK350	Paragon-Owned		10.0
Excavator with crusher	SK250			9.0

WORK PERFORMED TODAY:

0700 - EA - M. Wright on-site; Paragon Environmental Construction (PEC) on-site - E. Beeman, R. Spinks on-site.

PEC used SK250 excavator to move timber to staging area. PEC used SK350 excavator load dump trucks with demolition debris to be hauled off-site.

Dustrak II particulate air monitors were in use throughout day to measure fugitive dust generated by earthwork as designated by the work plan. One monitor was located upwind of the work area and one was located downwind of the work area. There were no dust/particulate issues that required action.

All personnel offsite at 1700.

EA ENGINEERING, P.C.

SITE SUPERVISOR/SUXOS
DAILY REPORT
INTERIM REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 009

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan.

REMARKS:

NONE

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Mike Wright
Site Supervisor
EA ENGINEERING, P;C.

Photographs



Loading a dump truck with concrete for removal off-site

SITE SUPERVISOR/SUXOS
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 010

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Overcast/Light Rain	54	43	87	40

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Wright	Site Supervisor	10.0	Oversight of Paragon for the removal of demolition debris and the final grading of the work area.
<u>Subcontractors</u>			
Paragon - E. Beeman R. Spink	Forman/Laborer Operator	10.0 10.0	Removal of remaining timbers off-site. Use of excavator and dozer to grade the area of the former FIB.

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with jaws Dozer	SK350	Paragon-Owned		5.5 4.5

WORK PERFORMED TODAY:

0700 - EA - M. Wright on-site; Paragon Environmental Construction (PEC) on-site - E. Beeman, R. Spinks on-site.

PEC used SK350 excavator to load dump trucks with timber for removal off-site; to move soil to begin the grading process. PEC used the dozer to put a final grade on the area of the former FIB.

All personnel off-site at 1700.

EA ENGINEERING, P.C.

SITE SUPERVISOR/SUXOS
DAILY REPORT
INTERIM REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 010

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan.

REMARKS:

NONE

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Mike Wright
Site Supervisor
EA ENGINEERING, P;C.

Photographs



Collapsing the berm that surrounded the former firing-in buttress



Berm completely collapsed and graded

SITE SUPERVISOR/SUXOS
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 011

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Heavy Rain	56	41	79	100

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Wright	Site Supervisor	2.0	Oversight of Paragon for the final grading of the work site.
<u>Subcontractors</u>			
Paragon - E. Beeman	Foreman/Laborer	2.0	Final grading of the work site and the removal of equipment off-site.
R. Spink	Operator	2.0	

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
Paragon - Excavator with jaws Dozer	SK350	Paragon-Owned		1.0 1.0

WORK PERFORMED TODAY:

0700 - EA - M. Wright on-site; Paragon Environmental Construction (PEC) on-site - E. Beeman, R. Spinks on-site.

PEC used SK350 excavator and dozer to put a final grade on the area of the former FIB.

All personnel off-site at 0900.

EA ENGINEERING, P.C.

SITE SUPERVISOR/SUXOS
DAILY REPORT
INTERIM REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 011

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A; all personnel observed safety protocol as designated in the work plan and Accident Prevention Plan

REMARKS:

NONE

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Mike Wright
Site Supervisor
EA ENGINEERING, P;C.

SITE SUPERVISOR/SUXOS
DAILY REPORT
NON-TIME CRITICAL REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 012

WORKDAY WEATHER:

Weather Description	High (°F)	Low (°F)	Humidity (%)	Rainfall (%)
Overcast/Light Rain Wind: N 5 mph	54	48	89	50

WORK PERFORMED BY CONTRACTORS/SUBCONTRACTORS:

Contractor	Title	Hours	Description of Work
<u>EA Engineering, P.C.</u>			
M. Wright	Site Supervisor	5.0	Oversight of Tim Murphy Landscaping.
<u>Subcontractors</u>			
Paragon- E. Beeman	Foreman	3.5	Oversight of Tim Murphy Landscaping.
Tim Murphy Landscaping		3.5	Hydroseeded the restored work area.

OPERATING EQUIPMENT DATA (Not hand tools):

Equipment	Equipment ID/TAG	Rental In	Rental Return	Hours Used
N/A				

WORK PERFORMED TODAY:

0815; M. Wright arrived on-site. 0900 E. Beeman (Paragon) and Tim Murphy Landscaping arrive on-site.

Tim Murphy Landscaping began to hydroseed the area at 0920. They used 4 batches of hydroseed equaling 400 gallons. Hydroseeding completed at 1230.

1230; E. Beeman and Tim Murphy Landscaping off-site.

1300; Final site inspection completed with Jason Murphy.

All remaining personnel off-site at 1315.

EA ENGINEERING, P.C.

SITE SUPERVISOR/SUXOS
DAILY REPORT
INTERIM REMOVAL ACTION
Hancock Field, New York

Report Daily Field Report

Project Hancock Field
Firing-In Buttress

Report No: 012

QUALITY CONTROL INSPECTIONS AND RESULTS:

N/A

QUALITY CONTROL TESTING AND RESULTS:

N/A

SAFETY INSPECTIONS:

N/A

REMARKS:

NONE

CONTRACTOR'S VERIFICATION:

I certify that to the best of my knowledge the above report is complete and correct. All material, equipment used, and work performed during this reporting period is in compliance with the contract plans and specifications except as noted above.



Mike Wright
Site Supervisor
EA ENGINEERING, P.C.

Photographs



Tim Murphy Landscaping beginning to hydroseed from the top of the hill



Final site appearance after the completion of restoration

"Full Service Environmental/Construction Company"

Client:	Omaha District USACE	Date:	4-17-19 4/5/2019
Project Name:	Hancock ANGB Debris removal	Field Day:	9 8
Subcontractor:	Paragon Environmental	PEC Job #:	19-0028
EA Engineering Site Super Intendent:	JD Marlow	Job Location:	Hancock Airport
Paragon Site Super:	Eddie Beeman	PEC Project Manager:	Chris Sanson

Description	Unit of Measure	Quantity/Hours
Mobilization	LS	
2-inch thick Plexi Glass for Excavator	LS	
Project Management	Hr	
Operator : Rick Emmons	8 Hr	
Operator OT : Rick Emmons	2 Hr	
Super/Labor : Ed Beeman	8 Hr	
Super/Labor OT : Ed Beeman	2 Hr	
Excavator with Hammer : Fleet # 430	Day	1
2nd Excavator OR Loader Fleet # 324	Day	1
Dozer : Fleet #	Day	
Pickup : Truck # 647	Day	1
Chainsaw	Day	
Rail Road Tie Disposal	Ton/Loads	1
Concrete Disposal	Ton/Loads	1
1st Soil Screening (600yds)	Yds	
2nd Soil Screening	Yds	
Soil Screener with E-Stop	Month Rental	
55-Gallon Drums	Each	
Silt Fence	LF	
* Operator - Randy, S	8-2 Hr	

ARRIVAL TIME: _____ **DEPARTURE TIME:** _____

Description of Task Completed:
 on site at 7:00 am safety meeting then continue hammering on the face of bunker. we have all of the roof off of the bunker rail road ties all in a pile to be scanned.

EA Rep. Signature: _____

Paragon Rep Signature: _____



EA Engineering, Science,
and Technology, Inc., PBC

225 Schilling Circle, Ste. 400
Hunt Valley, MD 21031

Daily Operational Journal

Client: <u>USACE</u>		Date: <u>04/17/2019</u>		
Project Title: <u>Hancock Field ANGB</u>				
Contract Number: <u>6273502</u>		Task Serviced: <u>CSS AA</u>		
EA Site Personnel		Time on site: <u>0631</u>	Time off site: <u>1700</u>	
Name	Position	0% HPD	4% HPD	8% HPD
<u>Miguel A. Ferrer</u>	<u>UXOIC/SO</u>	<u>0.5</u>	/	<u>9.5</u>
	<u>UXOTH</u>			
Detector Serial/WHO Number	Time of Daily Calibration	Munitions Debris (MD)	Scrap (non-MD)	Reportable items (MEC, MPPEH)
<u>Analog Detector: WHO178</u>	<u>0753</u>	/	/	/
<u>Down Hole:</u>				
<u>All Metals Detector:</u>				
<u>HAZMATCAD:</u>				
Comments:				
<u>0631: Arrived to jobsite.</u>				
<u>0705: Safety brief</u>				
<u>0721: Air monitors set up & running. Took pictures (before).</u>				
<u>0744: Concrete structure demolition resumed.</u>				
<u>0753: TVS check performed.</u>				
<u>0934: Checked air monitors.</u>				
<u>1127: Checked air monitors.</u>				
<u>1345: Checked air monitors.</u>				
<u>1549: Checked air monitors</u>				
<u>1633: Removed air monitors and stored them. Took pictures (after)</u>				
<u>1642: Concrete structure demolition stopped.</u>				
<u>1700: Field work completed. End of day.</u>				

Miguel A. Ferrer
EA-UXO Supervisor (printed name)

Client Representative (printed name)

 04/17/2019
Signature and Date

Signature and Date

Appendix B
Asbestos Manifest

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NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>NY 3570025475</i>		Manifest Document No. <i>19-021</i>	2. Page 1 of
3. Generator's Name and Mailing Address <i>APPL: JASON PRESTON 124TH AVE/END 6001 EAST MOLLOY RD SYRACUSE, NY 13211</i>		4. Generator's Phone <i>(315) 232-2111</i>		Filing - in Business <i>Syracuse NY 13211</i>	
5. Transporter 1 Company Name <i>Environmental contracting - construction</i>		6. US EPA ID Number <i>7A-680</i>		A. State Transporter's ID	
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone <i>315-451-0400</i>	
9. Designated Facility Name and Site Address <i>EPS of UT 832 SP. GUY BLVD. SYRACUSE NY 13209</i>		10. US EPA ID Number		C. State Transporter's ID	
				D. Transporter 2 Phone	
				E. State Facility's ID	
				F. Facility's Phone <i>315-451-6666</i>	
11. WASTE DESCRIPTION <i>RODA 2212, Asbestos, 9, P6, III</i>			Containers No. Type		13. Total Quantity
a.			<i>3 BA</i>		<i>408</i>
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above <i>A: Transit APE # * EFG # 171 182, 13, 213</i>			H. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>Emergency contact Environmental contracting and construction services, LLC 315-451-0400</i>					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name <i>Jason Preston</i>		Signature <i>[Signature]</i>		Date Month Day Year <i>4 12 19</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name <i>Michael Kelly</i>		Signature <i>[Signature]</i>	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in Item 19.					
Printed/Typed Name <i>Robert Heisey</i>		Signature <i>[Signature]</i>		Date Month Day Year <i>4 12 19</i>	

GENERATOR FACILITY TRANSPORTER

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Appendix C

Laboratory Validation and Analytical Reports

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DATA VALIDATION REPORT

Hancock Field

**Lead and Chromium
SDGs 167652 and 151367**

Chemical Analyses Performed by:

Eurofins Environmental Testing TestAmerica, Savannah

Prepared by

ENVIRONMENTAL DATA SERVICES, LTD.

Prepared for

EA Engineering, Science and Technology, Inc.

May 21, 2019

EXECUTIVE NARRATIVE

Sample Delivery Group: 167652, 151367
Laboratory: TestAmerica
Site: Hancock Field
Sampling dates: 4/04/19, 4/12/19, and 4/15/19
Number of Samples: 14 soil
Test Method: SW-846 6010
Analysis: Copper and Lead

Validation Level: Level 4

Quality Assurance Project Plan: NTCR Work Plan, Hancock Air National Guard Base, March 2019 (WP).

Validation Guidelines: United States Department of Defense, Quality Systems Manual, Rev. 5.1 2017, and United States Environmental Protection Agency (USEPA) Contract Laboratory National Functional Guidelines for Superfund Inorganic Methods Data Review, (USEPA 2017).

Client Sample ID	Laboratory Sample ID	Client Sample ID	Laboratory Sample ID
FIB-BASE-01	680-167652-1	FIB-BASE-08	680-167652-8
FIB-BASE-02	680-167652-2	FIB-BASE-09	680-167652-9
FIB-BASE-03	680-167652-3	FIB-BASE-10	680-167652-10
FIB-BASE-04	680-167652-4	STOCKPILE 01	680-167652-11
FIB-BASE-05	680-167652-5	STOCKPILE 02	680-167652-12
FIB-BASE-06	680-167652-6	FIB-DUP-01	680-167652-13
FIB-BASE-07	680-167652-7	Railroad Timber	480-151367-1

Table 1, provides a summary of the major and minor data quality issues applied to this data set. All data are acceptable except those results which have been qualified with "R", rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

All data users should note two facts. First, an "R" flag means that the associated value is unusable due to significant quality control (QC) problems, the data is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on any data tables even as a last resort. Second, no analyte concentration, even if it passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

DATA ASSESSMENT

1. NARRATIVE AND COMPLETENESS REVIEW:

The case narrative was reviewed and the data package was checked for completeness. No discrepancies were noted.

2. SAMPLE DELIVERY AND CONDITION:

The samples arrived at the laboratory in acceptable condition. Proper custody was documented. No qualification required.

3. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects will be flagged as not detected at an estimated quantitation limit, "UJ", unless the holding time is grossly exceeded (by more than two times the holding time specified), in which case non-detect results are flagged "R", rejected. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. CALIBRATION:

Method requirements for satisfactory instrument calibration are established to ensure that the instrument can produce acceptable quantitative data. Initial calibration verification (ICV) demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. Continuing calibration verification (CCV) demonstrates that the initial calibration is still valid by checking the performance of the instrument on a continuing basis.

Initial and Continuing Calibration Verification:

Immediately after each system has been calibrated, the accuracy of the initial calibration must be verified and documented for each target analyte by the analysis of an ICV solution(s). The CCV standard shall be analyzed at a frequency of one for every 10 field samples analyzed during an analytical run, at the beginning of the run, and again after the last analytical sample. The percent recovery acceptable limits for ICV/CCV are 90 – 110% for metals. The percent recovery acceptable limits for the Contract Required Detection Limit (CRDL) standard for metals are 80-120%. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

5. BLANK CONTAMINATION:

Quality assurance blanks, i.e., instrument, preparation, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Calibration blanks (ICB and CCB) are used to ensure a stable instrument baseline before and during the analysis of analytical samples. Preparation blanks measure laboratory contamination. Field and rinse blanks measure cross-contamination of samples during field operations. When an equipment blank, trip blank, or lab blank has an analyte detection greater than $\frac{1}{2}$ the analyte Level of Quantitation (LOQ) or one tenth the concentration of associated samples, then all associated field samples are flagged per validation guidance. Qualifications were applied to the samples and analytes as shown below.

A) Method blank contamination:

No problems were found for this criterion the require qualification.

B) Instrument blank contamination:

No problems were found for this criterion the require qualification.

C) Field /Equipment blank contamination:

No field blank was submitted in association with this sample delivery group (SDG).

6. INTERFERENCE CHECK SAMPLE:

The Interference Check Sample (ICS) verifies the analytical instrument's ability to overcome interferences typical of those found in samples. The laboratory analyzed and reported ICS results for all elements being reported from the analytical run and for all interferences (target and non-target) for these reported elements. The ICS consists of two solutions: Solution A and Solution AB. Solution A consists of the interferences, and Solution AB consists of the analytes mixed with the interferences. Results for the analysis of ICS Solution must fall within the control limits of $\pm 20\%$ or $\pm CRQL$ (whichever is greater) of the true value for the analytes and interferences included in the solution. If results that are greater than or equal to the level of detection (LOD) are observed for analytes that are not present in the ICS solution, the possibility of false positives exists. If negative results are observed for analytes that are not present in the ICS solution, and their absolute value is greater than or equal to the LOD, the possibility of false negatives in the samples exists. In general, sample data can be accepted if the concentrations of Al, Ca, Fe, and Mg in the sample are found to be less than or equal to their respective concentrations in the ICS. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

7. LABORATORY CONTROL SAMPLE:

The Laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis. Aqueous/water and soil/sediment LCSs shall be analyzed for each analyte utilizing the same sample preparations, analytical methods, and quality assurance/quality control procedures as employed for the samples. Per the QAPP all LCS percent recoveries must fall within range specified in the US DOD Quality Systems Manual 5.1. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE:

The matrix spike/matrix spike duplicate (MS/MSD) sample analysis is designed to provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology. The matrix spike percent recoveries and relative percent difference (RPD) values must fall within the control limits established in the QAPP. However, spike recovery limits do not apply when the sample concentration is greater than or equal to four times the spike added. For a matrix spike analysis that does not meet the technical criteria, the action was applied to all samples in the preparation batch.

Sample FIB-BASE-10 was analyzed as an MS/MSD pair in association with samples in this delivery group. No problems were found for this criterion.

8. SERIAL DILUTION:

The serial dilution determines whether significant physical or chemical interferences exist due to sample matrix. If the analyte concentration is sufficiently high (concentration in the original sample is greater than 50 times the detection limit), the percent difference between the original determination and the serial dilution analysis (a five-fold dilution) after correction for dilution shall be less than 10. For a serial dilution analysis that does not meet the technical criteria, the action was applied to only the field sample used to prepare the serial dilution sample.

A serial dilution analysis was performed on sample FIB-BASE-10 in association with this delivery group. Serial dilution criteria were met in all cases.

9. FIELD DUPLICATES:

Field duplicates may be taken and analyzed as an indication of overall precision. These analyses measure both field and laboratory precision. A control limit of 35% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values greater than or equal to five times (5x) the LOQ. A control limit of two times the LOQ shall be used if either the sample or duplicate value is less than 5x the LOQ. For field duplicate analyses that do not meet the technical criteria, the action was applied to only the field sample and it's duplicate.

Samples FIB-BASE-02 and FIB-DUP-01 were submitted as a field duplicate pair. Upon evaluation observed precision for the pair was adequate.

10. ANALYTE QUANTIFICATION AND REPORTED DETECTION LIMITS:

Analyte quantitation was verified as part of the Level 4 data validation. No anomalies were identified.

11. SYSTEM PERFORMANCE:

No other problems were found.

Table 1 Major and Minor Findings

	Were acceptance criteria met?		
	Yes	No	
Metals		Major	Minor
Holding Time	X		
Initial and Continuing Calibration Verification	X		
Initial and Continuing Calibration Blanks	X		
Method Blank	X		
Field or Rinse Blank	NA		
Interference Check Standards	X		
Matrix Spike/Matrix Spike Duplicate	X		
Laboratory Control Sample	X		
ICP Serial Dilution	X		
Field Duplicate	X		

Major = Major data quality issue identified resulting in rejection of data.

Minor = Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.

NA = Not applicable

Table 2 Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for, but not detected or is qualified as non-detected because of blank contamination.
J	The analyte was positively identified; however, the result is estimated because of discrepancies in meeting certain analyte specific quality control criteria.
UJ	The analyte was not detected; however, the result is estimated because of discrepancies in meeting certain analyte specific quality control criteria.
R	The data are rejected due to serious deficiencies in meeting QC criteria and may not be used for decision making.

ANALYTICAL REPORT

Job Number: 680-167652-1

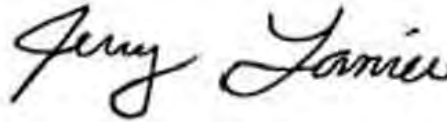
Job Description: Hancock ANGB Munitions Response

Contract Number: W9128F-13-D-0006

For:

EA Engineering, Science, and Technology
6712 Brooklawn Parkway
Suite 104
Syracuse, NY 13211

Attention: Joe Von Uderitz



Approved for release.
Jerry A Lanier
Project Manager I
4/22/2019 6:01 PM

Jerry A Lanier, Project Manager I
5102 LaRoche Avenue, Savannah, GA, 31404
(912)250-0281
jerry.lanier@testamericainc.com
04/22/2019

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.

Savannah Certifications and ID #: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; AZ: AZ0741; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN: C-GA-02; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

Eurofins TestAmerica, Savannah

5102 LaRoche Avenue, Savannah, GA 31404

Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com



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CASE NARRATIVE

Client: EA Engineering, Science, and Technology

Project: Hancock ANGB Munitions Response

Report Number: 680-167652-1

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 04/16/2019; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.1 C.

METALS (ICP)

Samples FIB-BASE-01 (680-167652-1), FIB-BASE-02 (680-167652-2), FIB-BASE-03 (680-167652-3), FIB-BASE-04 (680-167652-4), FIB-BASE-05 (680-167652-5), FIB-BASE-06 (680-167652-6), FIB-BASE-07 (680-167652-7), FIB-BASE-08 (680-167652-8), FIB-BASE-09 (680-167652-9), FIB-BASE-10 (680-167652-10), STOCKPILE 01 (680-167652-11), STOCKPILE 02 (680-167652-12) and FIB-DUP-01 (680-167652-13) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/19/2019 and analyzed on 04/20/2019.

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

PERCENT SOLIDS/MOISTURE

Samples FIB-BASE-01 (680-167652-1), FIB-BASE-02 (680-167652-2), FIB-BASE-03 (680-167652-3), FIB-BASE-04 (680-167652-4), FIB-BASE-05 (680-167652-5), FIB-BASE-06 (680-167652-6), FIB-BASE-07 (680-167652-7), FIB-BASE-08 (680-167652-8), FIB-BASE-09 (680-167652-9), FIB-BASE-10 (680-167652-10), STOCKPILE 01 (680-167652-11), STOCKPILE 02 (680-167652-12) and FIB-DUP-01 (680-167652-13) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 04/17/2019.

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

METALS

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job Number: 680-167652-1

SDG No.: _____

Project: Hancock ANGB Munitions Response

Client Sample ID	Lab Sample ID
<u>FIB-BASE-01</u>	<u>680-167652-1</u>
<u>FIB-BASE-02</u>	<u>680-167652-2</u>
<u>FIB-BASE-03</u>	<u>680-167652-3</u>
<u>FIB-BASE-04</u>	<u>680-167652-4</u>
<u>FIB-BASE-05</u>	<u>680-167652-5</u>
<u>FIB-BASE-06</u>	<u>680-167652-6</u>
<u>FIB-BASE-07</u>	<u>680-167652-7</u>
<u>FIB-BASE-08</u>	<u>680-167652-8</u>
<u>FIB-BASE-09</u>	<u>680-167652-9</u>
<u>FIB-BASE-10</u>	<u>680-167652-10</u>
<u>STOCKPILE 01</u>	<u>680-167652-11</u>
<u>STOCKPILE 02</u>	<u>680-167652-12</u>
<u>FIB-DUP-01</u>	<u>680-167652-13</u>

Comments:

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-01

Lab Sample ID: 680-167652-1

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:10

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 90.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	21	2.3	0.47	0.16	mg/Kg			1	6010C
Lead	8.5	0.93	0.93	0.32	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-02

Lab Sample ID: 680-167652-2

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:13

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 89.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	20	2.4	0.48	0.16	mg/Kg			1	6010C
Lead	6.5	0.97	0.97	0.33	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-03

Lab Sample ID: 680-167652-3

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:16

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 88.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.6	0.51	0.17	mg/Kg			1	6010C
Lead	6.1	1.0	1.0	0.35	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-04

Lab Sample ID: 680-167652-4

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:19

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 88.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	18	2.5	0.50	0.17	mg/Kg			1	6010C
Lead	5.4	1.0	1.0	0.34	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-05

Lab Sample ID: 680-167652-5

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:22

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 86.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.5	0.51	0.17	mg/Kg			1	6010C
Lead	6.9	1.0	1.0	0.35	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-06

Lab Sample ID: 680-167652-6

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:25

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 94.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	22	2.3	0.47	0.16	mg/Kg			1	6010C
Lead	15	0.93	0.93	0.32	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-07

Lab Sample ID: 680-167652-7

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:28

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 94.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	21	2.2	0.44	0.15	mg/Kg			1	6010C
Lead	13	0.89	0.89	0.30	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-08

Lab Sample ID: 680-167652-8

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:31

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 89.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	22	2.4	0.48	0.16	mg/Kg			1	6010C
Lead	18	0.95	0.95	0.32	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-09

Lab Sample ID: 680-167652-9

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:34

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 92.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.3	0.46	0.16	mg/Kg			1	6010C
Lead	6.2	0.93	0.93	0.32	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-10

Lab Sample ID: 680-167652-10

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:37

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 86.3

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	22	2.5	0.50	0.17	mg/Kg			1	6010C
Lead	6.4	1.0	1.0	0.34	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: STOCKPILE 01

Lab Sample ID: 680-167652-11

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/12/2019 11:45

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 89.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.4	0.49	0.17	mg/Kg			1	6010C
Lead	10	0.97	0.97	0.33	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: STOCKPILE 02

Lab Sample ID: 680-167652-12

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/12/2019 11:50

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 89.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	21	2.4	0.49	0.17	mg/Kg			1	6010C
Lead	10	0.98	0.98	0.33	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-DUP-01

Lab Sample ID: 680-167652-13

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/12/2019 00:00

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 90.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.3	0.47	0.16	mg/Kg			1	6010C
Lead	6.5	0.93	0.93	0.32	mg/Kg			1	6010C

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

ICV Source: P_ICV_wk_00352 Concentration Units: ug/L

CCV Source: ME ICP CCV_00003

Analyte	ICV 680-567312/4 04/19/2019 10:59				CCV 680-567312/344 04/20/2019 10:59				CCV 680-567312/356 04/20/2019 11:49			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Copper	1010		1000	101	493		500	99	499		500	100
Lead	1030		1000	103	489		500	98	493		500	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: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

ICV Source: P_ICV_wk_00352 Concentration Units: ug/L

CCV Source: ME ICP CCV_00003

Analyte	CCV 680-567312/368 04/20/2019 12:40											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Copper	500		500	100								
Lead	489		500	98								

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: Eurofins TestAmerica, Savannah Job No.: 680-167652-1
 SDG No.: _____
 Method: 6010C Instrument ID: ICPE
 Lab Sample ID: CRI 680-567312/6 Concentration Units: ug/L
 CRQL Check Standard Source: P_RL_Int_00071

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Copper	20.0	21.7		108	80-120
Lead	10.0	10.3		103	80-120

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

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICBIS 680-567312/5 04/19/2019 11:02		CCB 680-567312/345 04/20/2019 11:03		CCB 680-567312/357 04/20/2019 11:54		CCB 680-567312/369 04/20/2019 12:44	
		Found	C	Found	C	Found	C	Found	C
Copper	20	5.0	U	5.0	U	5.0	U	5.0	U
Lead	10	10	U	10	U	10	U	10	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Concentration Units: mg/Kg Lab Sample ID: MB 680-567050/1-A

Instrument Code: ICPE Batch No.: 567312

CAS No.	Analyte	Concentration	C	Q	Method
7440-50-8	Copper	0.47	U		6010C_DOD5
7439-92-1	Lead	0.94	U		6010C_DOD5

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1
 SDG No.: _____
 Lab Sample ID: ICSA 680-567312/7 Instrument ID: ICPE
 Lab File ID: E04192019FF.csv ICS Source: P_ICSA_wk_00072
 Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Copper		1.51	
Lead		-5.66	
<i>Aluminum</i>	<i>500000</i>	<i>543210</i>	<i>109</i>
<i>Antimony</i>		<i>-0.661</i>	
<i>Arsenic</i>		<i>10.4</i>	
<i>Barium</i>		<i>2.98</i>	
<i>Beryllium</i>		<i>-0.227</i>	
<i>Boron</i>		<i>4.58</i>	
<i>Cadmium</i>		<i>1.82</i>	
<i>Calcium</i>	<i>500000</i>	<i>522160</i>	<i>104</i>
<i>Chromium</i>		<i>1.14</i>	
<i>Cobalt</i>		<i>0.413</i>	
<i>Iron</i>	<i>200000</i>	<i>205894</i>	<i>103</i>
<i>Magnesium</i>	<i>500000</i>	<i>542664</i>	<i>109</i>
<i>Manganese</i>		<i>-2.14</i>	
<i>Molybdenum</i>		<i>2.52</i>	
<i>Nickel</i>		<i>4.82</i>	
<i>Potassium</i>		<i>-6.39</i>	
<i>Selenium</i>		<i>2.81</i>	
<i>Silver</i>		<i>0.506</i>	
<i>Sodium</i>		<i>-57.3</i>	
<i>Thallium</i>		<i>-7.02</i>	
<i>Vanadium</i>		<i>-0.330</i>	
<i>Zinc</i>		<i>2.66</i>	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG No.: _____

Lab Sample ID: ICSAB 680-567312/8

Instrument ID: ICPE

Lab File ID: E04192019FF.csv

ICS Source: P_ICSAB_wk_00090

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Copper	500	571	114
Lead	50.0	46.9	94
<i>Aluminum</i>	<i>500000</i>	<i>534104</i>	<i>107</i>
<i>Antimony</i>	<i>600</i>	<i>684</i>	<i>114</i>
<i>Arsenic</i>	<i>100</i>	<i>109</i>	<i>109</i>
<i>Barium</i>	<i>500</i>	<i>545</i>	<i>109</i>
<i>Beryllium</i>	<i>500</i>	<i>526</i>	<i>105</i>
<i>Boron</i>		<i>4.18</i>	
<i>Cadmium</i>	<i>1000</i>	<i>1004</i>	<i>100</i>
<i>Calcium</i>	<i>500000</i>	<i>514022</i>	<i>103</i>
<i>Chromium</i>	<i>500</i>	<i>512</i>	<i>102</i>
<i>Cobalt</i>	<i>500</i>	<i>506</i>	<i>101</i>
<i>Iron</i>	<i>200000</i>	<i>201964</i>	<i>101</i>
<i>Magnesium</i>	<i>500000</i>	<i>534339</i>	<i>107</i>
<i>Manganese</i>	<i>500</i>	<i>517</i>	<i>103</i>
<i>Molybdenum</i>	<i>1000</i>	<i>1057</i>	<i>106</i>
<i>Nickel</i>	<i>1000</i>	<i>1004</i>	<i>100</i>
<i>Potassium</i>		<i>22.6</i>	
<i>Selenium</i>	<i>50.0</i>	<i>54.8</i>	<i>110</i>
<i>Silver</i>	<i>200</i>	<i>224</i>	<i>112</i>
<i>Sodium</i>		<i>-31.9</i>	
<i>Strontium</i>		<i>6.40</i>	
<i>Thallium</i>	<i>100</i>	<i>97.6</i>	<i>98</i>
<i>Tin</i>	<i>1000</i>	<i>1012</i>	<i>101</i>
<i>Titanium</i>		<i>3.55</i>	
<i>Vanadium</i>	<i>500</i>	<i>529</i>	<i>106</i>
<i>Zinc</i>	<i>1000</i>	<i>972</i>	<i>97</i>

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

5A-IN
 MATRIX SPIKE SAMPLE RECOVERY
 METALS

Client ID: FIB-BASE-10 MS

Lab ID: 680-167652-10 MS

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG No.: _____

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 85.6

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Copper	31.7	22	9.82	98	81-117		6010C
Lead	54.1	6.4	49.1	97	81-112		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Note - Results and Reporting Limits have been adjusted for dry weight.

5A-IN
 MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
 METALS

Client ID: FIB-BASE-10 MSD Lab ID: 680-167652-10 MSD
 Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1
 SDG No.: _____
 Matrix: Solid Concentration Units: mg/Kg
 % Solids: 85.6

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Copper	33.5	9.82	117	81-117	6	20		6010C
Lead	55.7	49.1	100	81-112	3	20		6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Note - Results and Reporting Limits have been adjusted for dry weight.

5B-IN
 POST DIGESTION SPIKE SAMPLE RECOVERY
 METALS

Client ID: FIB-BASE-10 PDS

Lab ID: 680-167652-10 PDS

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG No.: _____

Matrix: Solid

Concentration Units: mg/Kg

Analyte	SSR C	Sample Result (SR) C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Copper	32.9	22	9.99	109	80-120		6010C
Lead	60.3	6.4	49.9	108	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
 Note - Results and Reporting Limits have been adjusted for dry weight.

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 680-567050/2-A

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

Sample Matrix: Solid

LCS Source: MS_LCS1_WK_00082

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Copper	9.52	9.75		102	81	117		6010C
Lead	47.6	46.3		97	81	112		6010C

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: 680-167652-10

SDG No: _____

Lab Name: Eurofins TestAmerica, Savannah

Job No: 680-167652-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Difference	Q	Method
Copper	22	22.1	0.32	D	6010C
Lead	6.4	6.29	NC	D	6010C

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job Number: 680-167652-1

SDG Number: _____

Matrix: Solid

Instrument ID: ICPE

Method: 6010C

DL Date: 06/05/2015 09:48

Prep Method: 3050B

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Copper		2.5	0.17
Lead		1	0.34

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job Number: 680-167652-1

SDG Number: _____

Matrix: Solid

Instrument ID: ICPE

Method: 6010C

XMDL Date: 06/12/2015 11:39

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Copper		20	1.8
Lead		10	3.9

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Savannah Job Number: 680-167652-1

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		

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Savannah Job Number: 680-167652-1

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														

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job No: 680-167652-1

SDG No.: _____

Instrument ID: ICPE

Date: 02/27/2012 11:40

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Copper		45000	6010C
Lead		18000	6010C

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG No.: _____

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 680-567050/1-A	04/19/2019 07:43	567050	1.06		100
LCS 680-567050/2-A	04/19/2019 07:43	567050	1.05		100
680-167652-10	04/19/2019 07:43	567050	1.16		100
680-167652-10 MS	04/19/2019 07:43	567050	1.19		100
680-167652-10 MSD	04/19/2019 07:43	567050	1.19		100
680-167652-3	04/19/2019 07:43	567050	1.11		100
680-167652-4	04/19/2019 07:43	567050	1.13		100
680-167652-5	04/19/2019 07:43	567050	1.14		100
680-167652-6	04/19/2019 07:43	567050	1.14		100
680-167652-7	04/19/2019 07:43	567050	1.19		100
680-167652-8	04/19/2019 07:43	567050	1.17		100
680-167652-9	04/19/2019 07:43	567050	1.16		100
680-167652-11	04/19/2019 07:43	567050	1.15		100
680-167652-12	04/19/2019 07:43	567050	1.14		100
680-167652-13	04/19/2019 07:43	567050	1.19		100
680-167652-1	04/19/2019 07:43	567050	1.18		100
680-167652-2	04/19/2019 07:43	567050	1.15		100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			10:32																
ZZZZZZ			10:36																
ZZZZZZ			10:39																
ICV 680-567312/4	1		10:59	X	X														
ICBIS 680-567312/5	1		11:02	X	X														
CRI 680-567312/6	1		11:06	X	X														
ICSA 680-567312/7	1		11:16	X	X														
ICSAB 680-567312/8	1		11:20	X	X														
CCV 680-567312/9			11:26																
CCB 680-567312/10			11:29																
ZZZZZZ			11:33																
ZZZZZZ			11:37																
ZZZZZZ			11:41																
ZZZZZZ			11:45																
ZZZZZZ			11:49																
ZZZZZZ			11:52																
ZZZZZZ			11:56																
ZZZZZZ			12:00																
ZZZZZZ			12:04																
ZZZZZZ			12:08																
ZZZZZZ			12:12																
ZZZZZZ			12:16																
ZZZZZZ			12:19																
ZZZZZZ			12:23																
ZZZZZZ			12:27																
ZZZZZZ			12:31																
ZZZZZZ			12:35																
ZZZZZZ			12:39																
ZZZZZZ			12:42																
ZZZZZZ			12:46																
ZZZZZZ			12:50																
ZZZZZZ			12:54																
ZZZZZZ			12:58																
ZZZZZZ			13:02																
ZZZZZZ			13:06																
ZZZZZZ			13:10																
ZZZZZZ			13:13																
ZZZZZZ			13:17																
ZZZZZZ			13:21																
ZZZZZZ			13:25																
ZZZZZZ			13:29																
ZZZZZZ			13:33																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			13:36																
ZZZZZZ			13:40																
ZZZZZZ			13:44																
ZZZZZZ			13:48																
ZZZZZZ			13:52																
ZZZZZZ			13:56																
ZZZZZZ			14:00																
ZZZZZZ			14:03																
ZZZZZZ			14:07																
ZZZZZZ			14:11																
ZZZZZZ			14:15																
ZZZZZZ			14:19																
ZZZZZZ			14:23																
ZZZZZZ			14:27																
ZZZZZZ			14:30																
ZZZZZZ			14:34																
ZZZZZZ			14:38																
ZZZZZZ			14:42																
ZZZZZZ			14:46																
ZZZZZZ			14:50																
ZZZZZZ			14:54																
ZZZZZZ			14:57																
ZZZZZZ			15:01																
ZZZZZZ			15:05																
ZZZZZZ			15:09																
ZZZZZZ			15:13																
ZZZZZZ			15:17																
ZZZZZZ			15:21																
ZZZZZZ			15:24																
ZZZZZZ			15:29																
ZZZZZZ			15:33																
ZZZZZZ			15:37																
ZZZZZZ			15:41																
ZZZZZZ			15:44																
ZZZZZZ			15:48																
ZZZZZZ			15:52																
ZZZZZZ			15:56																
ZZZZZZ			16:00																
ZZZZZZ			16:04																
ZZZZZZ			16:07																
ZZZZZZ			16:11																
ZZZZZZ			16:15																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
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																
ZZZZZZ			16:54																
ZZZZZZ			16:58																
ZZZZZZ			17:02																
ZZZZZZ			17:06																
ZZZZZZ			17:10																
ZZZZZZ			17:15																
ZZZZZZ			17:19																
ZZZZZZ			17:23																
ZZZZZZ			17:28																
ZZZZZZ			17:32																
ZZZZZZ			17:36																
ZZZZZZ			17:40																
ZZZZZZ			17:44																
ZZZZZZ			17:49																
ZZZZZZ			17:53																
ZZZZZZ			17:57																
ZZZZZZ			18:01																
ZZZZZZ			18:05																
ZZZZZZ			18:10																
ZZZZZZ			18:14																
ZZZZZZ			18:18																
ZZZZZZ			18:22																
ZZZZZZ			18:26																
ZZZZZZ			18:31																
ZZZZZZ			18:35																
ZZZZZZ			18:39																
ZZZZZZ			18:43																
ZZZZZZ			18:47																
ZZZZZZ			18:52																
ZZZZZZ			18:56																
ZZZZZZ			19:00																
ZZZZZZ			19:04																
ZZZZZZ			19:08																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			19:13																
ZZZZZZ			19:17																
ZZZZZZ			19:21																
ZZZZZZ			19:25																
ZZZZZZ			19:29																
ZZZZZZ			19:34																
ZZZZZZ			19:38																
ZZZZZZ			19:42																
ZZZZZZ			19:46																
ZZZZZZ			19:50																
ZZZZZZ			19:55																
ZZZZZZ			19:59																
ZZZZZZ			20:03																
ZZZZZZ			20:07																
ZZZZZZ			20:11																
ZZZZZZ			20:16																
ZZZZZZ			20:20																
ZZZZZZ			20:24																
ZZZZZZ			20:28																
ZZZZZZ			20:32																
ZZZZZZ			20:37																
ZZZZZZ			20:41																
ZZZZZZ			20:45																
ZZZZZZ			20:49																
ZZZZZZ			20:54																
ZZZZZZ			20:58																
ZZZZZZ			21:02																
ZZZZZZ			21:06																
ZZZZZZ			21:10																
ZZZZZZ			21:15																
ZZZZZZ			21:19																
ZZZZZZ			21:23																
ZZZZZZ			21:27																
ZZZZZZ			21:31																
ZZZZZZ			21:36																
ZZZZZZ			21:40																
ZZZZZZ			21:44																
ZZZZZZ			21:48																
ZZZZZZ			21:52																
ZZZZZZ			21:57																
ZZZZZZ			22:01																
ZZZZZZ			22:05																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			22:09																
ZZZZZZ			22:13																
ZZZZZZ			22:18																
ZZZZZZ			22:22																
ZZZZZZ			22:26																
ZZZZZZ			22:30																
ZZZZZZ			22:35																
ZZZZZZ			22:39																
ZZZZZZ			22:43																
ZZZZZZ			22:47																
ZZZZZZ			22:51																
ZZZZZZ			22:56																
ZZZZZZ			23:00																
ZZZZZZ			23:04																
ZZZZZZ			23:08																
ZZZZZZ			23:12																
ZZZZZZ			23:17																
ZZZZZZ			23:21																
ZZZZZZ			23:25																
ZZZZZZ			23:29																
ZZZZZZ			23:34																
ZZZZZZ			23:38																
ZZZZZZ			23:42																
ZZZZZZ			23:46																
ZZZZZZ			23:50																
ZZZZZZ			23:55																
ZZZZZZ			23:59																
ZZZZZZ			00:03																
ZZZZZZ			00:07																
ZZZZZZ			00:12																
ZZZZZZ			00:16																
ZZZZZZ			00:20																
ZZZZZZ			00:24																
ZZZZZZ			00:28																
ZZZZZZ			00:33																
ZZZZZZ			00:37																
ZZZZZZ			00:41																
CCV 680-567312/206			00:45																
CCB 680-567312/207			00:50																
ZZZZZZ			00:54																
ZZZZZZ			00:58																
ZZZZZZ			01:02																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			01:06																
ZZZZZZ			01:11																
ZZZZZZ			01:15																
ZZZZZZ			01:19																
ZZZZZZ			01:23																
ZZZZZZ			01:28																
ZZZZZZ			01:32																
CCV 680-567312/218			01:36																
CCB 680-567312/219			01:40																
ZZZZZZ			01:45																
ZZZZZZ			01:49																
ZZZZZZ			01:53																
ZZZZZZ			01:57																
ZZZZZZ			02:02																
ZZZZZZ			02:06																
ZZZZZZ			02:10																
ZZZZZZ			02:14																
ZZZZZZ			02:18																
ZZZZZZ			02:23																
CCV 680-567312/230			02:27																
CCB 680-567312/231			02:31																
ZZZZZZ			02:35																
ZZZZZZ			02:40																
ZZZZZZ			02:44																
ZZZZZZ			02:48																
ZZZZZZ			02:52																
ZZZZZZ			02:57																
ZZZZZZ			03:01																
ZZZZZZ			03:05																
ZZZZZZ			03:09																
ZZZZZZ			03:14																
CCV 680-567312/242			03:18																
CCB 680-567312/243			03:22																
ZZZZZZ			03:26																
ZZZZZZ			03:30																
ZZZZZZ			03:35																
ZZZZZZ			03:39																
ZZZZZZ			03:43																
ZZZZZZ			03:47																
ZZZZZZ			03:52																
ZZZZZZ			03:56																
ZZZZZZ			04:00																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			04:04																
CCV 680-567312/254			04:09																
CCB 680-567312/255			04:13																
ZZZZZZ			04:17																
ZZZZZZ			04:21																
ZZZZZZ			04:26																
ZZZZZZ			04:30																
ZZZZZZ			04:34																
ZZZZZZ			04:38																
ZZZZZZ			04:43																
ZZZZZZ			04:47																
ZZZZZZ			04:51																
ZZZZZZ			04:55																
CCV 680-567312/266			05:00																
CCB 680-567312/267			05:04																
ZZZZZZ			05:08																
ZZZZZZ			05:12																
ZZZZZZ			05:17																
ZZZZZZ			05:21																
CCV 680-567312/272			05:25																
CCB 680-567312/273			05:29																
ZZZZZZ			05:33																
ZZZZZZ			05:38																
ZZZZZZ			05:42																
ZZZZZZ			05:46																
ZZZZZZ			05:50																
ZZZZZZ			05:54																
ZZZZZZ			05:58																
ZZZZZZ			06:03																
ZZZZZZ			06:07																
ZZZZZZ			06:11																
CCV 680-567312/284			06:15																
CCB 680-567312/285			06:20																
ZZZZZZ			06:24																
ZZZZZZ			06:28																
ZZZZZZ			06:32																
ZZZZZZ			06:36																
ZZZZZZ			06:40																
ZZZZZZ			06:45																
ZZZZZZ			06:49																
ZZZZZZ			06:53																
ZZZZZZ			06:57																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	T y p e	Time	Analytes															
				C u	P b														
ZZZZZZ			07:01																
CCV 680-567312/296			07:06																
CCB 680-567312/297			07:10																
ZZZZZZ			07:14																
ZZZZZZ			07:18																
ZZZZZZ			07:22																
ZZZZZZ			07:27																
ZZZZZZ			07:31																
ZZZZZZ			07:35																
ZZZZZZ			07:39																
ZZZZZZ			07:43																
ZZZZZZ			07:47																
ZZZZZZ			07:52																
CCV 680-567312/308			07:56																
CCB 680-567312/309			08:00																
ZZZZZZ			08:08																
ZZZZZZ			08:12																
ZZZZZZ			08:16																
ZZZZZZ			08:20																
ZZZZZZ			08:25																
ZZZZZZ			08:29																
ZZZZZZ			08:33																
ZZZZZZ			08:37																
ZZZZZZ			08:41																
ZZZZZZ			08:46																
CCV 680-567312/320			09:06																
CCB 680-567312/321			09:10																
ZZZZZZ			09:24																
ZZZZZZ			09:28																
ZZZZZZ			09:32																
ZZZZZZ			09:37																
ZZZZZZ			09:41																
ZZZZZZ			09:45																
ZZZZZZ			09:49																
ZZZZZZ			09:53																
ZZZZZZ			10:00																
ZZZZZZ			10:04																
CCV 680-567312/332			10:09																
CCB 680-567312/333			10:13																
ZZZZZZ			10:17																
ZZZZZZ			10:21																
ZZZZZZ			10:25																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			13:26																
CCV 680-567312/380			13:30																
CCB 680-567312/381			13:34																
ZZZZZZ			13:39																
ZZZZZZ			13:43																
ZZZZZZ			13:47																
ZZZZZZ			13:51																
ZZZZZZ			13:55																
ZZZZZZ			14:00																
ZZZZZZ			14:04																
ZZZZZZ			14:08																
ZZZZZZ			14:12																
ZZZZZZ			14:16																
CCV 680-567312/392			14:21																
CCB 680-567312/393			14:25																
ZZZZZZ			14:29																
ZZZZZZ			14:33																
ZZZZZZ			14:37																
ZZZZZZ			14:42																
ZZZZZZ			14:46																
ZZZZZZ			14:50																
ZZZZZZ			14:54																
ZZZZZZ			14:59																
ZZZZZZ			15:03																
ZZZZZZ			15:07																
CCV 680-567312/404			15:11																
CCB 680-567312/405			15:15																
ZZZZZZ			15:20																
ZZZZZZ			15:24																
ZZZZZZ			15:28																
CCV 680-567312/409			15:32																
CCB 680-567312/410			15:36																
ZZZZZZ			15:41																
ZZZZZZ			15:45																
ZZZZZZ			15:49																
ZZZZZZ			15:53																
ZZZZZZ			15:57																
ZZZZZZ			16:02																
ZZZZZZ			16:06																
ZZZZZZ			16:10																
ZZZZZZ			16:14																
ZZZZZZ			16:19																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/19/2019 10:32 End Date: 04/20/2019 20:02

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
CCV 680-567312/421			16:23																
CCB 680-567312/422			16:27																
ZZZZZZ			16:31																
ZZZZZZ			16:35																
ZZZZZZ			16:40																
ZZZZZZ			16:44																
ZZZZZZ			16:48																
ZZZZZZ			16:52																
ZZZZZZ			16:56																
ZZZZZZ			17:01																
ZZZZZZ			17:05																
ZZZZZZ			17:09																
CCV 680-567312/433			17:13																
CCB 680-567312/434			17:18																
ZZZZZZ			17:22																
ZZZZZZ			17:26																
ZZZZZZ			17:30																
ZZZZZZ			17:34																
ZZZZZZ			17:39																
ZZZZZZ			17:43																
ZZZZZZ			17:47																
ZZZZZZ			17:51																
ZZZZZZ			17:55																
ZZZZZZ			18:00																
CCV 680-567312/445			18:04																
CCB 680-567312/446			18:08																
ZZZZZZ			18:12																
ZZZZZZ			18:17																
ZZZZZZ			18:21																
ZZZZZZ			18:25																
ZZZZZZ			18:29																
ZZZZZZ			18:33																
ZZZZZZ			18:38																
ZZZZZZ			18:42																
ZZZZZZ			18:46																
ZZZZZZ			18:50																
CCV 680-567312/457			18:55																
CCB 680-567312/458			18:59																
ZZZZZZ			19:03																
ZZZZZZ			19:07																
ZZZZZZ			19:11																
ZZZZZZ			19:16																

15-IN
 ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
 METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

ICP Instrument ID: ICPE Start Date: 04/19/2019 End Date: 04/20/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICV 680-567312/4	10:59										
ICBIS 680-567312/5	11:02										
CRI 680-567312/6	11:06	97									
ICSA 680-567312/7	11:16	91									
ICSAB 680-567312/8	11:20	91									
CCV 680-567312/344	10:59	85									
CCB 680-567312/345	11:03	86									
MB 680-567050/1-A	11:07	85									
LCS 680-567050/2-A	11:12	83									
680-167652-10	11:16	84									
680-167652-10 SD	11:20	85									
680-167652-10 PDS	11:24	84									
680-167652-10 MS	11:28	84									
680-167652-10 MSD	11:33	84									
680-167652-3	11:37	85									
680-167652-4	11:41	85									
680-167652-5	11:45	85									
CCV 680-567312/356	11:49	85									
CCB 680-567312/357	11:54	86									
680-167652-6	11:58	84									
680-167652-7	12:02	83									
680-167652-8	12:06	85									
680-167652-9	12:10	84									
680-167652-11	12:15	84									
680-167652-12	12:19	84									
680-167652-13	12:23	83									
680-167652-1	12:27	83									
680-167652-2	12:31	83									
CCV 680-567312/368	12:40	84									
CCB 680-567312/369	12:44	84									

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Blank (Blk)	4/19/2019, 10:32:08 AM		Rack S, Tube 1
Label	Replicates Concentration		
Ag 328.068	-0.6383	-0.0979	0.7362
Al 308.215	3.4433	-8.4648	5.0215
As 188.980	2.1793	-1.6259	-0.5534
B 249.678	0.3018	0.6471	-0.9489
Ba 389.178	-0.1895	1.5337	-1.3442
Be 313.042	-0.0030	0.0065	-0.0036
Ca 370.602	0.0678	-2.726	2.659
Cd 226.502	0.1153	0.1833	-0.2985
Co 228.615	-0.2290	0.8513	-0.6223
Cr 267.716	-0.0027	-0.5376	0.5404
Cu 324.754	0.0112	-0.2418	0.2306
Fe 271.441	-6.4958	-5.7253	12.2210
K 766.491	0.0672	0.1206	-0.1878
Mg 279.078	0.6704	1.2212	-1.8915
Mn 257.610	0.0449	-0.0410	-0.0039
Mo 202.032	0.2547	-0.4882	0.2335
Na 330.237	-191.778	-28.5312	220.309
Ni 231.604	-1.6402	1.0494	0.5908
Pb 220.353	1.2231	2.8492	-4.0724
Sb 206.834	7.0607	-4.4734	-2.5872
Se 196.026	1.6242	-14.6581	13.0339
Si 288.158	0.2492	0.1204	-0.3697
Sn 189.925	4.4623	-1.5167	-2.9456
Sr 216.596	0.6646	-0.7531	0.0885
Ti 334.941	-0.0863	0.0128	0.0735
Tl 190.794	-5.9784	9.4171	-3.4386
V 292.401	-0.1395	0.2589	-0.1195
Zn 206.200	0.1230	0.5005	-0.6235

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Ag 328.068	0.0000	ppb	21.034	51.7	-40.7179
Al 308.215	0.0000	ppb	14.423	7.0	207.123
As 188.980	0.0000	ppb	0.524	74.2	0.7063
B 249.678	0.0000	ppb	5.748	99.9	-5.7513
Ba 389.178	0.0000	ppb	9.105	24.9	-36.6405
Be 313.042	0.0000	ppb	4.567	1.4	-326.824
Ca 370.602	0.0000	ppb	4.503	17.9	25.09
Cd 226.502	0.0000	ppb	3.347	84.8	3.9479
Co 228.615	0.0000	ppb	3.023	24.4	-12.3669
Cr 267.716	0.0000	ppb	9.017	66.5	13.5543
Cu 324.754	0.0000	ppb	7.160	1.6	436.079
Fe 271.441	0.0000	ppb	5.863	34.0	17.2276
K 766.491	0.0000	ppb	3.391	1.3	256.192
Mg 279.078	0.0000	ppb	2.221	10.2	21.6956
Mn 257.610	0.0000	ppb	3.574	13.5	26.5607
Mo 202.032	0.0000	ppb	0.714	17.8	4.0040
Na 330.237	0.0000	ppb	5.609	14.9	37.5700
Ni 231.604	0.0000	ppb	1.614	91.1	-1.7714
Pb 220.353	0.0000	ppb	1.371	160.0	0.8564
Sb 206.834	0.0000	ppb	2.174	35.9	6.0536
Se 196.026	0.0000	ppb	2.624	96.4	2.7216
Si 288.158	0.0000	ppb	1.524	0.3	535.956
Sn 189.925	0.0000	ppb	0.993	100.0	0.9934

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Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Mo 202.032	1000.00	ppb	5.658	0.3	1691.68
Na 330.237	20000.0	ppb	4.327	0.7	578.100
Ni 231.604	1000.00	ppb	6.512	0.6	1120.09
Pb 220.353	1000.00	ppb	1.694	0.4	379.539
Sb 206.834	1000.00	ppb	4.994	1.4	357.461
Se 196.026	1000.00	ppb	1.113	0.6	191.233
Si 288.158	10000.0	ppb	85.132	0.2	47207.6
Sn 189.925	1000.00	ppb	2.702	1.1	253.728
Sr 216.596	1000.00	ppb	11.886	0.4	2926.29
Ti 334.941	1000.00	ppb	247.272	0.3	88681.1
Tl 190.794	1000.00	ppb	1.288	0.5	238.068
V 292.401	1000.00	ppb	27.444	0.3	10169.4
Zn 206.200	2000.00	ppb	8.766	0.8	1103.61

Ag 328.068 Calibration (ppb) 4/19/2019, 10:36:01 AM **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-40.7179	0.0000	0.0000	-	-
HIGH STD		30334.9	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 30.4 x + -40.7$

Al 308.215 Calibration (ppb) 4/19/2019, 10:36:01 AM **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		207.123	0.0000	0.0000	-	-
HIGH STD		39329.5	20000.0	20000.0	0.0020	0.0

Curve Type: Linear Equation: $y = 2.0 x + 207.1$

As 188.980 Calibration (ppb) 4/19/2019, 10:36:01 AM **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		0.7063	0.0000	0.0000	-	-
HIGH STD		267.718	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 0.3 x + 0.7$

B 249.678 Calibration (ppb) 4/19/2019, 10:36:01 AM **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-5.7513	0.0000	0.0000	-	-
HIGH STD		6839.07	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 6.8 x + -5.8$

Ba 389.178 Calibration (ppb) 4/19/2019, 10:36:01 AM **Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-36.6405	0.0000	0.0000	-	-
HIGH STD		6250.35	1000.00	1000.00	0.0000	0.0

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Curve Type: Linear Equation: $y = 6.3 x + -36.6$ **Be 313.042 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-326.824	0.0000	0.0000	-	-
HIGH STD		806435	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 806.8 x + -326.8$ **Ca 370.602 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		25.09	0.0000	0.0000	-	-
HIGH STD		33463	20000	20000	0.0000	0.0

Curve Type: Linear Equation: $y = 1.7 x + 25.1$ **Cd 226.502 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		3.9479	0.0000	0.0000	-	-
HIGH STD		12840.3	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 12.8 x + 3.9$ **Co 228.615 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-12.3669	0.0000	0.0000	-	-
HIGH STD		3949.98	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 4.0 x + -12.4$ **Cr 267.716 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		13.5543	0.0000	0.0000	-	-
HIGH STD		16741.7	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: $y = 16.7 x + 13.6$ **Cu 324.754 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		436.079	0.0000	0.0000	-	-
HIGH STD		30726.1	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 30.3 x + 436.1$

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Fe 271.441 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		17.2276	0.0000	0.0000	-	-
HIGH STD		11093.8	20010.0	20010.0	0.0020	0.0

Curve Type: Linear Equation: $y = 0.6 x + 17.2$ **K 766.491 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		256.192	0.0000	0.0000	-	-
HIGH STD		411885	20000.0	20000.0	0.0000	0.0

Curve Type: Linear Equation: $y = 20.6 x + 256.2$ **Mg 279.078 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		21.6956	0.0000	0.0000	-	-
HIGH STD		26767.9	20000.0	20000.0	-0.0020	0.0

Curve Type: Linear Equation: $y = 1.3 x + 21.7$ **Mn 257.610 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		26.5607	0.0000	0.0000	-	-
HIGH STD		82923.3	1000.00	1000.000	-0.0002	0.0

Curve Type: Linear Equation: $y = 82.9 x + 26.6$ **Mo 202.032 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		4.0040	0.0000	0.0000	-	-
HIGH STD		1691.68	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 1.7 x + 4.0$ **Na 330.237 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		37.5700	0.0000	0.0000	-	-
HIGH STD		578.100	20000.0	20000.0	-0.0020	0.0

Curve Type: Linear Equation: $y = 0.0 x + 37.6$ **Ni 231.604 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-1.7714	0.0000	0.0000	-	-
HIGH STD		1120.09	1000.00	1000.000	-0.0002	0.0

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Curve Type: Linear Equation: $y = 1.1 x + -1.8$ **Pb 220.353 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		0.8564	0.0000	0.0000	-	-
HIGH STD		379.539	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 0.4 x + 0.9$ **Sb 206.834 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		6.0536	0.0000	0.0000	-	-
HIGH STD		357.461	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.4 x + 6.1$ **Se 196.026 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		2.7216	0.0000	0.0000	-	-
HIGH STD		191.233	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: $y = 0.2 x + 2.7$ **Si 288.158 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		535.956	0.0000	0.0000	-	-
HIGH STD		47207.6	10000.0	10000.0	0.0000	0.0

Curve Type: Linear Equation: $y = 4.7 x + 536.0$ **Sn 189.925 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		0.9934	0.0000	0.0000	-	-
HIGH STD		253.728	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.3 x + 1.0$ **Sr 216.596 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		7.1770	0.0000	0.0000	-	-
HIGH STD		2926.29	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 2.9 x + 7.2$

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Ti 334.941 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-25.3582	0.0000	0.0000	-	-
HIGH STD		88681.1	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 88.7 x + -25.4$ **Tl 190.794 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-1.4186	0.0000	0.0000	-	-
HIGH STD		238.068	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.2 x + -1.4$ **V 292.401 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-12.7519	0.0000	0.0000	-	-
HIGH STD		10169.4	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 10.2 x + -12.8$ **Zn 206.200 Calibration (ppb) 4/19/2019, 10:36:01 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-0.1052	0.0000	0.0000	-	-
HIGH STD		1103.61	2000.00	2000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.6 x + -0.1$ **Lab Control Sample (LCS) 4/19/2019, 10:39:51 AM Rack S, Tube 2****Weight: 1 Volume: 1 Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	1000.99	1000.60	999.369
Al 308.215	20045.0	20023.7	20079.2
As 188.980	996.024	975.733	973.183
B 249.678	1030.21	1031.90	1037.52
Ba 389.178	1000.32	998.286	1001.88
Be 313.042	1003.23	1000.71	1004.89
Ca 370.602	20048	20017	20103
Cd 226.502	999.633	998.021	999.386
Co 228.615	1008.98	1007.73	1007.20
Cr 267.716	1001.87	1001.01	1003.73
Cu 324.754	1001.20	1003.21	998.791
Fe 271.441	19940.5	19915.6	20024.7
K 766.491	20240.4	20206.7	20310.1
Mg 279.078	20052.2	20032.8	20071.8
Mn 257.610	1000.24	1000.77	1003.45
Mo 202.032	1006.63	1003.76	1007.44
Na 330.237	20730.0	21058.6	20717.8
Ni 231.604	995.156	998.789	1000.10

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Label	Replicates Concentration		
Pb 220.353	995.691	985.429	987.582
Sb 206.834	979.854	992.111	989.536
Se 196.026	1012.22	1036.55	1048.43
Si 288.158	10023.1	10019.8	10068.0
Sn 189.925	1001.75	1011.34	1004.87
Sr 216.596	1005.10	1002.83	1007.91
Ti 334.941	1002.62	1000.98	1003.82
Tl 190.794	1002.80	990.907	991.562
V 292.401	1008.44	1006.55	1013.95
Zn 206.200	2003.60	2010.14	2001.06

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	1000.32	ppb	0.8445	0.1	30339.6	100.03175
Al 308.215	20049.3	ppb	27.9982	0.1	39463.1	100.24648
As 188.980	981.646	ppb	12.5161	1.3	262.603	98.16464
B 249.678	1033.21	ppb	3.8288	0.4	7045.68	103.32078
Ba 389.178	1000.16	ppb	1.8019	0.2	6284.22	100.01620
Be 313.042	1002.94	ppb	2.1032	0.2	808768	100.29421
Ca 370.602	20056	ppb	43.76	0.2	33564	100.28124
Cd 226.502	999.014	ppb	0.8680	0.1	12859.3	99.90135
Co 228.615	1007.97	ppb	0.9141	0.1	3980.01	100.79696
Cr 267.716	1002.20	ppb	1.3937	0.1	16780.9	100.22037
Cu 324.754	1001.07	ppb	2.2148	0.2	30772.8	100.10670
Fe 271.441	19960.3	ppb	57.1460	0.3	11107.1	99.75140
K 766.491	20252.4	ppb	52.7270	0.3	411959	101.26201
Mg 279.078	20052.3	ppb	19.4689	0.1	26823.8	100.26136
Mn 257.610	1001.49	ppb	1.7213	0.2	83151.6	100.14906
Mo 202.032	1005.94	ppb	1.9387	0.2	1701.31	100.59447
Na 330.237	20835.5	ppb	193.356	0.9	567.689	104.17746
Ni 231.604	998.015	ppb	2.5620	0.3	1116.97	99.80153
Pb 220.353	989.567	ppb	5.4118	0.5	374.423	98.95673
Sb 206.834	987.167	ppb	6.4631	0.7	363.906	98.71672
Se 196.026	1032.40	ppb	18.4547	1.8	197.518	103.23976
Si 288.158	10037.0	ppb	26.9081	0.3	47647.2	100.37001
Sn 189.925	1005.99	ppb	4.8915	0.5	255.243	100.59878
Sr 216.596	1005.28	ppb	2.5463	0.3	2929.38	100.52805
Ti 334.941	1002.47	ppb	1.4287	0.1	88953.5	100.24712
Tl 190.794	995.089	ppb	6.6834	0.7	236.605	99.50887
V 292.401	1009.65	ppb	3.8472	0.4	10182.7	100.96474
Zn 206.200	2004.93	ppb	4.6871	0.2	1105.82	100.24666

Initial Calib Verif (ICV)

4/19/2019, 10:59:07 AM

Rack S, Tube 3

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1007.59	999.540	1025.91
Al 308.215	1008.50	1009.41	1024.78
As 188.980	969.010	971.442	1002.91
B 249.678	1006.97	1012.38	1034.52
Ba 389.178	1034.63	1038.41	1054.52
Be 313.042	1016.35	1017.04	1032.89
Ca 370.602	1001	1005	1024
Cd 226.502	1023.60x	1024.33x	1043.02x
Co 228.615	993.112	990.535	1009.02

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Label	Replicates Concentration		
Cr 267.716	1005.97	1006.87	1024.25
Cu 324.754	1008.74	992.557	1021.55
Fe 271.441	1058.82	1037.19	1063.02
K 766.491	9438.12	9440.50	9596.27
Mg 279.078	1020.02	1011.34	1030.63
Mn 257.610	1002.88	1002.61	1020.58
Mo 202.032	1004.26	1007.78	1014.11
Na 330.237	10205.3	9989.29	9764.99
Ni 231.604	1000.36	1008.24	1026.21
Pb 220.353	1039.62	1028.35	1033.12
Sb 206.834	1038.15	1032.07	1079.98
Se 196.026	1033.57	1009.40	1030.02
Si 288.158	575.885	575.981	586.448
Sn 189.925	4937.92	4933.56	4995.66
Sr 216.596	4896.74	4878.96	4982.44
Ti 334.941	997.766	996.432	1014.92
Tl 190.794	993.389	1001.01	1011.10
V 292.401	1024.70	1026.72	1041.24
Zn 206.200	1012.77	1022.23	1029.45

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	1011.01b	ppb	13.5143	1.3	30656.2	101.10149
Al 308.215	1014.23b	ppb	9.1498	0.9	2228.32	101.42316
As 188.980	981.121b	ppb	18.9098	1.9	262.512	98.11212
B 249.678	1017.96b	ppb	14.5961	1.4	6960.85	101.79586
Ba 389.178	1042.52b	ppb	10.5601	1.0	6521.28	104.25206
Be 313.042	1022.09b	ppb	9.3565	0.9	824215	102.20918
Ca 370.602	1010b	ppb	12.66	1.3	1752	101.00472
Cd 226.502	1030.31xb	ppb	11.0064	1.1	13230.9	103.03131
Co 228.615	997.556b	ppb	10.0134	1.0	3938.26	99.75564
Cr 267.716	1012.36b	ppb	10.3013	1.0	16949.1	101.23619
Cu 324.754	1007.62b	ppb	14.5309	1.4	30967.7	100.76161
Fe 271.441	1053.01b	ppb	13.8646	1.3	640.741	105.30113
K 766.491	9491.63b	ppb	90.6326	1.0	190439	94.91627
Mg 279.078	1020.66b	ppb	9.6628	0.9	1376.19	102.06629
Mn 257.610	1008.69b	ppb	10.2997	1.0	83665.1	100.86910
Mo 202.032	1008.71b	ppb	4.9920	0.5	1706.20	100.87148
Na 330.237	9986.54b	ppb	220.186	2.2	286.603	99.86540
Ni 231.604	1011.61b	ppb	13.2473	1.3	1132.22	101.16058
Pb 220.353	1033.70b	ppb	5.6580	0.5	391.838	103.36967
Sb 206.834	1050.07b	ppb	26.0854	2.5	386.117	105.00688
Se 196.026	1024.33b	ppb	13.0486	1.3	195.919	102.43297
Si 288.158	579.438b	ppb	6.0711	1.0	3840.01	115.88759Q
Sn 189.925	4955.71b	ppb	34.6635	0.7	1253.47	99.11422
Sr 216.596	4919.38b	ppb	55.3284	1.1	14352.8	98.38757
Ti 334.941	1003.04b	ppb	10.3094	1.0	88953.0	100.30383
Tl 190.794	1001.83b	ppb	8.8820	0.9	239.084	100.18336
V 292.401	1030.89b	ppb	9.0231	0.9	10397.3	103.08901
Zn 206.200	1021.48b	ppb	8.3663	0.8	563.050	102.14814

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Initial Calib Blank (ICB) **4/19/2019, 11:02:57 AM** **Rack S, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0949u	0.3812	0.7657
Al 308.215	9.6773	5.1998	5.6812
As 188.980	0.1492	4.7452	-1.7987u
B 249.678	33.5816	30.6570	24.9015
Ba 389.178	3.0023	0.0841	0.6131
Be 313.042	0.2307	0.1760	0.1537
Ca 370.602	4.264	0.4794	3.451
Cd 226.502	0.1578	0.2367	0.1470
Co 228.615	1.1958	0.4921	1.0690
Cr 267.716	0.4715	0.1769	-0.1662u
Cu 324.754	0.8041	0.4587	-0.1429u
Fe 271.441	-2.6420u	-1.3292u	-5.2242u
K 766.491	1.0935	0.5052	-0.6710
Mg 279.078	8.3254	6.2363	6.9308
Mn 257.610	0.3017	0.1893	0.1144
Mo 202.032	2.5515	1.8231	1.7094
Na 330.237	281.677	61.3271	-37.3435u
Ni 231.604	0.1961	-1.9225u	1.1690
Pb 220.353	-4.8896u	-2.0315u	-3.2990u
Sb 206.834	-6.8669u	3.1555	1.6086
Se 196.026	2.3487	-8.3835u	-0.6160u
Si 288.158	0.2655	1.0943	0.8135
Sn 189.925	-6.7744u	-3.4608u	-3.6718u
Sr 216.596	0.6798	1.7962	0.6173
Ti 334.941	0.5034	0.5464	0.2634
Tl 190.794	-0.5387u	-7.8963u	-6.2300u
V 292.401	-0.0254u	0.7296	0.3324
Zn 206.200	-0.2470u	1.7819	-0.9375u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3507	ppb	0.4311	122.9	-30.0739	0.35067
Al 308.215	6.8528	ppb	2.4579	35.9	220.570	6.85278
As 188.980	1.0319	ppb	3.3601	325.6	0.9815	1.03186
B 249.678	29.7134	ppb	4.4163	14.9	197.620	29.71335
Ba 389.178	1.2332	ppb	1.5548	126.1	-28.8743	1.23315
Be 313.042	0.1868	ppb	0.0396	21.2	-176.303	0.18679
Ca 370.602	2.731	ppb	1.992	72.9	29.65	2.73142
Cd 226.502	0.1805	ppb	0.0490	27.1	6.2818	0.18051
Co 228.615	0.9190	ppb	0.3751	40.8	-8.7469	0.91895
Cr 267.716	0.1608	ppb	0.3191	198.5	16.2442	0.16075
Cu 324.754	0.3733	ppb	0.4792	128.4	447.432	0.37329
Fe 271.441	-3.0651	ppb	1.9817	64.7	15.5677	-3.06513
K 766.491	0.3092	ppb	0.8984	290.6	283.762	0.30921
Mg 279.078	7.1642	ppb	1.0639	14.9	31.2725	7.16416
Mn 257.610	0.2018	ppb	0.0943	46.7	43.3165	0.20177
Mo 202.032	2.0280	ppb	0.4569	22.5	7.4264	2.02798
Na 330.237	101.887	ppb	163.332	160.3	40.3132	101.88692
Ni 231.604	-0.1858	ppb	1.5808	850.8	-1.9807	-0.18579
Pb 220.353	-3.4067	ppb	1.4321	42.0	-0.4348	-3.40669
Sb 206.834	-0.7009	ppb	5.3956	769.8	5.7786	-0.70093
Se 196.026	-2.2169	ppb	5.5423	250.0	2.3038	-2.21695
Si 288.158	0.7244	ppb	0.4215	58.2	539.375	0.72441

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	517.961	ppb	6.3514	1.2	714.221	103.59225
Mn 257.610	10.6688	ppb	0.2487	2.3	913.106	106.68826
Mo 202.032	10.3950	ppb	1.0196	9.8	21.5450	103.95019
Na 330.237	1187.26	ppb	85.8455	7.2	69.3372	118.72565
Ni 231.604	40.9037	ppb	0.8153	2.0	44.1077	102.25915
Pb 220.353	10.3397	ppb	2.9655	28.7	4.7652	103.39676
Sb 206.834	17.8455	ppb	2.3715	13.3	12.4855	89.22752
Se 196.026	18.1836	ppb	11.1289	61.2	6.1506	90.91805
Si 288.158	14.8191	ppb	1.9591	13.2	610.613	14.81913R
Sn 189.925	47.8285	ppb	5.2729	11.0	13.0814	95.65693
Sr 216.596	10.5524	ppb	1.5459	14.7	37.6981	105.52397
Ti 334.941	10.3593	ppb	0.1225	1.2	894.932	103.59299
Tl 190.794	20.4132	ppb	2.5461	12.5	3.4745	81.65283
V 292.401	10.8998	ppb	0.6400	5.9	97.3565	108.99828
Zn 206.200	19.6193	ppb	0.9104	4.6	10.7163	98.09633

Interf Check A (ICSA)

4/19/2019, 11:16:28 AM

Rack S, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4997u	-0.0441u	1.0614u
Al 308.215	541899	543438	544292
As 188.980	2.2250	18.3511	10.6599
B 249.678	5.4071u	4.4068u	3.9331u
Ba 389.178	2.6388	3.3272	2.9870
Be 313.042	-0.2288u	-0.2134u	-0.2394u
Ca 370.602	520306	522942	523233
Cd 226.502	1.9455	1.7600	1.7441
Co 228.615	-0.1573u	0.9269u	0.4692u
Cr 267.716	0.8918	1.5880	0.9493
Cu 324.754	1.1940	0.9663	2.3611
Fe 271.441	205513	205626	206542
K 766.491	-6.8558	-7.0750	-5.2294
Mg 279.078	541691	543029	543273
Mn 257.610	-2.1716	-2.0931	-2.1627
Mo 202.032	3.4595	0.6689u	3.4408
Na 330.237	-475.237u	116.373u	186.909u
Ni 231.604	6.8350	5.4297	2.1809
Pb 220.353	-13.4636u	2.8933u	-6.4245u
Sb 206.834	-4.8929	6.4831	-3.5736
Se 196.026	-16.2153u	30.0223	-5.3740u
Si 288.158	27.1546	28.2415	31.6205
Sn 189.925	-14.9308u	-25.3508u	-16.6654u
Sr 216.596	5.9916	6.3565	8.6294
Ti 334.941	3.5491	3.8159	3.7337
Tl 190.794	-5.0715u	-2.3453u	-13.6438u
V 292.401	-0.3211	-0.8808	0.2114
Zn 206.200	-1.7279u	3.6501	6.0606

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.5057	ppb	0.5528	109.3	-65.0678	0.50569
Al 308.215	543210	ppb	1212.96	0.2	1062796	-
As 188.980	10.4120	ppb	8.0659	77.5	2.9435	10.41201
B 249.678	4.5823	ppb	0.7525	16.4	184.484	4.58235

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	2.9843	ppb	0.3442	11.5	668.124	2.98434
Be 313.042	-0.2272	ppb	0.0131	5.7	-420.215	-0.22721
Ca 370.602	522160	ppb	1613	0.3	872685	-
Cd 226.502	1.8166	ppb	0.1120	6.2	366.143	1.81656
Co 228.615	0.4129	ppb	0.5443	131.8	-15.4150	0.41292
Cr 267.716	1.1430	ppb	0.3864	33.8	51.5765	1.14301
Cu 324.754	1.5071	ppb	0.7483	49.6	518.670	1.50714
Fe 271.441	205894	ppb	564.489	0.3	113990	-
K 766.491	-6.3867	ppb	1.0082	15.8	313.056	-6.38672
Mg 279.078	542664	ppb	851.790	0.2	725629	-
Mn 257.610	-2.1425	ppb	0.0430	2.0	2001.93	-2.14248
Mo 202.032	2.5231	ppb	1.6058	63.6	5.8603	2.52306
Na 330.237	-57.3184	ppb	363.643	634.4	28.1016	-57.31836
Ni 231.604	4.8152	ppb	2.3871	49.6	3.7167	4.81519
Pb 220.353	-5.6650	ppb	8.2049	144.8	-9.8574	-5.66496
Sb 206.834	-0.6611	ppb	6.2221	941.1	8.5704	-0.66112
Se 196.026	2.8110	ppb	24.1811	860.2	4.0968	2.81096
Si 288.158	29.0055	ppb	2.3289	8.0	671.389	29.00555
Sn 189.925	-18.9823	ppb	5.5831	29.4	-3.8043	-18.98231
Sr 216.596	6.9925	ppb	1.4293	20.4	51.2880	6.99249
Ti 334.941	3.6996	ppb	0.1366	3.7	1749.18	3.69956
Tl 190.794	-7.0202	ppb	5.8960	84.0	-12.3435	-7.02020
V 292.401	-0.3302	ppb	0.5462	165.4	-2.7295	-0.33015
Zn 206.200	2.6609	ppb	3.9874	149.8	1.8108	2.66091

Interf Check AB (ICSAB)

4/19/2019, 11:20:20 AM

Rack S, Tube 6

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	224.228	227.263	221.908
Al 308.215	533294	534676	534342
As 188.980	120.302	97.8452	108.320
B 249.678	4.0445u	4.5355u	3.9564u
Ba 389.178	548.712	544.035	543.278
Be 313.042	525.278	526.164	525.154
Ca 370.602	514474	514372	513219
Cd 226.502	1002.46	1004.96	1004.77
Co 228.615	507.316	507.415	504.402
Cr 267.716	512.954	512.678	511.732
Cu 324.754	570.436	571.317	570.744
Fe 271.441	201322	202324	202246
K 766.491	23.5584	22.3533	21.9146
Mg 279.078	534279	534590	534147
Mn 257.610	516.067	517.760	517.668
Mo 202.032	1056.12	1057.56	1058.17
Na 330.237	-158.267u	78.3348u	-15.8238u
Ni 231.604	1002.70	1004.31	1005.10
Pb 220.353	60.8908	32.7172	47.0155
Sb 206.834	679.955	701.365	671.939
Se 196.026	76.5005	33.8857	53.9014
Si 288.158	-19.0638	-18.2837	-19.4972
Sn 189.925	1018.08	1010.96	1005.63
Sr 216.596	7.8309	5.5541	5.8103
Ti 334.941	3.4852	3.5157	3.6570

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Label	Replicates Concentration		
Tl 190.794	81.5712	103.123	108.223
V 292.401	528.780	528.013	529.134
Zn 206.200	967.674	986.065	962.497

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	224.467	ppb	2.6857	1.2	6740.09	112.23331
Al 308.215	534104	ppb	721.075	0.1	1045010	106.82074
As 188.980	108.823	ppb	11.2370	10.3	29.0890	108.82265
B 249.678	4.1788	ppb	0.3120	7.5	-183.809	-
Ba 389.178	545.342	ppb	2.9436	0.5	4071.35	109.06836
Be 313.042	525.532	ppb	0.5506	0.1	423683	105.10635
Ca 370.602	514022	ppb	696.9	0.1	859094	102.80436
Cd 226.502	1004.06	ppb	1.3885	0.1	13225.8	100.40630
Co 228.615	506.378	ppb	1.7118	0.3	1980.00	101.27553
Cr 267.716	512.455	ppb	0.6411	0.1	8604.44	102.49091
Cu 324.754	570.832	ppb	0.4470	0.1	17777.4	114.16642
Fe 271.441	201964	ppb	557.160	0.3	111836	100.98184
K 766.491	22.6088	ppb	0.8512	3.8	334.339	-
Mg 279.078	534339	ppb	227.809	0.0	714491	106.86770
Mn 257.610	517.165	ppb	0.9519	0.2	45025.4	103.43298
Mo 202.032	1057.28	ppb	1.0540	0.1	1785.91	105.72849
Na 330.237	-31.9186	ppb	119.119	373.2	17.6363	-
Ni 231.604	1004.04	ppb	1.2200	0.1	1124.26	100.40390
Pb 220.353	46.8745	ppb	14.0873	30.1	9.9294	93.74898
Sb 206.834	684.420	ppb	15.2127	2.2	251.924	114.06998
Se 196.026	54.7625	ppb	21.3204	38.9	13.9253	109.52509
Si 288.158	-18.9482	ppb	0.6149	3.2	676.963	-
Sn 189.925	1011.56	ppb	6.2454	0.6	256.649	101.15567
Sr 216.596	6.3984	ppb	1.2472	19.5	34.0082	-
Ti 334.941	3.5526	ppb	0.0917	2.6	1719.44	-
Tl 190.794	97.6392	ppb	14.1471	14.5	13.0622	97.63921
V 292.401	528.643	ppb	0.5733	0.1	5299.00	105.72850
Zn 206.200	972.079	ppb	12.3863	1.3	536.502	97.20789

Cont Calib Verif (CCV)

4/19/2019, 11:26:03 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	502.664	499.277	504.865
Al 308.215	10085.5	10051.6	10023.6
As 188.980	504.559	486.936	491.502
B 249.678	509.781	512.061	510.659
Ba 389.178	500.181	494.724	498.762
Be 313.042	515.584	513.365	511.278
Ca 370.602	10103	10038	10045
Cd 226.502	505.221	502.517	503.439
Co 228.615	504.233	501.661	502.495
Cr 267.716	503.745	500.001	499.368
Cu 324.754	499.218	500.082	502.370
Fe 271.441	10085.9	10051.5	10017.0
K 766.491	9836.45	9799.01	9772.70
Mg 279.078	10067.7	10035.4	10019.1
Mn 257.610	505.452	502.657	502.181
Mo 202.032	504.478	502.694	501.675

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Label	Replicates Concentration		
Na 330.237	10685.1	10261.6	9923.67
Ni 231.604	501.955	501.863	497.432
Pb 220.353	488.981	496.330	508.800
Sb 206.834	485.281	482.235	480.210
Se 196.026	499.375	486.939	501.401
Si 288.158	5022.56	5003.42	4987.15
Sn 189.925	507.488	500.257	496.886
Sr 216.596	503.254	500.413	500.905
Ti 334.941	505.239	502.573	501.859
Tl 190.794	503.189	511.636	503.795
V 292.401	508.077	507.277	505.513
Zn 206.200	1008.22	1005.72	1002.05

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	502.269	ppb	2.8151	0.6	15213.5	100.45372
Al 308.215	10053.6	ppb	30.9877	0.3	19891.7	100.53568
As 188.980	494.332	ppb	9.1457	1.9	132.591	98.86647
B 249.678	510.833	ppb	1.1501	0.2	3480.39	102.16669
Ba 389.178	497.889	ppb	2.8312	0.6	3110.06	99.57784
Be 313.042	513.409	ppb	2.1537	0.4	413852	102.68182
Ca 370.602	10062	ppb	35.45	0.4	16851	100.61756
Cd 226.502	503.726	ppb	1.3746	0.3	6485.90	100.74513
Co 228.615	502.797	ppb	1.3118	0.3	1979.14	100.55930
Cr 267.716	501.038	ppb	2.3655	0.5	8396.16	100.20763
Cu 324.754	500.557	ppb	1.6288	0.3	15605.1	100.11131
Fe 271.441	10051.5	ppb	34.4473	0.3	5601.63	100.46445
K 766.491	9802.72	ppb	32.0371	0.3	199422	98.02721
Mg 279.078	10040.7	ppb	24.7179	0.2	13442.2	100.40727
Mn 257.610	503.430	ppb	1.7671	0.4	41811.8	100.68595
Mo 202.032	502.949	ppb	1.4186	0.3	852.615	100.58976
Na 330.237	10290.1	ppb	381.521	3.7	299.127	102.90126
Ni 231.604	500.417	ppb	2.5851	0.5	559.179	100.08334
Pb 220.353	498.037	ppb	10.0194	2.0	188.870	99.60742
Sb 206.834	482.575	ppb	2.5524	0.5	181.152	96.51508
Se 196.026	495.905	ppb	7.8302	1.6	96.2945	99.18102
Si 288.158	5004.38	ppb	17.7270	0.4	24025.3	100.08757
Sn 189.925	501.544	ppb	5.4170	1.1	127.752	100.30874
Sr 216.596	501.524	ppb	1.5183	0.3	1465.03	100.30482
Ti 334.941	503.224	ppb	1.7816	0.4	44640.5	100.64476
Tl 190.794	506.207	ppb	4.7117	0.9	119.665	101.24136
V 292.401	506.956	ppb	1.3115	0.3	5106.77	101.39114
Zn 206.200	1005.33	ppb	3.1017	0.3	554.441	100.53325

Cont Calib Blank (CCB) 4/19/2019, 11:29:55 AM Rack S, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9531	0.9601	0.6303
Al 308.215	3.5617	3.8362	4.1357
As 188.980	1.2593	2.6424	0.5492
B 249.678	16.2351	14.2124	12.1579
Ba 389.178	-2.5413u	1.5136	-0.0339u
Be 313.042	0.1191	0.1027	0.0269
Ca 370.602	2.722	7.172	-4.851u

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Label	Replicates Concentration		
Cd 226.502	-0.1299u	0.1648	0.0966
Co 228.615	0.5925	-0.0128u	1.3925
Cr 267.716	-0.0384u	0.1466	-0.2699u
Cu 324.754	-0.0019u	0.1221	0.5119
Fe 271.441	0.5796	14.7810	-6.8915u
K 766.491	0.1044	-1.3264	-2.1076
Mg 279.078	12.0622	5.8348	4.0263
Mn 257.610	0.1636	0.1449	0.0645
Mo 202.032	0.2105	0.3378	0.0001
Na 330.237	14.7347	-66.1397u	683.966
Ni 231.604	1.9100	-2.5475u	-2.9832u
Pb 220.353	2.7311	-0.4220u	-3.8326u
Sb 206.834	-5.5892u	4.8092	5.4845
Se 196.026	-4.5131u	-3.8461u	0.9374
Si 288.158	7.2559	6.2987	6.5284
Sn 189.925	-0.3918u	-5.2134u	-13.5505u
Sr 216.596	0.6832	-2.2507u	-0.4665u
Ti 334.941	0.2932	0.1522	0.1877
Tl 190.794	-10.8555u	-9.5360u	-7.4335u
V 292.401	0.4182	0.4162	0.1464
Zn 206.200	-3.4878u	-1.8291u	-0.9699u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.8478	ppb	0.1884	22.2	-14.9692	0.84782
Al 308.215	3.8445	ppb	0.2871	7.5	214.653	3.84453
As 188.980	1.4836	ppb	1.0645	71.7	1.1024	1.48363
B 249.678	14.2018	ppb	2.0386	14.4	91.4578	14.20182
Ba 389.178	-0.3539	ppb	2.0463	578.3	-38.8600	-0.35387
Be 313.042	0.0829	ppb	0.0492	59.4	-259.962	0.08290
Ca 370.602	1.681	ppb	6.079	361.6	27.91	1.68108
Cd 226.502	0.0438	ppb	0.1543	351.9	4.5106	0.04384
Co 228.615	0.6574	ppb	0.7049	107.2	-9.7613	0.65740
Cr 267.716	-0.0539	ppb	0.2087	387.4	12.6531	-0.05388
Cu 324.754	0.2107	ppb	0.2681	127.2	442.465	0.21069
Fe 271.441	2.8230	ppb	11.0091	390.0	18.8080	2.82305
K 766.491	-1.1099	ppb	1.1218	101.1	277.796	-1.10989
Mg 279.078	7.3078	ppb	4.2156	57.7	31.4663	7.30778
Mn 257.610	0.1243	ppb	0.0527	42.4	36.8840	0.12431
Mo 202.032	0.1828	ppb	0.1705	93.3	4.3125	0.18281
Na 330.237	210.854	ppb	411.718	195.3	43.2896	210.85358
Ni 231.604	-1.2069	ppb	2.7081	224.4	-3.1258	-1.20691
Pb 220.353	-0.5078	ppb	3.2827	646.4	0.6639	-0.50784
Sb 206.834	1.5682	ppb	6.2076	395.8	6.5442	1.56819
Se 196.026	-2.4739	ppb	2.9731	120.2	2.2553	-2.47392
Si 288.158	6.6943	ppb	0.4997	7.5	566.432	6.69433
Sn 189.925	-6.3852	ppb	6.6571	104.3	-0.6204	-6.38523
Sr 216.596	-0.6780	ppb	1.4783	218.0	5.1935	-0.67799
Ti 334.941	0.2110	ppb	0.0734	34.8	-6.6277	0.21104
Tl 190.794	-9.2750	ppb	1.7258	18.6	-3.6397	-9.27502
V 292.401	0.3269	ppb	0.1564	47.8	-9.4532	0.32694
Zn 206.200	-2.0956	ppb	1.2800	61.1	-1.2618	-2.09561

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

mb 680-566565/1-a (Samp) **4/19/2019, 11:33:44 AM** **Rack 1, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3945	-0.0171u	-0.0282u
Al 308.215	2.3619	4.5334	5.0674
As 188.980	-1.6620u	5.7192	6.9933
B 249.678	3.4631	3.6223	2.9711
Ba 389.178	-0.0599u	-0.4412u	0.3575
Be 313.042	-0.0636u	-0.0523u	-0.0573u
Ca 370.602	10.96	10.53	5.107
Cd 226.502	0.2591	-0.0639u	-0.2563u
Co 228.615	-0.6569u	0.2504	1.0595
Cr 267.716	0.1919	0.4903	-0.9136u
Cu 324.754	-0.4338u	-0.8451u	-1.4929u
Fe 271.441	-7.2851u	14.3257	-4.5200u
K 766.491	-0.0858	0.6145	1.4142
Mg 279.078	-2.1984u	2.1653	-1.6951u
Mn 257.610	0.2684	0.1678	0.0457
Mo 202.032	-0.0090u	-0.2695u	-0.2295u
Na 330.237	27.9173	389.876	106.185
Ni 231.604	2.8580	-1.2649u	-2.6005u
Pb 220.353	-0.7177u	0.9715	-7.0507u
Sb 206.834	-0.0799u	-2.4754u	0.1031u
Se 196.026	-9.8166u	-4.1448u	-4.1839u
Si 288.158	0.5685	2.4566	2.7873
Sn 189.925	-15.3865u	-0.8073u	2.9335
Sr 216.596	-0.5607u	-0.6964u	-0.0987u
Ti 334.941	0.2147	0.1872	0.0411
Tl 190.794	-7.9385u	-6.8672u	-8.2637u
V 292.401	0.6823	-0.0184u	0.5033
Zn 206.200	-0.2124u	-1.0651u	2.1374

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1164	ppb	0.2409	207.0	-37.1834
Al 308.215	3.9876	ppb	1.4329	35.9	214.924
As 188.980	3.6835	ppb	4.6730	126.9	1.6899
B 249.678	3.3522	ppb	0.3395	10.1	17.1927
Ba 389.178	-0.0479	ppb	0.3995	833.9	-36.9432
Be 313.042	-0.0577	ppb	0.0057	9.8	-373.377
Ca 370.602	8.866	ppb	3.263	36.8	39.92
Cd 226.502	-0.0204	ppb	0.2604	1279.5	3.6883
Co 228.615	0.2176	ppb	0.8587	394.5	-11.4975
Cr 267.716	-0.0771	ppb	0.7396	958.8	12.2646
Cu 324.754	-0.9239	ppb	0.5339	57.8	408.083
Fe 271.441	0.8402	ppb	11.7603	1399.7	17.7044
K 766.491	0.6476	ppb	0.7505	115.9	303.187
Mg 279.078	-0.5761	ppb	2.3874	414.4	20.9228
Mn 257.610	0.1606	ppb	0.1115	69.4	39.8717
Mo 202.032	-0.1693	ppb	0.1403	82.9	3.7182
Na 330.237	174.659	ppb	190.447	109.0	42.2870
Ni 231.604	-0.3358	ppb	2.8454	847.3	-2.1484
Pb 220.353	-2.2657	ppb	4.2292	186.7	-0.0016
Sb 206.834	-0.8174	ppb	1.4388	176.0	5.7204
Se 196.026	-6.0485	ppb	3.2634	54.0	1.5814
Si 288.158	1.9375	ppb	1.1970	61.8	544.404

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-4.4201	ppb	9.6796	219.0	-0.1237
Sr 216.596	-0.4520	ppb	0.3133	69.3	5.8604
Ti 334.941	0.1476	ppb	0.0933	63.2	-12.2683
Tl 190.794	-7.6898	ppb	0.7307	9.5	-3.2599
V 292.401	0.3891	ppb	0.3640	93.6	-8.7570
Zn 206.200	0.2866	ppb	1.6585	578.6	0.0529

ics 680-566565/2-a (Samp) 4/19/2019, 11:37:34 AM Rack 1, Tube 2
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	53.5807	53.4451	52.5554
Al 308.215	5078.28	5082.14	5067.41
As 188.980	106.277	99.8981	102.174
B 249.678	203.065	203.426	205.005
Ba 389.178	107.901	105.551	104.104
Be 313.042	53.3633	53.5160	53.2085
Ca 370.602	5061	5076	5051
Cd 226.502	51.6050	51.4250	51.5086
Co 228.615	54.5988	51.2314	52.4911
Cr 267.716	103.403	104.101	102.413
Cu 324.754	103.862	104.353	103.157
Fe 271.441	5129.63	5181.18	5099.09
K 766.491	7614.51	7630.22	7606.51
Mg 279.078	5095.77	5127.51	5084.57
Mn 257.610	515.290	516.933	513.980
Mo 202.032	103.331	101.128	101.925
Na 330.237	5199.07	5164.03	5191.33
Ni 231.604	104.653	104.261	101.533
Pb 220.353	525.486	513.032	506.211
Sb 206.834	46.5063	52.4126	39.0840
Se 196.026	85.2612	104.120	111.689
Si 288.158	-0.5396	-0.7577	-2.0570
Sn 189.925	102.884	99.6680	99.2848
Sr 216.596	102.675	102.127	102.297
Ti 334.941	408.566	409.867	408.377
Tl 190.794	30.1068	24.4495	27.3476
V 292.401	103.867	102.987	102.667
Zn 206.200	106.074	102.641	106.953

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.1938	ppb	0.5569	1.0	1574.41
Al 308.215	5075.94	ppb	7.6362	0.2	10140.3
As 188.980	102.783	ppb	3.2330	3.1	28.1205
B 249.678	203.832	ppb	1.0319	0.5	1384.18
Ba 389.178	105.852	ppb	1.9162	1.8	636.888
Be 313.042	53.3626	ppb	0.1538	0.3	42720.1
Ca 370.602	5063	ppb	12.87	0.3	8497
Cd 226.502	51.5128	ppb	0.0901	0.2	673.211
Co 228.615	52.7738	ppb	1.7014	3.2	198.846
Cr 267.716	103.306	ppb	0.8480	0.8	1743.01
Cu 324.754	103.791	ppb	0.6011	0.6	3581.91
Fe 271.441	5136.63	ppb	41.4917	0.8	2863.10
K 766.491	7617.08	ppb	12.0643	0.2	156878

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5102.62	ppb	22.2714	0.4	6839.27
Mn 257.610	515.401	ppb	1.4794	0.3	42780.8
Mo 202.032	102.128	ppb	1.1153	1.1	176.286
Na 330.237	5184.81	ppb	18.4073	0.4	172.633
Ni 231.604	103.482	ppb	1.6994	1.6	114.275
Pb 220.353	514.909	ppb	9.7737	1.9	195.600
Sb 206.834	46.0010	ppb	6.6787	14.5	22.8608
Se 196.026	100.357	ppb	13.6101	13.6	21.7097
Si 288.158	-1.1181	ppb	0.8204	73.4	571.212
Sn 189.925	100.612	ppb	1.9765	2.0	26.4221
Sr 216.596	102.366	ppb	0.2803	0.3	305.094
Ti 334.941	408.937	ppb	0.8111	0.2	36263.4
Tl 190.794	27.3013	ppb	2.8289	10.4	5.0230
V 292.401	103.174	ppb	0.6211	0.6	1030.56
Zn 206.200	105.223	ppb	2.2788	2.2	57.9165

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Rack 1, Tube 3

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2402u	0.0050u	0.2291u
Al 308.215	343.201	341.744	345.117
As 188.980	-1.8887u	14.5063	6.9955
B 249.678	777.683	787.618	785.306
Ba 389.178	2.4985	3.3862	1.5952
Be 313.042	-0.0246u	-0.0288u	-0.0110u
Ca 370.602	48318	48679	48333
Cd 226.502	-0.3365u	-0.1618u	-0.2583u
Co 228.615	-0.3012u	0.7471	0.2482
Cr 267.716	99.4687	99.4776	99.9028
Cu 324.754	7.2145	7.2331	7.0312
Fe 271.441	203.535	203.765	213.223
K 766.491	29536.5	29714.9	29591.9
Mg 279.078	7215.16	7271.65	7209.38
Mn 257.610	29.6857	30.0307	29.8279
Mo 202.032	0.8160	0.2826	-1.2878u
Na 330.237	908071x	911495x	907267x
Ni 231.604	0.5231	0.3011	1.2397
Pb 220.353	-5.2476u	-1.4769u	-4.7331u
Sb 206.834	3.6959	-1.7396u	-5.7112u
Se 196.026	10.7180	-8.1763u	-9.9034u
Si 288.158	244.917	246.168	244.412
Sn 189.925	-1.1906u	-1.1956u	3.8910
Sr 216.596	2376.90	2395.80	2382.85
Ti 334.941	0.7168	0.5853	0.5351
Tl 190.794	2.9164	-21.7246u	-5.2086u
V 292.401	0.8503	0.6396	0.6213
Zn 206.200	21.8437	24.2825	21.6142

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1581b	ppb	0.1327	83.9	-43.2499
Al 308.215	343.354b	ppb	1.6917	0.5	878.775
As 188.980	6.5377b	ppb	8.2071	125.5	2.4461
B 249.678	783.536b	ppb	5.1987	0.7	5357.24

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	2.4933b	ppb	0.8955	35.9	-12.8944
Be 313.042	-0.0215b	ppb	0.0093	43.4	-378.580
Ca 370.602	48443b	ppb	204.6	0.4	81017
Cd 226.502	-0.2522b	ppb	0.0875	34.7	-0.5198
Co 228.615	0.2314b	ppb	0.5243	226.6	-11.3603
Cr 267.716	99.6164b	ppb	0.2481	0.2	1685.14
Cu 324.754	7.1596b	ppb	0.1116	1.6	652.972
Fe 271.441	206.841b	ppb	5.5281	2.7	131.798
K 766.491	29614.4b	ppb	91.3049	0.3	609803
Mg 279.078	7232.06b	ppb	34.4018	0.5	9692.83
Mn 257.610	29.8481b	ppb	0.1734	0.6	2526.54
Mo 202.032	-0.0631b	ppb	1.0937	1733.9	3.8951
Na 330.237	908944xb	ppb	2245.46	0.2	24602.9
Ni 231.604	0.6879b	ppb	0.4905	71.3	-0.9997
Pb 220.353	-3.8192b	ppb	2.0447	53.5	-0.5919
Sb 206.834	-1.2516b	ppb	4.7225	377.3	5.8980
Se 196.026	-2.4539b	ppb	11.4398	466.2	2.2627
Si 288.158	245.166b	ppb	0.9040	0.4	1680.02
Sn 189.925	0.5016b	ppb	2.9353	585.2	1.2095
Sr 216.596	2385.18b	ppb	9.6630	0.4	6969.80
Ti 334.941	0.6124b	ppb	0.0938	15.3	27.7403
Tl 190.794	-8.0056b	ppb	12.5563	156.8	-3.3384
V 292.401	0.7037b	ppb	0.1272	18.1	-9.8964
Zn 206.200	22.5801b	ppb	1.4788	6.5	12.3008

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Rack 1, Tube 4

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2087	0.0269u	0.0404u
Al 308.215	70.6507	64.5962	68.3553
As 188.980	2.8792	-2.5605u	5.1339
B 249.678	178.837	175.872	171.515
Ba 389.178	0.2201	-0.4047u	-1.5571u
Be 313.042	-0.0647u	-0.0892u	-0.0628u
Ca 370.602	9708	9639	9580
Cd 226.502	-0.0853u	-0.2440u	0.2318
Co 228.615	-0.4233u	0.0065	1.4778
Cr 267.716	20.3589	19.4353	19.6481
Cu 324.754	1.5486	1.5107	1.5135
Fe 271.441	54.8417	45.0203	57.8793
K 766.491	4811.69	4797.85	4766.89
Mg 279.078	1491.75	1475.12	1476.29
Mn 257.610	6.1686	5.9954	6.0355
Mo 202.032	-0.8725u	-0.4629u	-0.0806u
Na 330.237	148763x	147809x	147310x
Ni 231.604	0.1402	2.3944	0.9546
Pb 220.353	-1.2734u	-8.6163u	2.4651
Sb 206.834	-2.6448u	3.5461	0.0603
Se 196.026	3.3584	6.5258	-4.9642u
Si 288.158	47.4713	46.1896	48.0088
Sn 189.925	-10.5124u	-8.6483u	-3.8234u
Sr 216.596	477.189	474.240	471.521
Ti 334.941	0.1730	0.1653	0.1169

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Label	Replicates Concentration		
Tl 190.794	-9.3690u	-3.6486u	-5.5120u
V 292.401	0.6734	0.1344	0.1495
Zn 206.200	6.2052	4.8448	5.1876

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0920b	ppb	0.1013	110.1	-39.3791
Al 308.215	67.8675b	ppb	3.0566	4.5	339.880
As 188.980	1.8175b	ppb	3.9556	217.6	1.1905
B 249.678	175.408b	ppb	3.6833	2.1	1194.85
Ba 389.178	-0.5806b	ppb	0.9015	155.3	-38.6398
Be 313.042	-0.0722b	ppb	0.0147	20.3	-390.433
Ca 370.602	9642b	ppb	64.23	0.7	16146
Cd 226.502	-0.0325b	ppb	0.2423	745.6	3.3441
Co 228.615	0.3537b	ppb	0.9970	281.9	-10.9433
Cr 267.716	19.8141b	ppb	0.4837	2.4	345.855
Cu 324.754	1.5243b	ppb	0.0211	1.4	482.251
Fe 271.441	52.5804b	ppb	6.7211	12.8	46.3576
K 766.491	4792.15b	ppb	22.9387	0.5	98914.7
Mg 279.078	1481.05b	ppb	9.2822	0.6	2002.25
Mn 257.610	6.0665b	ppb	0.0907	1.5	534.770
Mo 202.032	-0.4720b	ppb	0.3960	83.9	3.2069
Na 330.237	147960xb	ppb	738.645	0.5	4036.36
Ni 231.604	1.1631b	ppb	1.1415	98.1	-0.4668
Pb 220.353	-2.4749b	ppb	5.6375	227.8	-0.0812
Sb 206.834	0.3206b	ppb	3.1036	968.2	6.1925
Se 196.026	1.6400b	ppb	5.9346	361.9	3.0315
Si 288.158	47.2232b	ppb	0.9346	2.0	755.341
Sn 189.925	-7.6614b	ppb	3.4520	45.1	-0.9284
Sr 216.596	474.317b	ppb	2.8347	0.6	1391.76
Ti 334.941	0.1517b	ppb	0.0304	20.0	-11.2949
Tl 190.794	-6.1766b	ppb	2.9175	47.2	-2.8982
V 292.401	0.3191b	ppb	0.3069	96.2	-10.2551
Zn 206.200	5.4125b	ppb	0.7076	13.1	2.8708

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Rack 1, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	53.7598	53.7144	53.3907
Al 308.215	5537.58	5538.57	5553.88
As 188.980	108.788	100.390	98.0320
B 249.678	964.457	971.447	979.737
Ba 389.178	105.780	107.592	108.172
Be 313.042	51.0473	51.0814	51.2251
Ca 370.602	51920	52033	52085
Cd 226.502	50.0702	50.3157	49.8454
Co 228.615	50.5080	52.3852	49.5639
Cr 267.716	197.835	198.810	198.206
Cu 324.754	109.953	108.873	109.800
Fe 271.441	5142.77	5160.98	5198.72
K 766.491	40025.5x	40126.0x	40135.8x
Mg 279.078	11858.9	11922.0	11948.5
Mn 257.610	524.469	525.201	526.814
Mo 202.032	99.7345	99.6250	100.406

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Label	Replicates Concentration		
Na 330.237	895022x	899995x	898830x
Ni 231.604	101.060	98.9727	98.1023
Pb 220.353	499.360	489.790	496.930
Sb 206.834	42.7064	48.5159	34.0834
Se 196.026	113.407	97.0817	105.724
Si 288.158	237.815	240.187	243.526
Sn 189.925	91.1386	92.1322	93.0346
Sr 216.596	2429.64	2434.21	2433.50
Ti 334.941	400.931	401.862	402.768
Tl 190.794	48.4463	39.4736	30.8834
V 292.401	101.491	101.051	101.462
Zn 206.200	115.659	122.714	119.141

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.6216b	ppb	0.2013	0.4	1580.27
Al 308.215	5543.35b	ppb	9.1390	0.2	11054.5
As 188.980	102.403b	ppb	5.6537	5.5	28.0143
B 249.678	971.881b	ppb	7.6491	0.8	6641.37
Ba 389.178	107.181b	ppb	1.2482	1.2	652.794
Be 313.042	51.1179b	ppb	0.0944	0.2	40875.3
Ca 370.602	52013b	ppb	84.44	0.2	86993
Cd 226.502	50.0771b	ppb	0.2352	0.5	653.277
Co 228.615	50.8190b	ppb	1.4361	2.8	191.142
Cr 267.716	198.284b	ppb	0.4921	0.2	3336.88
Cu 324.754	109.542b	ppb	0.5844	0.5	3756.09
Fe 271.441	5167.49b	ppb	28.5374	0.6	2880.17
K 766.491	40095.7xb	ppb	61.0541	0.2	825275
Mg 279.078	11909.8b	ppb	46.0034	0.4	15942.4
Mn 257.610	525.495b	ppb	1.2001	0.2	43641.5
Mo 202.032	99.9219b	ppb	0.4229	0.4	172.562
Na 330.237	897949xb	ppb	2600.59	0.3	24300.8
Ni 231.604	99.3783b	ppb	1.5200	1.5	109.672
Pb 220.353	495.360b	ppb	4.9746	1.0	188.202
Sb 206.834	41.7686b	ppb	7.2618	17.4	21.7713
Se 196.026	105.404b	ppb	8.1673	7.7	22.6622
Si 288.158	240.509b	ppb	2.8693	1.2	1698.19
Sn 189.925	92.1018b	ppb	0.9483	1.0	24.3590
Sr 216.596	2432.45b	ppb	2.4591	0.1	7106.91
Ti 334.941	401.854b	ppb	0.9181	0.2	35633.2
Tl 190.794	39.6011b	ppb	8.7821	22.2	7.9699
V 292.401	101.335b	ppb	0.2460	0.2	1007.76
Zn 206.200	119.171b	ppb	3.5276	3.0	65.5618

680-167279-a-2-b ms (Samp) 4/19/2019, 11:52:55 AM Rack 1, Tube 6
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.3621	54.9053	54.6556
Al 308.215	5664.91	5666.85	5674.16
As 188.980	97.4563	104.604	104.316
B 249.678	1005.95	1005.18	1007.20
Ba 389.178	113.053	112.266	111.613
Be 313.042	52.2633	52.4739	52.2152
Ca 370.602	52661	52740	52739

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	51.7901	51.4308	50.8103
Co 228.615	52.0458	49.9486	51.5990
Cr 267.716	201.351	202.509	201.970
Cu 324.754	111.784	111.622	111.507
Fe 271.441	5283.67	5279.79	5280.94
K 766.491	40779.8x	40864.3x	40765.3x
Mg 279.078	12118.9	12143.1	12120.3
Mn 257.610	535.669	537.813	536.220
Mo 202.032	102.512	100.478	104.955
Na 330.237	910884x	912176x	912854x
Ni 231.604	99.8552	101.718	102.671
Pb 220.353	510.711	506.720	502.561
Sb 206.834	47.4400	42.5393	48.3014
Se 196.026	96.1243	98.7720	94.5223
Si 288.158	240.898	244.098	239.832
Sn 189.925	105.793	99.4134	102.590
Sr 216.596	2459.65	2471.59	2468.73
Ti 334.941	410.902	411.621	412.147
Tl 190.794	33.2863	31.8554	25.5445
V 292.401	103.256	104.893	104.286
Zn 206.200	120.658	120.819	123.685

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.6410b	ppb	0.2719	0.5	1611.14
Al 308.215	5668.64b	ppb	4.8818	0.1	11299.7
As 188.980	102.125b	ppb	4.0460	4.0	27.9392
B 249.678	1006.11b	ppb	1.0170	0.1	6875.55
Ba 389.178	112.311b	ppb	0.7208	0.6	685.327
Be 313.042	52.3174b	ppb	0.1376	0.3	41842.3
Ca 370.602	52713b	ppb	45.43	0.1	88164
Cd 226.502	51.3437b	ppb	0.4956	1.0	669.695
Co 228.615	51.1978b	ppb	1.1046	2.2	192.680
Cr 267.716	201.943b	ppb	0.5791	0.3	3398.20
Cu 324.754	111.637b	ppb	0.1390	0.1	3819.62
Fe 271.441	5281.46b	ppb	1.9929	0.0	2943.28
K 766.491	40803.1xb	ppb	53.4613	0.1	839889
Mg 279.078	12127.4b	ppb	13.5847	0.1	16233.3
Mn 257.610	536.567b	ppb	1.1135	0.2	44560.3
Mo 202.032	102.648b	ppb	2.2413	2.2	177.162
Na 330.237	911971xb	ppb	1000.68	0.1	24679.7
Ni 231.604	101.415b	ppb	1.4323	1.4	111.957
Pb 220.353	506.664b	ppb	4.0752	0.8	192.477
Sb 206.834	46.0936b	ppb	3.1081	6.7	23.2301
Se 196.026	96.4728b	ppb	2.1462	2.2	20.9801
Si 288.158	241.609b	ppb	2.2202	0.9	1705.17
Sn 189.925	102.599b	ppb	3.1896	3.1	27.0133
Sr 216.596	2466.66b	ppb	6.2318	0.3	7206.73
Ti 334.941	411.557b	ppb	0.6249	0.2	36494.2
Tl 190.794	30.2287b	ppb	4.1193	13.6	5.7224
V 292.401	104.145b	ppb	0.8278	0.8	1036.06
Zn 206.200	121.720b	ppb	1.7028	1.4	66.9669

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167279-a-2-c msd (Samp) 4/19/2019, 11:56:46 AM Rack 1, Tube 7**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	54.8019	54.7789	54.3200
Al 308.215	5693.10	5675.61	5693.77
As 188.980	107.996	99.4493	111.154
B 249.678	1025.29	1025.25	1025.75
Ba 389.178	109.196	110.998	111.935
Be 313.042	52.5464	52.4460	52.4871
Ca 370.602	53348	53299	53358
Cd 226.502	51.3699	51.3951	51.5111
Co 228.615	51.9676	52.4981	52.1417
Cr 267.716	203.787	203.522	202.678
Cu 324.754	112.884	111.810	111.687
Fe 271.441	5312.31	5271.39	5276.65
K 766.491	41230.9x	41109.7x	41097.8x
Mg 279.078	12210.2	12215.2	12216.2
Mn 257.610	539.035	539.109	537.888
Mo 202.032	101.311	101.039	103.403
Na 330.237	929862x	928484x	926576x
Ni 231.604	99.8069	105.311	103.130
Pb 220.353	493.696	508.784	517.012
Sb 206.834	36.5822	47.3729	55.9894
Se 196.026	85.3568	90.7290	102.412
Si 288.158	247.602	244.548	244.576
Sn 189.925	83.6084	97.2486	93.1465
Sr 216.596	2493.15	2493.37	2496.33
Ti 334.941	412.540	412.793	411.914
Tl 190.794	32.5368	35.6387	35.3726
V 292.401	104.448	104.327	102.809
Zn 206.200	120.941	123.944	125.030

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.6336b	ppb	0.2718	0.5	1610.83
Al 308.215	5687.49b	ppb	10.2949	0.2	11336.5
As 188.980	106.200b	ppb	6.0555	5.7	29.0271
B 249.678	1025.43b	ppb	0.2793	0.0	7007.78
Ba 389.178	110.710b	ppb	1.3923	1.3	675.360
Be 313.042	52.4932b	ppb	0.0505	0.1	41983.5
Ca 370.602	53335b	ppb	31.93	0.1	89204
Cd 226.502	51.4254b	ppb	0.0753	0.1	670.732
Co 228.615	52.2024b	ppb	0.2704	0.5	196.681
Cr 267.716	203.329b	ppb	0.5790	0.3	3421.48
Cu 324.754	112.127b	ppb	0.6586	0.6	3834.43
Fe 271.441	5286.79b	ppb	22.2637	0.4	2946.27
K 766.491	41146.1xb	ppb	73.6284	0.2	846942
Mg 279.078	12213.9b	ppb	3.2220	0.0	16348.8
Mn 257.610	538.677b	ppb	0.6847	0.1	44735.6
Mo 202.032	101.918b	ppb	1.2934	1.3	175.929
Na 330.237	928307xb	ppb	1650.10	0.2	25121.2
Ni 231.604	102.749b	ppb	2.7715	2.7	113.453
Pb 220.353	506.497b	ppb	11.8249	2.3	192.414
Sb 206.834	46.6482b	ppb	9.7239	20.8	23.4387
Se 196.026	92.8327b	ppb	8.7203	9.4	20.2941
Si 288.158	245.576b	ppb	1.7554	0.7	1722.94

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	91.3345b	ppb	6.9983	7.7	24.1680
Sr 216.596	2494.28b	ppb	1.7752	0.1	7287.37
Ti 334.941	412.416b	ppb	0.4526	0.1	36570.2
Tl 190.794	34.5160b	ppb	1.7192	5.0	6.7498
V 292.401	103.861b	ppb	0.9137	0.9	1033.19
Zn 206.200	123.305b	ppb	2.1180	1.7	67.8405

680-167322-w-1-a (Samp) 4/19/2019, 12:00:37 PM Rack 1, Tube 8

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	3.9842	3.5578	3.6663
Al 308.215	245.841	250.831	255.126
As 188.980	0.3970	-0.1994u	2.3612
B 249.678	193.711	189.788	187.052
Ba 389.178	55.2852	52.5915	52.4573
Be 313.042	-0.0528u	-0.0597u	-0.0730u
Ca 370.602	27282	27172	27290
Cd 226.502	0.2919	-0.2482	-0.3449
Co 228.615	25.3341	25.8355	25.2964
Cr 267.716	10.7370	10.7986	10.2041
Cu 324.754	39.9277	40.3175	40.2409
Fe 271.441	10174.1	10044.4	10118.5
K 766.491	26696.2	26638.0	26732.6
Mg 279.078	5048.90	5024.38	5052.98
Mn 257.610	1024.14	1019.20	1024.57
Mo 202.032	7.1049	9.3469	5.6660
Na 330.237	29991.1	29398.5	29558.1
Ni 231.604	26.6462	23.6030	24.8378
Pb 220.353	21.3456	13.5695	14.1151
Sb 206.834	0.1154	-1.5458u	8.3933
Se 196.026	21.6522	2.2085	-11.1840u
Si 288.158	3039.32	3021.33	3044.58
Sn 189.925	-2.5683u	-3.7127u	-3.9966u
Sr 216.596	107.407	106.843	107.649
Ti 334.941	8.5303	8.6683	8.6516
Tl 190.794	-4.6713u	-8.5350u	-3.5734u
V 292.401	0.9562	1.1192	0.5360
Zn 206.200	454.945	450.358	449.427

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	3.7361	ppb	0.2216	5.9	72.4342
Al 308.215	250.599	ppb	4.6471	1.9	697.702
As 188.980	0.8529	ppb	1.3398	157.1	0.9059
B 249.678	190.183	ppb	3.3471	1.8	1285.63
Ba 389.178	53.4447	ppb	1.5954	3.0	309.306
Be 313.042	-0.0618	ppb	0.0102	16.6	-375.229
Ca 370.602	27248	ppb	65.91	0.2	45580
Cd 226.502	-0.1004	ppb	0.3432	341.8	18.2963
Co 228.615	25.4887	ppb	0.3010	1.2	88.4091
Cr 267.716	10.5799	ppb	0.3269	3.1	193.088
Cu 324.754	40.1620	ppb	0.2065	0.5	1654.53
Fe 271.441	10112.4	ppb	65.0836	0.6	5615.83
K 766.491	26688.9	ppb	47.7008	0.2	549584

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5042.09	ppb	15.4687	0.3	6754.09
Mn 257.610	1022.64	ppb	2.9848	0.3	84825.5
Mo 202.032	7.3726	ppb	1.8550	25.2	16.3273
Na 330.237	29649.2	ppb	306.620	1.0	833.190
Ni 231.604	25.0290	ppb	1.5306	6.1	26.2853
Pb 220.353	16.3434	ppb	4.3406	26.6	6.7446
Sb 206.834	2.3210	ppb	5.3240	229.4	7.0095
Se 196.026	4.2256	ppb	16.5108	390.7	3.6564
Si 288.158	3035.08	ppb	12.1928	0.4	14702.2
Sn 189.925	-3.4259	ppb	0.7562	22.1	0.1304
Sr 216.596	107.299	ppb	0.4137	0.4	321.385
Ti 334.941	8.6167	ppb	0.0753	0.9	751.703
Tl 190.794	-5.5932	ppb	2.6061	46.6	-2.9888
V 292.401	0.8705	ppb	0.3009	34.6	-3.9708
Zn 206.200	451.576	ppb	2.9539	0.7	249.117

680-167571-b-1-a (Samp)

4/19/2019, 12:04:28 PM

Rack 1, Tube 9

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1460	0.5088	-0.0644u
Al 308.215	4.1105	10.7277	2.2894
As 188.980	11.9897	1.6572	-1.3233u
B 249.678	155.778	155.212	154.649
Ba 389.178	4.5654	2.9606	2.6684
Be 313.042	-0.0700u	-0.0892u	-0.0743u
Ca 370.602	17822	17858	17823
Cd 226.502	-0.0447u	-0.2069u	0.2419
Co 228.615	-0.0904u	1.1240	0.3131
Cr 267.716	-0.1390u	0.7494	-0.1880u
Cu 324.754	0.2344	-0.0305u	0.5925
Fe 271.441	123.993	116.571	111.105
K 766.491	13562.9	13553.4	13542.8
Mg 279.078	31640.9	31689.8	31637.1
Mn 257.610	9.5081	9.5369	9.7060
Mo 202.032	47.9051	48.5544	47.2061
Na 330.237	333570x	333395x	334829x
Ni 231.604	0.9039	-2.0402u	2.4263
Pb 220.353	2.5323	-3.8323u	-5.0020u
Sb 206.834	1.8169	-2.9260u	-6.2335u
Se 196.026	7.6738	3.1805	-10.6924u
Si 288.158	459.847	461.233	460.393
Sn 189.925	-6.9302u	-4.1969u	-9.9141u
Sr 216.596	453.898	452.162	453.093
Ti 334.941	-0.8392	-0.8698u	-0.9788u
Tl 190.794	6.7599	-2.4788u	-9.8204u
V 292.401	0.9714	0.5294	0.9506
Zn 206.200	-0.2368u	2.1201	-0.5375u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1968b	ppb	0.2900	147.4	-36.3259
Al 308.215	5.7092b	ppb	4.4405	77.8	218.927
As 188.980	4.1079b	ppb	6.9867	170.1	1.7977
B 249.678	155.213b	ppb	0.5644	0.4	1056.55

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	3.3981b	ppb	1.0214	30.1	19.8024
Be 313.042	-0.0778b	ppb	0.0101	13.0	-405.938
Ca 370.602	17835b	ppb	20.43	0.1	29843
Cd 226.502	-0.0032b	ppb	0.2272	7016.5	3.6384
Co 228.615	0.4489b	ppb	0.6185	137.8	-11.0239
Cr 267.716	0.1408b	ppb	0.5276	374.8	17.8188
Cu 324.754	0.2655b	ppb	0.3126	117.8	444.939
Fe 271.441	117.223b	ppb	6.4683	5.5	82.1344
K 766.491	13553.0b	ppb	10.0597	0.1	279219
Mg 279.078	31655.9b	ppb	29.3671	0.1	42355.4
Mn 257.610	9.5836b	ppb	0.1069	1.1	938.450
Mo 202.032	47.8885b	ppb	0.6743	1.4	84.8229
Na 330.237	333931xb	ppb	782.465	0.2	9062.56
Ni 231.604	0.4300b	ppb	2.2706	528.1	-1.2889
Pb 220.353	-2.1007b	ppb	4.0547	193.0	0.0484
Sb 206.834	-2.4476b	ppb	4.0465	165.3	5.1611
Se 196.026	0.0540b	ppb	9.5740	17735.8	2.7333
Si 288.158	460.491b	ppb	0.6978	0.2	2690.95
Sn 189.925	-7.0138b	ppb	2.8595	40.8	-0.7465
Sr 216.596	453.051b	ppb	0.8687	0.2	1329.19
Ti 334.941	-0.8959b	ppb	0.0733	8.2	-28.2430
Tl 190.794	-1.8464b	ppb	8.3082	450.0	-1.8752
V 292.401	0.8171b	ppb	0.2494	30.5	-8.5540
Zn 206.200	0.4486b	ppb	1.4553	324.4	0.1426

680-167571-b-1-a (Samp)

4/19/2019, 12:08:20 PM

Rack 1, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2070	0.0981	0.2717
Al 308.215	4.1068	-0.1831u	0.8583
As 188.980	3.8909	-3.2766u	-2.5153u
B 249.678	22.9529	22.6315	22.7769
Ba 389.178	0.3594	1.2378	0.6844
Be 313.042	-0.0909u	-0.0872u	-0.0815u
Ca 370.602	1868	1832	1869
Cd 226.502	-0.4428u	0.1611	-0.4541u
Co 228.615	0.4040	0.9919	0.0948
Cr 267.716	-0.0002	0.2900	0.4610
Cu 324.754	0.3014	0.6577	0.3047
Fe 271.441	7.8810	1.9464	19.4324
K 766.491	1100.56	1081.07	1101.33
Mg 279.078	3346.91	3302.12	3339.88
Mn 257.610	0.9410	0.9051	0.9325
Mo 202.032	5.2836	4.7257	6.4297
Na 330.237	30095.0	29547.9	30527.5
Ni 231.604	1.8051	1.9916	0.0369
Pb 220.353	8.3056	-5.1144u	-8.0703u
Sb 206.834	-3.9569u	3.6810	-2.7232u
Se 196.026	-3.4519u	1.8281	1.9030
Si 288.158	52.6816	48.7538	52.2127
Sn 189.925	-4.8919u	-3.8391u	-3.9313u
Sr 216.596	48.3939	45.2910	47.2181
Ti 334.941	-0.1978u	-0.1634u	-0.0295

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-10.4031u	-5.0488u	-11.5781u
V 292.401	0.7893	0.3059	0.0661
Zn 206.200	-2.8906u	4.2422	0.0004

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1923	ppb	0.0877	45.6	-35.0460
Al 308.215	1.5940	ppb	2.2376	140.4	210.323
As 188.980	-0.6337	ppb	3.9368	621.3	0.5365
B 249.678	22.7871	ppb	0.1610	0.7	150.208
Ba 389.178	0.7605	ppb	0.4441	58.4	-28.1661
Be 313.042	-0.0865	ppb	0.0047	5.4	-398.159
Ca 370.602	1856	ppb	21.35	1.2	3129
Cd 226.502	-0.2453	ppb	0.3520	143.5	0.7848
Co 228.615	0.4969	ppb	0.4557	91.7	-10.4497
Cr 267.716	0.2503	ppb	0.2332	93.2	17.9125
Cu 324.754	0.4213	ppb	0.2048	48.6	448.934
Fe 271.441	9.7533	ppb	8.8921	91.2	22.6463
K 766.491	1094.32	ppb	11.4792	1.0	22820.4
Mg 279.078	3329.64	ppb	24.0885	0.7	4474.44
Mn 257.610	0.9262	ppb	0.0188	2.0	115.707
Mo 202.032	5.4797	ppb	0.8687	15.9	13.2517
Na 330.237	30056.8	ppb	490.926	1.6	849.892
Ni 231.604	1.2779	ppb	1.0787	84.4	-0.3382
Pb 220.353	-1.6264	ppb	8.7274	536.6	0.2389
Sb 206.834	-0.9997	ppb	4.1002	410.1	5.6448
Se 196.026	0.0931	ppb	3.0703	3298.6	2.7393
Si 288.158	51.2161	ppb	2.1452	4.2	775.557
Sn 189.925	-4.2208	ppb	0.5831	13.8	-0.0704
Sr 216.596	46.9677	ppb	1.5665	3.3	144.218
Ti 334.941	-0.1303	ppb	0.0889	68.3	-28.7402
Tl 190.794	-9.0100	ppb	3.4804	38.6	-3.5780
V 292.401	0.3871	ppb	0.3684	95.2	-9.2722
Zn 206.200	0.4506	ppb	3.5877	796.1	0.1436

Cont Calib Verif (CCV) 4/19/2019, 12:12:13 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	499.067	498.172	497.124
Al 308.215	9917.05	9932.93	9953.29
As 188.980	473.932	498.277	488.329
B 249.678	495.645	500.207	505.095
Ba 389.178	494.546	491.041	493.371
Be 313.042	505.937	508.370	509.230
Ca 370.602	9901	9927	9946
Cd 226.502	494.642	497.961	499.416
Co 228.615	496.683	495.828	500.759
Cr 267.716	492.139	493.921	494.961
Cu 324.754	496.771	499.343	493.790
Fe 271.441	9893.95	9964.30	9946.31
K 766.491	9656.52	9712.83	9725.98
Mg 279.078	9869.25	9906.96	9922.76
Mn 257.610	494.942	497.919	498.872
Mo 202.032	490.776	492.453	492.946

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	10300.6	10451.6	10001.2
Ni 231.604	494.101	496.926	499.182
Pb 220.353	480.710	500.881	486.642
Sb 206.834	486.515	489.260	483.363
Se 196.026	510.749	489.535	517.575
Si 288.158	4941.43	4977.13	4977.34
Sn 189.925	504.118	487.737	485.405
Sr 216.596	492.471	492.788	497.683
Ti 334.941	495.396	497.189	497.763
Tl 190.794	488.341	488.722	492.295
V 292.401	497.505	500.931	500.669
Zn 206.200	998.250	997.330	990.752

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	498.121	ppb	0.9728	0.2	15087.6	99.62421
Al 308.215	9934.42	ppb	18.1696	0.2	19658.4	99.34425
As 188.980	486.846	ppb	12.2403	2.5	130.594	97.36919
B 249.678	500.316	ppb	4.7257	0.9	3408.55	100.06319
Ba 389.178	492.986	ppb	1.7839	0.4	3079.00	98.59718
Be 313.042	507.846	ppb	1.7080	0.3	409364	101.56921
Ca 370.602	9925	ppb	22.48	0.2	16622	99.24767
Cd 226.502	497.340	ppb	2.4470	0.5	6403.71	99.46796
Co 228.615	497.757	ppb	2.6352	0.5	1959.21	99.55139
Cr 267.716	493.674	ppb	1.4274	0.3	8272.95	98.73480
Cu 324.754	496.635	ppb	2.7793	0.6	15486.2	99.32693
Fe 271.441	9934.85	ppb	36.5485	0.4	5536.86	99.29887
K 766.491	9698.44	ppb	36.8975	0.4	197330	96.98442
Mg 279.078	9899.65	ppb	27.4933	0.3	13253.7	98.99652
Mn 257.610	497.244	ppb	2.0499	0.4	41298.3	99.44888
Mo 202.032	492.058	ppb	1.1377	0.2	834.238	98.41165
Na 330.237	10251.1	ppb	229.233	2.2	298.259	102.51096
Ni 231.604	496.736	ppb	2.5461	0.5	555.055	99.34729
Pb 220.353	489.411	ppb	10.3668	2.1	185.611	97.88221
Sb 206.834	486.379	ppb	2.9509	0.6	182.386	97.27589
Se 196.026	505.953	ppb	14.6223	2.9	98.1876	101.19068
Si 288.158	4965.30	ppb	20.6741	0.4	23840.9	99.30598
Sn 189.925	492.420	ppb	10.1977	2.1	125.446	98.48402
Sr 216.596	494.314	ppb	2.9223	0.6	1444.09	98.86281
Ti 334.941	496.783	ppb	1.2347	0.2	44068.7	99.35652
Tl 190.794	489.786	ppb	2.1811	0.4	115.736	97.95714
V 292.401	499.702	ppb	1.9070	0.4	5033.73	99.94033
Zn 206.200	995.444	ppb	4.0893	0.4	548.988	99.54442

Cont Calib Blank (CCB)

4/19/2019, 12:16:05 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0006u	0.6070	0.8896
Al 308.215	4.5772	4.3210	6.2853
As 188.980	3.6629	-2.5521u	-0.1127u
B 249.678	16.3160	13.2865	11.5173
Ba 389.178	-0.0932u	1.2489	-0.1263u
Be 313.042	0.0241	0.0461	0.0529
Ca 370.602	-4.518u	-4.701u	-9.674u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.5075	-0.0405u	-0.2308u
Co 228.615	0.8920	1.0980	-0.4074u
Cr 267.716	-0.7384u	0.2658	-0.1300u
Cu 324.754	0.1881	0.3329	0.0101
Fe 271.441	-2.8891u	-2.3554u	3.2631
K 766.491	0.0241	-0.2956	-1.7610u
Mg 279.078	-2.6745u	1.5133	4.1326
Mn 257.610	0.0922	0.1010	0.1168
Mo 202.032	-0.3936u	0.7514	-0.1692u
Na 330.237	-42.0099u	249.122	-102.729u
Ni 231.604	-1.0957u	-0.1487u	2.8091
Pb 220.353	-4.6061u	-4.2126u	-3.8315u
Sb 206.834	-2.8721u	-4.8053u	-4.4415u
Se 196.026	-9.8890u	1.6508	8.0725
Si 288.158	7.5342	8.7870	4.8494
Sn 189.925	-5.1083u	-3.2860u	-4.1519u
Sr 216.596	-0.0500u	-0.9086u	0.2213
Ti 334.941	0.2904	0.2832	0.2015
Tl 190.794	0.0403	0.2723	-14.9219u
V 292.401	0.5244	0.7029	-0.6362u
Zn 206.200	-2.2930u	-0.3250u	-0.5629u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.4986	ppb	0.4549	91.2	-25.5729	0.49865
Al 308.215	5.0612	ppb	1.0679	21.1	217.019	5.06115
As 188.980	0.3327	ppb	3.1314	941.1	0.7952	0.33273
B 249.678	13.7066	ppb	2.4268	17.7	88.0642	13.70661
Ba 389.178	0.3431	ppb	0.7846	228.6	-34.4829	0.34313
Be 313.042	0.0410	ppb	0.0150	36.6	-293.699	0.04104
Ca 370.602	-6.298	ppb	2.925	46.5	14.56	-6.29754
Cd 226.502	0.0787	ppb	0.3833	486.8	4.9645	0.07873
Co 228.615	0.5275	ppb	0.8162	154.7	-10.2715	0.52753
Cr 267.716	-0.2009	ppb	0.5058	251.8	10.1949	-0.20087
Cu 324.754	0.1770	ppb	0.1617	91.3	441.437	0.17703
Fe 271.441	-0.6605	ppb	3.4084	516.0	16.8878	-0.66049
K 766.491	-0.6775	ppb	0.9518	140.5	272.480	-0.67749
Mg 279.078	0.9905	ppb	3.4335	346.6	23.0177	0.99049
Mn 257.610	0.1033	ppb	0.0125	12.1	35.1270	0.10330
Mo 202.032	0.0629	ppb	0.6067	965.1	4.1101	0.06287
Na 330.237	34.7946	ppb	188.080	540.5	38.5162	34.79460
Ni 231.604	0.5216	ppb	2.0368	390.5	-1.1869	0.52156
Pb 220.353	-4.2167	ppb	0.3873	9.2	-0.7407	-4.21675
Sb 206.834	-4.0396	ppb	1.0274	25.4	4.5932	-4.03961
Se 196.026	-0.0552	ppb	9.1014	16482.2	2.7112	-0.05522
Si 288.158	7.0569	ppb	2.0117	28.5	568.522	7.05689
Sn 189.925	-4.1821	ppb	0.9115	21.8	-0.0636	-4.18209
Sr 216.596	-0.2457	ppb	0.5898	240.0	6.4526	-0.24574
Ti 334.941	0.2584	ppb	0.0494	19.1	-2.4411	0.25838
Tl 190.794	-4.8697	ppb	8.7062	178.8	-2.5847	-4.86974
V 292.401	0.1970	ppb	0.7271	369.0	-10.7315	0.19703
Zn 206.200	-1.0603	ppb	1.0742	101.3	-0.6904	-1.06026

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167571-b-2-a (Samp) 4/19/2019, 12:19:56 PM Rack 1, Tube 11

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2828	0.2800	-0.1472u
Al 308.215	2.2183	5.4001	5.1685
As 188.980	3.9017	7.0148	3.9228
B 249.678	151.504	151.237	152.578
Ba 389.178	1.2833	0.9172	0.2945
Be 313.042	-0.0855u	-0.0597u	-0.0629u
Ca 370.602	17792	17750	17826
Cd 226.502	0.0866	-0.1707u	0.1604
Co 228.615	0.1906	0.8760	-0.3355u
Cr 267.716	-0.0509	-0.1991u	0.0463
Cu 324.754	0.1946	0.4463	0.5341
Fe 271.441	186.665	195.012	174.965
K 766.491	14327.3	14337.9	14358.8
Mg 279.078	33924.7	33868.6	33980.7
Mn 257.610	12.6241	12.5953	12.5406
Mo 202.032	46.5579	49.5276	46.2294
Na 330.237	353675x	355664x	355540x
Ni 231.604	0.8309	1.9723	-2.2787u
Pb 220.353	0.0963	-1.8020u	-3.7857u
Sb 206.834	-6.4655u	3.4276	-2.1707u
Se 196.026	9.8935	-14.7677u	2.0570
Si 288.158	412.357	407.326	410.177
Sn 189.925	-8.2013u	-3.0943u	-10.4415u
Sr 216.596	412.806	412.445	413.881
Ti 334.941	-1.0695u	-0.9257	-0.9813u
Tl 190.794	-11.2465u	-11.9205u	-7.9600u
V 292.401	1.1773	0.5812	0.2326u
Zn 206.200	-0.9394u	-2.5711u	2.9832

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1386b	ppb	0.2475	178.6	-37.9927
Al 308.215	4.2623b	ppb	1.7740	41.6	216.080
As 188.980	4.9464b	ppb	1.7913	36.2	2.0215
B 249.678	151.773b	ppb	0.7098	0.5	1032.93
Ba 389.178	0.8317b	ppb	0.4999	60.1	6.2487
Be 313.042	-0.0694b	ppb	0.0141	20.3	-400.131
Ca 370.602	17789b	ppb	37.77	0.2	29767
Cd 226.502	0.0254b	ppb	0.1738	684.1	4.0880
Co 228.615	0.2437b	ppb	0.6075	249.3	-11.8305
Cr 267.716	-0.0679b	ppb	0.1236	181.9	14.4596
Cu 324.754	0.3917b	ppb	0.1762	45.0	448.762
Fe 271.441	185.547b	ppb	10.0697	5.4	119.963
K 766.491	14341.3b	ppb	16.0570	0.1	295477
Mg 279.078	33924.7b	ppb	56.0684	0.2	45389.3
Mn 257.610	12.5867b	ppb	0.0424	0.3	1196.00
Mo 202.032	47.4383b	ppb	1.8168	3.8	84.0623
Na 330.237	354960xb	ppb	1113.98	0.3	9630.89
Ni 231.604	0.1748b	ppb	2.2001	1258.4	-1.5754
Pb 220.353	-1.8304b	ppb	1.9411	106.0	0.1486
Sb 206.834	-1.7362b	ppb	4.9608	285.7	5.3657
Se 196.026	-0.9390b	ppb	12.6007	1341.9	2.5467
Si 288.158	409.953b	ppb	2.5232	0.6	2454.76

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-7.2457b	ppb	3.7657	52.0	-0.8030
Sr 216.596	413.044b	ppb	0.7468	0.2	1212.43
Ti 334.941	-0.9922b	ppb	0.0725	7.3	-31.1243
Tl 190.794	-10.3757b	ppb	2.1190	20.4	-3.9201
V 292.401	0.6637b	ppb	0.4777	72.0	-10.0989
Zn 206.200	-0.1758b	ppb	2.8548	1624.3	-0.2018

680-167571-b-2-a (Samp) 4/19/2019, 12:23:49 PM Rack 1, Tube 12

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0408	0.2901	0.6201
Al 308.215	2.7386	3.1982	0.8081
As 188.980	7.3930	2.4731	-1.6382u
B 249.678	20.1215	19.5404	19.2766
Ba 389.178	-0.1564	0.3725	-2.0326u
Be 313.042	-0.0895u	-0.0968u	-0.0985u
Ca 370.602	1883	1870	1854
Cd 226.502	-0.5008u	-0.1087u	0.0998
Co 228.615	0.8947	1.5001	-0.2668u
Cr 267.716	0.0569	0.4644	-0.2126u
Cu 324.754	0.3176	0.5176	0.5552
Fe 271.441	20.7732	17.1856	5.7775
K 766.491	1161.50	1155.31	1147.04
Mg 279.078	3618.41	3586.37	3555.26
Mn 257.610	1.2906	1.2397	1.1853
Mo 202.032	4.3710	5.4875	5.7912
Na 330.237	31839.1	31744.9	31610.4
Ni 231.604	1.5466	2.3159	0.3730
Pb 220.353	1.0122	-6.7010u	-4.9265u
Sb 206.834	2.9993	-5.0020u	-13.6949u
Se 196.026	-18.3797u	2.5732	-4.3518u
Si 288.158	47.3109	47.6393	43.7215
Sn 189.925	-16.4483u	-15.1308u	-9.7147u
Sr 216.596	42.1833	42.3423	43.0584
Ti 334.941	-0.1661u	-0.2271u	-0.2781u
Tl 190.794	-10.2582u	0.7176	-16.7071u
V 292.401	0.6348	-0.0423u	0.5204
Zn 206.200	-1.4211u	-4.4091u	-0.5247u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3170	ppb	0.2906	91.7	-31.2448
Al 308.215	2.2483	ppb	1.2683	56.4	211.594
As 188.980	2.7426	ppb	4.5217	164.9	1.4381
B 249.678	19.6462	ppb	0.4323	2.2	128.709
Ba 389.178	-0.6055	ppb	1.2639	208.7	-36.4733
Be 313.042	-0.0949	ppb	0.0048	5.1	-404.971
Ca 370.602	1869	ppb	14.47	0.8	3150
Cd 226.502	-0.1699	ppb	0.3049	179.5	1.7508
Co 228.615	0.7094	ppb	0.8979	126.6	-9.6013
Cr 267.716	0.1029	ppb	0.3408	331.3	15.4574
Cu 324.754	0.4635	ppb	0.1277	27.6	450.201
Fe 271.441	14.5788	ppb	7.8303	53.7	25.3175
K 766.491	1154.61	ppb	7.2545	0.6	24070.0

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	3586.68	ppb	31.5780	0.9	4818.18
Mn 257.610	1.2385	ppb	0.0526	4.2	142.541
Mo 202.032	5.2166	ppb	0.7479	14.3	12.8076
Na 330.237	31731.5	ppb	114.929	0.4	895.186
Ni 231.604	1.4118	ppb	0.9785	69.3	-0.1879
Pb 220.353	-3.5384	ppb	4.0396	114.2	-0.4850
Sb 206.834	-5.2325	ppb	8.3495	159.6	4.1452
Se 196.026	-6.7194	ppb	10.6752	158.9	1.4551
Si 288.158	46.2239	ppb	2.1733	4.7	751.701
Sn 189.925	-13.7646	ppb	3.5686	25.9	-2.4823
Sr 216.596	42.5280	ppb	0.4662	1.1	131.263
Ti 334.941	-0.2237	ppb	0.0561	25.1	-36.3942
Tl 190.794	-8.7493	ppb	8.8098	100.7	-3.5153
V 292.401	0.3710	ppb	0.3624	97.7	-9.3947
Zn 206.200	-2.1183	ppb	2.0339	96.0	-1.2741

mb 680-566695/1-a (Samp)

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Rack 1, Tube 13

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2561	0.3768	0.1451
Al 308.215	6.1674	5.8805	7.7134
As 188.980	6.0512	-0.1990u	-2.4976u
B 249.678	1.2682	1.4310	0.3591
Ba 389.178	-2.4034u	-2.1894u	-1.6446u
Be 313.042	-0.0706u	-0.0948u	-0.0779u
Ca 370.602	2.718	-5.233u	-5.121u
Cd 226.502	0.1379	-0.1190u	0.0519
Co 228.615	0.9674	0.7403	0.7681
Cr 267.716	0.1110	0.5519	0.2256
Cu 324.754	0.9727	0.5923	1.1517
Fe 271.441	1.3473	7.6353	-2.5954u
K 766.491	1.4716	1.6705	0.7159
Mg 279.078	9.2531	4.4228	6.3184
Mn 257.610	0.0868	0.0969	0.0102
Mo 202.032	-0.1520u	1.5120	-1.1435u
Na 330.237	-7.8504u	321.566	322.156
Ni 231.604	-3.2941u	0.6000	-2.1925u
Pb 220.353	0.7457	0.5301	-11.3784u
Sb 206.834	4.2744	-11.3670u	-4.6699u
Se 196.026	-9.9054u	-14.3953u	-17.4896u
Si 288.158	-1.7458u	-0.1156u	-1.5843u
Sn 189.925	-10.5752u	-6.1901u	-1.6518u
Sr 216.596	0.3070	-1.2281u	-1.4639u
Ti 334.941	0.1021	-0.0018u	-0.0936u
Tl 190.794	-5.0271u	-8.7466u	-1.0873u
V 292.401	0.0486	-0.0287u	-0.9908u
Zn 206.200	-3.8237u	1.6262	1.5770

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2593	ppb	0.1159	44.7	-32.8404
Al 308.215	6.5871	ppb	0.9859	15.0	220.002
As 188.980	1.1182	ppb	4.4240	395.7	1.0048
B 249.678	1.0194	ppb	0.5777	56.7	1.2334

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-2.0791	ppb	0.3912	18.8	-49.7101
Be 313.042	-0.0811	ppb	0.0124	15.3	-392.290
Ca 370.602	-2.545	ppb	4.558	179.1	20.85
Cd 226.502	0.0236	ppb	0.1308	553.8	4.2408
Co 228.615	0.8253	ppb	0.1239	15.0	-9.0985
Cr 267.716	0.2962	ppb	0.2288	77.2	18.5097
Cu 324.754	0.9056	ppb	0.2857	31.5	463.515
Fe 271.441	2.1291	ppb	5.1600	242.4	18.4378
K 766.491	1.2860	ppb	0.5036	39.2	308.260
Mg 279.078	6.6648	ppb	2.4337	36.5	30.6061
Mn 257.610	0.0646	ppb	0.0474	73.3	31.9294
Mo 202.032	0.0722	ppb	1.3418	1859.3	4.1259
Na 330.237	211.957	ppb	190.359	89.8	43.2843
Ni 231.604	-1.6289	ppb	2.0073	123.2	-3.5996
Pb 220.353	-3.3676	ppb	6.9384	206.0	-0.4189
Sb 206.834	-3.9208	ppb	7.8475	200.1	4.6416
Se 196.026	-13.9301	ppb	3.8135	27.4	0.0956
Si 288.158	-1.1486uv	ppb	0.8982	78.2	530.171
Sn 189.925	-6.1390	ppb	4.4619	72.7	-0.5582
Sr 216.596	-0.7950	ppb	0.9616	121.0	4.8494
Ti 334.941	0.0022	ppb	0.0979	4401.6	-25.1542
Tl 190.794	-4.9537	ppb	3.8302	77.3	-2.6045
V 292.401	-0.3236	ppb	0.5791	179.0	-16.0827
Zn 206.200	-0.2068	ppb	3.1324	1514.4	-0.2196

ics 680-566695/2-a (Samp)

4/19/2019, 12:31:29 PM

Rack 1, Tube 14

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	22.6752	22.8927	22.8588
Al 308.215	2165.34	2147.49	2171.46
As 188.980	42.2321	50.0003	51.6395
B 249.678	84.8065	83.8549	87.6247
Ba 389.178	45.4383	44.8034	44.5029
Be 313.042	22.1879	22.1315	22.2598
Ca 370.602	2173	2151	2178
Cd 226.502	22.2081	22.8799	21.9843
Co 228.615	23.2229	22.9514	21.1083
Cr 267.716	44.1314	43.8419	43.4545
Cu 324.754	43.5876	43.4049	44.0054
Fe 271.441	2162.15	2154.28	2166.85
K 766.491	3637.69	3620.72	3642.16
Mg 279.078	2147.12	2142.40	2152.86
Mn 257.610	176.874	176.044	177.406
Mo 202.032	42.8051	42.8519	43.7118
Na 330.237	2285.79	2136.58	2482.40
Ni 231.604	44.5046	41.5537	40.5385
Pb 220.353	209.293	215.962	213.964
Sb 206.834	19.6065	20.8528	21.3288
Se 196.026	24.1693	48.6135	35.2590
Si 288.158	-2.0536	-3.4697	2.1050
Sn 189.925	39.2287	33.2640	47.6630
Sr 216.596	44.4075	41.6285	42.9965
Ti 334.941	172.408	171.683	172.959

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Label	Replicates Concentration		
Tl 190.794	2.1528	1.5186	12.0997
V 292.401	43.3837	43.1620	43.6872
Zn 206.200	45.2190	43.9580	45.2298

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	22.8089	ppb	0.1170	0.5	651.751
Al 308.215	2161.43	ppb	12.4563	0.6	4436.82
As 188.980	47.9573	ppb	5.0255	10.5	13.4987
B 249.678	85.4287	ppb	1.9604	2.3	576.761
Ba 389.178	44.9149	ppb	0.4775	1.1	249.128
Be 313.042	22.1931	ppb	0.0643	0.3	17576.0
Ca 370.602	2167	ppb	14.46	0.7	3651
Cd 226.502	22.3574	ppb	0.4661	2.1	294.342
Co 228.615	22.4275	ppb	1.1505	5.1	77.3750
Cr 267.716	43.8093	ppb	0.3396	0.8	746.910
Cu 324.754	43.6660	ppb	0.3078	0.7	1759.58
Fe 271.441	2161.09	ppb	6.3502	0.3	1214.55
K 766.491	3633.53	ppb	11.3101	0.3	75029.3
Mg 279.078	2147.46	ppb	5.2403	0.2	2891.30
Mn 257.610	176.775	ppb	0.6864	0.4	14692.9
Mo 202.032	43.1229	ppb	0.5105	1.2	76.7488
Na 330.237	2301.59	ppb	173.449	7.5	97.6254
Ni 231.604	42.1990	ppb	2.0603	4.9	45.5501
Pb 220.353	213.073	ppb	3.4224	1.6	81.4383
Sb 206.834	20.5960	ppb	0.8894	4.3	13.4895
Se 196.026	36.0139	ppb	12.2396	34.0	9.5363
Si 288.158	-1.1394	ppb	2.8976	254.3	547.705
Sn 189.925	40.0519	ppb	7.2347	18.1	11.1161
Sr 216.596	43.0108	ppb	1.3896	3.2	132.348
Ti 334.941	172.350	ppb	0.6403	0.4	15268.9
Tl 190.794	5.2570	ppb	5.9344	112.9	-0.2099
V 292.401	43.4110	ppb	0.2637	0.6	426.192
Zn 206.200	44.8023	ppb	0.7312	1.6	24.5999

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Rack 1, Tube 15

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	10.6594	11.5088	11.8813
Al 308.215	220.981	227.872	225.435
As 188.980	18.7386	23.1814	23.2036
B 249.678	105.102	107.003	107.727
Ba 389.178	9.9341	11.2935	12.6705
Be 313.042	4.1811	4.2427	4.2419
Ca 370.602	534.8	532.9	542.8
Cd 226.502	5.4803	5.3797	5.5244
Co 228.615	13.3829	11.3897	11.8375
Cr 267.716	11.3435	10.5485	10.3145
Cu 324.754	22.9381	22.1717	21.7775
Fe 271.441	45.4503	57.6547	63.1392
K 766.491	1137.54	1143.18	1150.85
Mg 279.078	533.338	538.835	538.614
Mn 257.610	10.9727	11.0542	11.0331
Mo 202.032	12.5872	10.6317	10.9763

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Label	Replicates Concentration		
Na 330.237	1156.10	954.662	1106.20
Ni 231.604	42.3137	42.8691	43.5487
Pb 220.353	13.1420	5.0131	12.6846
Sb 206.834	23.5088	22.6080	20.5360
Se 196.026	9.2006	15.3984	23.9694
Si 288.158	10.9966	10.1913	10.3969
Sn 189.925	52.1102	46.8491	41.6543
Sr 216.596	9.6174	11.3443	10.3259
Ti 334.941	10.7960	11.0485	10.9850
Tl 190.794	19.5712	16.1500	18.9877
V 292.401	22.0514	22.2138	21.6558
Zn 206.200	21.4998	22.5798	19.2711

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.3498	ppb	0.6263	5.5	304.022
Al 308.215	224.763	ppb	3.4948	1.6	647.466
As 188.980	21.7079	ppb	2.5715	11.8	6.5007
B 249.678	106.611	ppb	1.3555	1.3	723.919
Ba 389.178	11.2994	ppb	1.3682	12.1	35.0422
Be 313.042	4.2219	ppb	0.0353	0.8	3079.02
Ca 370.602	536.8	ppb	5.224	1.0	923.0
Cd 226.502	5.4615	ppb	0.0742	1.4	74.1527
Co 228.615	12.2034	ppb	1.0458	8.6	35.9634
Cr 267.716	10.7355	ppb	0.5394	5.0	193.137
Cu 324.754	22.2958	ppb	0.5902	2.6	1111.49
Fe 271.441	55.4147	ppb	9.0547	16.3	48.4427
K 766.491	1143.86	ppb	6.6801	0.6	23706.2
Mg 279.078	536.929	ppb	3.1119	0.6	739.581
Mn 257.610	11.0200	ppb	0.0423	0.4	942.291
Mo 202.032	11.3984	ppb	1.0439	9.2	23.2365
Na 330.237	1072.32	ppb	104.907	9.8	66.2089
Ni 231.604	42.9105	ppb	0.6185	1.4	46.3575
Pb 220.353	10.2799	ppb	4.5669	44.4	4.7416
Sb 206.834	22.2176	ppb	1.5244	6.9	14.0269
Se 196.026	16.1895	ppb	7.4161	45.8	5.7748
Si 288.158	10.5283	ppb	0.4184	4.0	590.747
Sn 189.925	46.8712	ppb	5.2280	11.2	12.8394
Sr 216.596	10.4292	ppb	0.8681	8.3	37.3218
Ti 334.941	10.9432	ppb	0.1314	1.2	946.770
Tl 190.794	18.2363	ppb	1.8302	10.0	2.9563
V 292.401	21.9737	ppb	0.2870	1.3	210.036
Zn 206.200	21.1169	ppb	1.6872	8.0	11.5426

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Rack 1, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0302u	-0.5113u	-0.1035u
Al 308.215	1399.06	1409.25	1395.92
As 188.980	1.1823	7.8928	2.7571
B 249.678	16.3743	14.2693	14.8698
Ba 389.178	23.6644	23.5265	25.5403
Be 313.042	-0.0757u	-0.0816u	-0.0623u
Ca 370.602	4354	4375	4357

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Label	Replicates Concentration		
Cd 226.502	-0.6034u	-0.2460u	-0.1658u
Co 228.615	1.6905	1.8970	-0.7899u
Cr 267.716	0.1094	-0.1176u	-0.0208u
Cu 324.754	0.2632	0.6993	0.5460
Fe 271.441	51.3414	39.3433	40.4103
K 766.491	2364.23	2368.23	2360.41
Mg 279.078	1450.63	1477.65	1459.39
Mn 257.610	85.2164	85.5280	85.0570
Mo 202.032	-0.2047u	0.8331	0.0131
Na 330.237	5610.29	5460.74	5709.18
Ni 231.604	0.3401	-0.7528u	-1.9314u
Pb 220.353	-9.2482u	-10.9743u	4.8104
Sb 206.834	5.3811	-3.2261u	2.3918
Se 196.026	-10.5138u	5.8662	0.8694
Si 288.158	2226.36	2224.42	2215.95
Sn 189.925	-11.2098u	-11.0625u	7.8613
Sr 216.596	30.2138	32.0455	29.4673
Ti 334.941	0.1865	0.0501	0.0734
Tl 190.794	-9.0813u	-7.1895u	-5.7769u
V 292.401	0.2308	-0.0411u	0.8873
Zn 206.200	-1.1894u	-0.3780u	-1.8410u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2150	ppb	0.2592	120.6	-47.2058
Al 308.215	1401.41	ppb	6.9693	0.5	2948.46
As 188.980	3.9441	ppb	3.5092	89.0	1.7593
B 249.678	15.1711	ppb	1.0844	7.1	98.0496
Ba 389.178	24.2437	ppb	1.1250	4.6	117.407
Be 313.042	-0.0732	ppb	0.0099	13.5	-385.543
Ca 370.602	4362	ppb	11.08	0.3	7319
Cd 226.502	-0.3384	ppb	0.2330	68.9	-0.2765
Co 228.615	0.9325	ppb	1.4952	160.3	-8.6735
Cr 267.716	-0.0096	ppb	0.1139	1182.7	13.5609
Cu 324.754	0.5028	ppb	0.2212	44.0	451.324
Fe 271.441	43.6983	ppb	6.6406	15.2	41.4526
K 766.491	2364.29	ppb	3.9108	0.2	48949.2
Mg 279.078	1462.56	ppb	13.7850	0.9	1976.46
Mn 257.610	85.2671	ppb	0.2396	0.3	7100.39
Mo 202.032	0.2138	ppb	0.5473	255.9	4.3643
Na 330.237	5593.40	ppb	125.080	2.2	188.751
Ni 231.604	-0.7813	ppb	1.1361	145.4	-2.6486
Pb 220.353	-5.1373	ppb	8.6581	168.5	-1.0909
Sb 206.834	1.5156	ppb	4.3699	288.3	6.5419
Se 196.026	-1.2594	ppb	8.3950	666.6	2.4924
Si 288.158	2222.24	ppb	5.5309	0.2	10906.7
Sn 189.925	-4.8037	ppb	10.9684	228.3	-0.2202
Sr 216.596	30.5755	ppb	1.3266	4.3	96.4272
Ti 334.941	0.1033	ppb	0.0730	70.6	-12.4271
Tl 190.794	-7.3492	ppb	1.6579	22.6	-3.1620
V 292.401	0.3590	ppb	0.4773	133.0	-9.1456
Zn 206.200	-1.1362	ppb	0.7329	64.5	-0.7322

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680-167474-a-4-d (Samp) **4/19/2019, 12:42:59 PM** **Rack 1, Tube 17****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.5712	-0.1984u	0.4914
Al 308.215	292.267	288.230	290.147
As 188.980	5.0190	9.4005	3.3588
B 249.678	0.9426	2.6651	1.5336
Ba 389.178	4.7006	0.8657	3.9147
Be 313.042	-0.0853u	-0.0771u	-0.0912u
Ca 370.602	889.3	885.0	895.2
Cd 226.502	-0.0114u	-0.1774u	-0.3307u
Co 228.615	0.9752	0.1385	0.3465
Cr 267.716	-0.2438u	0.3165	-0.1122u
Cu 324.754	0.0456	0.9942	0.4386
Fe 271.441	22.1537	10.5731	8.3932
K 766.491	475.355	475.265	477.592
Mg 279.078	302.723	295.734	304.644
Mn 257.610	17.3416	17.4033	17.4974
Mo 202.032	2.3793	0.1147	1.2654
Na 330.237	1273.62	1102.63	1390.83
Ni 231.604	-0.5053u	-1.1197u	0.1778
Pb 220.353	-5.8129u	4.6427	-6.9978u
Sb 206.834	-5.9640u	-3.7936u	0.7835
Se 196.026	-18.0166u	-17.3729u	-18.1869u
Si 288.158	451.116	448.728	456.671
Sn 189.925	-1.2326u	-9.4863u	-4.6382u
Sr 216.596	6.1680	6.1808	5.9897
Ti 334.941	0.0158	-0.1096u	0.1043
Tl 190.794	1.6105	2.9518	-13.3570u
V 292.401	-0.5228u	-0.0983u	0.4789
Zn 206.200	0.4506	-1.8770u	2.9910

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2881	ppb	0.4232	146.9	-31.9620
Al 308.215	290.214	ppb	2.0193	0.7	774.824
As 188.980	5.9261	ppb	3.1213	52.7	2.2885
B 249.678	1.7138	ppb	0.8752	51.1	5.9708
Ba 389.178	3.1603	ppb	2.0257	64.1	-16.4413
Be 313.042	-0.0846	ppb	0.0071	8.4	-395.048
Ca 370.602	889.8	ppb	5.086	0.6	1513
Cd 226.502	-0.1732	ppb	0.1597	92.2	1.7489
Co 228.615	0.4867	ppb	0.4356	89.5	-10.4459
Cr 267.716	-0.0132	ppb	0.2930	2227.9	13.3687
Cu 324.754	0.4928	ppb	0.4766	96.7	451.026
Fe 271.441	13.7067	ppb	7.3961	54.0	24.8330
K 766.491	476.070	ppb	1.3186	0.3	10079.7
Mg 279.078	301.033	ppb	4.6892	1.6	424.037
Mn 257.610	17.4141	ppb	0.0785	0.5	1471.24
Mo 202.032	1.2532	ppb	1.1323	90.4	6.1189
Na 330.237	1255.69	ppb	144.932	11.5	71.4999
Ni 231.604	-0.4824	ppb	0.6490	134.5	-2.3130
Pb 220.353	-2.7226	ppb	6.4061	235.3	-0.1753
Sb 206.834	-2.9914	ppb	3.4445	115.1	4.9677
Se 196.026	-17.8588	ppb	0.4294	2.4	-0.6433
Si 288.158	452.172	ppb	4.0755	0.9	2645.68

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-5.1190	ppb	4.1478	81.0	-0.3003
Sr 216.596	6.1128	ppb	0.1068	1.7	25.0072
Ti 334.941	0.0035	ppb	0.1075	3085.9	-24.2870
Tl 190.794	-2.9316	ppb	9.0536	308.8	-2.1175
V 292.401	-0.0474	ppb	0.5028	1060.3	-13.3149
Zn 206.200	0.5215	ppb	2.4348	466.9	0.1825

680-167474-a-4-d (Samp) 4/19/2019, 12:46:50 PM Rack 1, Tube 18

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	53.7960	54.6383	56.2634
Al 308.215	6575.47	6578.68	6624.81
As 188.980	98.2429	108.625	103.527
B 249.678	219.683	222.841	225.528
Ba 389.178	132.439	129.384	132.722
Be 313.042	53.9501	53.8932	54.2639
Ca 370.602	9491	9477	9534
Cd 226.502	53.0252	53.6813	54.0669
Co 228.615	54.7214	53.9024	53.3217
Cr 267.716	106.673	106.179	106.794
Cu 324.754	106.174	107.163	106.904
Fe 271.441	5235.66	5232.94	5270.08
K 766.491	11073.0	11093.5	11144.7
Mg 279.078	6599.08	6611.46	6634.16
Mn 257.610	608.730	608.445	612.851
Mo 202.032	103.466	105.937	104.523
Na 330.237	10767.3	10650.7	11086.5
Ni 231.604	104.673	106.862	108.676
Pb 220.353	511.068	525.961	528.731
Sb 206.834	55.5754	46.2980	45.6661
Se 196.026	104.556	104.436	114.903
Si 288.158	2174.73	2186.50	2195.17
Sn 189.925	102.639	98.5229	100.734
Sr 216.596	136.973	134.676	133.299
Ti 334.941	417.111	417.372	419.836
Tl 190.794	43.6398	38.8801	28.9338
V 292.401	105.882	106.829	106.573
Zn 206.200	108.708	105.657	106.498

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.8993	ppb	1.2542	2.3	1626.25
Al 308.215	6592.99	ppb	27.6059	0.4	13107.9
As 188.980	103.465	ppb	5.1915	5.0	28.3019
B 249.678	222.684	ppb	2.9253	1.3	1513.07
Ba 389.178	131.515	ppb	1.8510	1.4	799.962
Be 313.042	54.0357	ppb	0.1996	0.4	43263.5
Ca 370.602	9501	ppb	29.64	0.3	15918
Cd 226.502	53.5911	ppb	0.5267	1.0	700.175
Co 228.615	53.9818	ppb	0.7032	1.3	203.669
Cr 267.716	106.549	ppb	0.3255	0.3	1797.45
Cu 324.754	106.747	ppb	0.5129	0.5	3671.50
Fe 271.441	5246.23	ppb	20.7023	0.4	2923.83
K 766.491	11103.7	ppb	36.9469	0.3	228584

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6614.90	ppb	17.7905	0.3	8860.42
Mn 257.610	610.009	ppb	2.4658	0.4	50629.3
Mo 202.032	104.642	ppb	1.2399	1.2	180.526
Na 330.237	10834.9	ppb	225.579	2.1	325.224
Ni 231.604	106.737	ppb	2.0044	1.9	117.925
Pb 220.353	521.920	ppb	9.4995	1.8	198.248
Sb 206.834	49.1798	ppb	5.5477	11.3	24.0604
Se 196.026	107.965	ppb	6.0086	5.6	23.1534
Si 288.158	2185.46	ppb	10.2595	0.5	10777.7
Sn 189.925	100.632	ppb	2.0601	2.0	26.4276
Sr 216.596	134.983	ppb	1.8563	1.4	400.286
Ti 334.941	418.107	ppb	1.5035	0.4	37080.8
Tl 190.794	37.1512	ppb	7.5039	20.2	7.3963
V 292.401	106.428	ppb	0.4897	0.5	1063.54
Zn 206.200	106.954	ppb	1.5757	1.5	58.8714

680-167474-a-4-e ms (Samp)

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Rack 1, Tube 19

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	22.0818	22.2873	21.4801
Al 308.215	3396.64	3403.46	3414.34
As 188.980	39.4821	38.7761	40.0118
B 249.678	99.3210	98.2948	97.4348
Ba 389.178	61.5294	62.5196	62.5210
Be 313.042	20.9531	21.0862	21.0944
Ca 370.602	6198	6232	6237
Cd 226.502	20.7581	21.2910	20.9932
Co 228.615	20.4118	20.8519	21.5269
Cr 267.716	41.5819	41.4739	41.6440
Cu 324.754	41.9887	42.3988	43.1599
Fe 271.441	2082.45	2072.33	2063.91
K 766.491	5648.98	5673.04	5675.41
Mg 279.078	3431.50	3458.65	3449.85
Mn 257.610	247.870	249.493	248.920
Mo 202.032	41.3890	40.3731	40.9292
Na 330.237	7445.83	7148.20	7185.70
Ni 231.604	39.8193	40.2540	41.8511
Pb 220.353	203.478	200.090	208.704
Sb 206.834	15.3481	14.2344	21.1783
Se 196.026	44.7623	38.9742	36.7565
Si 288.158	2129.89	2144.77	2140.33
Sn 189.925	33.2960	32.5849	43.0946
Sr 216.596	69.9231	70.4607	70.3638
Ti 334.941	162.340	162.899	162.888
Tl 190.794	12.8694	10.8488	10.2966
V 292.401	41.8971	41.3194	41.3547
Zn 206.200	41.5683	40.9480	44.6388

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	21.9497	ppb	0.4195	1.9	625.724
Al 308.215	3404.81	ppb	8.9281	0.3	6868.95
As 188.980	39.4233	ppb	0.6199	1.6	11.2207
B 249.678	98.3502	ppb	0.9443	1.0	665.302

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	62.1900	ppb	0.5721	0.9	359.113
Be 313.042	21.0446	ppb	0.0793	0.4	16649.9
Ca 370.602	6223	ppb	21.09	0.3	10432
Cd 226.502	21.0141	ppb	0.2671	1.3	277.005
Co 228.615	20.9302	ppb	0.5617	2.7	71.3986
Cr 267.716	41.5666	ppb	0.0860	0.2	709.525
Cu 324.754	42.5158	ppb	0.5943	1.4	1724.69
Fe 271.441	2072.90	ppb	9.2871	0.4	1165.66
K 766.491	5665.81	ppb	14.6184	0.3	116812
Mg 279.078	3446.67	ppb	13.8524	0.4	4627.78
Mn 257.610	248.761	ppb	0.8231	0.3	20664.9
Mo 202.032	40.8971	ppb	0.5087	1.2	72.9935
Na 330.237	7259.91	ppb	162.098	2.2	231.765
Ni 231.604	40.6414	ppb	1.0699	2.6	43.8045
Pb 220.353	204.091	ppb	4.3394	2.1	78.0415
Sb 206.834	16.9202	ppb	3.7294	22.0	12.2483
Se 196.026	40.1643	ppb	4.1335	10.3	10.3251
Si 288.158	2138.33	ppb	7.6392	0.4	10531.9
Sn 189.925	36.3252	ppb	5.8733	16.2	10.1747
Sr 216.596	70.2492	ppb	0.2866	0.4	211.881
Ti 334.941	162.709	ppb	0.3197	0.2	14416.9
Tl 190.794	11.3383	ppb	1.3544	11.9	1.2656
V 292.401	41.5238	ppb	0.3238	0.8	407.154
Zn 206.200	42.3850	ppb	1.9763	4.7	23.2672

680-167474-a-4-f msd (Samp) 4/19/2019, 12:54:32 PM Rack 1, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	21.2215	21.1918	22.4256
Al 308.215	3494.67	3532.24	3562.91
As 188.980	41.0325	48.9649	47.0087
B 249.678	100.646	99.8554	100.948
Ba 389.178	66.2359	62.7062	67.8684
Be 313.042	21.5692	21.7012	21.8583
Ca 370.602	6426	6458	6520
Cd 226.502	21.9583	21.4089	21.8301
Co 228.615	22.4355	20.5268	22.6418
Cr 267.716	42.1116	42.6864	42.6066
Cu 324.754	43.6075	44.4838	43.3641
Fe 271.441	2149.08	2145.70	2166.16
K 766.491	5834.84	5853.92	5915.66
Mg 279.078	3550.27	3556.81	3591.38
Mn 257.610	256.013	257.142	260.097
Mo 202.032	41.2346	41.2794	44.0826
Na 330.237	7870.33	7474.44	7681.06
Ni 231.604	40.9750	41.3269	41.0001
Pb 220.353	201.472	212.328	203.041
Sb 206.834	17.7999	12.1783	20.4663
Se 196.026	42.6292	32.9725	59.7106
Si 288.158	2218.66	2219.41	2247.96
Sn 189.925	37.2454	31.6695	28.8368
Sr 216.596	72.6131	72.8135	75.7993
Ti 334.941	166.477	167.391	169.253

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Label	Replicates Concentration		
Tl 190.794	19.7478	25.4865	9.7959
V 292.401	42.2092	42.8977	42.7118
Zn 206.200	42.5466	42.7789	42.7577

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	21.6129	ppb	0.7039	3.3	615.487
Al 308.215	3529.94	ppb	34.1806	1.0	7113.75
As 188.980	45.6687	ppb	4.1325	9.0	12.8879
B 249.678	100.483	ppb	0.5642	0.6	679.823
Ba 389.178	65.6035	ppb	2.6386	4.0	380.742
Be 313.042	21.7096	ppb	0.1447	0.7	17186.3
Ca 370.602	6468	ppb	47.84	0.7	10842
Cd 226.502	21.7325	ppb	0.2874	1.3	286.346
Co 228.615	21.8680	ppb	1.1661	5.3	75.1388
Cr 267.716	42.4682	ppb	0.3114	0.7	724.631
Cu 324.754	43.8185	ppb	0.5889	1.3	1764.18
Fe 271.441	2153.65	ppb	10.9719	0.5	1210.41
K 766.491	5868.14	ppb	42.2431	0.7	120954
Mg 279.078	3566.15	ppb	22.0916	0.6	4787.46
Mn 257.610	257.750	ppb	2.1089	0.8	21410.7
Mo 202.032	42.1989	ppb	1.6315	3.9	75.1895
Na 330.237	7675.28	ppb	198.007	2.6	242.934
Ni 231.604	41.1007	ppb	0.1963	0.5	44.3187
Pb 220.353	205.614	ppb	5.8677	2.9	78.6147
Sb 206.834	16.8148	ppb	4.2309	25.2	12.2463
Se 196.026	45.1041	ppb	13.5398	30.0	11.2575
Si 288.158	2228.68	ppb	16.7052	0.7	10953.8
Sn 189.925	32.5839	ppb	4.2782	13.1	9.2292
Sr 216.596	73.7420	ppb	1.7845	2.4	222.073
Ti 334.941	167.707	ppb	1.4147	0.8	14860.6
Tl 190.794	18.3434	ppb	7.9390	43.3	2.9422
V 292.401	42.6062	ppb	0.3562	0.8	418.072
Zn 206.200	42.6944	ppb	0.1285	0.3	23.4374

Cont Calib Verif (CCV) 4/19/2019, 12:58:25 PM Rack S, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	499.527	502.944	508.133
Al 308.215	9979.30	10024.6	10064.3
As 188.980	493.790	487.822	493.651
B 249.678	500.973	504.747	505.400
Ba 389.178	490.677	490.022	494.953
Be 313.042	509.623	512.156	513.437
Ca 370.602	9958	10046	10058
Cd 226.502	498.466	499.256	500.171
Co 228.615	496.571	499.675	504.010
Cr 267.716	495.327	497.177	497.447
Cu 324.754	499.307	501.534	510.419
Fe 271.441	9979.51	10032.4	10075.0
K 766.491	9717.91	9735.54	9772.37
Mg 279.078	9952.34	10021.3	10032.7
Mn 257.610	496.976	498.699	500.831
Mo 202.032	492.649	493.884	495.777

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Label	Replicates Concentration		
Na 330.237	10112.9	10320.1	10306.3
Ni 231.604	498.031	505.466	504.363
Pb 220.353	493.178	484.777	508.691
Sb 206.834	470.892	484.246	484.119
Se 196.026	508.509	498.270	529.483
Si 288.158	4989.03	5012.73	5028.73
Sn 189.925	489.762	486.268	493.196
Sr 216.596	492.867	496.977	495.234
Ti 334.941	495.315	498.036	499.727
Tl 190.794	490.371	481.818	499.039
V 292.401	499.383	501.820	502.892
Zn 206.200	1003.39	1013.47	1007.60

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	503.535	ppb	4.3331	0.9	15252.0	100.70695
Al 308.215	10022.7	ppb	42.5323	0.4	19831.2	100.22726
As 188.980	491.754	ppb	3.4062	0.7	131.904	98.35086
B 249.678	503.707	ppb	2.3896	0.5	3431.67	100.74133
Ba 389.178	491.884	ppb	2.6777	0.5	3072.16	98.37679
Be 313.042	511.739	ppb	1.9411	0.4	412504	102.34772
Ca 370.602	10021	ppb	54.51	0.5	16782	100.20844
Cd 226.502	499.298	ppb	0.8529	0.2	6428.97	99.85957
Co 228.615	500.085	ppb	3.7362	0.7	1968.43	100.01708
Cr 267.716	496.651	ppb	1.1540	0.2	8322.75	99.33012
Cu 324.754	503.753	ppb	5.8789	1.2	15701.8	100.75066
Fe 271.441	10029.0	ppb	47.8590	0.5	5589.06	100.23972
K 766.491	9741.94	ppb	27.7869	0.3	198240	97.41940
Mg 279.078	10002.1	ppb	43.4656	0.4	13390.6	100.02095
Mn 257.610	498.835	ppb	1.9310	0.4	41430.4	99.76706
Mo 202.032	494.103	ppb	1.5755	0.3	837.688	98.82063
Na 330.237	10246.4	ppb	115.851	1.1	297.975	102.46439
Ni 231.604	502.620	ppb	4.0121	0.8	561.653	100.52402
Pb 220.353	495.549	ppb	12.1320	2.4	187.932	99.10976
Sb 206.834	479.752	ppb	7.6737	1.6	180.047	95.95049
Se 196.026	512.087	ppb	15.9114	3.1	99.3444	102.41748
Si 288.158	5010.16	ppb	19.9751	0.4	24050.3	100.20328
Sn 189.925	489.742	ppb	3.4643	0.7	124.769	97.94842
Sr 216.596	495.026	ppb	2.0630	0.4	1446.13	99.00523
Ti 334.941	497.693	ppb	2.2260	0.4	44149.6	99.53851
Tl 190.794	490.409	ppb	8.6104	1.8	115.883	98.08185
V 292.401	501.365	ppb	1.7986	0.4	5050.46	100.27300
Zn 206.200	1008.16	ppb	5.0651	0.5	556.002	100.81554

Cont Calib Blank (CCB)

4/19/2019, 1:02:17 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4379	0.9056	0.5302
Al 308.215	-3.0250u	-0.6490u	-1.9112u
As 188.980	3.1268	11.4073	-2.2459u
B 249.678	14.1789	12.7028	12.8223
Ba 389.178	-2.3225u	0.4145	-0.2634u
Be 313.042	0.0184	-0.0043u	-0.0403u
Ca 370.602	-6.310u	-5.884u	-2.989u

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Label	Replicates Concentration		
Cd 226.502	-0.0790u	-0.0402u	-0.0240u
Co 228.615	0.8114	0.7310	1.5481
Cr 267.716	0.3802	-0.2997u	-0.1150u
Cu 324.754	0.0416	0.9732	1.3335
Fe 271.441	1.2368	-13.6578u	-25.2380u
K 766.491	0.2516	-0.5842	-1.1237
Mg 279.078	3.2699	5.1824	-3.6585u
Mn 257.610	0.0088	-0.0618u	0.0988
Mo 202.032	1.2594	1.6396	0.7277
Na 330.237	346.344	-37.0210u	-89.3078u
Ni 231.604	1.3857	-3.4874u	1.2285
Pb 220.353	-6.1135u	0.2565	-5.4351u
Sb 206.834	-7.3542u	-3.9007u	-10.0801u
Se 196.026	2.8029	-3.4007u	-6.1774u
Si 288.158	4.7137	5.8571	4.4100
Sn 189.925	3.6146	4.0280	-7.3988u
Sr 216.596	0.5517	-0.2854u	0.3289
Ti 334.941	0.1018	-0.0205u	0.1942
Tl 190.794	-9.0497u	4.4993	-10.1441u
V 292.401	-1.0321u	0.1175	0.8509
Zn 206.200	-1.1729u	0.0179	-0.6337u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.6245	ppb	0.2477	39.7	-21.7531	0.62454
Al 308.215	-1.8617	ppb	1.1888	63.9	203.488	-1.86173
As 188.980	4.0961	ppb	6.8780	167.9	1.7999	4.09608
B 249.678	13.2347	ppb	0.8199	6.2	84.8416	13.23467
Ba 389.178	-0.7238	ppb	1.4254	196.9	-41.1912	-0.72379
Be 313.042	-0.0087	ppb	0.0296	339.2	-333.962	-0.00873
Ca 370.602	-5.061	ppb	1.807	35.7	16.64	-5.06119
Cd 226.502	-0.0477	ppb	0.0283	59.2	3.3290	-0.04774
Co 228.615	1.0302	ppb	0.4503	43.7	-8.2930	1.03018
Cr 267.716	-0.0115	ppb	0.3516	3059.3	13.3635	-0.01149
Cu 324.754	0.7828	ppb	0.6667	85.2	459.809	0.78278
Fe 271.441	-12.5530	ppb	13.2719	105.7	10.3178	-12.55302
K 766.491	-0.4854	ppb	0.6929	142.7	275.521	-0.48544
Mg 279.078	1.5979	ppb	4.6515	291.1	23.8324	1.59792
Mn 257.610	0.0153	ppb	0.0805	526.8	27.8250	0.01528
Mo 202.032	1.2089	ppb	0.4581	37.9	6.0443	1.20889
Na 330.237	73.3383	ppb	237.871	324.3	39.5555	73.33833
Ni 231.604	-0.2911	ppb	2.7692	951.4	-2.0990	-0.29106
Pb 220.353	-3.7640	ppb	3.4984	92.9	-0.5693	-3.76405
Sb 206.834	-7.1117	ppb	3.0968	43.5	3.5147	-7.11170
Se 196.026	-2.2584	ppb	4.5978	203.6	2.2959	-2.25839
Si 288.158	4.9936	ppb	0.7631	15.3	558.869	4.99361
Sn 189.925	0.0812	ppb	6.4812	7978.7	1.0139	0.08123
Sr 216.596	0.1984	ppb	0.4336	218.5	7.7410	0.19840
Ti 334.941	0.0918	ppb	0.1077	117.3	-17.2195	0.09181
Tl 190.794	-4.8982	ppb	8.1568	166.5	-2.5914	-4.89817
V 292.401	-0.0213	ppb	0.9491	4465.4	-13.0535	-0.02126
Zn 206.200	-0.5962	ppb	0.5963	100.0	-0.4344	-0.59623

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0521	0.3838	0.1251
Al 308.215	1134.32	1126.22	1142.27
As 188.980	1.3640	-0.7639u	2.2387
B 249.678	51.1585	50.2173	50.6352
Ba 389.178	79.1341	78.1364	78.0770
Be 313.042	-0.0770u	-0.0849u	-0.1044u
Ca 370.602	38552	38507	38837
Cd 226.502	-0.0853u	0.3549	0.0513
Co 228.615	1.4010	1.0325	-0.0474u
Cr 267.716	-0.2219u	0.6443	0.5389
Cu 324.754	21.9639	21.5160	22.5800
Fe 271.441	477.372	489.713	496.654
K 766.491	3441.25	3441.23	3472.52
Mg 279.078	8546.52	8528.25	8613.55
Mn 257.610	8.4568	8.5409	8.4414
Mo 202.032	0.8264	0.0612	-0.4469u
Na 330.237	39814.4	40239.8	40483.9
Ni 231.604	1.0942	0.0045	-0.8483u
Pb 220.353	4.9621	0.1473	10.6799
Sb 206.834	-11.1505u	-1.1259u	-4.1063u
Se 196.026	-5.0774u	-18.3426u	0.6183
Si 288.158	3206.55	3203.85	3234.41
Sn 189.925	-4.6651u	-7.9703u	-2.0842u
Sr 216.596	301.767	299.517	304.211
Ti 334.941	0.3364	0.2416	0.0796
Tl 190.794	-14.0991u	-16.9417u	-5.8839u
V 292.401	3.0465	3.1761	3.6014
Zn 206.200	29.1900	30.6535	26.4918

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5203	ppb	0.4784	91.9	-25.9898
Al 308.215	1134.27	ppb	8.0282	0.7	2425.98
As 188.980	0.9463	ppb	1.5443	163.2	0.9577
B 249.678	50.6703	ppb	0.4716	0.9	340.585
Ba 389.178	78.4492	ppb	0.5939	0.8	466.208
Be 313.042	-0.0888	ppb	0.0141	15.9	-394.574
Ca 370.602	38632	ppb	179.2	0.5	64613
Cd 226.502	0.1070	ppb	0.2253	210.6	6.0790
Co 228.615	0.7954	ppb	0.7527	94.6	-9.2217
Cr 267.716	0.3204	ppb	0.4726	147.5	19.1939
Cu 324.754	22.0200	ppb	0.5342	2.4	1103.13
Fe 271.441	487.913	ppb	9.7665	2.0	287.353
K 766.491	3451.67	ppb	18.0602	0.5	71336.4
Mg 279.078	8562.77	ppb	44.9115	0.5	11472.5
Mn 257.610	8.4797	ppb	0.0536	0.6	761.726
Mo 202.032	0.1469	ppb	0.6409	436.3	4.2457
Na 330.237	40179.4	ppb	338.838	0.8	1123.13
Ni 231.604	0.0835	ppb	0.9736	1166.7	-1.6782
Pb 220.353	5.2631	ppb	5.2727	100.2	2.8298
Sb 206.834	-5.4609	ppb	5.1477	94.3	4.0884
Se 196.026	-7.6005	ppb	9.7290	128.0	1.2917
Si 288.158	3214.94	ppb	16.9160	0.5	15540.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-4.9066	ppb	2.9505	60.1	-0.2428
Sr 216.596	301.832	ppb	2.3479	0.8	888.305
Ti 334.941	0.2192	ppb	0.1299	59.2	15.8785
Tl 190.794	-12.3083	ppb	5.7423	46.7	-4.3851
V 292.401	3.2747	ppb	0.2903	8.9	20.5369
Zn 206.200	28.7784	ppb	2.1112	7.3	15.7772

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7098u	0.8535	0.4003
Al 308.215	32.2377	32.1425	26.8703
As 188.980	4.2961	0.8017	6.3235
B 249.678	33.2895	31.8831	31.9740
Ba 389.178	78.8813	79.1408	78.6998
Be 313.042	-0.0963u	-0.0914u	-0.1116u
Ca 370.602	37047	36829	37193
Cd 226.502	0.3065	-0.0799u	-0.7938u
Co 228.615	1.3286	0.3829	0.8093
Cr 267.716	0.2317	0.1333	-0.1771u
Cu 324.754	1.3619	1.0161	1.0680
Fe 271.441	-4.3169u	-4.7133u	1.3594
K 766.491	3346.70	3330.14	3357.54
Mg 279.078	8268.53	8230.95	8289.76
Mn 257.610	0.5410	0.5028	0.5184
Mo 202.032	1.8888	0.9750	-1.1187u
Na 330.237	38716.3	39019.5	38698.9
Ni 231.604	0.3903	-0.0772u	0.2606
Pb 220.353	-2.2171u	-1.2840u	-9.1109u
Sb 206.834	1.2550	-12.7738u	7.1676
Se 196.026	-19.5802u	-3.2990u	7.4576
Si 288.158	2962.01	2947.71	2973.48
Sn 189.925	-11.3467u	-0.8362u	-0.2141u
Sr 216.596	299.422	300.584	301.855
Ti 334.941	-0.0738	-0.0060	-0.0263
Tl 190.794	-5.0314u	-6.4343u	-16.3212u
V 292.401	0.0330	1.4137	1.5846
Zn 206.200	3.7297	2.9545	2.0908

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1813	ppb	0.8044	443.6	-36.2106
Al 308.215	30.4168	ppb	3.0717	10.1	266.655
As 188.980	3.8071	ppb	2.7932	73.4	1.7228
B 249.678	32.3822	ppb	0.7871	2.4	215.896
Ba 389.178	78.9073	ppb	0.2216	0.3	468.560
Be 313.042	-0.0998	ppb	0.0105	10.6	-403.700
Ca 370.602	37023	ppb	182.9	0.5	61924
Cd 226.502	-0.1891	ppb	0.5582	295.2	1.5004
Co 228.615	0.8403	ppb	0.4736	56.4	-9.0371
Cr 267.716	0.0626	ppb	0.2133	340.5	14.8217
Cu 324.754	1.1487	ppb	0.1864	16.2	470.874
Fe 271.441	-2.5569	ppb	3.3974	132.9	15.8464
K 766.491	3344.79	ppb	13.8021	0.4	69144.3

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	8263.08	ppb	29.7844	0.4	11072.0
Mn 257.610	0.5207	ppb	0.0192	3.7	100.544
Mo 202.032	0.5817	ppb	1.5418	265.1	4.9855
Na 330.237	38811.5	ppb	180.298	0.5	1086.47
Ni 231.604	0.1912	ppb	0.2414	126.2	-1.5576
Pb 220.353	-4.2040	ppb	4.2750	101.7	-0.7361
Sb 206.834	-1.4504	ppb	10.2423	706.2	5.4783
Se 196.026	-5.1406	ppb	13.6126	264.8	1.7527
Si 288.158	2961.07	ppb	12.9082	0.4	14354.9
Sn 189.925	-4.1323	ppb	6.2556	151.4	-0.0472
Sr 216.596	300.621	ppb	1.2170	0.4	884.709
Ti 334.941	-0.0354	ppb	0.0348	98.5	-7.4657
Tl 190.794	-9.2623	ppb	6.1533	66.4	-3.6364
V 292.401	1.0104	ppb	0.8508	84.2	-2.5611
Zn 206.200	2.9250	ppb	0.8198	28.0	1.5090

680-167499-a-2-b (Samp)

4/19/2019, 1:13:52 PM

Rack 1, Tube 23

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0316u	0.0332	0.7484
Al 308.215	116.741	110.797	112.538
As 188.980	1.8917	-2.0770u	-2.4293u
B 249.678	47.4024	48.4687	48.3837
Ba 389.178	69.5505	68.3902	70.8807
Be 313.042	-0.1097u	-0.1063u	-0.1063u
Ca 370.602	37868	38058	38016
Cd 226.502	-0.0684u	-0.2411u	-0.2891u
Co 228.615	2.7839	-0.0868u	-0.4633u
Cr 267.716	-0.0852u	0.4326	0.0180
Cu 324.754	3.3195	2.5351	2.8327
Fe 271.441	-6.7375u	4.8238	3.1316
K 766.491	3408.42	3419.70	3422.23
Mg 279.078	8566.50	8593.13	8567.94
Mn 257.610	2.0888	1.9365	1.9188
Mo 202.032	0.2023	0.4822	-0.1944u
Na 330.237	40388.2	40361.9	40276.7
Ni 231.604	2.2237	1.8468	1.3711
Pb 220.353	-13.6272u	-6.1840u	-3.9723u
Sb 206.834	-1.1285u	-1.3650u	3.0509
Se 196.026	1.5419	5.1810	7.3456
Si 288.158	2961.21	2962.33	2954.02
Sn 189.925	-5.1793u	-8.9897u	-6.4439u
Sr 216.596	296.818	297.865	301.504
Ti 334.941	-0.0112	-0.3206u	-0.1978
Tl 190.794	5.8825	-2.7933u	-11.2231u
V 292.401	1.8603	1.8206	1.5748
Zn 206.200	1.4506	0.5767	-0.4948u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2710	ppb	0.4134	152.5	-33.4801
Al 308.215	113.359	ppb	3.0561	2.7	428.910
As 188.980	-0.8715	ppb	2.3995	275.3	0.4736
B 249.678	48.0849	ppb	0.5926	1.2	323.380

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	69.6071	ppb	1.2462	1.8	410.440
Be 313.042	-0.1075	ppb	0.0020	1.8	-409.775
Ca 370.602	37981	ppb	99.64	0.3	63525
Cd 226.502	-0.1996	ppb	0.1161	58.2	1.3646
Co 228.615	0.7446	ppb	1.7761	238.5	-9.4118
Cr 267.716	0.1218	ppb	0.2741	225.0	15.8207
Cu 324.754	2.8958	ppb	0.3960	13.7	523.779
Fe 271.441	0.4060	ppb	6.2440	1538.1	17.4838
K 766.491	3416.79	ppb	7.3541	0.2	70601.2
Mg 279.078	8575.86	ppb	14.9749	0.2	11490.2
Mn 257.610	1.9814	ppb	0.0935	4.7	222.808
Mo 202.032	0.1633	ppb	0.3400	208.2	4.2793
Na 330.237	40342.3	ppb	58.2635	0.1	1127.88
Ni 231.604	1.8139	ppb	0.4272	23.6	0.2630
Pb 220.353	-7.9278	ppb	5.0582	63.8	-2.1463
Sb 206.834	0.1858	ppb	2.4840	1337.0	6.0876
Se 196.026	4.6895	ppb	2.9329	62.5	3.6059
Si 288.158	2959.19	ppb	4.5102	0.2	14346.2
Sn 189.925	-6.8710	ppb	1.9408	28.2	-0.7392
Sr 216.596	298.729	ppb	2.4597	0.8	879.192
Ti 334.941	-0.1765	ppb	0.1558	88.2	-19.1749
Tl 190.794	-2.7113	ppb	8.5531	315.5	-2.0669
V 292.401	1.7519	ppb	0.1547	8.8	5.0251
Zn 206.200	0.5108	ppb	0.9744	190.7	0.1767

180-88926-d-1-b (Samp) 4/19/2019, 1:17:44 PM Rack 1, Tube 24
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0401u	0.1455	0.2076
Al 308.215	87.8056	89.6734	89.6008
As 188.980	0.4635	-1.3294u	2.1018
B 249.678	26.1759	26.7299	27.6643
Ba 389.178	22.7684	25.3233	24.3394
Be 313.042	-0.0838u	-0.1001u	-0.0855u
Ca 370.602	1362	1382	1395
Cd 226.502	-0.3308u	-0.2366	-0.2134
Co 228.615	1.3636	0.5920	1.0712
Cr 267.716	-0.0723u	0.4523	0.4283
Cu 324.754	1.3468	1.8161	0.8374
Fe 271.441	2490.25	2496.08	2547.09
K 766.491	198.449	200.704	202.466
Mg 279.078	626.056	632.637	633.850
Mn 257.610	58.1061	58.5174	59.4031
Mo 202.032	0.1098	0.3470	-0.4457u
Na 330.237	20845.5	21633.8	21003.9
Ni 231.604	-1.4450u	2.8999	-0.3887u
Pb 220.353	-1.5796u	3.0128	-6.5443u
Sb 206.834	2.0578	-7.3739u	-7.2967u
Se 196.026	-4.8027u	-1.9821u	-5.5502u
Si 288.158	641.349	646.029	650.767
Sn 189.925	-5.2815u	-3.8850u	-8.3882u
Sr 216.596	49.6596	48.0054	48.7232
Ti 334.941	0.7395	0.9621	0.7792

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-9.4568u	-9.6035u	-10.3753u
V 292.401	-0.1829u	0.2293	1.1333
Zn 206.200	0.0123	2.4876	2.7668

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1043	ppb	0.1288	123.5	-38.0490
Al 308.215	89.0266	ppb	1.0581	1.2	381.351
As 188.980	0.4119	ppb	1.7162	416.6	0.8097
B 249.678	26.8567	ppb	0.7523	2.8	175.515
Ba 389.178	24.1437	ppb	1.2886	5.3	116.919
Be 313.042	-0.0898	ppb	0.0090	10.0	-400.026
Ca 370.602	1380	ppb	16.34	1.2	2328
Cd 226.502	-0.2603	ppb	0.0622	23.9	4.4284
Co 228.615	1.0089	ppb	0.3896	38.6	-8.4162
Cr 267.716	0.2694	ppb	0.2962	109.9	18.4761
Cu 324.754	1.3334	ppb	0.4895	36.7	476.910
Fe 271.441	2511.14	ppb	31.2683	1.2	1407.32
K 766.491	200.540	ppb	2.0135	1.0	4431.31
Mg 279.078	630.848	ppb	4.1936	0.7	864.721
Mn 257.610	58.6755	ppb	0.6628	1.1	4894.53
Mo 202.032	0.0037	ppb	0.4068	11003.0	3.9809
Na 330.237	21161.1	ppb	417.004	2.0	609.370
Ni 231.604	0.3554	ppb	2.2660	637.6	-1.3738
Pb 220.353	-1.7037	ppb	4.7798	280.6	0.1291
Sb 206.834	-4.2043	ppb	5.4233	129.0	4.5499
Se 196.026	-4.1117	ppb	1.8818	45.8	1.9623
Si 288.158	646.048	ppb	4.7091	0.7	3550.54
Sn 189.925	-5.8516	ppb	2.3051	39.4	-0.4835
Sr 216.596	48.7961	ppb	0.8295	1.7	149.904
Ti 334.941	0.8269	ppb	0.1187	14.4	49.1877
Tl 190.794	-9.8119	ppb	0.4934	5.0	-3.8680
V 292.401	0.3932	ppb	0.6732	171.2	-8.6383
Zn 206.200	1.7556	ppb	1.5162	86.4	0.8687

180-88941-d-1-b (Samp) 4/19/2019, 1:21:35 PM Rack 1, Tube 25

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1039u	-0.5286u	0.4209
Al 308.215	46.3344	45.8071	49.8722
As 188.980	2.7790	0.0450	6.5058
B 249.678	9.9884	12.3861	10.6934
Ba 389.178	14.5419	12.9945	8.9197
Be 313.042	-0.1017u	-0.0870u	-0.0761u
Ca 370.602	18885	18992	19156
Cd 226.502	-0.3590u	-0.3062u	0.0391
Co 228.615	-0.4345u	1.8131	1.6582
Cr 267.716	-0.2195u	0.3624	0.6236
Cu 324.754	0.8183	1.2841	1.0241
Fe 271.441	950.326	928.534	953.580
K 766.491	242.202	242.638	245.735
Mg 279.078	8866.84	8900.78	8985.88
Mn 257.610	37.4354	37.6085	37.8843
Mo 202.032	0.7788	1.3610	-0.4364u

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Label	Replicates Concentration		
Na 330.237	9032.49	8658.87	8697.32
Ni 231.604	-0.8394u	1.3037	0.8376
Pb 220.353	3.7041	-1.1750u	-8.3755u
Sb 206.834	-1.2985u	-4.6758u	-6.3892u
Se 196.026	5.7193	-20.8407u	6.1483
Si 288.158	793.842	796.128	805.358
Sn 189.925	-5.2933u	-1.8952u	-13.0647u
Sr 216.596	203.049	204.966	205.213
Ti 334.941	0.1413	0.1297	0.1072
Tl 190.794	1.6611	2.6369	-11.2819u
V 292.401	1.1897	0.2359	0.0710
Zn 206.200	0.8652	1.3035	-0.4929u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0705	ppb	0.4757	674.4	-43.6481
Al 308.215	47.3379	ppb	2.2106	4.7	299.773
As 188.980	3.1099	ppb	3.2431	104.3	1.5341
B 249.678	11.0226	ppb	1.2323	11.2	68.7354
Ba 389.178	12.1521	ppb	2.9042	23.9	50.0201
Be 313.042	-0.0883	ppb	0.0129	14.6	-395.795
Ca 370.602	19011	ppb	136.7	0.7	31809
Cd 226.502	-0.2087	ppb	0.2162	103.6	2.7384
Co 228.615	1.0123	ppb	1.2554	124.0	-8.3810
Cr 267.716	0.2555	ppb	0.4316	168.9	18.0131
Cu 324.754	1.0422	ppb	0.2334	22.4	467.826
Fe 271.441	944.146	ppb	13.6187	1.4	539.895
K 766.491	243.525	ppb	1.9265	0.8	5279.52
Mg 279.078	8917.83	ppb	61.3257	0.7	11947.2
Mn 257.610	37.6427	ppb	0.2264	0.6	3180.95
Mo 202.032	0.5678	ppb	0.9171	161.5	4.9512
Na 330.237	8796.23	ppb	205.508	2.3	275.258
Ni 231.604	0.4339	ppb	1.1271	259.7	-1.2853
Pb 220.353	-1.9488	ppb	6.0769	311.8	0.0881
Sb 206.834	-4.1212	ppb	2.5902	62.9	4.6043
Se 196.026	-2.9910	ppb	15.4597	516.9	2.1652
Si 288.158	798.443	ppb	6.0970	0.8	4262.07
Sn 189.925	-6.7510	ppb	5.7256	84.8	-0.7120
Sr 216.596	204.409	ppb	1.1848	0.6	603.966
Ti 334.941	0.1261	ppb	0.0173	13.8	9.3273
Tl 190.794	-2.3280	ppb	7.7696	333.8	-2.0100
V 292.401	0.4989	ppb	0.6039	121.1	-7.6620
Zn 206.200	0.5586	ppb	0.9366	167.7	0.2050

mb 680-566712/1-a (Samp)

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Rack 1, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7775u	-0.0944u	0.5487
Al 308.215	7.0351	1.5161	2.7657
As 188.980	-1.2382u	7.5278	1.7569
B 249.678	-2.0010u	-1.7550u	-2.8450u
Ba 389.178	-1.5605u	-1.9744u	0.1850
Be 313.042	-0.1065u	-0.0911u	-0.0954u
Ca 370.602	3.139	-0.7256u	9.126

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Label	Replicates Concentration		
Cd 226.502	0.2952	-0.1740u	0.0473
Co 228.615	0.5187	3.2834	0.3529
Cr 267.716	0.0347	0.0788	-0.5082u
Cu 324.754	0.6992	-0.1845u	1.0459
Fe 271.441	-1.3631u	18.0170	13.1174
K 766.491	-1.0110	-0.7831	-1.2218
Mg 279.078	0.7253	-0.7867u	2.9000
Mn 257.610	-0.0015u	-0.0396u	0.0019
Mo 202.032	-0.3292u	0.5478	0.2382
Na 330.237	87.6734	183.197	228.770
Ni 231.604	1.2234	0.4113	0.0852
Pb 220.353	-0.8319u	-0.5208u	-5.3765u
Sb 206.834	-0.4927u	-7.5622u	5.0847
Se 196.026	-18.8735u	-4.6204u	3.0794
Si 288.158	5.4209	7.4032	5.7424
Sn 189.925	-6.6383u	-7.8530u	-0.1653u
Sr 216.596	-1.3343u	-0.7295u	-0.5848u
Ti 334.941	0.0319	0.0649	0.0659
Tl 190.794	-10.5731u	-22.0370u	-5.6587u
V 292.401	0.1730	0.0323	-0.0413u
Zn 206.200	-2.1534u	-1.9687u	-0.6409u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1078	ppb	0.6632	615.4	-43.9909
Al 308.215	3.7723	ppb	2.8939	76.7	214.501
As 188.980	2.6822	ppb	4.4557	166.1	1.4225
B 249.678	-2.2003	ppb	0.5717	26.0	-20.8137
Ba 389.178	-1.1167	ppb	1.1461	102.6	-43.6616
Be 313.042	-0.0977	ppb	0.0079	8.1	-405.633
Ca 370.602	3.847	ppb	4.964	129.0	31.52
Cd 226.502	0.0562	ppb	0.2347	417.9	4.6711
Co 228.615	1.3850	ppb	1.6461	118.9	-6.8780
Cr 267.716	-0.1316	ppb	0.3269	248.5	11.3540
Cu 324.754	0.5202	ppb	0.6344	122.0	451.837
Fe 271.441	9.9238	ppb	10.0771	101.5	22.7698
K 766.491	-1.0053	ppb	0.2194	21.8	288.182
Mg 279.078	0.9462	ppb	1.8533	195.9	22.9601
Mn 257.610	-0.0131	ppb	0.0230	176.1	25.4725
Mo 202.032	0.1523	ppb	0.4448	292.0	4.2610
Na 330.237	166.547	ppb	72.0066	43.2	42.0929
Ni 231.604	0.5733	ppb	0.5861	102.2	-1.1295
Pb 220.353	-2.2431	ppb	2.7181	121.2	0.0066
Sb 206.834	-0.9901	ppb	6.3381	640.2	5.6332
Se 196.026	-6.8048	ppb	11.1383	163.7	1.4388
Si 288.158	6.1888	ppb	1.0639	17.2	564.108
Sn 189.925	-4.8856	ppb	4.1327	84.6	-0.2414
Sr 216.596	-0.8829	ppb	0.3976	45.0	4.5918
Ti 334.941	0.0542	ppb	0.0193	35.7	-20.5514
Tl 190.794	-12.7563	ppb	8.4046	65.9	-4.4732
V 292.401	0.0547	ppb	0.1089	199.2	-12.2051
Zn 206.200	-1.5877	ppb	0.8251	52.0	-0.9814

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

ics 680-566712/2-a (Samp) 4/19/2019, 1:29:14 PM Rack 1, Tube 27

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.5083	55.9496	55.6491
Al 308.215	5279.64	5258.65	5304.21
As 188.980	99.4768	103.627	104.407
B 249.678	210.444	211.222	214.830
Ba 389.178	104.254	105.463	107.122
Be 313.042	55.6275	55.6882	55.9544
Ca 370.602	5270	5285	5303
Cd 226.502	54.5018	54.9276	55.1160
Co 228.615	54.4187	56.0540	55.4244
Cr 267.716	106.756	106.708	107.865
Cu 324.754	108.337	108.738	109.279
Fe 271.441	5311.17	5312.37	5374.33
K 766.491	8001.36	8007.67	8057.02
Mg 279.078	5278.63	5308.72	5306.05
Mn 257.610	434.199	435.177	436.354
Mo 202.032	107.136	107.980	109.524
Na 330.237	5425.15	5320.73	5548.45
Ni 231.604	104.157	105.243	103.684
Pb 220.353	537.541	518.828	531.697
Sb 206.834	49.4660	53.4396	46.5909
Se 196.026	106.042	111.721	108.083
Si 288.158	1.7893	0.6944	5.7243
Sn 189.925	96.1815	107.645	109.587
Sr 216.596	106.302	106.997	106.901
Ti 334.941	423.890	425.536	426.796
Tl 190.794	31.8137	37.0870	41.5943
V 292.401	106.776	106.838	107.617
Zn 206.200	104.277	107.747	108.875

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.7023	ppb	0.2254	0.4	1650.40
Al 308.215	5280.83	ppb	22.8044	0.4	10541.2
As 188.980	102.503	ppb	2.6499	2.6	28.0444
B 249.678	212.165	ppb	2.3404	1.1	1441.02
Ba 389.178	105.613	ppb	1.4400	1.4	635.704
Be 313.042	55.7567	ppb	0.1739	0.3	44651.3
Ca 370.602	5286	ppb	16.04	0.3	8870
Cd 226.502	54.8485	ppb	0.3146	0.6	716.331
Co 228.615	55.2990	ppb	0.8248	1.5	208.904
Cr 267.716	107.110	ppb	0.6548	0.6	1806.55
Cu 324.754	108.785	ppb	0.4726	0.4	3733.30
Fe 271.441	5332.62	ppb	36.1290	0.7	2971.70
K 766.491	8022.02	ppb	30.4771	0.4	165158
Mg 279.078	5297.80	ppb	16.6553	0.3	7101.06
Mn 257.610	435.243	ppb	1.0789	0.2	36137.1
Mo 202.032	108.213	ppb	1.2105	1.1	186.553
Na 330.237	5431.44	ppb	113.993	2.1	179.128
Ni 231.604	104.361	ppb	0.7994	0.8	115.259
Pb 220.353	529.355	ppb	9.5733	1.8	201.056
Sb 206.834	49.8322	ppb	3.4390	6.9	24.2967
Se 196.026	108.616	ppb	2.8766	2.6	23.2598
Si 288.158	2.7360	ppb	2.6452	96.7	591.459

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	104.471	ppb	7.2444	6.9	27.3973
Sr 216.596	106.733	ppb	0.3764	0.4	317.788
Ti 334.941	425.408	ppb	1.4573	0.3	37725.1
Tl 190.794	36.8317	ppb	4.8953	13.3	7.2798
V 292.401	107.077	ppb	0.4684	0.4	1069.85
Zn 206.200	106.966	ppb	2.3962	2.2	58.8774

680-167535-g-7-d (Samp) 4/19/2019, 1:33:04 PM Rack 1, Tube 28

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2689u	0.2588	-0.4443u
Al 308.215	232.627	226.555	237.001
As 188.980	14.4227	7.8587	10.3627
B 249.678	75.9412	76.3351	77.2310
Ba 389.178	-1.5759u	0.1426	1.9739
Be 313.042	-0.0315u	-0.0350u	-0.0417u
Ca 370.602	131.1	130.5	138.5
Cd 226.502	0.0666	-0.6382u	-0.2526u
Co 228.615	2.4913	3.6699	2.5122
Cr 267.716	0.2149	0.4490	0.3859
Cu 324.754	2.8757	2.9228	3.7782
Fe 271.441	271.581	288.014	275.751
K 766.491	372.993	372.977	378.645
Mg 279.078	108.436	112.433	111.760
Mn 257.610	370.666	371.900	375.903
Mo 202.032	31.6408	32.4857	32.6260
Na 330.237	420941x	424359x	425364x
Ni 231.604	-0.6368u	1.2342	1.3756
Pb 220.353	-9.6214u	5.5987	-11.6460u
Sb 206.834	-11.8100u	-7.4436u	0.4637
Se 196.026	-3.2979u	2.6645	-10.9246u
Si 288.158	2537.61	2554.63	2584.62
Sn 189.925	-7.5238u	-8.5501u	-6.7795u
Sr 216.596	-0.9895u	0.1969	0.0613u
Ti 334.941	3.0572	2.8491	3.0202
Tl 190.794	-0.4684u	-14.8156u	-4.2138u
V 292.401	2.3666	1.2825	1.8253
Zn 206.200	2.4823	0.1212	-0.6791u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1515b	ppb	0.3660	241.6	-44.6821
Al 308.215	232.061b	ppb	5.2463	2.3	661.519
As 188.980	10.8814b	ppb	3.3126	30.4	3.6075
B 249.678	76.5024b	ppb	0.6610	0.9	517.611
Ba 389.178	0.1802b	ppb	1.7752	985.2	-35.2315
Be 313.042	-0.0361b	ppb	0.0052	14.3	-377.150
Ca 370.602	133.3b	ppb	4.445	3.3	253.2
Cd 226.502	-0.2747b	ppb	0.3529	128.5	0.1155
Co 228.615	2.8911b	ppb	0.6745	23.3	-1.1872
Cr 267.716	0.3499b	ppb	0.1211	34.6	22.3840
Cu 324.754	3.1923b	ppb	0.5080	15.9	533.350
Fe 271.441	278.449b	ppb	8.5421	3.1	171.485
K 766.491	374.872b	ppb	3.2678	0.9	7996.44

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	110.877b	ppb	2.1400	1.9	166.140
Mn 257.610	372.823b	ppb	2.7378	0.7	30932.2
Mo 202.032	32.2508b	ppb	0.5329	1.7	58.4295
Na 330.237	423555xb	ppb	2318.72	0.5	11484.7
Ni 231.604	0.6577b	ppb	1.1233	170.8	-1.0361
Pb 220.353	-5.2229b	ppb	9.4263	180.5	-1.1201
Sb 206.834	-6.2633b	ppb	6.2214	99.3	3.8238
Se 196.026	-3.8527b	ppb	6.8115	176.8	2.0316
Si 288.158	2558.95b	ppb	23.8000	0.9	12482.9
Sn 189.925	-7.6178b	ppb	0.8890	11.7	-0.8903
Sr 216.596	-0.2438b	ppb	0.6494	266.4	6.1598
Ti 334.941	2.9755b	ppb	0.1110	3.7	229.345
Tl 190.794	-6.4992b	ppb	7.4416	114.5	-2.9135
V 292.401	1.8248b	ppb	0.5421	29.7	2.4392
Zn 206.200	0.6415b	ppb	1.6436	256.2	0.2488

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Rack 1, Tube 29

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0290u	0.1951	1.0981
Al 308.215	48.8786	49.0177	54.9300
As 188.980	6.1626	0.2445	1.7232
B 249.678	16.1843	15.0579	15.0608
Ba 389.178	0.7260	1.3806	-0.7525u
Be 313.042	-0.0826u	-0.0744u	-0.0804u
Ca 370.602	21.80	33.59	26.75
Cd 226.502	-0.1476u	-0.0473u	0.0555
Co 228.615	0.9771	1.4653	1.2597
Cr 267.716	0.1875	-0.6188u	-0.4572u
Cu 324.754	1.5186	1.3044	0.1371
Fe 271.441	68.0534	45.2112	60.7032
K 766.491	57.8560	57.7642	59.1629
Mg 279.078	19.6319	24.3310	19.8370
Mn 257.610	77.6379	77.4610	79.6824
Mo 202.032	6.1811	5.8789	7.2885
Na 330.237	76527.5	76123.9	78652.3
Ni 231.604	-0.9095u	-0.0447u	-3.0475u
Pb 220.353	7.3816	-5.6939u	-5.7665u
Sb 206.834	-9.8490u	1.4079	-11.7959u
Se 196.026	1.6894	-12.3426u	-9.8807u
Si 288.158	531.017	523.665	544.203
Sn 189.925	-5.2635u	-2.9331u	7.7235
Sr 216.596	-1.7971u	-2.1198u	1.4099
Ti 334.941	0.7478	0.5271	0.6980
Tl 190.794	-8.3621u	-3.0308u	2.7782
V 292.401	-0.3348u	0.3649	-0.0346u
Zn 206.200	-1.2292u	-0.3480u	0.3058

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4214	ppb	0.5966	141.6	-27.7881
Al 308.215	50.9421	ppb	3.4543	6.8	306.853
As 188.980	2.7101	ppb	3.0800	113.6	1.4291
B 249.678	15.4343	ppb	0.6495	4.2	99.8338

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.4514	ppb	1.0928	242.1	-33.7467
Be 313.042	-0.0791	ppb	0.0043	5.4	-394.575
Ca 370.602	27.38	ppb	5.923	21.6	71.95
Cd 226.502	-0.0465	ppb	0.1015	218.5	3.3093
Co 228.615	1.2340	ppb	0.2451	19.9	-7.5313
Cr 267.716	-0.2962	ppb	0.4266	144.0	9.1580
Cu 324.754	0.9867	ppb	0.7435	75.4	466.084
Fe 271.441	57.9892	ppb	11.6605	20.1	49.3656
K 766.491	58.2610	ppb	0.7823	1.3	1478.66
Mg 279.078	21.2666	ppb	2.6558	12.5	49.3306
Mn 257.610	78.2604	ppb	1.2346	1.6	6514.08
Mo 202.032	6.4495	ppb	0.7421	11.5	14.8880
Na 330.237	77101.2	ppb	1358.33	1.8	2121.35
Ni 231.604	-1.3339	ppb	1.5457	115.9	-3.2688
Pb 220.353	-1.3596	ppb	7.5702	556.8	0.3417
Sb 206.834	-6.7457	ppb	7.1280	105.7	3.6506
Se 196.026	-6.8446	ppb	7.4925	109.5	1.4390
Si 288.158	532.962	ppb	10.4065	2.0	3023.88
Sn 189.925	-0.1577	ppb	6.9241	4391.3	0.9611
Sr 216.596	-0.8357	ppb	1.9514	233.5	4.6797
Ti 334.941	0.6576	ppb	0.1158	17.6	31.3038
Tl 190.794	-2.8716	ppb	5.5719	194.0	-2.0933
V 292.401	-0.0015	ppb	0.3510	23050.3	-13.4155
Zn 206.200	-0.4238	ppb	0.7703	181.8	-0.3389

680-167535-g-7-d (Samp)

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Rack 1, Tube 30

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.1462	54.2660	54.7444
Al 308.215	5525.83	5509.76	5514.35
As 188.980	113.074	115.411	121.006
B 249.678	274.822	276.879	278.854
Ba 389.178	104.855	102.788	111.114
Be 313.042	53.1902	53.1935	53.2457
Ca 370.602	5187	5188	5201
Cd 226.502	52.4925	52.5037	53.2559
Co 228.615	56.2162	53.8950	54.6551
Cr 267.716	104.122	104.663	104.162
Cu 324.754	107.979	109.392	108.285
Fe 271.441	5406.05	5394.43	5432.58
K 766.491	11095.1	11070.1	11112.3
Mg 279.078	5120.46	5124.09	5123.31
Mn 257.610	884.866	883.082	885.092
Mo 202.032	133.804	131.387	135.804
Na 330.237	426441x	424019x	428868x
Ni 231.604	107.657	104.719	104.807
Pb 220.353	485.499	505.777	522.790
Sb 206.834	48.5381	53.5403	47.6938
Se 196.026	87.7021	92.0752	104.631
Si 288.158	2544.88	2542.34	2544.41
Sn 189.925	100.920	92.7331	100.124
Sr 216.596	101.956	102.608	103.463
Ti 334.941	416.958	417.739	418.625

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Label	Replicates Concentration		
Tl 190.794	39.3315	19.1349	37.2178
V 292.401	105.059	104.611	106.326
Zn 206.200	103.176	105.748	104.330

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.3856b	ppb	0.3165	0.6	1611.24
Al 308.215	5516.65b	ppb	8.2805	0.2	11002.8
As 188.980	116.497b	ppb	4.0760	3.5	31.7781
B 249.678	276.852b	ppb	2.0161	0.7	1883.71
Ba 389.178	106.253b	ppb	4.3354	4.1	639.603
Be 313.042	53.2098b	ppb	0.0311	0.1	42575.7
Ca 370.602	5192b	ppb	7.793	0.2	8719
Cd 226.502	52.7507b	ppb	0.4376	0.8	688.801
Co 228.615	54.9221b	ppb	1.1834	2.2	207.108
Cr 267.716	104.316b	ppb	0.3014	0.3	1762.88
Cu 324.754	108.552b	ppb	0.7432	0.7	3726.69
Fe 271.441	5411.02b	ppb	19.5533	0.4	3015.08
K 766.491	11092.5b	ppb	21.2287	0.2	228387
Mg 279.078	5122.62b	ppb	1.9100	0.0	6862.19
Mn 257.610	884.347b	ppb	1.1009	0.1	73364.8
Mo 202.032	133.665b	ppb	2.2118	1.7	229.507
Na 330.237	426443xb	ppb	2424.41	0.6	11557.7
Ni 231.604	105.727b	ppb	1.6716	1.6	116.792
Pb 220.353	504.689b	ppb	18.6690	3.7	191.730
Sb 206.834	49.9241b	ppb	3.1601	6.3	24.2721
Se 196.026	94.8027b	ppb	8.7877	9.3	20.6986
Si 288.158	2543.88b	ppb	1.3548	0.1	12454.5
Sn 189.925	97.9258b	ppb	4.5146	4.6	25.7845
Sr 216.596	102.676b	ppb	0.7559	0.7	305.693
Ti 334.941	417.774b	ppb	0.8340	0.2	37038.0
Tl 190.794	31.8947b	ppb	11.1008	34.8	6.1838
V 292.401	105.332b	ppb	0.8894	0.8	1049.19
Zn 206.200	104.418b	ppb	1.2883	1.2	57.4728

Cont Calib Verif (CCV) 4/19/2019, 1:44:38 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	498.505	500.094	499.643
Al 308.215	10016.4	9981.77	10000.5
As 188.980	497.338	491.430	495.784
B 249.678	504.150	506.338	510.930
Ba 389.178	497.055	491.742	494.875
Be 313.042	513.682	511.691	513.082
Ca 370.602	9999	9978	10026
Cd 226.502	502.469	500.326	501.312
Co 228.615	501.086	497.636	501.493
Cr 267.716	498.690	495.526	496.731
Cu 324.754	500.376	493.873	500.678
Fe 271.441	10018.4	9978.42	10019.0
K 766.491	9780.09	9745.56	9771.36
Mg 279.078	9988.45	9950.82	9987.56
Mn 257.610	501.033	498.926	500.867
Mo 202.032	494.568	502.915	498.946

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Label	Replicates Concentration		
Na 330.237	10068.7	10416.1	10297.1
Ni 231.604	503.039	497.775	501.913
Pb 220.353	485.810	492.911	485.982
Sb 206.834	474.075	491.956	486.111
Se 196.026	486.964	502.238	508.083
Si 288.158	5013.35	4991.01	5001.97
Sn 189.925	490.672	493.310	499.273
Sr 216.596	496.344	494.315	497.003
Ti 334.941	500.764	498.983	500.649
Tl 190.794	510.557	495.005	493.655
V 292.401	503.213	502.702	501.176
Zn 206.200	1006.23	1005.98	1003.92

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	499.414	ppb	0.8187	0.2	15126.9	99.88284
Al 308.215	9999.55	ppb	17.3259	0.2	19785.9	99.99554
As 188.980	494.851	ppb	3.0629	0.6	132.731	98.97014
B 249.678	507.139	ppb	3.4604	0.7	3455.18	101.42784
Ba 389.178	494.557	ppb	2.6704	0.5	3089.00	98.91142
Be 313.042	512.818	ppb	1.0215	0.2	413375	102.56364
Ca 370.602	10001	ppb	24.30	0.2	16749	100.01212
Cd 226.502	501.369	ppb	1.0725	0.2	6455.53	100.27375
Co 228.615	500.072	ppb	2.1190	0.4	1968.36	100.01436
Cr 267.716	496.982	ppb	1.5967	0.3	8328.30	99.39644
Cu 324.754	498.309	ppb	3.8448	0.8	15536.9	99.66178
Fe 271.441	10005.3	ppb	23.2722	0.2	5575.96	100.00287
K 766.491	9765.67	ppb	17.9526	0.2	198688	97.65670
Mg 279.078	9975.61	ppb	21.4725	0.2	13355.2	99.75610
Mn 257.610	500.275	ppb	1.1716	0.2	41549.9	100.05503
Mo 202.032	498.810	ppb	4.1753	0.8	845.631	99.76194
Na 330.237	10260.6	ppb	176.561	1.7	298.394	102.60621
Ni 231.604	500.909	ppb	2.7722	0.6	559.733	100.18180
Pb 220.353	488.234	ppb	4.0509	0.8	185.162	97.64687
Sb 206.834	484.047	ppb	9.1174	1.9	181.612	96.80946
Se 196.026	499.095	ppb	10.9049	2.2	96.8952	99.81897
Si 288.158	5002.11	ppb	11.1694	0.2	24012.8	100.04213
Sn 189.925	494.418	ppb	4.4064	0.9	125.951	98.88367
Sr 216.596	495.887	ppb	1.4009	0.3	1448.62	99.17741
Ti 334.941	500.132	ppb	0.9967	0.2	44366.0	100.02641
Tl 190.794	499.739	ppb	9.3930	1.9	118.118	99.94785
V 292.401	502.364	ppb	1.0600	0.2	5060.45	100.47272
Zn 206.200	1005.38	ppb	1.2677	0.1	554.469	100.53786

Cont Calib Blank (CCB)

4/19/2019, 1:48:30 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0755u	0.0874	-0.5625u
Al 308.215	8.4066	6.5959	6.4873
As 188.980	1.0131	-1.3841u	0.7753
B 249.678	16.6422	13.7518	10.1255
Ba 389.178	-0.8891u	-1.9411u	-2.5102u
Be 313.042	-0.0058u	0.0039	0.0607
Ca 370.602	-5.462u	-1.765u	-4.249u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.3463u	-0.0134u	-0.1788u
Co 228.615	1.3899	0.4444	-0.2690u
Cr 267.716	-0.2539u	-0.1965u	0.1187
Cu 324.754	1.6208	0.9133	0.4952
Fe 271.441	-14.9198u	-6.5258u	5.5891
K 766.491	-1.1931	-2.1386u	-1.4490
Mg 279.078	-1.9975u	-0.0796u	0.7496
Mn 257.610	-0.0320u	0.0840	0.0951
Mo 202.032	1.4544	0.8900	-0.4881u
Na 330.237	-285.291u	223.588	81.5666
Ni 231.604	1.0539	-0.7661u	-3.1276u
Pb 220.353	4.9135	-1.0496u	0.4347
Sb 206.834	6.3664	1.2234	4.6694
Se 196.026	-16.9688u	2.5271	-0.8714u
Si 288.158	6.5811	4.4673	-0.1712u
Sn 189.925	2.5547	-10.3224u	-9.7942u
Sr 216.596	-0.8693u	0.1040	0.4556
Ti 334.941	0.0179	0.0768	0.0852
Tl 190.794	-7.6974u	-10.5258u	-9.9117u
V 292.401	-0.1127u	0.7031	0.8920
Zn 206.200	0.2871	-2.8076u	2.1255

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1835	ppb	0.3382	184.3	-46.2959	-0.18353
Al 308.215	7.1632	ppb	1.0781	15.1	221.148	7.16325
As 188.980	0.1348	ppb	1.3207	979.9	0.7423	0.13478
B 249.678	13.5065	ppb	3.2653	24.2	86.6952	13.50648
Ba 389.178	-1.7801	ppb	0.8224	46.2	-47.8330	-1.78010
Be 313.042	0.0196	ppb	0.0359	183.1	-310.997	0.01963
Ca 370.602	-3.825	ppb	1.885	49.3	18.70	-3.82530
Cd 226.502	-0.1795	ppb	0.1665	92.7	1.6488	-0.17950
Co 228.615	0.5218	ppb	0.8321	159.5	-10.3001	0.52176
Cr 267.716	-0.1106	ppb	0.2006	181.4	11.7040	-0.11059
Cu 324.754	1.0098	ppb	0.5689	56.3	466.667	1.00978
Fe 271.441	-5.2855	ppb	10.3105	195.1	14.3245	-5.28547
K 766.491	-1.5936	ppb	0.4890	30.7	264.946	-1.59357
Mg 279.078	-0.4425	ppb	1.4091	318.4	21.1011	-0.44252
Mn 257.610	0.0490	ppb	0.0704	143.6	30.6177	0.04903
Mo 202.032	0.6188	ppb	0.9993	161.5	5.0482	0.61878
Na 330.237	6.6212	ppb	262.587	3965.8	37.7500	6.62121
Ni 231.604	-0.9466	ppb	2.0966	221.5	-2.8339	-0.94660
Pb 220.353	1.4329	ppb	3.1043	216.6	1.3987	1.43288
Sb 206.834	4.0864	ppb	2.6206	64.1	7.4333	4.08639
Se 196.026	-5.1044	ppb	10.4145	204.0	1.7594	-5.10439
Si 288.158	3.6258uv	ppb	3.4539	95.3	552.451	3.62577
Sn 189.925	-5.8539	ppb	7.2869	124.5	-0.4861	-5.85394
Sr 216.596	-0.1033	ppb	0.6863	664.7	6.8756	-0.10325
Ti 334.941	0.0600	ppb	0.0366	61.1	-20.0449	0.05997
Tl 190.794	-9.3783	ppb	1.4877	15.9	-3.6645	-9.37830
V 292.401	0.4941	ppb	0.5340	108.1	-7.7434	0.49412
Zn 206.200	-0.1317	ppb	2.4931	1893.5	-0.1780	-0.13167

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167535-g-7-e ms (Samp) 4/19/2019, 1:52:20 PM Rack 1, Tube 31**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	53.5230	53.6651	53.9219
Al 308.215	5778.27	5767.98	5795.00
As 188.980	107.498	125.286	107.353
B 249.678	274.189	273.470	276.143
Ba 389.178	105.413	109.712	108.744
Be 313.042	52.8498	52.7959	53.1767
Ca 370.602	5140	5142	5181
Cd 226.502	52.3019	52.2338	52.4638
Co 228.615	54.5685	54.4988	55.4737
Cr 267.716	102.593	102.163	103.432
Cu 324.754	112.268	112.047	113.158
Fe 271.441	5555.35	5534.39	5577.20
K 766.491	10851.3	10843.8	10911.0
Mg 279.078	5091.18	5060.49	5106.01
Mn 257.610	804.853	804.123	809.479
Mo 202.032	131.446	134.222	132.689
Na 330.237	399944x	402843x	405348x
Ni 231.604	102.505	105.123	100.143
Pb 220.353	491.192	503.872	501.947
Sb 206.834	49.7029	41.4859	47.1534
Se 196.026	84.5502	112.433	105.145
Si 288.158	2815.49	2814.21	2831.76
Sn 189.925	99.6307	99.5632	98.0950
Sr 216.596	99.6140	100.921	99.7276
Ti 334.941	411.683	411.852	414.137
Tl 190.794	43.6344	20.0975	30.6516
V 292.401	105.255	104.655	105.259
Zn 206.200	103.573	109.385	105.003

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.7033b	ppb	0.2022	0.4	1590.35
Al 308.215	5780.42b	ppb	13.6365	0.2	11518.7
As 188.980	113.379b	ppb	10.3120	9.1	30.9453
B 249.678	274.601b	ppb	1.3830	0.5	1868.10
Ba 389.178	107.956b	ppb	2.2553	2.1	650.361
Be 313.042	52.9408b	ppb	0.2060	0.4	42359.9
Ca 370.602	5154b	ppb	23.04	0.4	8654
Cd 226.502	52.3332b	ppb	0.1182	0.2	683.793
Co 228.615	54.8470b	ppb	0.5438	1.0	206.781
Cr 267.716	102.729b	ppb	0.6455	0.6	1736.10
Cu 324.754	112.491b	ppb	0.5883	0.5	3846.02
Fe 271.441	5555.65b	ppb	21.4110	0.4	3095.13
K 766.491	10868.7b	ppb	36.8125	0.3	223801
Mg 279.078	5085.90b	ppb	23.2147	0.5	6813.83
Mn 257.610	806.152b	ppb	2.9046	0.4	66882.7
Mo 202.032	132.786b	ppb	1.3903	1.0	228.020
Na 330.237	402712xb	ppb	2704.33	0.7	10916.4
Ni 231.604	102.590b	ppb	2.4914	2.4	113.272
Pb 220.353	499.004b	ppb	6.8329	1.4	189.567
Sb 206.834	46.1141b	ppb	4.2059	9.1	22.9008
Se 196.026	100.709b	ppb	14.4607	14.4	21.8055
Si 288.158	2820.49b	ppb	9.7872	0.3	13744.7

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	99.0963b	ppb	0.8678	0.9	26.0780
Sr 216.596	100.088b	ppb	0.7242	0.7	298.190
Ti 334.941	412.557b	ppb	1.3702	0.3	36575.7
Tl 190.794	31.4612b	ppb	11.7893	37.5	6.0547
V 292.401	105.056b	ppb	0.3479	0.3	1046.61
Zn 206.200	105.987b	ppb	3.0284	2.9	58.3401

680-167535-g-7-f msd (Samp) 4/19/2019, 1:56:12 PM Rack 1, Tube 32

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.8223	54.7403	54.5033
Al 308.215	5814.24	5813.96	5812.39
As 188.980	112.041	105.816	118.281
B 249.678	281.338	280.211	281.850
Ba 389.178	106.675	108.638	110.537
Be 313.042	53.5498	53.3682	53.4605
Ca 370.602	5200	5186	5214
Cd 226.502	51.7702	52.2146	52.6342
Co 228.615	53.1277	54.0039	56.7484
Cr 267.716	103.800	104.144	104.197
Cu 324.754	113.206	113.169	112.576
Fe 271.441	5584.50	5587.39	5619.15
K 766.491	10965.8	10962.1	10972.3
Mg 279.078	5138.31	5144.94	5157.55
Mn 257.610	811.539	811.900	813.579
Mo 202.032	132.976	135.534	133.518
Na 330.237	402826x	402668x	404563x
Ni 231.604	108.592	106.388	103.936
Pb 220.353	500.230	497.514	510.283
Sb 206.834	54.6221	46.5449	54.6930
Se 196.026	117.780	90.3095	111.801
Si 288.158	2788.68	2790.75	2785.90
Sn 189.925	101.053	98.9890	92.0380
Sr 216.596	102.514	103.665	101.919
Ti 334.941	415.686	415.663	416.328
Tl 190.794	22.8132	39.0402	27.3763
V 292.401	105.482	105.468	104.902
Zn 206.200	104.097	103.592	109.929

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.6886b	ppb	0.1656	0.3	1620.27
Al 308.215	5813.53b	ppb	0.9995	0.0	11583.5
As 188.980	112.046b	ppb	6.2325	5.6	30.5892
B 249.678	281.133b	ppb	0.8385	0.3	1912.80
Ba 389.178	108.617b	ppb	1.9311	1.8	654.573
Be 313.042	53.4595b	ppb	0.0908	0.2	42778.3
Ca 370.602	5200b	ppb	14.23	0.3	8730
Cd 226.502	52.2063b	ppb	0.4320	0.8	682.184
Co 228.615	54.6267b	ppb	1.8890	3.5	205.932
Cr 267.716	104.047b	ppb	0.2155	0.2	1758.15
Cu 324.754	112.984b	ppb	0.3536	0.3	3860.95
Fe 271.441	5597.01b	ppb	19.2271	0.3	3118.03
K 766.491	10966.7b	ppb	5.1662	0.0	225808

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5146.93b	ppb	9.7779	0.2	6895.38
Mn 257.610	812.339b	ppb	1.0891	0.1	67395.9
Mo 202.032	134.009b	ppb	1.3480	1.0	230.085
Na 330.237	403352xb	ppb	1051.41	0.3	10933.6
Ni 231.604	106.305b	ppb	2.3295	2.2	117.440
Pb 220.353	502.676b	ppb	6.7266	1.3	190.957
Sb 206.834	51.9533b	ppb	4.6840	9.0	24.9734
Se 196.026	106.630b	ppb	14.4468	13.5	22.9223
Si 288.158	2788.44b	ppb	2.4360	0.1	13595.4
Sn 189.925	97.3599b	ppb	4.7230	4.9	25.6393
Sr 216.596	102.700b	ppb	0.8875	0.9	305.790
Ti 334.941	415.892b	ppb	0.3774	0.1	36871.6
Tl 190.794	29.7432b	ppb	8.3684	28.1	5.6439
V 292.401	105.284b	ppb	0.3309	0.3	1048.85
Zn 206.200	105.873b	ppb	3.5217	3.3	58.2762

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Rack 1, Tube 33

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.9834u	-1.3277u	-1.5335u
Al 308.215	26320.4	26380.8	26369.6
As 188.980	19.3989	20.4012	28.7789
B 249.678	23.8797u	22.5553u	20.8838u
Ba 389.178	-35.8092	-35.6737	-36.9535
Be 313.042	28.0169	27.9928	28.0302
Ca 370.602	235430	235726	235943
Cd 226.502	2.7388	3.2872	2.9762
Co 228.615	1962.02	1958.34	1981.46
Cr 267.716	-4.5539	-3.8511	-3.1460
Cu 324.754	11.0803	11.2954	12.1417
Fe 271.441	589428	590592	591661
K 766.491	10244.1	10253.3	10261.7
Mg 279.078	106784	107128	107110
Mn 257.610	65490.4x	65496.0x	65858.7x
Mo 202.032	0.6734u	1.1353u	-1.2863u
Na 330.237	11189.8	11406.3	11260.0
Ni 231.604	312.026	313.916	313.445
Pb 220.353	37.6570u	56.6029	51.0724
Sb 206.834	-11.1987	-12.2018	-10.5352
Se 196.026	-29.3565	-5.9099	-15.9712
Si 288.158	14398.5	14434.3	14437.5
Sn 189.925	5.8339	0.0553	5.6031
Sr 216.596	620.703	624.124	622.106
Ti 334.941	-1.9514	-1.9092	-1.9573
Tl 190.794	72.3750	68.1034	69.9879
V 292.401	6.1632	6.1584	5.5373
Zn 206.200	1315.57	1333.94	1335.00

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.6149b	ppb	0.3353	20.8	-78.0336
Al 308.215	26356.9b	ppb	32.1024	0.1	51779.2
As 188.980	22.8597b	ppb	5.1506	22.5	5.2445
B 249.678	22.4396b	ppb	1.5013	6.7	-458.281

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-36.1454b	ppb	0.7031	1.9	108.279
Be 313.042	28.0133b	ppb	0.0190	0.1	22293.3
Ca 370.602	235700b	ppb	257.9	0.1	394086
Cd 226.502	3.0007b	ppb	0.2750	9.2	954.792
Co 228.615	1967.27b	ppb	12.4244	0.6	7768.74
Cr 267.716	-3.8503b	ppb	0.7040	18.3	97.0427
Cu 324.754	11.5058b	ppb	0.5611	4.9	891.013
Fe 271.441	590560b	ppb	1116.78	0.2	326991
K 766.491	10253.0b	ppb	8.8205	0.1	211146
Mg 279.078	107007b	ppb	193.764	0.2	142452
Mn 257.610	65615.1xb	ppb	211.049	0.3	5440087
Mo 202.032	0.1742b	ppb	1.2857	738.3	-2.6324
Na 330.237	11285.4b	ppb	110.425	1.0	304.879
Ni 231.604	313.129b	ppb	0.9838	0.3	347.759
Pb 220.353	48.4441b	ppb	9.7426	20.1	1.9926
Sb 206.834	-11.3119b	ppb	0.8391	7.4	10.9328
Se 196.026	-17.0792b	ppb	11.7625	68.9	8.1161
Si 288.158	14423.4b	ppb	21.6544	0.2	67852.4
Sn 189.925	3.8308b	ppb	3.2717	85.4	1.9623
Sr 216.596	622.311b	ppb	1.7195	0.3	1890.90
Ti 334.941	-1.9393b	ppb	0.0262	1.4	86.0739
Tl 190.794	70.1554b	ppb	2.1407	3.1	3.5439
V 292.401	5.9530b	ppb	0.3599	6.0	84.2949
Zn 206.200	1328.17b	ppb	10.9225	0.8	734.150

680-167561-d-2-b (Samp)

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Rack 1, Tube 34

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2207u	-0.5149u	0.3611
Al 308.215	31.0031	28.0163	31.5363
As 188.980	3.2343	5.1033	5.4289
B 249.678	3.7426	3.3147	4.4986
Ba 389.178	-0.0318u	0.2240	0.1869
Be 313.042	-0.0515u	-0.0395u	-0.0566u
Ca 370.602	71.56	71.25	71.15
Cd 226.502	-0.3599u	-0.1453u	-0.1893u
Co 228.615	1.1295	0.6371	1.0579
Cr 267.716	0.3655	0.5992	0.6572
Cu 324.754	1.2323	0.0794	1.9190
Fe 271.441	16.7354	18.9758	29.6073
K 766.491	7.8716	9.0163	7.7472
Mg 279.078	13.7209	14.9329	8.5661
Mn 257.610	3.7660	3.2516	2.8554
Mo 202.032	0.3856	-0.5169u	-0.5011u
Na 330.237	14945.9	15096.6	14963.3
Ni 231.604	1.2043	0.9915	-1.5544u
Pb 220.353	-9.1946u	-7.3815u	-7.3834u
Sb 206.834	-4.9304u	-10.4785u	1.0868
Se 196.026	17.8183	16.3561	0.5831
Si 288.158	342.524	343.320	342.757
Sn 189.925	-9.7641u	5.2654	3.0582
Sr 216.596	1.6743	1.0273	0.2996
Ti 334.941	-0.0195u	0.1324	0.0526

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-1.8861u	-7.4676u	-10.6288u
V 292.401	-0.3847u	0.9920	0.5814
Zn 206.200	-0.5492u	4.7678	-1.9305u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1248	ppb	0.4458	357.1	-44.5189
Al 308.215	30.1852	ppb	1.8972	6.3	266.171
As 188.980	4.5888	ppb	1.1843	25.8	1.9315
B 249.678	3.8520	ppb	0.5995	15.6	20.5843
Ba 389.178	0.1264	ppb	0.1382	109.4	-35.8243
Be 313.042	-0.0492	ppb	0.0088	17.9	-367.140
Ca 370.602	71.32	ppb	0.2147	0.3	144.3
Cd 226.502	-0.2315	ppb	0.1134	49.0	0.9978
Co 228.615	0.9415	ppb	0.2660	28.3	-8.6324
Cr 267.716	0.5406	ppb	0.1544	28.6	22.6887
Cu 324.754	1.0769	ppb	0.9296	86.3	468.697
Fe 271.441	21.7728	ppb	6.8767	31.6	29.3144
K 766.491	8.2117	ppb	0.6996	8.5	476.986
Mg 279.078	12.4066	ppb	3.3807	27.2	38.2472
Mn 257.610	3.2910	ppb	0.4566	13.9	299.396
Mo 202.032	-0.2108	ppb	0.5166	245.0	3.6479
Na 330.237	15001.9	ppb	82.4528	0.5	443.012
Ni 231.604	0.2138	ppb	1.5350	718.0	-1.5324
Pb 220.353	-7.9865	ppb	1.0462	13.1	-2.1690
Sb 206.834	-4.7740	ppb	5.7842	121.2	4.3066
Se 196.026	11.5858	ppb	9.5567	82.5	4.9061
Si 288.158	342.867	ppb	0.4096	0.1	2135.75
Sn 189.925	-0.4802	ppb	8.1155	1690.2	0.8735
Sr 216.596	1.0004	ppb	0.6877	68.7	10.0974
Ti 334.941	0.0551	ppb	0.0760	137.8	-20.7770
Tl 190.794	-6.6608	ppb	4.4268	66.5	-3.0140
V 292.401	0.3962	ppb	0.7068	178.4	-8.7411
Zn 206.200	0.7627	ppb	3.5366	463.7	0.3156

680-167318-f-2-b (Samp)

4/19/2019, 2:07:47 PM

Rack 1, Tube 35

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0145	0.3376	-0.0529u
Al 308.215	3.9158	-0.0800u	4.6164
As 188.980	-1.0074u	7.8058	0.9582
B 249.678	-0.6976u	-0.7040u	-2.0739u
Ba 389.178	0.6923	2.6941	-0.6336u
Be 313.042	-0.0910u	-0.0890u	-0.0945u
Ca 370.602	8643	8750	8856
Cd 226.502	-0.1444u	-0.3053u	0.2394
Co 228.615	1.8661	0.0571	1.0584
Cr 267.716	-0.0119	-0.4301u	-0.1845u
Cu 324.754	2.7573	2.4863	2.3301
Fe 271.441	5.2760	-0.0790u	11.2236
K 766.491	5359.34	5419.42	5490.48
Mg 279.078	831.265	843.799	847.070
Mn 257.610	0.6823	0.6059	0.7137
Mo 202.032	0.6984	1.2583	0.1800

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	37524.4	37717.2	38164.0
Ni 231.604	-2.3861u	-0.3973u	1.0196
Pb 220.353	-5.5877u	4.3395	-0.0386u
Sb 206.834	1.9454	3.5228	-3.0767u
Se 196.026	-4.5297u	-3.0090u	-10.7952u
Si 288.158	433.878	439.454	444.186
Sn 189.925	-2.9761u	-2.5648u	0.1414
Sr 216.596	12.8435	12.5364	14.5751
Ti 334.941	0.0331	-0.0003	-0.0826u
Tl 190.794	-3.7977u	-15.8660u	-10.4608u
V 292.401	0.4244	0.4331	0.6755
Zn 206.200	3.3811	1.2092	0.1946

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0997	ppb	0.2088	209.4	-37.7396
Al 308.215	2.8174	ppb	2.5335	89.9	212.658
As 188.980	2.5855	ppb	4.6265	178.9	1.3966
B 249.678	-1.1585	ppb	0.7928	68.4	-13.6793
Ba 389.178	0.9176	ppb	1.6753	182.6	-29.9425
Be 313.042	-0.0915	ppb	0.0028	3.1	-401.210
Ca 370.602	8750	ppb	106.4	1.2	14653
Cd 226.502	-0.0701	ppb	0.2798	399.1	2.9928
Co 228.615	0.9939	ppb	0.9062	91.2	-8.4358
Cr 267.716	-0.2089	ppb	0.2102	100.6	10.2748
Cu 324.754	2.5245	ppb	0.2162	8.6	512.563
Fe 271.441	5.4735	ppb	5.6539	103.3	20.2927
K 766.491	5423.08	ppb	65.6452	1.2	111908
Mg 279.078	840.712	ppb	8.3427	1.0	1145.98
Mn 257.610	0.6673	ppb	0.0554	8.3	84.9737
Mo 202.032	0.7122	ppb	0.5393	75.7	5.2059
Na 330.237	37801.9	ppb	328.111	0.9	1059.19
Ni 231.604	-0.5879	ppb	1.7108	291.0	-2.4318
Pb 220.353	-0.4289	ppb	4.9751	1159.9	0.6934
Sb 206.834	0.7971	ppb	3.4463	432.3	6.2821
Se 196.026	-6.1113	ppb	4.1270	67.5	1.5697
Si 288.158	439.173	ppb	5.1599	1.2	2585.16
Sn 189.925	-1.7998	ppb	1.6937	94.1	0.5422
Sr 216.596	13.3183	ppb	1.0992	8.3	46.0391
Ti 334.941	-0.0166	ppb	0.0595	358.7	-25.4559
Tl 190.794	-10.0415	ppb	6.0450	60.2	-3.8233
V 292.401	0.5110	ppb	0.1425	27.9	-7.7232
Zn 206.200	1.5949	ppb	1.6279	102.1	0.7750

mb 680-566774/1-a (Samp)

4/19/2019, 2:11:39 PM

Rack 1, Tube 36

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3812	0.0876	-0.2235u
Al 308.215	4.3303	2.8944	4.5532
As 188.980	11.0962	6.6410	2.5427
B 249.678	-2.8311u	-2.5659u	-1.1344u
Ba 389.178	-3.0967u	0.6482	0.7852
Be 313.042	-0.0919u	-0.0748u	-0.0932u
Ca 370.602	-1.634u	6.574	8.019

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.1252u	-0.0655u	-0.0774u
Co 228.615	1.0643	0.5836	0.7208
Cr 267.716	-0.0540u	0.4480	0.5807
Cu 324.754	1.6931	0.8445	0.3142
Fe 271.441	-0.8304u	7.0802	-0.3530u
K 766.491	4.3695	5.8164	5.3377
Mg 279.078	5.1385	-1.9384u	-3.1789u
Mn 257.610	0.0896	0.1875	0.1253
Mo 202.032	-0.2463u	-0.8245u	-0.0240u
Na 330.237	-60.3727u	596.812	310.222
Ni 231.604	-2.4750u	-1.3883u	-2.0655u
Pb 220.353	9.1847	-1.8053u	-10.1596u
Sb 206.834	-0.3260u	-8.4309u	-5.4048u
Se 196.026	-14.0197u	-5.4344u	0.0470
Si 288.158	10.1696	8.5979	10.4794
Sn 189.925	2.2758	3.3307	3.1606
Sr 216.596	-0.0999u	0.8822	-0.3505u
Ti 334.941	-0.1454u	-0.0830u	-0.1529u
Tl 190.794	-0.8311u	2.6434	-2.6064u
V 292.401	-0.3546u	-0.2676u	0.1862
Zn 206.200	2.1578	3.0287	0.6264

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0818	ppb	0.3024	369.8	-38.2364
Al 308.215	3.9260	ppb	0.9003	22.9	214.791
As 188.980	6.7600	ppb	4.2780	63.3	2.5114
B 249.678	-2.1771	ppb	0.9127	41.9	-20.6551
Ba 389.178	-0.5544	ppb	2.2028	397.3	-40.1340
Be 313.042	-0.0867	ppb	0.0103	11.9	-396.726
Ca 370.602	4.320	ppb	5.206	120.5	32.31
Cd 226.502	-0.0894	ppb	0.0316	35.3	2.8030
Co 228.615	0.7896	ppb	0.2476	31.4	-9.2338
Cr 267.716	0.3249	ppb	0.3348	103.0	18.9910
Cu 324.754	0.9506	ppb	0.6956	73.2	464.864
Fe 271.441	1.9656	ppb	4.4358	225.7	18.3391
K 766.491	5.1745	ppb	0.7372	14.2	389.703
Mg 279.078	0.0071	ppb	4.4870	63522.5	21.7022
Mn 257.610	0.1341	ppb	0.0495	36.9	37.6506
Mo 202.032	-0.3649	ppb	0.4132	113.2	3.3881
Na 330.237	282.221	ppb	329.486	116.7	45.1879
Ni 231.604	-1.9763	ppb	0.5488	27.8	-3.9891
Pb 220.353	-0.9267	ppb	9.7021	1046.9	0.5054
Sb 206.834	-4.7205	ppb	4.0955	86.8	4.3593
Se 196.026	-6.4690	ppb	7.0902	109.6	1.5022
Si 288.158	9.7490	ppb	1.0088	10.3	581.452
Sn 189.925	2.9224	ppb	0.5664	19.4	1.7320
Sr 216.596	0.1439	ppb	0.6515	452.7	7.6046
Ti 334.941	-0.1271	ppb	0.0384	30.2	-36.6571
Tl 190.794	-0.2647	ppb	2.6703	1008.7	-1.4817
V 292.401	-0.1453	ppb	0.2904	199.9	-14.1988
Zn 206.200	1.9376	ppb	1.2162	62.8	0.9639

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ics 680-566774/2-a (Samp) 4/19/2019, 2:15:31 PM Rack 1, Tube 37

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	53.8936	53.6415	53.5414
Al 308.215	5124.48	5111.67	5135.06
As 188.980	102.864	98.5615	93.5121
B 249.678	203.089	205.355	206.526
Ba 389.178	103.015	104.906	104.108
Be 313.042	54.0102	54.1276	54.3549
Ca 370.602	5100	5123	5149
Cd 226.502	52.1412	52.7602	52.2473
Co 228.615	52.2398	51.5871	53.9642
Cr 267.716	103.523	104.095	105.109
Cu 324.754	104.830	106.926	103.848
Fe 271.441	5141.70	5184.59	5190.32
K 766.491	7646.12	7664.59	7693.72
Mg 279.078	5134.99	5135.38	5168.10
Mn 257.610	420.086	421.323	422.842
Mo 202.032	104.213	104.442	104.635
Na 330.237	5376.78	5375.85	5543.54
Ni 231.604	106.275	102.803	102.656
Pb 220.353	516.896	515.162	512.930
Sb 206.834	43.6793	55.9376	45.9397
Se 196.026	86.0473	92.9396	98.8276
Si 288.158	0.9963	3.3616	1.3603
Sn 189.925	98.2360	97.5556	102.252
Sr 216.596	100.814	99.7444	101.643
Ti 334.941	408.558	408.748	410.591
Tl 190.794	38.7619	41.0342	44.5765
V 292.401	103.816	103.581	103.742
Zn 206.200	106.126	100.419	105.463

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.6922	ppb	0.1815	0.3	1589.37
Al 308.215	5123.74	ppb	11.7115	0.2	10233.8
As 188.980	98.3124	ppb	4.6807	4.8	26.9265
B 249.678	204.990	ppb	1.7473	0.9	1392.07
Ba 389.178	104.010	ppb	0.9494	0.9	625.368
Be 313.042	54.1642	ppb	0.1752	0.3	43366.8
Ca 370.602	5124	ppb	24.46	0.5	8598
Cd 226.502	52.3829	ppb	0.3310	0.6	684.448
Co 228.615	52.5971	ppb	1.2281	2.3	198.128
Cr 267.716	104.242	ppb	0.8031	0.8	1758.54
Cu 324.754	105.201	ppb	1.5724	1.5	3624.67
Fe 271.441	5172.20	ppb	26.5724	0.5	2882.78
K 766.491	7668.15	ppb	23.9979	0.3	157869
Mg 279.078	5146.16	ppb	19.0039	0.4	6898.45
Mn 257.610	421.417	ppb	1.3805	0.3	34990.0
Mo 202.032	104.430	ppb	0.2114	0.2	180.170
Na 330.237	5432.06	ppb	96.5484	1.8	179.308
Ni 231.604	103.912	ppb	2.0483	2.0	114.757
Pb 220.353	514.996	ppb	1.9887	0.4	195.626
Sb 206.834	48.5189	ppb	6.5234	13.4	23.8298
Se 196.026	92.6048	ppb	6.3967	6.9	20.2397
Si 288.158	1.9061	ppb	1.2736	66.8	586.272

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	99.3479	ppb	2.5381	2.6	26.1025
Sr 216.596	100.734	ppb	0.9516	0.9	300.307
Ti 334.941	409.299	ppb	1.1234	0.3	36295.7
Tl 190.794	41.4575	ppb	2.9303	7.1	8.3906
V 292.401	103.713	ppb	0.1203	0.1	1035.91
Zn 206.200	104.003	ppb	3.1215	3.0	57.2434

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4608	-0.1050u	0.1219
Al 308.215	23.0843	28.8688	24.6910
As 188.980	-1.2932u	0.7236	4.7755
B 249.678	18.5184	17.0816	17.6222
Ba 389.178	21.4482	20.7766	26.3759
Be 313.042	-0.1522u	-0.1273u	-0.1179u
Ca 370.602	173455	173447	173388
Cd 226.502	-0.1042u	-0.3243u	0.1985
Co 228.615	-0.2826u	-0.2431u	1.4703
Cr 267.716	0.5861	0.6527	1.3529
Cu 324.754	1.3985	0.0875	1.9466
Fe 271.441	38.2071	41.8219	43.5035
K 766.491	3423.24	3415.84	3416.83
Mg 279.078	12090.5	12111.6	12074.4
Mn 257.610	2.9395	2.9667	2.9700
Mo 202.032	0.3948	-0.3923u	-0.8326u
Na 330.237	64226.6	64320.8	64468.8
Ni 231.604	1.4875	-0.1826u	-1.4663u
Pb 220.353	-4.3142u	10.7071	-9.0371u
Sb 206.834	5.4935	-5.3509u	4.2385
Se 196.026	-5.6853u	-8.8391u	-9.2917u
Si 288.158	7146.90	7138.84	7123.42
Sn 189.925	-8.7399u	-4.0692u	-6.1100u
Sr 216.596	546.529	546.650	545.000
Ti 334.941	1.0338	1.1179	0.9096
Tl 190.794	-3.8779u	-11.8306u	-22.3738u
V 292.401	-0.6661u	-0.5554u	0.0046u
Zn 206.200	3.3100	1.1923	1.8467

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1592	ppb	0.2848	178.8	-37.7649
Al 308.215	25.5480	ppb	2.9860	11.7	257.093
As 188.980	1.4020	ppb	3.0907	220.4	1.0805
B 249.678	17.7407	ppb	0.7257	4.1	115.637
Ba 389.178	22.8669	ppb	3.0574	13.4	120.467
Be 313.042	-0.1325	ppb	0.0177	13.4	-410.765
Ca 370.602	173430	ppb	36.67	0.0	289982
Cd 226.502	-0.0767	ppb	0.2625	342.4	2.9762
Co 228.615	0.3149	ppb	1.0008	317.9	-11.1040
Cr 267.716	0.8639	ppb	0.4248	49.2	28.3790
Cu 324.754	1.1442	ppb	0.9553	83.5	470.742
Fe 271.441	41.1775	ppb	2.7064	6.6	40.0330
K 766.491	3418.64	ppb	4.0156	0.1	70678.5

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	12092.2	ppb	18.6697	0.2	16192.6
Mn 257.610	2.9587	ppb	0.0167	0.6	317.513
Mo 202.032	-0.2767	ppb	0.6218	224.7	3.5365
Na 330.237	64338.7	ppb	122.115	0.2	1776.38
Ni 231.604	-0.0538	ppb	1.4811	2754.1	-1.8320
Pb 220.353	-0.8814	ppb	10.3100	1169.7	0.5209
Sb 206.834	1.4604	ppb	5.9320	406.2	6.4839
Se 196.026	-7.9387	ppb	1.9646	24.7	1.2256
Si 288.158	7136.39	ppb	11.9298	0.2	33841.7
Sn 189.925	-6.3064	ppb	2.3415	37.1	-0.5942
Sr 216.596	546.060	ppb	0.9197	0.2	1601.19
Ti 334.941	1.0204	ppb	0.1048	10.3	95.7610
Tl 190.794	-12.6941	ppb	9.2781	73.1	-4.4599
V 292.401	-0.4056	ppb	0.3596	88.6	-16.9852
Zn 206.200	2.1163	ppb	1.0843	51.2	1.0625

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Rack 1, Tube 39

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3349	-0.0759u	-0.0728u
Al 308.215	6.0778	6.1839	6.9578
As 188.980	-1.1940u	0.8393	3.1515
B 249.678	1.9822	1.6731	0.7802
Ba 389.178	5.5230	3.0078	4.3860
Be 313.042	-0.1004u	-0.1052u	-0.0881u
Ca 370.602	34787	34899	34915
Cd 226.502	-0.3856u	-0.1690u	-0.0182u
Co 228.615	1.5700	0.3718	1.5957
Cr 267.716	0.1582	0.1257	0.1112
Cu 324.754	1.2388	0.2215	0.8642
Fe 271.441	3.4880	8.5130	13.9869
K 766.491	670.661	671.602	667.379
Mg 279.078	2448.00	2451.87	2454.75
Mn 257.610	0.8111	0.9324	0.7382
Mo 202.032	-0.8460u	0.6157	-0.5069u
Na 330.237	12153.2	12165.5	11925.8
Ni 231.604	-1.4300u	1.0088	0.0628
Pb 220.353	-4.5179u	1.3044	-4.1669u
Sb 206.834	4.7549	-10.8445u	-5.4389u
Se 196.026	-1.2533u	-1.1192u	-0.0939u
Si 288.158	1438.79	1436.68	1441.83
Sn 189.925	-13.7358u	-1.7837u	3.7539
Sr 216.596	110.686	112.145	111.463
Ti 334.941	0.1041	0.1594	0.1454
Tl 190.794	-4.3014u	-3.9302u	-10.3907u
V 292.401	0.1325	0.9167	-0.1603u
Zn 206.200	1.0575	1.6834	2.6388

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0621	ppb	0.2363	380.6	-39.2104
Al 308.215	6.4065	ppb	0.4804	7.5	219.663
As 188.980	0.9323	ppb	2.1742	233.2	0.9552
B 249.678	1.4785	ppb	0.6242	42.2	4.3651

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	4.3056	ppb	1.2595	29.3	-6.8708
Be 313.042	-0.0979	ppb	0.0088	9.0	-401.156
Ca 370.602	34867	ppb	69.85	0.2	58319
Cd 226.502	-0.1909	ppb	0.1847	96.7	1.4937
Co 228.615	1.1792	ppb	0.6993	59.3	-7.6921
Cr 267.716	0.1317	ppb	0.0241	18.3	15.8277
Cu 324.754	0.7748	ppb	0.5145	66.4	459.550
Fe 271.441	8.6626	ppb	5.2511	60.6	22.0672
K 766.491	669.881	ppb	2.2170	0.3	14079.2
Mg 279.078	2451.54	ppb	3.3845	0.1	3300.15
Mn 257.610	0.8272	ppb	0.0981	11.9	104.380
Mo 202.032	-0.2457	ppb	0.7651	311.3	3.5892
Na 330.237	12081.5	ppb	134.988	1.1	364.079
Ni 231.604	-0.1194	ppb	1.2296	1029.4	-1.9065
Pb 220.353	-2.4601	ppb	3.2649	132.7	-0.0756
Sb 206.834	-3.8428	ppb	7.9212	206.1	4.6551
Se 196.026	-0.8222	ppb	0.6342	77.1	2.5667
Si 288.158	1439.10	ppb	2.5925	0.2	7251.80
Sn 189.925	-3.9219	ppb	8.9388	227.9	0.0033
Sr 216.596	111.431	ppb	0.7299	0.7	332.449
Ti 334.941	0.1363	ppb	0.0288	21.1	-7.0505
Tl 190.794	-6.2075	ppb	3.6276	58.4	-2.9047
V 292.401	0.2963	ppb	0.5569	187.9	-9.7772
Zn 206.200	1.7932	ppb	0.7964	44.4	0.8842

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Rack 1, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	58.7878	59.6860	58.7260
Al 308.215	5618.25	5629.16	5607.86
As 188.980	112.952	120.154	114.793
B 249.678	235.750	236.855	236.108
Ba 389.178	136.943	139.685	141.739
Be 313.042	57.5798	57.5031	57.3490
Ca 370.602	187320	187191	187038
Cd 226.502	55.3815	55.9116	55.6227
Co 228.615	55.3419	57.8017	53.2740
Cr 267.716	111.663	111.332	111.507
Cu 324.754	114.729	113.652	114.345
Fe 271.441	5551.27	5575.50	5525.92
K 766.491	13095.1	13062.5	13046.5
Mg 279.078	18178.0	18171.4	18148.3
Mn 257.610	554.383	553.960	553.040
Mo 202.032	112.580	109.631	111.297
Na 330.237	73933.1	73824.7	73724.0
Ni 231.604	108.311	109.678	108.699
Pb 220.353	547.520	550.517	546.395
Sb 206.834	55.8363	49.1269	54.1425
Se 196.026	108.455	99.6599	129.808
Si 288.158	7554.86	7552.22	7543.68
Sn 189.925	104.638	108.287	100.542
Sr 216.596	680.644	682.055	684.253
Ti 334.941	441.067	441.284	440.499

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Label	Replicates Concentration		
Tl 190.794	43.3611	37.3583	38.6095
V 292.401	110.514	111.509	110.620
Zn 206.200	108.646	111.225	113.182

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	59.0666	ppb	0.5373	0.9	1750.78
Al 308.215	5618.42	ppb	10.6497	0.2	11201.8
As 188.980	115.966	ppb	3.7418	3.2	31.6380
B 249.678	236.238	ppb	0.5635	0.2	1605.58
Ba 389.178	139.456	ppb	2.4061	1.7	862.740
Be 313.042	57.4773	ppb	0.1176	0.2	46063.2
Ca 370.602	187183	ppb	141.4	0.1	312985
Cd 226.502	55.6386	ppb	0.2654	0.5	726.741
Co 228.615	55.4726	ppb	2.2667	4.1	209.684
Cr 267.716	111.500	ppb	0.1657	0.1	1880.59
Cu 324.754	114.242	ppb	0.5463	0.5	3898.68
Fe 271.441	5550.90	ppb	24.7946	0.4	3092.57
K 766.491	13068.0	ppb	24.7638	0.2	269007
Mg 279.078	18165.9	ppb	15.6078	0.1	24308.5
Mn 257.610	553.794	ppb	0.6869	0.1	46013.6
Mo 202.032	111.169	ppb	1.4786	1.3	191.538
Na 330.237	73827.3	ppb	104.543	0.1	2027.42
Ni 231.604	108.896	ppb	0.7042	0.6	120.345
Pb 220.353	548.144	ppb	2.1311	0.4	208.165
Sb 206.834	53.0352	ppb	3.4890	6.6	25.4473
Se 196.026	112.641	ppb	15.5040	13.8	24.0307
Si 288.158	7550.25	ppb	5.8438	0.1	35818.8
Sn 189.925	104.489	ppb	3.8745	3.7	27.4086
Sr 216.596	682.317	ppb	1.8189	0.3	1997.95
Ti 334.941	440.950	ppb	0.4057	0.1	39136.3
Tl 190.794	39.7763	ppb	3.1669	8.0	8.0017
V 292.401	110.881	ppb	0.5467	0.5	1108.17
Zn 206.200	111.018	ppb	2.2750	2.0	61.1111

Cont Calib Verif (CCV) 4/19/2019, 2:30:53 PM Rack S, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	504.164	498.193	500.444
Al 308.215	9999.80	9990.81	10060.4
As 188.980	482.895	496.095	501.781
B 249.678	502.731	506.069	511.078
Ba 389.178	490.291	490.732	493.918
Be 313.042	511.444	510.697	513.863
Ca 370.602	10029	10036	10084
Cd 226.502	497.294	497.697	500.662
Co 228.615	498.661	497.562	499.267
Cr 267.716	492.709	494.043	496.467
Cu 324.754	500.802	492.994	499.890
Fe 271.441	10050.1	10042.4	10067.4
K 766.491	9729.54	9703.98	9758.18
Mg 279.078	10004.1	9975.81	10046.6
Mn 257.610	499.026	497.900	500.832
Mo 202.032	495.993	492.922	496.463

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Label	Replicates Concentration		
Na 330.237	10390.3	10292.0	10312.2
Ni 231.604	499.150	502.993	504.463
Pb 220.353	502.821	500.208	486.696
Sb 206.834	485.836	485.374	488.376
Se 196.026	514.510	511.258	493.636
Si 288.158	5023.63	4996.25	5027.30
Sn 189.925	496.868	504.989	506.922
Sr 216.596	493.091	492.503	495.913
Ti 334.941	495.388	495.539	498.878
Tl 190.794	496.101	479.832	495.897
V 292.401	498.608	499.544	502.576
Zn 206.200	1006.42	1000.33	1011.10

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	500.934	ppb	3.0157	0.6	15173.0	100.18671
Al 308.215	10017.0	ppb	37.8503	0.4	19820.0	100.17001
As 188.980	493.591	ppb	9.6887	2.0	132.394	98.71811
B 249.678	506.626	ppb	4.2016	0.8	3451.66	101.32519
Ba 389.178	491.647	ppb	1.9789	0.4	3070.70	98.32940
Be 313.042	512.001	ppb	1.6553	0.3	412716	102.40028
Ca 370.602	10050	ppb	29.87	0.3	16831	100.49842
Cd 226.502	498.551	ppb	1.8393	0.4	6419.38	99.71021
Co 228.615	498.497	ppb	0.8647	0.2	1962.12	99.69934
Cr 267.716	494.406	ppb	1.9050	0.4	8285.21	98.88129
Cu 324.754	497.895	ppb	4.2691	0.9	15524.4	99.57903
Fe 271.441	10053.3	ppb	12.7871	0.1	5602.49	100.48298
K 766.491	9730.57	ppb	27.1151	0.3	198016	97.30567
Mg 279.078	10008.9	ppb	35.6504	0.4	13399.7	100.08852
Mn 257.610	499.253	ppb	1.4790	0.3	41465.1	99.85051
Mo 202.032	495.126	ppb	1.9231	0.4	839.413	99.02513
Na 330.237	10331.5	ppb	51.9235	0.5	300.288	103.31500
Ni 231.604	502.202	ppb	2.7435	0.5	561.185	100.44040
Pb 220.353	496.575	ppb	8.6543	1.7	188.321	99.31501
Sb 206.834	486.529	ppb	1.6166	0.3	182.417	97.30578
Se 196.026	506.468	ppb	11.2313	2.2	98.2851	101.29361
Si 288.158	5015.73	ppb	16.9660	0.3	24077.4	100.31460
Sn 189.925	502.926	ppb	5.3352	1.1	128.101	100.58526
Sr 216.596	493.836	ppb	1.8229	0.4	1442.64	98.76711
Ti 334.941	496.602	ppb	1.9725	0.4	44052.8	99.32030
Tl 190.794	490.610	ppb	9.3347	1.9	115.931	98.12202
V 292.401	500.243	ppb	2.0743	0.4	5038.95	100.04851
Zn 206.200	1005.95	ppb	5.3994	0.5	554.784	100.59492

Cont Calib Blank (CCB)

4/19/2019, 2:34:45 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1363	-0.7600u	-0.1578u
Al 308.215	3.1872	2.9752	1.3104
As 188.980	12.6044	0.5322	-2.5031u
B 249.678	16.1706	13.3721	11.0503
Ba 389.178	-2.2790u	0.5639	1.0584
Be 313.042	0.0063	-0.0174u	0.0170
Ca 370.602	4.992	-7.522u	-5.486u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.2443u	-0.2119u	0.2772
Co 228.615	0.6977	0.1296	0.0955
Cr 267.716	0.3206	-0.1317u	-0.0941u
Cu 324.754	1.4620	0.1676	1.4473
Fe 271.441	1.8070	-9.0848u	-1.8425u
K 766.491	-1.5460	-2.0129u	-1.7355
Mg 279.078	4.0159	7.5925	0.8926
Mn 257.610	0.1426	0.1403	0.0689
Mo 202.032	0.1206	0.4808	1.5945
Na 330.237	178.695	236.340	67.7986
Ni 231.604	-1.2734u	-0.3561u	-3.6001u
Pb 220.353	0.2991	-3.2629u	-8.2849u
Sb 206.834	-0.5595u	-1.6966u	8.1999
Se 196.026	-14.5032u	-2.1614u	-1.6333u
Si 288.158	7.2861	7.7533	3.7785
Sn 189.925	-10.2799u	-6.0297u	-5.2509u
Sr 216.596	-1.0586u	-1.6282u	-0.5934u
Ti 334.941	0.2359	-0.0022u	0.2419
Tl 190.794	-3.1407u	-9.5813u	-3.5892u
V 292.401	0.3756	0.0591	-0.1557u
Zn 206.200	-2.1411u	-3.1543u	4.0230

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2605	ppb	0.4569	175.4	-48.6333	-0.26053
Al 308.215	2.4909	ppb	1.0279	41.3	211.996	2.49093
As 188.980	3.5445	ppb	7.9915	225.5	1.6527	3.54451
B 249.678	13.5310	ppb	2.5639	18.9	86.8713	13.53102
Ba 389.178	-0.2189	ppb	1.8012	822.8	-38.0180	-0.21890
Be 313.042	0.0019	ppb	0.0176	901.4	-325.265	0.00195
Ca 370.602	-2.672	ppb	6.715	251.3	20.64	-2.67193
Cd 226.502	-0.0597	ppb	0.2922	489.6	3.1743	-0.05968
Co 228.615	0.3076	ppb	0.3383	110.0	-11.1474	0.30757
Cr 267.716	0.0316	ppb	0.2510	794.9	14.0829	0.03157
Cu 324.754	1.0257	ppb	0.7431	72.5	467.148	1.02567
Fe 271.441	-3.0401	ppb	5.5438	182.4	15.5584	-3.04009
K 766.491	-1.7648	ppb	0.2348	13.3	257.875	-1.76482
Mg 279.078	4.1670	ppb	3.3525	80.5	27.2656	4.16701
Mn 257.610	0.1173	ppb	0.0419	35.7	36.2816	0.11725
Mo 202.032	0.7320	ppb	0.7684	105.0	5.2394	0.73196
Na 330.237	160.944	ppb	85.6612	53.2	41.9189	160.94440
Ni 231.604	-1.7432	ppb	1.6723	95.9	-3.7274	-1.74321
Pb 220.353	-3.7496	ppb	4.3126	115.0	-0.5635	-3.74960
Sb 206.834	1.9813	ppb	5.4154	273.3	6.6982	1.98127
Se 196.026	-6.0993	ppb	7.2828	119.4	1.5718	-6.09928
Si 288.158	6.2726	ppb	2.1726	34.6	564.976	6.27262
Sn 189.925	-7.1868	ppb	2.7068	37.7	-0.8230	-7.18681
Sr 216.596	-1.0934	ppb	0.5183	47.4	3.9824	-1.09337
Ti 334.941	0.1585	ppb	0.1392	87.8	-11.2962	0.15853
Tl 190.794	-5.4371	ppb	3.5960	66.1	-2.7204	-5.43706
V 292.401	0.0930	ppb	0.2673	287.3	-11.8187	0.09302
Zn 206.200	-0.4242	ppb	3.8845	915.8	-0.3394	-0.42415

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680-167491-a-7-e ms (Samp) 4/19/2019, 2:38:36 PM Rack 1, Tube 41**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	53.6556	53.9698	55.0914
Al 308.215	5244.73	5223.18	5254.94
As 188.980	105.610	103.714	90.7950
B 249.678	219.056	220.820	222.435
Ba 389.178	128.482	128.452	126.690
Be 313.042	53.0682	53.0511	53.2666
Ca 370.602	173865	173898	174089
Cd 226.502	50.6817	51.3601	50.8836
Co 228.615	50.2700	51.3805	51.7724
Cr 267.716	105.421	104.546	104.973
Cu 324.754	105.961	106.452	105.884
Fe 271.441	5251.08	5257.45	5253.54
K 766.491	11973.3	11974.3	12002.0
Mg 279.078	16817.8	16843.2	16883.2
Mn 257.610	419.410	418.504	419.582
Mo 202.032	102.151	100.693	100.988
Na 330.237	68132.9	68547.3	68258.1
Ni 231.604	99.6189	98.2286	97.4651
Pb 220.353	511.128	492.579	498.305
Sb 206.834	53.0555	59.2480	50.5044
Se 196.026	107.526	107.927	104.951
Si 288.158	7090.00	7077.34	7078.17
Sn 189.925	103.755	95.4894	96.8332
Sr 216.596	633.420	635.877	635.627
Ti 334.941	407.872	407.076	407.921
Tl 190.794	33.7427	28.0008	32.4912
V 292.401	100.915	101.591	101.239
Zn 206.200	102.182	106.763	104.760

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.2389	ppb	0.7548	1.4	1604.16
Al 308.215	5240.95	ppb	16.2119	0.3	10463.0
As 188.980	100.040	ppb	8.0620	8.1	27.3878
B 249.678	220.770	ppb	1.6901	0.8	1500.01
Ba 389.178	127.874	ppb	1.0260	0.8	788.331
Be 313.042	53.1286	ppb	0.1198	0.2	42553.6
Ca 370.602	173951	ppb	120.5	0.1	290859
Cd 226.502	50.9751	ppb	0.3484	0.7	666.417
Co 228.615	51.1410	ppb	0.7793	1.5	192.374
Cr 267.716	104.980	ppb	0.4378	0.4	1771.25
Cu 324.754	106.099	ppb	0.3081	0.3	3651.84
Fe 271.441	5254.02	ppb	3.2120	0.1	2928.03
K 766.491	11983.2	ppb	16.3145	0.1	246721
Mg 279.078	16848.1	ppb	32.9384	0.2	22547.5
Mn 257.610	419.165	ppb	0.5794	0.1	34847.5
Mo 202.032	101.277	ppb	0.7706	0.8	174.849
Na 330.237	68312.8	ppb	212.528	0.3	1878.77
Ni 231.604	98.4375	ppb	1.0920	1.1	108.616
Pb 220.353	500.670	ppb	9.4980	1.9	190.200
Sb 206.834	54.2693	ppb	4.4964	8.3	25.7965
Se 196.026	106.801	ppb	1.6153	1.5	22.9160
Si 288.158	7081.84	ppb	7.0815	0.1	33628.7

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	98.6926	ppb	4.4355	4.5	25.9431
Sr 216.596	634.975	ppb	1.3520	0.2	1859.87
Ti 334.941	407.623	ppb	0.4743	0.1	36176.6
Tl 190.794	31.4116	ppb	3.0193	9.6	5.9813
V 292.401	101.248	ppb	0.3378	0.3	1010.89
Zn 206.200	104.569	ppb	2.2966	2.2	57.5552

680-167491-a-7-f msd (Samp) 4/19/2019, 2:42:26 PM Rack 1, Tube 42

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	57.3531	57.7580	58.2465
Al 308.215	5268.42	5280.27	5255.56
As 188.980	106.064	98.4448	104.483
B 249.678	227.166	229.113	227.640
Ba 389.178	128.876	129.938	128.457
Be 313.042	53.8896	54.0417	53.8664
Ca 370.602	177152	177432	176881
Cd 226.502	52.7038	52.0007	51.9753
Co 228.615	52.1625	50.7554	51.8566
Cr 267.716	104.598	105.504	104.015
Cu 324.754	106.475	106.508	105.806
Fe 271.441	5229.31	5221.68	5184.86
K 766.491	12174.5	12202.4	12182.5
Mg 279.078	17154.2	17214.1	17118.3
Mn 257.610	421.380	421.355	421.011
Mo 202.032	101.388	103.057	101.120
Na 330.237	69562.8	69808.4	69237.1
Ni 231.604	105.079	100.950	100.327
Pb 220.353	538.921	525.352	508.211
Sb 206.834	54.8363	50.0129	48.8292
Se 196.026	104.103	115.813	118.864
Si 288.158	7142.88	7145.20	7130.89
Sn 189.925	100.144	90.8849	103.030
Sr 216.596	641.616	645.101	644.280
Ti 334.941	411.162	411.001	410.535
Tl 190.794	45.2880	32.9980	40.9798
V 292.401	102.386	102.402	101.872
Zn 206.200	106.984	106.814	107.557

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	57.7859	ppb	0.4474	0.8	1711.86
Al 308.215	5268.08	ppb	12.3587	0.2	10516.1
As 188.980	102.997	ppb	4.0210	3.9	28.1774
B 249.678	227.973	ppb	1.0153	0.4	1549.35
Ba 389.178	129.091	ppb	0.7633	0.6	796.314
Be 313.042	53.9325	ppb	0.0952	0.2	43202.6
Ca 370.602	177155	ppb	275.3	0.2	296217
Cd 226.502	52.2266	ppb	0.4135	0.8	682.427
Co 228.615	51.5915	ppb	0.7401	1.4	194.170
Cr 267.716	104.706	ppb	0.7504	0.7	1766.67
Cu 324.754	106.263	ppb	0.3964	0.4	3656.81
Fe 271.441	5211.95	ppb	23.7720	0.5	2904.75
K 766.491	12186.5	ppb	14.3496	0.1	250877

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	17162.2	ppb	48.4186	0.3	22967.6
Mn 257.610	421.249	ppb	0.2062	0.0	35021.5
Mo 202.032	101.855	ppb	1.0495	1.0	175.823
Na 330.237	69536.1	ppb	286.620	0.4	1911.77
Ni 231.604	102.118	ppb	2.5824	2.5	112.746
Pb 220.353	524.161	ppb	15.3896	2.9	199.096
Sb 206.834	51.2261	ppb	3.1820	6.2	24.7618
Se 196.026	112.927	ppb	7.7926	6.9	24.0707
Si 288.158	7139.66	ppb	7.6827	0.1	33899.3
Sn 189.925	98.0196	ppb	6.3452	6.5	25.7731
Sr 216.596	643.666	ppb	1.8220	0.3	1885.21
Ti 334.941	410.899	ppb	0.3254	0.1	36468.1
Tl 190.794	39.7553	ppb	6.2358	15.7	7.9816
V 292.401	102.220	ppb	0.3014	0.3	1020.69
Zn 206.200	107.118	ppb	0.3889	0.4	58.9627

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Rack 1, Tube 43

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0505	-1.3307u	-0.1878u
Al 308.215	14.8837	9.4169	7.5613
As 188.980	6.3456	20.7540	22.0554
B 249.678	10.5539	8.6442	8.6316
Ba 389.178	29.8296	29.6897	28.3058
Be 313.042	-0.1076u	-0.0993u	-0.0955u
Ca 370.602	34870	34465	34872
Cd 226.502	0.3249	0.9143	0.5045
Co 228.615	2.9910	1.6040	3.6769
Cr 267.716	0.0418	-0.2924u	-0.1490u
Cu 324.754	0.7109	2.3020	1.3849
Fe 271.441	5652.74	5593.45	5681.25
K 766.491	2193.80	2181.08	2197.68
Mg 279.078	1982.49	1956.65	1979.43
Mn 257.610	163.112	161.645	163.156
Mo 202.032	-0.9914u	0.4421	0.1189
Na 330.237	14494.3	14159.2	14419.6
Ni 231.604	2.0721	1.1622	0.4975
Pb 220.353	-5.3897u	-4.0123u	-3.5314u
Sb 206.834	5.9557	-6.7981u	7.1593
Se 196.026	13.8537	6.4433	-5.7395u
Si 288.158	5210.23	5174.59	5216.59
Sn 189.925	-1.3156u	7.4658	1.9752
Sr 216.596	103.905	101.321	102.327
Ti 334.941	0.2942	0.2287	0.2988
Tl 190.794	-17.0722u	-5.1051u	5.2900
V 292.401	0.0680	0.0657	0.5368
Zn 206.200	15.6425	12.9923	11.1866

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1560	ppb	1.1909	763.4	-46.5273
Al 308.215	10.6206	ppb	3.8067	35.8	228.074
As 188.980	16.3850	ppb	8.7187	53.2	5.0664
B 249.678	9.2766	ppb	1.1062	11.9	51.9659

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	29.2750	ppb	0.8423	2.9	152.007
Be 313.042	-0.1008	ppb	0.0062	6.1	-403.700
Ca 370.602	34736	ppb	234.2	0.7	58093
Cd 226.502	0.5812	ppb	0.3021	52.0	20.0814
Co 228.615	2.7573	ppb	1.0560	38.3	-1.5679
Cr 267.716	-0.1332	ppb	0.1676	125.8	12.1199
Cu 324.754	1.4659	ppb	0.7986	54.5	481.491
Fe 271.441	5642.48	ppb	44.7887	0.8	3140.73
K 766.491	2190.85	ppb	8.6857	0.4	45374.1
Mg 279.078	1972.86	ppb	14.1184	0.7	2658.36
Mn 257.610	162.637	ppb	0.8602	0.5	13519.8
Mo 202.032	-0.1435	ppb	0.7519	524.0	3.6957
Na 330.237	14357.7	ppb	175.930	1.2	425.237
Ni 231.604	1.2439	ppb	0.7905	63.5	-0.3783
Pb 220.353	-4.3111	ppb	0.9645	22.4	-0.9593
Sb 206.834	2.1056	ppb	7.7343	367.3	6.8394
Se 196.026	4.8525	ppb	9.8930	203.9	3.6749
Si 288.158	5200.47	ppb	22.6388	0.4	24807.0
Sn 189.925	2.7085	ppb	4.4364	163.8	1.6793
Sr 216.596	102.518	ppb	1.3025	1.3	307.081
Ti 334.941	0.2739	ppb	0.0392	14.3	3.8314
Tl 190.794	-5.6291	ppb	11.1903	198.8	-2.9850
V 292.401	0.2235	ppb	0.2713	121.4	-10.1441
Zn 206.200	13.2738	ppb	2.2412	16.9	7.2323

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	57.2439	56.2681	56.8494
Al 308.215	5224.10	5219.24	5214.99
As 188.980	119.520	113.204	123.136
B 249.678	211.744	212.319	213.178
Ba 389.178	136.172	132.212	132.831
Be 313.042	54.9308	54.9002	54.8775
Ca 370.602	37789	37716	37657
Cd 226.502	53.9986	54.0719	54.3334
Co 228.615	56.2546	52.9203	54.6332
Cr 267.716	105.334	104.559	105.135
Cu 324.754	107.919	106.908	108.205
Fe 271.441	10609.1	10568.2	10552.1
K 766.491	10123.0	10101.3	10106.9
Mg 279.078	7014.24	7012.08	7004.86
Mn 257.610	583.390	582.763	583.088
Mo 202.032	105.029	106.057	105.089
Na 330.237	18749.7	18944.2	18924.5
Ni 231.604	108.832	106.354	106.540
Pb 220.353	510.131	532.129	519.338
Sb 206.834	44.3282	54.6769	56.5133
Se 196.026	84.9137	90.6749	86.3226
Si 288.158	4931.35	4918.62	4922.28
Sn 189.925	99.1713	97.1274	110.035
Sr 216.596	203.907	199.778	201.766
Ti 334.941	413.532	413.287	413.649

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	34.9856	31.4150	31.4674
V 292.401	104.474	104.064	104.203
Zn 206.200	116.297	119.656	120.399

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	56.7871	ppb	0.4909	0.9	1682.36
Al 308.215	5219.44	ppb	4.5603	0.1	10421.2
As 188.980	118.620	ppb	5.0265	4.2	32.3343
B 249.678	212.414	ppb	0.7218	0.3	1437.37
Ba 389.178	133.738	ppb	2.1304	1.6	816.635
Be 313.042	54.9028	ppb	0.0268	0.0	43966.6
Ca 370.602	37721	ppb	65.85	0.2	63090
Cd 226.502	54.1346	ppb	0.1760	0.3	715.192
Co 228.615	54.6027	ppb	1.6674	3.1	205.961
Cr 267.716	105.009	ppb	0.4023	0.4	1772.14
Cu 324.754	107.677	ppb	0.6813	0.6	3700.67
Fe 271.441	10576.5	ppb	29.3737	0.3	5874.39
K 766.491	10110.4	ppb	11.2786	0.1	208178
Mg 279.078	7010.39	ppb	4.9129	0.1	9389.84
Mn 257.610	583.080	ppb	0.3136	0.1	48402.0
Mo 202.032	105.392	ppb	0.5772	0.5	181.730
Na 330.237	18872.8	ppb	107.027	0.6	542.171
Ni 231.604	107.242	ppb	1.3801	1.3	118.491
Pb 220.353	520.533	ppb	11.0473	2.1	197.548
Sb 206.834	51.8395	ppb	6.5694	12.7	25.0183
Se 196.026	87.3037	ppb	3.0033	3.4	19.2777
Si 288.158	4924.08	ppb	6.5530	0.1	23559.6
Sn 189.925	102.111	ppb	6.9376	6.8	26.8022
Sr 216.596	201.817	ppb	2.0650	1.0	595.968
Ti 334.941	413.489	ppb	0.1844	0.0	36672.0
Tl 190.794	32.6227	ppb	2.0466	6.3	6.0677
V 292.401	104.247	ppb	0.2082	0.2	1041.48
Zn 206.200	118.784	ppb	2.1854	1.8	65.4117

680-167491-a-12-f ms (Samp) 4/19/2019, 2:54:00 PM Rack 1, Tube 45

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.9692	55.2042	55.1523
Al 308.215	5264.94	5268.37	5276.74
As 188.980	119.637	116.015	118.795
B 249.678	219.773	220.662	220.106
Ba 389.178	135.208	135.025	134.012
Be 313.042	55.4786	55.5582	55.5101
Ca 370.602	38412	38413	38400
Cd 226.502	54.5057	54.9136	54.1103
Co 228.615	54.6041	56.4405	56.1772
Cr 267.716	106.395	106.893	105.977
Cu 324.754	109.060	109.784	108.035
Fe 271.441	10549.2	10559.1	10515.4
K 766.491	10284.7	10277.0	10234.5
Mg 279.078	7103.80	7097.64	7102.30
Mn 257.610	584.679	584.736	583.622
Mo 202.032	107.256	106.926	103.684

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	19868.4	20036.9	19880.2
Ni 231.604	105.142	108.118	109.711
Pb 220.353	514.397	521.902	516.920
Sb 206.834	48.6578	49.4319	59.7983
Se 196.026	109.016	113.235	114.963
Si 288.158	5024.45	5032.14	5017.76
Sn 189.925	106.167	104.468	102.271
Sr 216.596	202.786	204.913	202.133
Ti 334.941	417.976	418.404	418.285
Tl 190.794	38.5650	36.5931	22.5979
V 292.401	105.515	106.112	106.295
Zn 206.200	120.085	124.668	120.144

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.1085	ppb	0.1234	0.2	1631.37
Al 308.215	5270.02	ppb	6.0698	0.1	10520.2
As 188.980	118.149	ppb	1.8958	1.6	32.2086
B 249.678	220.180	ppb	0.4493	0.2	1490.56
Ba 389.178	134.748	ppb	0.6439	0.5	823.081
Be 313.042	55.5156	ppb	0.0401	0.1	44461.1
Ca 370.602	38409	ppb	7.148	0.0	64240
Cd 226.502	54.5099	ppb	0.4016	0.7	719.970
Co 228.615	55.7406	ppb	0.9930	1.8	210.502
Cr 267.716	106.422	ppb	0.4586	0.4	1795.77
Cu 324.754	108.960	ppb	0.8790	0.8	3739.51
Fe 271.441	10541.2	ppb	22.9495	0.2	5854.96
K 766.491	10265.4	ppb	27.0163	0.3	211389
Mg 279.078	7101.25	ppb	3.2121	0.0	9511.32
Mn 257.610	584.346	ppb	0.6271	0.1	48507.3
Mo 202.032	105.955	ppb	1.9741	1.9	182.681
Na 330.237	19928.5	ppb	94.0505	0.5	570.616
Ni 231.604	107.657	ppb	2.3191	2.2	118.955
Pb 220.353	517.740	ppb	3.8190	0.7	196.490
Sb 206.834	52.6293	ppb	6.2206	11.8	25.2710
Se 196.026	112.405	ppb	3.0590	2.7	24.0096
Si 288.158	5024.78	ppb	7.1948	0.1	24030.2
Sn 189.925	104.302	ppb	1.9532	1.9	27.3560
Sr 216.596	203.277	ppb	1.4540	0.7	600.221
Ti 334.941	418.221	ppb	0.2211	0.1	37092.0
Tl 190.794	32.5853	ppb	8.7054	26.7	6.0611
V 292.401	105.974	ppb	0.4081	0.4	1059.03
Zn 206.200	121.632	ppb	2.6292	2.2	66.9828

680-167491-a-15-b (Samp) 4/19/2019, 2:57:51 PM Rack 1, Tube 46

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3233u	-0.2466u	0.3951
Al 308.215	382.061	372.447	379.951
As 188.980	7.2447	4.1718	10.7857
B 249.678	63.1812	62.8140	61.5964
Ba 389.178	19.2868	19.5827	17.8045
Be 313.042	-0.0842u	-0.0813u	-0.0797u
Ca 370.602	27415	27273	27386

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.1824	0.4284	-0.0249
Co 228.615	0.0547	1.3601	1.1661
Cr 267.716	0.8040	1.3613	0.4760
Cu 324.754	2.2006	2.1314	2.7617
Fe 271.441	4530.39	4523.37	4528.96
K 766.491	234.523	231.414	233.036
Mg 279.078	1389.61	1383.04	1383.38
Mn 257.610	97.0982	97.0994	97.0966
Mo 202.032	-0.2860u	1.0875	0.6500
Na 330.237	10967.9	10692.2	10891.6
Ni 231.604	0.6080	-0.7124u	-1.2734u
Pb 220.353	-1.1295u	6.0039	4.7724
Sb 206.834	3.4602	1.2534	1.8190
Se 196.026	-3.4887u	-10.0921u	9.9608
Si 288.158	6827.11	6811.41	6810.42
Sn 189.925	2.7980	-1.4593u	-2.1854u
Sr 216.596	77.4372	77.9343	76.9044
Ti 334.941	8.9252	8.8452	8.9181
Tl 190.794	-7.7815u	-10.0066u	-3.8764u
V 292.401	2.0825	2.5266	1.1785
Zn 206.200	26.5617	27.0735	24.9595

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0583	ppb	0.3945	676.9	-43.4015
Al 308.215	378.153	ppb	5.0530	1.3	947.031
As 188.980	7.4007	ppb	3.3097	44.7	2.6703
B 249.678	62.5306	ppb	0.8296	1.3	417.627
Ba 389.178	18.8913	ppb	0.9528	5.0	85.5958
Be 313.042	-0.0817	ppb	0.0022	2.7	-389.189
Ca 370.602	27358	ppb	75.04	0.3	45758
Cd 226.502	0.0737	ppb	0.3171	430.4	11.8555
Co 228.615	0.8603	ppb	0.7044	81.9	-9.0000
Cr 267.716	0.8804	ppb	0.4476	50.8	28.8686
Cu 324.754	2.3646	ppb	0.3456	14.6	508.511
Fe 271.441	4527.57	ppb	3.7111	0.1	2523.52
K 766.491	232.991	ppb	1.5551	0.7	5089.95
Mg 279.078	1385.34	ppb	3.6992	0.3	1873.27
Mn 257.610	97.0981	ppb	0.0014	0.0	8084.03
Mo 202.032	0.4838	ppb	0.7016	145.0	4.7673
Na 330.237	10850.6	ppb	142.369	1.3	330.271
Ni 231.604	-0.4593	ppb	0.9659	210.3	-2.2875
Pb 220.353	3.2156	ppb	3.8131	118.6	1.9235
Sb 206.834	2.1775	ppb	1.1463	52.6	6.8351
Se 196.026	-1.2067	ppb	10.2193	846.9	2.5219
Si 288.158	6816.31	ppb	9.3639	0.1	32349.2
Sn 189.925	-0.2822	ppb	2.6921	953.9	0.9231
Sr 216.596	77.4253	ppb	0.5150	0.7	233.703
Ti 334.941	8.8961	ppb	0.0443	0.5	767.205
Tl 190.794	-7.2215	ppb	3.1033	43.0	-3.3303
V 292.401	1.9292	ppb	0.6870	35.6	7.1310
Zn 206.200	26.1982	ppb	1.1029	4.2	14.3619

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680-167491-a-14-b (Samp) **4/19/2019, 3:01:43 PM** **Rack 1, Tube 47****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2335	0.5683	-0.0661u
Al 308.215	7.5231	13.3924	7.8506
As 188.980	117.940	119.773	121.382
B 249.678	21.1749	21.6233	20.3928
Ba 389.178	69.4322	72.6751	69.9004
Be 313.042	-0.0654u	-0.0767u	-0.0812u
Ca 370.602	40748	40843	40687
Cd 226.502	0.4973	-0.0676	-0.2022
Co 228.615	15.7107	16.1236	16.7246
Cr 267.716	-0.7712u	-0.6209u	0.0449
Cu 324.754	0.6099	0.1429	0.5600
Fe 271.441	37893.0	37973.7	37732.9
K 766.491	7213.70	7241.17	7209.69
Mg 279.078	5362.69	5367.31	5350.93
Mn 257.610	3066.18	3073.78	3062.95
Mo 202.032	0.0980u	0.8185	-0.4676u
Na 330.237	114445x	115060x	114453x
Ni 231.604	-1.6447u	-0.3453u	-1.2068u
Pb 220.353	1.2076u	-2.9009u	5.6956
Sb 206.834	3.0127	3.4839	-0.3726
Se 196.026	11.9143	12.2786	1.4695
Si 288.158	9518.56	9538.30	9518.05
Sn 189.925	-1.0853u	-5.7396u	3.4664
Sr 216.596	752.973	754.366	752.151
Ti 334.941	-0.0517	-0.0363	-0.1332u
Tl 190.794	1.8929u	9.0887	-11.4713u
V 292.401	0.2200	0.0426	-0.8132u
Zn 206.200	-3.3888u	-0.5893u	0.4113

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2452b	ppb	0.3174	129.4	-36.8046
Al 308.215	9.5887b	ppb	3.2981	34.4	227.026
As 188.980	119.698b	ppb	1.7219	1.4	32.5669
B 249.678	21.0637b	ppb	0.6227	3.0	99.5963
Ba 389.178	70.6693b	ppb	1.7528	2.5	429.842
Be 313.042	-0.0745b	ppb	0.0081	10.9	-386.933
Ca 370.602	40759b	ppb	78.80	0.2	68153
Cd 226.502	0.0759b	ppb	0.3712	489.3	63.1090
Co 228.615	16.1863b	ppb	0.5098	3.1	50.8824
Cr 267.716	-0.4491b	ppb	0.4344	96.7	14.4475
Cu 324.754	0.4376b	ppb	0.2564	58.6	456.154
Fe 271.441	37866.5b	ppb	122.547	0.3	20978.9
K 766.491	7221.52b	ppb	17.1386	0.2	148906
Mg 279.078	5360.31b	ppb	8.4479	0.2	7158.92
Mn 257.610	3067.64b	ppb	5.5598	0.2	254368
Mo 202.032	0.1496b	ppb	0.6446	430.9	3.8125
Na 330.237	114653xb	ppb	352.488	0.3	3134.82
Ni 231.604	-1.0656b	ppb	0.6611	62.0	-2.9810
Pb 220.353	1.3341b	ppb	4.2996	322.3	0.2289
Sb 206.834	2.0414b	ppb	2.1038	103.1	7.2972
Se 196.026	8.5541b	ppb	6.1382	71.8	4.7790
Si 288.158	9524.97b	ppb	11.5425	0.1	44990.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-1.1195b	ppb	4.6031	411.2	0.7217
Sr 216.596	753.163b	ppb	1.1194	0.1	2210.14
Ti 334.941	-0.0737b	ppb	0.0520	70.6	-20.3151
Tl 190.794	-0.1632b	ppb	10.4331	6391.3	-2.5008
V 292.401	-0.1835b	ppb	0.5525	301.0	-12.5774
Zn 206.200	-1.1890b	ppb	1.9697	165.7	-0.6784

680-167491-a-13-b (Samp) **4/19/2019, 3:05:36 PM** **Rack 1, Tube 48**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4492	0.3080	0.2727
Al 308.215	10.0980	12.5535	9.2735
As 188.980	109.799	112.933	113.923
B 249.678	18.2022	18.2352	18.4690
Ba 389.178	69.9446	72.4967	69.4027
Be 313.042	-0.1081u	-0.0666u	-0.0964u
Ca 370.602	39836	39992	39827
Cd 226.502	0.2702	-0.2044	-0.0448
Co 228.615	15.7110	16.4098	16.7507
Cr 267.716	-0.8736u	-0.2393	-0.2599
Cu 324.754	0.1807	0.0062	0.6767
Fe 271.441	36215.5	36321.7	36177.4
K 766.491	7066.28	7111.88	7083.71
Mg 279.078	5252.17	5242.01	5227.31
Mn 257.610	2973.67	2984.24	2972.27
Mo 202.032	1.4993	1.5163	0.5885
Na 330.237	112600x	112852x	112247x
Ni 231.604	0.4683	-1.5240u	0.1204
Pb 220.353	-0.4372u	-9.6516u	-2.2873u
Sb 206.834	-3.6169u	-3.2058u	-9.3769u
Se 196.026	13.5210	-0.8357	-3.9277u
Si 288.158	9281.48	9303.17	9272.40
Sn 189.925	-0.8135u	-5.9929u	2.2092
Sr 216.596	745.835	744.837	746.345
Ti 334.941	-0.1052	0.0151	0.0691
Tl 190.794	-9.0967u	-3.5853u	-4.3230u
V 292.401	0.0219	-0.1294	-0.1036
Zn 206.200	0.7561	-1.7882u	0.8569

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3433b	ppb	0.0934	27.2	-33.6699
Al 308.215	10.6416b	ppb	1.7062	16.0	229.047
As 188.980	112.218b	ppb	2.1530	1.9	30.5738
B 249.678	18.3021b	ppb	0.1455	0.8	82.3708
Ba 389.178	70.6147b	ppb	1.6523	2.3	428.663
Be 313.042	-0.0904b	ppb	0.0214	23.7	-399.814
Ca 370.602	39885b	ppb	92.97	0.2	66693
Cd 226.502	0.0070b	ppb	0.2415	3462.1	59.7080
Co 228.615	16.2905b	ppb	0.5300	3.3	51.3284
Cr 267.716	-0.4576b	ppb	0.3605	78.8	14.0206
Cu 324.754	0.2878b	ppb	0.3479	120.9	451.336
Fe 271.441	36238.2b	ppb	74.7701	0.2	20077.5
K 766.491	7087.29b	ppb	23.0105	0.3	146168

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5240.50b	ppb	12.5004	0.2	6999.61
Mn 257.610	2976.73b	ppb	6.5460	0.2	246831
Mo 202.032	1.2014b	ppb	0.5308	44.2	5.6067
Na 330.237	112566xb	ppb	303.845	0.3	3078.49
Ni 231.604	-0.3118b	ppb	1.0642	341.3	-2.1357
Pb 220.353	-4.1254b	ppb	4.8744	118.2	-1.7879
Sb 206.834	-5.3999b	ppb	3.4503	63.9	4.6248
Se 196.026	2.9192b	ppb	9.3107	318.9	3.7015
Si 288.158	9285.68b	ppb	15.8071	0.2	43873.0
Sn 189.925	-1.5324b	ppb	4.1480	270.7	0.6171
Sr 216.596	745.672b	ppb	0.7670	0.1	2188.07
Ti 334.941	-0.0070b	ppb	0.0892	1277.0	-14.6685
Tl 190.794	-5.6683b	ppb	2.9919	52.8	-3.7650
V 292.401	-0.0704b	ppb	0.0809	115.0	-11.5799
Zn 206.200	-0.0584b	ppb	1.4989	2567.3	-0.0582

680-167491-a-9-b (Samp)

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Rack 1, Tube 49

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1103	-0.2707u	-0.3005u
Al 308.215	143.352	144.522	142.240
As 188.980	9.4886	1.2702	0.1206
B 249.678	15.3071	16.0642	17.4958
Ba 389.178	41.8197	40.5634	42.8944
Be 313.042	-0.0976u	-0.1065u	-0.0755u
Ca 370.602	183517	183416	183218
Cd 226.502	0.2588	0.1803	0.3489
Co 228.615	0.6077	2.4318	4.0011
Cr 267.716	0.8441	0.8840	1.2832
Cu 324.754	1.3061	1.5316	1.3272
Fe 271.441	83.9183	103.616	90.1545
K 766.491	7109.13	7099.90	7085.84
Mg 279.078	9451.87	9464.82	9429.29
Mn 257.610	2250.70	2251.64	2247.09
Mo 202.032	-0.8311u	-0.3714u	0.2835
Na 330.237	126348x	126184x	125179x
Ni 231.604	0.1137	2.9657	-0.2773u
Pb 220.353	-1.4137u	-0.0509	-6.2684u
Sb 206.834	5.3166	9.4859	-3.6466u
Se 196.026	11.5624	6.9453	-0.9803
Si 288.158	4131.09	4126.83	4110.29
Sn 189.925	-7.8901u	-3.7151u	-7.3184u
Sr 216.596	572.797	574.308	569.502
Ti 334.941	0.5219	0.7476	0.7585
Tl 190.794	-11.5362u	0.9357	-12.6897u
V 292.401	0.2065	0.3416	-0.7495u
Zn 206.200	4.8463	4.7944	-0.5911u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1536b	ppb	0.2291	149.1	-43.1628
Al 308.215	143.372b	ppb	1.1414	0.8	487.578
As 188.980	3.6265b	ppb	5.1092	140.9	1.6743
B 249.678	16.2890b	ppb	1.1115	6.8	105.647

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	41.7592b	ppb	1.1667	2.8	236.338
Be 313.042	-0.0932b	ppb	0.0160	17.1	-380.752
Ca 370.602	183384b	ppb	152.2	0.1	306657
Cd 226.502	0.2627b	ppb	0.0844	32.1	7.3032
Co 228.615	2.3469b	ppb	1.6983	72.4	-3.0627
Cr 267.716	1.0038b	ppb	0.2428	24.2	34.4523
Cu 324.754	1.3883b	ppb	0.1245	9.0	478.153
Fe 271.441	92.5630b	ppb	10.0674	10.9	68.5430
K 766.491	7098.29b	ppb	11.7305	0.2	146388
Mg 279.078	9448.66b	ppb	17.9832	0.2	12634.6
Mn 257.610	2249.81b	ppb	2.4003	0.1	186564
Mo 202.032	-0.3063b	ppb	0.5601	182.8	3.4858
Na 330.237	125904xb	ppb	632.630	0.5	3440.26
Ni 231.604	0.9340b	ppb	1.7703	189.5	-0.7255
Pb 220.353	-2.5777b	ppb	3.2681	126.8	-0.0135
Sb 206.834	3.7187b	ppb	6.7105	180.5	7.3111
Se 196.026	5.8424b	ppb	6.3436	108.6	4.0354
Si 288.158	4122.73b	ppb	10.9896	0.3	19777.1
Sn 189.925	-6.3079b	ppb	2.2636	35.9	-0.5885
Sr 216.596	572.202b	ppb	2.4578	0.4	1677.50
Ti 334.941	0.6760b	ppb	0.1336	19.8	56.7795
Tl 190.794	-7.7634b	ppb	7.5557	97.3	-2.7970
V 292.401	-0.0671b	ppb	0.5948	886.0	-13.7634
Zn 206.200	3.0165b	ppb	3.1244	103.6	1.5592

680-167491-a-11-b (Samp) 4/19/2019, 3:13:17 PM Rack 1, Tube 50

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2016	0.4244	-0.3222u
Al 308.215	8.3282	9.7494	14.1230
As 188.980	32.1417	40.2354	34.4924
B 249.678	6.0109	7.9812	6.4681
Ba 389.178	24.7150	24.6170	22.4835
Be 313.042	-0.1170u	-0.0901u	-0.1078u
Ca 370.602	97793	97671	97657
Cd 226.502	-0.0180	-0.6589u	-0.1962
Co 228.615	3.1136	0.9817	2.5291
Cr 267.716	4.9983	4.9228	5.0589
Cu 324.754	0.5939	1.1521	0.9221
Fe 271.441	3608.63	3630.54	3639.33
K 766.491	3654.71	3648.34	3651.34
Mg 279.078	5228.65	5207.15	5209.06
Mn 257.610	2196.05	2194.04	2191.59
Mo 202.032	1.1930	-0.1674u	1.0661
Na 330.237	20713.8	20589.0	20792.6
Ni 231.604	32.6213	35.0245	33.2322
Pb 220.353	6.3688	3.9076	-1.1290u
Sb 206.834	-0.2078u	4.4738	2.6138
Se 196.026	-5.3094u	-10.3006u	11.1596
Si 288.158	6694.28	6688.13	6659.72
Sn 189.925	-6.6285u	0.2982	-4.8556u
Sr 216.596	293.373	293.029	291.964
Ti 334.941	0.1208	0.1478	0.1157

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-14.7823u	-6.6119u	-11.0131u
V 292.401	-0.7894u	0.4292	0.1609
Zn 206.200	10.8411	9.8860	8.5763

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1012	ppb	0.3833	378.6	-35.2273
Al 308.215	10.7335	ppb	3.0202	28.1	228.245
As 188.980	35.6232	ppb	4.1636	11.7	10.2081
B 249.678	6.8201	ppb	1.0312	15.1	37.2037
Ba 389.178	23.9385	ppb	1.2610	5.3	121.156
Be 313.042	-0.1050	ppb	0.0137	13.1	-398.319
Ca 370.602	97707	ppb	74.91	0.1	163408
Cd 226.502	-0.2911	ppb	0.3308	113.7	5.8059
Co 228.615	2.2081	ppb	1.1016	49.9	-3.7060
Cr 267.716	4.9933	ppb	0.0682	1.4	100.804
Cu 324.754	0.8894	ppb	0.2805	31.5	463.692
Fe 271.441	3626.17	ppb	15.8131	0.4	2024.58
K 766.491	3651.46	ppb	3.1859	0.1	75471.2
Mg 279.078	5214.95	ppb	11.9043	0.2	6973.41
Mn 257.610	2193.89	ppb	2.2317	0.1	181915
Mo 202.032	0.6972	ppb	0.7515	107.8	5.1380
Na 330.237	20698.4	ppb	102.688	0.5	596.721
Ni 231.604	33.6260	ppb	1.2490	3.7	35.9503
Pb 220.353	3.0491	ppb	3.8219	125.3	1.9955
Sb 206.834	2.2933	ppb	2.3572	102.8	6.8437
Se 196.026	-1.4835	ppb	11.2300	757.0	2.6636
Si 288.158	6680.71	ppb	18.4335	0.3	31715.6
Sn 189.925	-3.7286	ppb	3.5983	96.5	0.0530
Sr 216.596	292.789	ppb	0.7343	0.3	862.114
Ti 334.941	0.1281	ppb	0.0172	13.5	-0.6850
Tl 190.794	-10.8024	ppb	4.0893	37.9	-3.6967
V 292.401	-0.0664	ppb	0.6403	963.7	-13.4210
Zn 206.200	9.7678	ppb	1.1370	11.6	5.2904

Cont Calib Verif (CCV) 4/19/2019, 3:17:09 PM Rack S, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	513.744	517.102	513.107
Al 308.215	10369.3	10304.1	10305.7
As 188.980	521.286	505.988	509.207
B 249.678	514.848	513.789	519.767
Ba 389.178	506.616	504.884	505.009
Be 313.042	530.391	527.628	528.683
Ca 370.602	10378	10301	10304
Cd 226.502	515.381	512.039	511.581
Co 228.615	516.063	513.099	515.392
Cr 267.716	511.920	507.430	508.550
Cu 324.754	512.775	508.783	512.143
Fe 271.441	10322.2	10304.5	10342.7
K 766.491	10051.0	9980.68	10000.9
Mg 279.078	10340.0	10286.0	10296.5
Mn 257.610	515.784	512.277	512.510
Mo 202.032	512.525	505.333	511.686

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Label	Replicates Concentration		
Na 330.237	10618.0	10487.0	9935.98
Ni 231.604	518.235	516.387	522.688
Pb 220.353	500.929	497.294	511.295
Sb 206.834	485.145	485.639	513.239
Se 196.026	524.680	526.554	511.168
Si 288.158	5203.71	5156.97	5159.70
Sn 189.925	493.385	521.214	515.499
Sr 216.596	509.758	506.436	508.570
Ti 334.941	513.501	510.463	510.855
Tl 190.794	503.952	501.882	502.603
V 292.401	517.037	513.378	513.391
Zn 206.200	1033.74	1027.78	1030.82

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	514.651	ppb	2.1463	0.4	15589.6	102.93021
Al 308.215	10326.3	ppb	37.1681	0.4	20425.6	103.26347
As 188.980	512.160	ppb	8.0656	1.6	137.350	102.43203
B 249.678	516.135	ppb	3.1899	0.6	3516.45	103.22691
Ba 389.178	505.503	ppb	0.9660	0.2	3158.30	101.10065
Be 313.042	528.901	ppb	1.3945	0.3	426349	105.78014
Ca 370.602	10328	ppb	43.85	0.4	17295	103.27588
Cd 226.502	513.000	ppb	2.0744	0.4	6605.31	102.60004
Co 228.615	514.851	ppb	1.5543	0.3	2026.91	102.97026
Cr 267.716	509.300	ppb	2.3374	0.5	8534.39	101.86000
Cu 324.754	511.234	ppb	2.1454	0.4	15928.6	102.24672
Fe 271.441	10323.1	ppb	19.1421	0.2	5752.48	103.17966
K 766.491	10010.9	ppb	36.2019	0.4	203732	100.10877
Mg 279.078	10307.5	ppb	28.6539	0.3	13798.9	103.07515
Mn 257.610	513.524	ppb	1.9612	0.4	42649.7	102.70476
Mo 202.032	509.848	ppb	3.9323	0.8	864.254	101.96959
Na 330.237	10347.0	ppb	361.916	3.5	300.290	103.46994
Ni 231.604	519.103	ppb	3.2389	0.6	580.132	103.82068
Pb 220.353	503.173	ppb	7.2653	1.4	190.802	100.63451
Sb 206.834	494.674	ppb	16.0794	3.3	185.405	98.93483
Se 196.026	520.801	ppb	8.3947	1.6	100.989	104.16011
Si 288.158	5173.46	ppb	26.2321	0.5	24817.1	103.46918
Sn 189.925	510.033	ppb	14.6977	2.9	129.897	102.00651
Sr 216.596	508.255	ppb	1.6831	0.3	1484.55	101.65092
Ti 334.941	511.606	ppb	1.6526	0.3	45384.7	102.32123
Tl 190.794	502.812	ppb	1.0509	0.2	118.849	100.56247
V 292.401	514.602	ppb	2.1090	0.4	5184.00	102.92043
Zn 206.200	1030.78	ppb	2.9800	0.3	568.479	103.07771

Cont Calib Blank (CCB)

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Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3415u	0.5021	0.8691
Al 308.215	5.1320	9.5801	1.5102
As 188.980	-1.1808u	8.2926	8.8584
B 249.678	13.9129	12.0593	10.2420
Ba 389.178	0.4806	-2.4467u	1.0955
Be 313.042	0.1143	0.0654	0.0225
Ca 370.602	-0.6664u	1.887	-3.230u

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Label	Replicates Concentration		
Cd 226.502	-0.1692u	-0.1309u	0.3330
Co 228.615	-0.4702u	0.6227	1.4060
Cr 267.716	-0.1158u	0.1452	-0.5387u
Cu 324.754	0.3551	0.8659	1.0000
Fe 271.441	7.1045	-1.7104u	-0.4072u
K 766.491	-0.9727	-0.5155	-0.7901
Mg 279.078	2.4313	7.6621	7.5715
Mn 257.610	0.2281	0.1789	0.1533
Mo 202.032	1.1781	1.2020	1.2395
Na 330.237	55.9144	-186.864u	57.1479
Ni 231.604	0.0418	-0.3649u	-2.5680u
Pb 220.353	-6.8999u	-5.8381u	-6.1806u
Sb 206.834	-4.5662u	-1.8081u	-3.9941u
Se 196.026	-9.8796u	14.0641	7.1175
Si 288.158	7.9684	6.3880	6.5892
Sn 189.925	-4.9950u	-11.2338u	-12.2449u
Sr 216.596	-0.4163u	-1.5416u	0.2173
Ti 334.941	0.2225	0.3518	0.0281
Tl 190.794	-2.6221u	-12.0906u	-10.8326u
V 292.401	0.0804	0.0024u	-0.0280u
Zn 206.200	0.4513	0.4336	-0.7340u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3433	ppb	0.6207	180.8	-30.2930	0.34326
Al 308.215	5.4074	ppb	4.0420	74.7	217.712	5.40744
As 188.980	5.3234	ppb	5.6399	105.9	2.1276	5.32341
B 249.678	12.0714	ppb	1.8355	15.2	76.8723	12.07139
Ba 389.178	-0.2902	ppb	1.8927	652.3	-38.4626	-0.29017
Be 313.042	0.0674	ppb	0.0459	68.1	-272.507	0.06739
Ca 370.602	-0.6697	ppb	2.558	382.0	23.98	-0.66970
Cd 226.502	0.0110	ppb	0.2796	2550.4	4.0936	0.01096
Co 228.615	0.5195	ppb	0.9424	181.4	-10.3128	0.51950
Cr 267.716	-0.1698	ppb	0.3451	203.3	10.7148	-0.16976
Cu 324.754	0.7403	ppb	0.3403	46.0	458.517	0.74033
Fe 271.441	1.6623	ppb	4.7579	286.2	18.1655	1.66230
K 766.491	-0.7594	ppb	0.2301	30.3	281.744	-0.75942
Mg 279.078	5.8883	ppb	2.9942	50.8	29.5664	5.88829
Mn 257.610	0.1868	ppb	0.0380	20.4	42.0459	0.18675
Mo 202.032	1.2065	ppb	0.0310	2.6	6.0402	1.20651
Na 330.237	-24.6004	ppb	140.525	571.2	36.9193	-24.60037
Ni 231.604	-0.9637	ppb	1.4042	145.7	-2.8530	-0.96370
Pb 220.353	-6.3062	ppb	0.5419	8.6	-1.5320	-6.30616Z
Sb 206.834	-3.4561	ppb	1.4556	42.1	4.7836	-3.45612
Se 196.026	3.7674	ppb	12.3184	327.0	3.4318	3.76737
Si 288.158	6.9818	ppb	0.8603	12.3	568.067	6.98184
Sn 189.925	-9.4912	ppb	3.9265	41.4	-1.4054	-9.49124
Sr 216.596	-0.5802	ppb	0.8908	153.5	5.4695	-0.58017
Ti 334.941	0.2008	ppb	0.1629	81.1	-7.5467	0.20078
Tl 190.794	-8.5151	ppb	5.1421	60.4	-3.4580	-8.51510
V 292.401	0.0183	ppb	0.0559	306.2	-12.6315	0.01826
Zn 206.200	0.0503	ppb	0.6793	1351.0	-0.0777	0.05028

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680-167491-a-8-b (Samp) **4/19/2019, 3:24:51 PM** **Rack 1, Tube 51****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.4329	0.3543	0.2411
Al 308.215	85.1020	86.1017	89.6096
As 188.980	2.5216	6.8842	4.0781
B 249.678	11.2735	10.5168	8.6920
Ba 389.178	70.7050	73.8585	71.2311
Be 313.042	-0.0711u	-0.0652u	-0.0739u
Ca 370.602	115911	115742	116069
Cd 226.502	-0.2735u	-0.0182	0.1280
Co 228.615	0.4946	0.7303	0.6690
Cr 267.716	79.8315	79.6247	80.3640
Cu 324.754	5.4973	4.7805	4.9140
Fe 271.441	813.945	821.812	859.212
K 766.491	4387.18	4385.02	4402.06
Mg 279.078	4740.57	4743.90	4745.79
Mn 257.610	49.8538	49.8233	50.1663
Mo 202.032	-0.2708u	-1.0118u	1.7773
Na 330.237	218019x	217865x	218426x
Ni 231.604	20.3924	16.3201	18.6745
Pb 220.353	-0.0608u	-1.1603u	-5.4820u
Sb 206.834	1.0398	-2.8831u	-2.6168u
Se 196.026	3.1112	-1.4013u	13.3901
Si 288.158	4185.91	4187.97	4206.43
Sn 189.925	-6.0023u	-10.2378u	-3.7240u
Sr 216.596	511.743	516.050	514.467
Ti 334.941	2.1126	2.0551	2.0299
Tl 190.794	-5.9536u	-13.0054u	-17.5436u
V 292.401	1.4928	0.1697u	-0.3354u
Zn 206.200	16.2685	12.5424	10.9338

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3428b	ppb	0.0964	28.1	-32.0416
Al 308.215	86.9378b	ppb	2.3672	2.7	377.222
As 188.980	4.4946b	ppb	2.2109	49.2	1.9000
B 249.678	10.1608b	ppb	1.3271	13.1	62.9544
Ba 389.178	71.9315b	ppb	1.6894	2.3	421.169
Be 313.042	-0.0701b	ppb	0.0044	6.4	-375.991
Ca 370.602	115907b	ppb	163.5	0.1	193810
Cd 226.502	-0.0546b	ppb	0.2032	372.4	4.1633
Co 228.615	0.6313b	ppb	0.1223	19.4	-9.8040
Cr 267.716	79.9401b	ppb	0.3814	0.5	1352.18
Cu 324.754	5.0639b	ppb	0.3812	7.5	589.614
Fe 271.441	831.656b	ppb	24.1860	2.9	477.668
K 766.491	4391.42b	ppb	9.2749	0.2	90701.8
Mg 279.078	4743.42b	ppb	2.6461	0.1	6364.59
Mn 257.610	49.9478b	ppb	0.1898	0.4	4185.41
Mo 202.032	0.1649b	ppb	1.4447	876.0	4.2726
Na 330.237	218103xb	ppb	290.186	0.1	5931.94
Ni 231.604	18.4623b	ppb	2.0444	11.1	18.9403
Pb 220.353	-2.2344b	ppb	2.8658	128.3	-0.0123
Sb 206.834	-1.4867b	ppb	2.1921	147.4	5.7222
Se 196.026	5.0333b	ppb	7.5807	150.6	3.6786
Si 288.158	4193.44b	ppb	11.3023	0.3	20106.8

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-6.6547b	ppb	3.3055	49.7	-0.6671
Sr 216.596	514.086b	ppb	2.1784	0.4	1507.86
Ti 334.941	2.0659b	ppb	0.0424	2.1	165.551
Tl 190.794	-12.1675b	ppb	5.8402	48.0	-4.3588
V 292.401	0.4424b	ppb	0.9441	213.4	-10.3128
Zn 206.200	13.2483b	ppb	2.7365	20.7	7.1636

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5381	0.1660	0.1186
Al 308.215	114.351	111.490	117.140
As 188.980	1.8189	12.1259	3.9735
B 249.678	15.2509	18.5701	16.6836
Ba 389.178	40.2763	45.1152	42.3135
Be 313.042	-0.0877u	-0.0942u	-0.0958u
Ca 370.602	178581	178425	178472
Cd 226.502	0.0052	-0.0069u	-0.0879u
Co 228.615	3.7354	3.5719	2.7093
Cr 267.716	1.1513	1.9886	1.8392
Cu 324.754	1.8131	1.2561	2.3391
Fe 271.441	90.3922	85.2260	56.0780
K 766.491	6821.97	6819.47	6843.80
Mg 279.078	9301.15	9284.51	9304.39
Mn 257.610	3134.16	3130.05	3134.91
Mo 202.032	0.2000	1.7673	0.0235
Na 330.237	123405x	123178x	123523x
Ni 231.604	1.9128	1.1451	-0.5130u
Pb 220.353	1.3322	-1.7377u	-8.0729u
Sb 206.834	2.2111	1.2241	2.6260
Se 196.026	-8.6733u	-17.0234u	14.8400
Si 288.158	4131.38	4122.84	4123.90
Sn 189.925	-4.6730u	-14.0328u	-7.4591u
Sr 216.596	562.571	561.991	565.233
Ti 334.941	0.4949	0.6715	0.5880
Tl 190.794	-18.4383u	-19.1149u	-7.4319u
V 292.401	-0.8914u	0.1569	-0.3482u
Zn 206.200	5.7825	4.8255	8.0271

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2742b	ppb	0.2297	83.8	-28.4872
Al 308.215	114.327b	ppb	2.8249	2.5	430.757
As 188.980	5.9728b	ppb	5.4366	91.0	2.3008
B 249.678	16.8349b	ppb	1.6648	9.9	109.410
Ba 389.178	42.5683b	ppb	2.4295	5.7	241.224
Be 313.042	-0.0926b	ppb	0.0043	4.6	-381.007
Ca 370.602	178493b	ppb	80.07	0.0	298493
Cd 226.502	-0.0298b	ppb	0.0506	169.7	3.5110
Co 228.615	3.3389b	ppb	0.5513	16.5	0.8664
Cr 267.716	1.6597b	ppb	0.4466	26.9	46.7374
Cu 324.754	1.8027b	ppb	0.5416	30.0	490.706
Fe 271.441	77.2321b	ppb	18.5012	24.0	60.0899
K 766.491	6828.41b	ppb	13.3844	0.2	140854

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	9296.68b	ppb	10.6674	0.1	12422.4
Mn 257.610	3133.04b	ppb	2.6170	0.1	259780
Mo 202.032	0.6636b	ppb	0.9599	144.6	5.1231
Na 330.237	123368xb	ppb	175.552	0.1	3371.70
Ni 231.604	0.8483b	ppb	1.2399	146.2	-0.8226
Pb 220.353	-2.8261b	ppb	4.7961	169.7	-0.0633
Sb 206.834	2.0204b	ppb	0.7201	35.6	6.6885
Se 196.026	-3.6189b	ppb	16.5221	456.6	2.3349
Si 288.158	4126.04b	ppb	4.6547	0.1	19792.4
Sn 189.925	-8.7216b	ppb	4.8059	55.1	-1.1988
Sr 216.596	563.265b	ppb	1.7292	0.3	1651.40
Ti 334.941	0.5848b	ppb	0.0883	15.1	48.2886
Tl 190.794	-14.9950b	ppb	6.5586	43.7	-4.3372
V 292.401	-0.3609b	ppb	0.5243	145.3	-16.7674
Zn 206.200	6.2117b	ppb	1.6434	26.5	3.3222

Cont Calib Verif (CCV)

4/19/2019, 3:33:19 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	506.380	517.212	516.199
Al 308.215	10214.2	10313.0	10304.9
As 188.980	512.045	506.207	501.501
B 249.678	507.584	517.930	520.034
Ba 389.178	499.228	506.505	499.515
Be 313.042	523.566	528.084	527.395
Ca 370.602	10271	10342	10301
Cd 226.502	507.007	511.517	510.378
Co 228.615	511.457	512.961	512.154
Cr 267.716	503.132	507.757	507.034
Cu 324.754	498.841	514.141	508.660
Fe 271.441	10237.4	10286.4	10295.2
K 766.491	9865.04	9982.73	9958.52
Mg 279.078	10227.1	10307.2	10301.1
Mn 257.610	507.757	512.016	511.262
Mo 202.032	504.019	509.678	505.197
Na 330.237	10741.9	10551.0	10018.5
Ni 231.604	508.706	519.266	511.514
Pb 220.353	506.079	510.132	498.082
Sb 206.834	479.682	496.422	501.544
Se 196.026	497.385	519.750	523.769
Si 288.158	5115.16	5165.18	5154.11
Sn 189.925	500.661	501.661	521.069
Sr 216.596	500.098	506.120	508.723
Ti 334.941	504.430	509.103	508.659
Tl 190.794	504.695	502.916	518.063
V 292.401	508.233	510.462	509.920
Zn 206.200	1015.26	1035.75	1027.98

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	513.264	ppb	5.9831	1.2	15547.5	102.65271
Al 308.215	10277.4	ppb	54.8439	0.5	20329.7	102.77379
As 188.980	506.584	ppb	5.2824	1.0	135.862	101.31684
B 249.678	515.183	ppb	6.6644	1.3	3509.99	103.03651

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	501.749	ppb	4.1211	0.8	3134.59	100.34985
Be 313.042	526.348	ppb	2.4343	0.5	424291	105.26969
Ca 370.602	10305	ppb	35.41	0.3	17257	103.04778
Cd 226.502	509.634	ppb	2.3453	0.5	6562.00	101.92680
Co 228.615	512.190	ppb	0.7529	0.1	2016.37	102.43809
Cr 267.716	505.974	ppb	2.4880	0.5	8478.75	101.19485
Cu 324.754	507.214	ppb	7.7521	1.5	15806.8	101.44279
Fe 271.441	10273.0	ppb	31.1384	0.3	5724.62	102.67876
K 766.491	9935.43	ppb	62.1493	0.6	202111	99.35432
Mg 279.078	10278.5	ppb	44.5828	0.4	13760.1	102.78488
Mn 257.610	510.345	ppb	2.2727	0.4	42385.8	102.06897
Mo 202.032	506.298	ppb	2.9858	0.6	858.264	101.25954
Na 330.237	10437.1	ppb	374.913	3.6	302.808	104.37129
Ni 231.604	513.162	ppb	5.4693	1.1	573.469	102.63236
Pb 220.353	504.764	ppb	6.1316	1.2	191.408	100.95287
Sb 206.834	492.549	ppb	11.4343	2.3	184.742	98.50989
Se 196.026	513.635	ppb	14.2152	2.8	99.6381	102.72697
Si 288.158	5144.82	ppb	26.2726	0.5	24682.6	102.89637
Sn 189.925	507.797	ppb	11.5050	2.3	129.332	101.55942
Sr 216.596	504.980	ppb	4.4240	0.9	1475.04	100.99605
Ti 334.941	507.397	ppb	2.5791	0.5	45011.1	101.47942
Tl 190.794	508.558	ppb	8.2796	1.6	120.226	101.71159
V 292.401	509.538	ppb	1.1625	0.2	5132.69	101.90767
Zn 206.200	1026.33	ppb	10.3441	1.0	566.028	102.63335

Cont Calib Blank (CCB)

4/19/2019, 3:37:11 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0069u	-0.2396u	0.8472
Al 308.215	4.1326	0.3780	-3.6387u
As 188.980	14.3154	-2.0154u	6.6012
B 249.678	14.6169	13.1573	11.0981
Ba 389.178	-1.5049u	-0.8757u	-2.2355u
Be 313.042	0.0680	0.0424	-0.0173u
Ca 370.602	8.490	11.63	-0.2165u
Cd 226.502	-0.2604u	0.0510	-0.1926u
Co 228.615	-0.7314u	0.2370	0.1311
Cr 267.716	-0.3688u	0.1583	0.3257
Cu 324.754	0.1595	0.1154	-0.0592u
Fe 271.441	6.3775	-3.6505u	3.0457
K 766.491	-0.3835	-3.0440u	-2.2490u
Mg 279.078	7.1209	5.0535	-5.8020u
Mn 257.610	0.3685	0.1314	-0.0650u
Mo 202.032	1.6412	1.0565	0.2087
Na 330.237	-23.2427u	-18.1229u	53.8089
Ni 231.604	-2.0370u	1.3958	0.7962
Pb 220.353	-8.0628u	-3.5937u	-0.6326u
Sb 206.834	-7.0631u	-1.5309u	3.0878
Se 196.026	10.1879	-7.9912u	-11.1610u
Si 288.158	9.5756	3.9330	8.1546
Sn 189.925	-11.6154u	-7.8338u	-9.9977u
Sr 216.596	1.8474	0.3809	-0.2999u
Ti 334.941	0.3244	0.0722	0.1861

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	0.4381	-10.1392u	-14.8873u
V 292.401	0.2476	0.1123	0.1330
Zn 206.200	-2.7236u	-1.3152u	0.4169

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2003	ppb	0.5723	285.7	-34.6371	0.20027
Al 308.215	0.2906	ppb	3.8864	1337.2	207.711	0.29063
As 188.980	6.3004	ppb	8.1696	129.7	2.3885	6.30039
B 249.678	12.9574	ppb	1.7679	13.6	82.9403	12.95743
Ba 389.178	-1.5387	ppb	0.6805	44.2	-46.3152	-1.53869
Be 313.042	0.0310	ppb	0.0438	141.2	-301.886	0.03101
Ca 370.602	6.634	ppb	6.136	92.5	36.19	6.63380
Cd 226.502	-0.1340	ppb	0.1638	122.2	2.2275	-0.13402
Co 228.615	-0.1211	ppb	0.5312	438.7	-12.8539	-0.12110
Cr 267.716	0.0384	ppb	0.3625	943.9	14.1965	0.03840
Cu 324.754	0.0719	ppb	0.1156	160.8	438.277	0.07192
Fe 271.441	1.9243	ppb	5.1072	265.4	18.2968	1.92425
K 766.491	-1.8922	ppb	1.3657	72.2	256.410	-1.89217
Mg 279.078	2.1241	ppb	6.9416	326.8	24.5340	2.12413
Mn 257.610	0.1450	ppb	0.2171	149.7	38.5715	0.14496
Mo 202.032	0.9688	ppb	0.7203	74.3	5.6390	0.96878
Na 330.237	4.1479	ppb	43.0839	1038.7	37.7104	4.14788
Ni 231.604	0.0516	ppb	1.8335	3550.6	-1.7135	0.05164
Pb 220.353	-4.0963	ppb	3.7405	91.3	-0.6951	-4.09634
Sb 206.834	-1.8354	ppb	5.0823	276.9	5.3545	-1.83543
Se 196.026	-2.9881	ppb	11.5203	385.5	2.1583	-2.98811
Si 288.158	7.2211	ppb	2.9348	40.6	568.900	7.22105
Sn 189.925	-9.8157	ppb	1.8974	19.3	-1.4874	-9.81567
Sr 216.596	0.6428	ppb	1.0974	170.7	9.0337	0.64285
Ti 334.941	0.1943	ppb	0.1263	65.0	-8.1310	0.19427
Tl 190.794	-8.1961	ppb	7.8453	95.7	-3.3817	-8.19614
V 292.401	0.1643	ppb	0.0729	44.4	-11.1686	0.16431
Zn 206.200	-1.2073	ppb	1.5730	130.3	-0.7715	-1.20728

mb 680-567072/1-a (Samp) 4/19/2019, 3:41:02 PM Rack 2, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1801	-0.1276u	0.3243
Al 308.215	5.8360	12.6197	4.7326
As 188.980	-1.3291u	-0.6840u	-1.4815u
B 249.678	2.7573	1.8314	1.0955
Ba 389.178	-0.0702u	-3.0037u	0.4989
Be 313.042	-0.0801u	-0.0957u	-0.1139u
Ca 370.602	-5.481u	-0.7718u	0.5274
Cd 226.502	-0.1710u	-0.3817u	-0.2289u
Co 228.615	2.1043	0.8406	1.5287
Cr 267.716	0.0087	-0.3775u	0.0475
Cu 324.754	0.2887	0.0867	1.4988
Fe 271.441	-17.8067u	13.1763	3.6907
K 766.491	1.0292	-0.0741	1.2591
Mg 279.078	-1.9272u	1.9431	1.8314
Mn 257.610	-0.1376u	-0.0022u	0.0067
Mo 202.032	-0.5093u	-0.9566u	2.1000

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Label	Replicates Concentration		
Na 330.237	-113.605u	41.3528	280.961
Ni 231.604	-0.5272u	-1.6004u	1.1516
Pb 220.353	0.8014	3.9893	-0.5836u
Sb 206.834	4.6332	4.6384	7.6523
Se 196.026	2.1462	-11.4061u	5.7073
Si 288.158	5.3868	4.7090	7.8778
Sn 189.925	-6.7078u	-3.4902u	-6.5940u
Sr 216.596	-0.9358u	1.3637	-0.1690u
Ti 334.941	-0.0101u	-0.0319u	-0.0367u
Tl 190.794	-4.7789u	-9.0278u	-3.3588u
V 292.401	0.4157	0.6451	-0.3388u
Zn 206.200	-2.1535u	-2.2733u	-0.2004u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1256	ppb	0.2308	183.8	-36.9096
Al 308.215	7.7295	ppb	4.2709	55.3	222.244
As 188.980	-1.1649	ppb	0.4233	36.3	0.3953
B 249.678	1.8947	ppb	0.8327	43.9	7.2102
Ba 389.178	-0.8583	ppb	1.8796	219.0	-42.0341
Be 313.042	-0.0966	ppb	0.0169	17.5	-404.746
Ca 370.602	-1.908	ppb	3.161	165.7	21.89
Cd 226.502	-0.2605	ppb	0.1088	41.8	0.6156
Co 228.615	1.4912	ppb	0.6327	42.4	-6.4579
Cr 267.716	-0.1071	ppb	0.2350	219.4	11.7642
Cu 324.754	0.6247	ppb	0.7637	122.2	455.006
Fe 271.441	-0.3132	ppb	15.8748	5068.3	17.0973
K 766.491	0.7381	ppb	0.7127	96.6	291.511
Mg 279.078	0.6158	ppb	2.2030	357.8	22.5172
Mn 257.610	-0.0444	ppb	0.0809	182.2	22.8833
Mo 202.032	0.2114	ppb	1.6508	781.0	4.3607
Na 330.237	69.5698	ppb	198.791	285.7	39.4606
Ni 231.604	-0.3254	ppb	1.3871	426.3	-2.1375
Pb 220.353	1.4024	ppb	2.3450	167.2	1.3869
Sb 206.834	5.6413	ppb	1.7416	30.9	8.0077
Se 196.026	-1.1842	ppb	9.0297	762.5	2.4984
Si 288.158	5.9912	ppb	1.6686	27.9	563.167
Sn 189.925	-5.5974	ppb	1.8257	32.6	-0.4213
Sr 216.596	0.0863	ppb	1.1708	1356.5	7.4271
Ti 334.941	-0.0262	ppb	0.0142	54.1	-27.6912
Tl 190.794	-5.7218	ppb	2.9498	51.6	-2.7888
V 292.401	0.2407	ppb	0.5148	213.9	-10.3109
Zn 206.200	-1.5424	ppb	1.1637	75.4	-0.9563

ics 680-567072/2-a (Samp)

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Rack 2, Tube 2

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	110.112	110.245	109.294
Al 308.215	10572.5	10580.0	10496.7
As 188.980	209.644	206.568	204.692
B 249.678	503.086	507.186	507.136
Ba 389.178	211.745	211.530	212.577
Be 313.042	109.708	109.783	109.177
Ca 370.602	10970	10977	10863

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Label	Replicates Concentration		
Cd 226.502	107.546	107.130	106.735
Co 228.615	106.686	105.411	106.221
Cr 267.716	211.406	210.891	210.327
Cu 324.754	214.778	214.763	212.591
Fe 271.441	10355.2	10306.2	10325.2
K 766.491	18245.4	18253.4	18148.0
Mg 279.078	10394.6	10391.2	10334.5
Mn 257.610	856.483	854.727	850.273
Mo 202.032	209.919	211.675	211.228
Na 330.237	141924x	141989x	141700x
Ni 231.604	210.121	214.603	210.166
Pb 220.353	1047.01	1035.85	1037.53
Sb 206.834	103.771	105.252	110.552
Se 196.026	217.596	224.966	199.996
Si 288.158	37.5956	41.3198	41.0719
Sn 189.925	208.222	211.148	209.561
Sr 216.596	209.155	210.936	206.317
Ti 334.941	833.738	833.301	827.379
Tl 190.794	87.4218	82.1895	75.9400
V 292.401	214.114	213.081	212.446
Zn 206.200	216.930	215.561	212.504

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	109.884b	ppb	0.5148	0.5	3295.34
Al 308.215	10549.7b	ppb	46.0621	0.4	20851.9
As 188.980	206.968b	ppb	2.5000	1.2	55.9075
B 249.678	505.802b	ppb	2.3527	0.5	3445.61
Ba 389.178	211.951b	ppb	0.5528	0.3	1312.23
Be 313.042	109.556b	ppb	0.3302	0.3	88044.8
Ca 370.602	10936b	ppb	63.79	0.6	18323
Cd 226.502	107.137b	ppb	0.4057	0.4	1395.40
Co 228.615	106.106b	ppb	0.6455	0.6	412.287
Cr 267.716	210.874b	ppb	0.5397	0.3	3544.28
Cu 324.754	214.044b	ppb	1.2585	0.6	6923.61
Fe 271.441	10328.9b	ppb	24.6995	0.2	5739.79
K 766.491	18215.6b	ppb	58.6611	0.3	374739
Mg 279.078	10373.4b	ppb	33.7392	0.3	13883.5
Mn 257.610	853.828b	ppb	3.2011	0.4	70865.0
Mo 202.032	210.940b	ppb	0.9127	0.4	359.844
Na 330.237	141871xb	ppb	151.868	0.1	3861.52
Ni 231.604	211.630b	ppb	2.5747	1.2	235.554
Pb 220.353	1040.13b	ppb	6.0149	0.6	394.227
Sb 206.834	106.525b	ppb	3.5654	3.3	44.9540
Se 196.026	214.186b	ppb	12.8294	6.0	43.2218
Si 288.158	39.9958b	ppb	2.0823	5.2	807.344
Sn 189.925	209.644b	ppb	1.4646	0.7	53.9916
Sr 216.596	208.803b	ppb	2.3297	1.1	614.826
Ti 334.941	831.473b	ppb	3.5519	0.4	73756.0
Tl 190.794	81.8504b	ppb	5.7484	7.0	17.9412
V 292.401	213.214b	ppb	0.8421	0.4	2142.91
Zn 206.200	214.998b	ppb	2.2660	1.1	118.450

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lb 680-566725/1-b (Samp) **4/19/2019, 3:48:44 PM** **Rack 2, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3459u	0.2928	0.0990
Al 308.215	7.4813	4.5831	12.9564
As 188.980	0.8847	5.7064	5.7045
B 249.678	95.3993	92.5950	92.3520
Ba 389.178	1.1353	-1.7656u	0.5306
Be 313.042	-0.0875u	-0.0520u	-0.0126u
Ca 370.602	619.4	610.3	627.6
Cd 226.502	-0.3091u	-0.1415u	0.0846
Co 228.615	-0.3112u	0.0633	0.6246
Cr 267.716	0.2424	0.5336	0.2109
Cu 324.754	1.1236	0.3811	0.0646
Fe 271.441	-2.7993u	3.8630	6.3455
K 766.491	100.326	100.765	103.766
Mg 279.078	67.9813	62.6526	67.9107
Mn 257.610	0.1563	0.4098	0.5632
Mo 202.032	1.0059	-0.9221u	2.6073
Na 330.237	125486x	124088x	124797x
Ni 231.604	-0.0996u	-1.9370u	2.5968
Pb 220.353	8.0619	-1.9286u	-5.6415u
Sb 206.834	3.4908	-5.5743u	-7.3740u
Se 196.026	-3.5213u	8.3332	-6.1343u
Si 288.158	46.3590	42.1352	40.4562
Sn 189.925	2.1436	-2.5264u	1.6198
Sr 216.596	0.8694	-1.1097u	-0.3500u
Ti 334.941	0.2717	0.2383	0.5869
Tl 190.794	-8.9681u	-1.5725u	-2.4906u
V 292.401	-0.0573u	-0.6087u	0.3984
Zn 206.200	4.2634	0.5092	2.5340

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0153b	ppb	0.3275	2142.3	-40.2602
Al 308.215	8.3403b	ppb	4.2522	51.0	223.447
As 188.980	4.0985b	ppb	2.7833	67.9	1.8005
B 249.678	93.4488b	ppb	1.6936	1.8	633.885
Ba 389.178	-0.0332b	ppb	1.5304	4604.4	-36.7782
Be 313.042	-0.0507b	ppb	0.0375	73.9	-373.341
Ca 370.602	619.1b	ppb	8.672	1.4	1060
Cd 226.502	-0.1220b	ppb	0.1976	162.0	2.1704
Co 228.615	0.1256b	ppb	0.4710	375.1	-11.8756
Cr 267.716	0.3290b	ppb	0.1779	54.1	19.7638
Cu 324.754	0.5231b	ppb	0.5436	103.9	451.943
Fe 271.441	2.4697b	ppb	4.7289	191.5	18.6013
K 766.491	101.619b	ppb	1.8722	1.8	2367.31
Mg 279.078	66.1815b	ppb	3.0563	4.6	110.195
Mn 257.610	0.3764b	ppb	0.2055	54.6	57.7836
Mo 202.032	0.8971b	ppb	1.7672	197.0	5.5179
Na 330.237	124790xb	ppb	698.872	0.6	3410.19
Ni 231.604	0.1867b	ppb	2.2804	1221.2	-1.5621
Pb 220.353	0.1639b	ppb	7.0873	4323.6	0.9180
Sb 206.834	-3.1525b	ppb	5.8232	184.7	4.9201
Se 196.026	-0.4408b	ppb	7.7100	1749.2	2.6386
Si 288.158	42.9834b	ppb	3.0415	7.1	736.479

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	0.4124b	ppb	2.5584	620.4	1.1098
Sr 216.596	-0.1968b	ppb	0.9984	507.4	6.5869
Ti 334.941	0.3657b	ppb	0.1923	52.6	4.4378
Tl 190.794	-4.3438b	ppb	4.0311	92.8	-2.4592
V 292.401	-0.0892b	ppb	0.5043	565.4	-14.0760
Zn 206.200	2.4356b	ppb	1.8790	77.2	1.2386

680-167464-b-2-b (Samp) **4/19/2019, 3:52:35 PM** **Rack 2, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0408	-0.3933u	0.3530
Al 308.215	14.0616	14.7713	13.1206
As 188.980	2.1818	4.9755	4.7804
B 249.678	34.6106	34.1172	32.1830
Ba 389.178	73.8938	71.1018	70.5007
Be 313.042	-0.0748u	-0.0633u	-0.0623u
Ca 370.602	16588	16475	16498
Cd 226.502	1.3418	1.0170	0.3600
Co 228.615	4.6807	4.1499	5.0293
Cr 267.716	-0.1973u	-0.6790u	-0.1907u
Cu 324.754	42.8432	43.0483	42.9956
Fe 271.441	-4.4176u	-6.1592u	1.6090
K 766.491	479.285	477.488	476.950
Mg 279.078	390.562	393.220	390.116
Mn 257.610	776.203	772.051	771.678
Mo 202.032	2.0171	-0.3557u	-0.9243u
Na 330.237	114295x	113292x	113451x
Ni 231.604	0.4781	0.2408	-0.4578u
Pb 220.353	17061.7	17002.0	16978.0
Sb 206.834	30.7604	35.9661	44.2375
Se 196.026	22.9985	13.6727	3.7541
Si 288.158	326.863	323.112	327.380
Sn 189.925	2.1095	-0.3328u	-10.1993u
Sr 216.596	33.3130	33.3335	32.3568
Ti 334.941	0.1369	0.0124u	0.0633
Tl 190.794	-8.5058u	-2.1572u	-15.0842u
V 292.401	0.0307	-0.1345u	0.4173
Zn 206.200	49.2551	47.8356	46.2770

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0002b	ppb	0.3748	232522.6	-39.3971
Al 308.215	13.9845b	ppb	0.8280	5.9	234.466
As 188.980	3.9792b	ppb	1.5597	39.2	1.7689
B 249.678	33.6369b	ppb	1.2831	3.8	224.493
Ba 389.178	71.8321b	ppb	1.8106	2.5	415.386
Be 313.042	-0.0668b	ppb	0.0070	10.4	-385.332
Ca 370.602	16520b	ppb	59.60	0.4	27657
Cd 226.502	0.9063b	ppb	0.5002	55.2	15.4706
Co 228.615	4.6200b	ppb	0.4428	9.6	5.9424
Cr 267.716	-0.3557b	ppb	0.2800	78.7	9.4098
Cu 324.754	42.9624b	ppb	0.1066	0.2	1737.41
Fe 271.441	-2.9893b	ppb	4.0763	136.4	15.7330
K 766.491	477.908b	ppb	1.2229	0.3	10139.1

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	391.299b	ppb	1.6783	0.4	537.125
Mn 257.610	773.311b	ppb	2.5115	0.3	64132.8
Mo 202.032	0.2457b	ppb	1.5602	634.9	4.4188
Na 330.237	113679xb	ppb	538.857	0.5	3109.36
Ni 231.604	0.0870b	ppb	0.4865	559.0	-1.6779
Pb 220.353	17013.9b	ppb	43.0879	0.3	6443.76
Sb 206.834	36.9880b	ppb	6.7964	18.4	18.9876
Se 196.026	13.4751b	ppb	9.6237	71.4	5.3347
Si 288.158	325.785b	ppb	2.3297	0.7	2056.15
Sn 189.925	-2.8075b	ppb	6.5169	232.1	0.2950
Sr 216.596	33.0011b	ppb	0.5581	1.7	103.505
Ti 334.941	0.0709b	ppb	0.0626	88.4	-20.6152
Tl 190.794	-8.5824b	ppb	6.4638	75.3	-3.3055
V 292.401	0.1045b	ppb	0.2832	271.0	-11.9775
Zn 206.200	47.7892b	ppb	1.4896	3.1	26.2676

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Rack 2, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7182	0.5995	1.0742
Al 308.215	-57.4771u	-60.4970u	-57.7086u
As 188.980	-0.6433u	-1.9107u	0.4360
B 249.678	0.0334	-0.3665u	0.2992
Ba 389.178	0.5406	-2.2971u	-0.4035u
Be 313.042	0.1565	0.1535	0.1460
Ca 370.602	-8.061u	-7.627u	-9.299u
Cd 226.502	-0.0527u	-0.2429u	-0.1132u
Co 228.615	1.8861	2.1233	1.6502
Cr 267.716	-0.1787u	-0.0079u	0.1172
Cu 324.754	-8.3087u	-8.9999u	-8.8066u
Fe 271.441	-10.0074u	-3.0339u	-2.3840u
K 766.491	-5.8462u	-5.9456u	-5.3306u
Mg 279.078	-11.7796u	-10.5859u	-6.1506u
Mn 257.610	-0.1611u	-0.1787u	-0.2419u
Mo 202.032	-0.5524u	-1.6530u	-1.3118u
Na 330.237	-405.109u	-413.866u	-395.116u
Ni 231.604	0.8252	-0.2187u	0.0308
Pb 220.353	0.2751	-4.8108u	0.1560
Sb 206.834	-9.3304u	-4.7905u	-6.8945u
Se 196.026	-3.8663u	-5.0988u	-7.1324u
Si 288.158	-44.2719u	-50.9800u	-51.3565u
Sn 189.925	-5.2929u	-5.4157u	-0.8199u
Sr 216.596	-1.1233u	-1.0169u	-0.7952u
Ti 334.941	-0.1631u	-0.2202u	-0.2160u
Tl 190.794	-2.2275u	-5.4520u	-0.7234u
V 292.401	0.4787	0.9476	0.2514
Zn 206.200	1.2241	0.6724	0.0024

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7973	ppb	0.2470	31.0	-16.4961
Al 308.215	-58.5609	ppb	1.6807	2.9	92.5641
As 188.980	-0.7060	ppb	1.1746	166.4	0.5180
B 249.678	-0.0113	ppb	0.3351	2965.8	-5.7988

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.7200	ppb	1.4451	200.7	-41.1949
Be 313.042	0.1520	ppb	0.0054	3.6	-204.116
Ca 370.602	-8.329	ppb	0.8675	10.4	11.21
Cd 226.502	-0.1363	ppb	0.0972	71.3	2.1504
Co 228.615	1.8865	ppb	0.2365	12.5	-4.8828
Cr 267.716	-0.0231	ppb	0.1485	642.5	13.1623
Cu 324.754	-8.7051	ppb	0.3566	4.1	172.378
Fe 271.441	-5.1418	ppb	4.2263	82.2	14.4541
K 766.491	-5.7074	ppb	0.3302	5.8	139.420
Mg 279.078	-9.5054	ppb	2.9660	31.2	9.0035
Mn 257.610	-0.1939	ppb	0.0425	21.9	10.4171
Mo 202.032	-1.1724	ppb	0.5634	48.1	2.0257
Na 330.237	-404.697	ppb	9.3822	2.3	26.6241
Ni 231.604	0.2124	ppb	0.5451	256.6	-1.5349
Pb 220.353	-1.4599	ppb	2.9026	198.8	0.3046
Sb 206.834	-7.0052	ppb	2.2720	32.4	3.5910
Se 196.026	-5.3658	ppb	1.6494	30.7	1.7100
Si 288.158	-48.8694 ^{uv}	ppb	3.9861	8.2	307.389
Sn 189.925	-3.8428	ppb	2.6186	68.1	0.0221
Sr 216.596	-0.9785	ppb	0.1674	17.1	4.3239
Ti 334.941	-0.1998	ppb	0.0318	15.9	-43.1103
Tl 190.794	-2.8010	ppb	2.4159	86.3	-2.0871
V 292.401	0.5592	ppb	0.3550	63.5	-6.9902
Zn 206.200	0.6330	ppb	0.6118	96.7	0.2441

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Rack 2, Tube 6

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	56.0145	55.4695	55.9150
Al 308.215	5277.46	5275.76	5261.24
As 188.980	108.351	109.665	112.075
B 249.678	241.665	241.894	243.432
Ba 389.178	180.606	181.639	181.587
Be 313.042	55.0854	54.9198	54.8490
Ca 370.602	22287	22286	22211
Cd 226.502	54.3841	54.6373	54.2099
Co 228.615	56.4866	58.5668	58.1389
Cr 267.716	105.753	106.070	106.406
Cu 324.754	151.585	149.136	151.848
Fe 271.441	5166.65	5134.94	5125.48
K 766.491	9522.93	9495.84	9464.07
Mg 279.078	5623.53	5607.42	5585.30
Mn 257.610	1324.08	1321.44	1318.17
Mo 202.032	105.138	103.022	105.685
Na 330.237	126017 ^x	126214 ^x	125288 ^x
Ni 231.604	106.386	107.108	105.375
Pb 220.353	18253.3	18207.0	18126.7
Sb 206.834	89.3989	100.980	86.4164
Se 196.026	97.6225	119.825	111.642
Si 288.158	340.350	334.565	337.298
Sn 189.925	99.1345	96.8373	102.233
Sr 216.596	142.921	137.675	141.724
Ti 334.941	414.464	414.693	413.515

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Label	Replicates Concentration		
Tl 190.794	37.5888	38.6978	34.3817
V 292.401	107.004	105.536	106.289
Zn 206.200	156.124	157.879	154.820

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.7997b	ppb	0.2902	0.5	1654.90
Al 308.215	5271.49b	ppb	8.9182	0.2	10522.9
As 188.980	110.030b	ppb	1.8884	1.7	30.0549
B 249.678	242.330b	ppb	0.9613	0.4	1647.59
Ba 389.178	181.277b	ppb	0.5817	0.3	1111.66
Be 313.042	54.9514b	ppb	0.1213	0.2	43996.8
Ca 370.602	22262b	ppb	43.77	0.2	37264
Cd 226.502	54.4104b	ppb	0.2149	0.4	710.466
Co 228.615	57.7307b	ppb	1.0985	1.9	218.494
Cr 267.716	106.076b	ppb	0.3268	0.3	1791.26
Cu 324.754	150.856b	ppb	1.4961	1.0	5007.58
Fe 271.441	5142.36b	ppb	21.5635	0.4	2866.45
K 766.491	9494.28b	ppb	29.4583	0.3	195485
Mg 279.078	5605.42b	ppb	19.1933	0.3	7503.45
Mn 257.610	1321.23b	ppb	2.9602	0.2	109583
Mo 202.032	104.615b	ppb	1.4063	1.3	180.481
Na 330.237	125840xb	ppb	487.923	0.4	3432.85
Ni 231.604	106.290b	ppb	0.8705	0.8	117.420
Pb 220.353	18195.7b	ppb	64.0305	0.4	6891.04
Sb 206.834	92.2649b	ppb	7.6930	8.3	39.1652
Se 196.026	109.696b	ppb	11.2283	10.2	23.5467
Si 288.158	337.404b	ppb	2.8940	0.9	2152.07
Sn 189.925	99.4016b	ppb	2.7077	2.7	26.1279
Sr 216.596	140.773b	ppb	2.7492	2.0	417.171
Ti 334.941	414.224b	ppb	0.6249	0.2	36731.0
Tl 190.794	36.8894b	ppb	2.2415	6.1	7.4896
V 292.401	106.276b	ppb	0.7345	0.7	1061.59
Zn 206.200	156.275b	ppb	1.5352	1.0	86.0892

680-167464-b-2-c ms (Samp) 4/19/2019, 4:04:07 PM Rack 2, Tube 7

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.8711	2.8534	2.1808
Al 308.215	13.2513	17.0422	18.3049
As 188.980	317.564	328.663	328.909
B 249.678	351.414	353.064	354.065
Ba 389.178	373.610	376.492	374.967
Be 313.042	166.774	166.594	166.827
Ca 370.602	13766	13743	13768
Cd 226.502	161.864	161.488	162.051
Co 228.615	163.645	163.311	166.429
Cr 267.716	159.667	158.709	160.051
Cu 324.754	192.958	193.177	197.016
Fe 271.441	313.264	301.911	300.970
K 766.491	466.009	466.257	465.368
Mg 279.078	330.926	328.691	327.141
Mn 257.610	806.070	805.222	805.750
Mo 202.032	159.540	156.282	159.966

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Label	Replicates Concentration		
Na 330.237	94457.2	93895.0	93684.4
Ni 231.604	160.994	159.432	157.032
Pb 220.353	14269.8	14200.8	14209.7
Sb 206.834	179.897	186.197	198.506
Se 196.026	327.560	324.468	302.972
Si 288.158	593.224	597.171	589.637
Sn 189.925	309.789	305.798	314.787
Sr 216.596	186.874	184.401	185.012
Ti 334.941	158.629	158.735	158.620
Tl 190.794	314.523	310.519	315.759
V 292.401	162.476	160.985	162.138
Zn 206.200	199.331	207.308	203.030

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.3018	ppb	0.5022	21.8	30.0607
Al 308.215	16.1995	ppb	2.6301	16.2	244.638
As 188.980	325.046	ppb	6.4801	2.0	87.4709
B 249.678	352.848	ppb	1.3386	0.4	2409.09
Ba 389.178	375.023	ppb	1.4420	0.4	2321.93
Be 313.042	166.731	ppb	0.1223	0.1	134175
Ca 370.602	13759	ppb	13.85	0.1	23044
Cd 226.502	161.801	ppb	0.2867	0.2	2081.27
Co 228.615	164.462	ppb	1.7122	1.0	639.076
Cr 267.716	159.476	ppb	0.6913	0.4	2682.89
Cu 324.754	194.384	ppb	2.2823	1.2	6325.72
Fe 271.441	305.382	ppb	6.8425	2.2	192.908
K 766.491	465.878	ppb	0.4588	0.1	8232.41
Mg 279.078	328.920	ppb	1.9031	0.6	453.374
Mn 257.610	805.681	ppb	0.4283	0.1	66818.8
Mo 202.032	158.596	ppb	2.0151	1.3	271.632
Na 330.237	94012.2	ppb	399.507	0.4	2574.62
Ni 231.604	159.153	ppb	1.9958	1.3	176.629
Pb 220.353	14226.8	ppb	37.5248	0.3	5388.24
Sb 206.834	188.200	ppb	9.4645	5.0	74.9873
Se 196.026	318.333	ppb	13.3925	4.2	62.8082
Si 288.158	593.344	ppb	3.7684	0.6	3359.99
Sn 189.925	310.124	ppb	4.5037	1.5	79.3818
Sr 216.596	185.429	ppb	1.2881	0.7	546.172
Ti 334.941	158.661	ppb	0.0638	0.0	14047.6
Tl 190.794	313.601	ppb	2.7390	0.9	73.9099
V 292.401	161.867	ppb	0.7819	0.5	1621.55
Zn 206.200	203.223	ppb	3.9922	2.0	111.958

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Rack 2, Tube 8

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	2.5672	2.3839	2.8066
Al 308.215	18.1963	7.6886	18.5625
As 188.980	306.853	311.341	313.910
B 249.678	347.420	349.433	350.603
Ba 389.178	366.369	367.630	365.198
Be 313.042	162.364	162.670	163.013
Ca 370.602	13768	13801	13831

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Label	Replicates Concentration		
Cd 226.502	156.660	157.832	158.479
Co 228.615	158.621	160.412	162.772
Cr 267.716	156.600	156.562	156.415
Cu 324.754	191.890	193.441	192.944
Fe 271.441	320.252	303.287	282.668
K 766.491	509.734	510.226	509.451
Mg 279.078	336.235	345.932	342.636
Mn 257.610	802.720	806.938	807.098
Mo 202.032	158.564	153.712	155.946
Na 330.237	94870.4	94819.5	94733.6
Ni 231.604	163.733	163.273	164.541
Pb 220.353	14200.1	14279.3	14316.4
Sb 206.834	191.961	194.106	190.904
Se 196.026	321.619	335.405	325.168
Si 288.158	587.970	592.016	588.899
Sn 189.925	283.864	305.684	308.472
Sr 216.596	181.726	182.608	181.016
Ti 334.941	154.557	154.962	154.752
Tl 190.794	295.547	305.155	299.668
V 292.401	157.240	157.594	157.884
Zn 206.200	206.996	202.895	207.421

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.5859	ppb	0.2120	8.2	38.6984
Al 308.215	14.8158	ppb	6.1750	41.7	241.801
As 188.980	310.701	ppb	3.5719	1.1	83.6413
B 249.678	349.152	ppb	1.6101	0.5	2383.79
Ba 389.178	366.399	ppb	1.2164	0.3	2267.72
Be 313.042	162.682	ppb	0.3247	0.2	130908
Ca 370.602	13800	ppb	31.51	0.2	23113
Cd 226.502	157.657	ppb	0.9225	0.6	2028.07
Co 228.615	160.602	ppb	2.0817	1.3	623.772
Cr 267.716	156.526	ppb	0.0978	0.1	2633.55
Cu 324.754	192.758	ppb	0.7920	0.4	6276.47
Fe 271.441	302.069	ppb	18.8216	6.2	190.915
K 766.491	509.804	ppb	0.3926	0.1	9188.00
Mg 279.078	341.601	ppb	4.9306	1.4	470.334
Mn 257.610	805.585	ppb	2.4825	0.3	66810.9
Mo 202.032	156.074	ppb	2.4289	1.6	267.376
Na 330.237	94807.9	ppb	69.1393	0.1	2596.12
Ni 231.604	163.849	ppb	0.6419	0.4	181.901
Pb 220.353	14265.3	ppb	59.4242	0.4	5402.82
Sb 206.834	192.324	ppb	1.6319	0.8	76.3534
Se 196.026	327.398	ppb	7.1581	2.2	64.5169
Si 288.158	589.628	ppb	2.1194	0.4	3342.02
Sn 189.925	299.340	ppb	13.4749	4.5	76.6563
Sr 216.596	181.783	ppb	0.7974	0.4	535.534
Ti 334.941	154.757	ppb	0.2025	0.1	13701.3
Tl 190.794	300.123	ppb	4.8198	1.6	70.6803
V 292.401	157.572	ppb	0.3229	0.2	1578.04
Zn 206.200	205.771	ppb	2.4991	1.2	113.366

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680-167558-a-1-c (Samp) **4/19/2019, 4:11:49 PM** **Rack 2, Tube 9**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0380	-0.0095u	0.1187
Al 308.215	19.3637	19.8272	21.5672
As 188.980	2.1532	1.9379	0.1406
B 249.678	95.3618	95.3876	93.7107
Ba 389.178	66.2580	70.0085	68.6016
Be 313.042	-0.0797u	-0.0894u	-0.0710u
Ca 370.602	5885	5953	5875
Cd 226.502	0.3902	-0.6508u	-0.7265u
Co 228.615	2.7166	2.6101	3.3304
Cr 267.716	0.5685	0.1675	-0.3815u
Cu 324.754	0.6851	1.0394	1.3550
Fe 271.441	16.7346	-19.1580u	-2.5470u
K 766.491	152.734	154.475	152.569
Mg 279.078	648.373	657.150	640.799
Mn 257.610	212.005	213.412	211.075
Mo 202.032	0.0654	1.4167	-0.1633u
Na 330.237	139954x	141765x	139723x
Ni 231.604	1.6001	2.3748	2.7301
Pb 220.353	5.1417	1.7473	5.8940
Sb 206.834	-4.9905u	1.3710	-0.5120u
Se 196.026	6.2571	-11.4326u	-9.1096u
Si 288.158	2210.69	2223.00	2204.84
Sn 189.925	-0.5002u	1.1650	-2.8713u
Sr 216.596	49.8304	52.3607	52.2739
Ti 334.941	0.0189	-0.0542u	-0.0316u
Tl 190.794	1.2857	-14.3120u	-4.3116u
V 292.401	0.4322	0.7432	1.2651
Zn 206.200	0.2265	2.1852	0.8795

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0491b	ppb	0.0648	132.2	-38.9992
Al 308.215	20.2527b	ppb	1.1617	5.7	246.757
As 188.980	1.4106b	ppb	1.1051	78.3	1.0829
B 249.678	94.8200b	ppb	0.9608	1.0	643.277
Ba 389.178	68.2894b	ppb	1.8946	2.8	393.401
Be 313.042	-0.0800b	ppb	0.0092	11.5	-396.915
Ca 370.602	5904b	ppb	42.69	0.7	9900
Cd 226.502	-0.3290b	ppb	0.6240	189.7	-0.5206
Co 228.615	2.8857b	ppb	0.3887	13.5	-0.9362
Cr 267.716	0.1182b	ppb	0.4769	403.6	16.6426
Cu 324.754	1.0265b	ppb	0.3351	32.6	467.173
Fe 271.441	-1.6568b	ppb	17.9628	1084.2	16.4116
K 766.491	153.259b	ppb	1.0564	0.7	3434.87
Mg 279.078	648.774b	ppb	8.1831	1.3	887.147
Mn 257.610	212.164b	ppb	1.1764	0.6	17616.4
Mo 202.032	0.4396b	ppb	0.8539	194.2	4.7458
Na 330.237	140481xb	ppb	1118.18	0.8	3834.26
Ni 231.604	2.2350b	ppb	0.5778	25.9	0.7334
Pb 220.353	4.2610b	ppb	2.2092	51.8	2.4798
Sb 206.834	-1.3772b	ppb	3.2678	237.3	5.5373
Se 196.026	-4.7617b	ppb	9.6130	201.9	1.8440
Si 288.158	2212.84b	ppb	9.2702	0.4	10863.6

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.7355b	ppb	2.0284	275.8	0.8213
Sr 216.596	51.4883b	ppb	1.4365	2.8	157.455
Ti 334.941	-0.0223b	ppb	0.0374	167.9	-28.7925
Tl 190.794	-5.7793b	ppb	7.9018	136.7	-2.7558
V 292.401	0.8135b	ppb	0.4209	51.7	-4.8766
Zn 206.200	1.0971b	ppb	0.9973	90.9	0.5000

680-167558-a-2-c (Samp) 4/19/2019, 4:15:41 PM Rack 2, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2133	-0.7108u	-0.4640u
Al 308.215	7.8228	6.9593	13.6537
As 188.980	-2.0705u	0.1780	4.8616
B 249.678	85.1629	85.8767	86.2794
Ba 389.178	97.0179	96.4401	96.5965
Be 313.042	-0.0719u	-0.0875u	-0.1050u
Ca 370.602	4252	4288	4292
Cd 226.502	-0.1016u	-0.3505u	0.0330
Co 228.615	0.5661	1.5136	-0.1430u
Cr 267.716	0.6789	0.0848	0.5252
Cu 324.754	0.6594	0.5538	0.5399
Fe 271.441	-4.0544u	2.9461	13.8718
K 766.491	758.240	756.484	747.570
Mg 279.078	1312.03	1322.20	1326.18
Mn 257.610	72.3250	72.5992	72.9046
Mo 202.032	1.2932	0.3929	0.9956
Na 330.237	114988x	115668x	116264x
Ni 231.604	-1.1006u	0.6154	1.5682
Pb 220.353	-7.9841u	6.5514	6.5077
Sb 206.834	-1.0311u	2.5373	2.1073
Se 196.026	-0.7356u	-2.4443u	0.2249
Si 288.158	202.617	205.158	208.590
Sn 189.925	-6.6942u	-2.7009u	-10.2460u
Sr 216.596	39.0850	36.5101	40.6356
Ti 334.941	-0.1470u	0.0681	0.0938
Tl 190.794	-11.7037u	-4.4461u	11.0390
V 292.401	0.0510	-0.5439u	-0.1008u
Zn 206.200	2.0219	1.5401	6.2112

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3205b	ppb	0.4785	149.3	-50.4551
Al 308.215	9.4786b	ppb	3.6414	38.4	225.671
As 188.980	0.9897b	ppb	3.5366	357.3	0.9704
B 249.678	85.7730b	ppb	0.5654	0.7	581.348
Ba 389.178	96.6848b	ppb	0.2989	0.3	572.660
Be 313.042	-0.0881b	ppb	0.0166	18.8	-402.641
Ca 370.602	4277b	ppb	22.39	0.5	7178
Cd 226.502	-0.1397b	ppb	0.1946	139.3	1.9623
Co 228.615	0.6456b	ppb	0.8312	128.8	-9.8157
Cr 267.716	0.4296b	ppb	0.3083	71.8	21.5043
Cu 324.754	0.5844b	ppb	0.0654	11.2	453.797
Fe 271.441	4.2545b	ppb	9.0344	212.4	19.6143
K 766.491	754.098b	ppb	5.7210	0.8	15790.7

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1320.14b	ppb	7.2997	0.6	1786.39
Mn 257.610	72.6096b	ppb	0.2899	0.4	6050.33
Mo 202.032	0.8939b	ppb	0.4587	51.3	5.5126
Na 330.237	115640xb	ppb	637.963	0.6	3162.88
Ni 231.604	0.3610b	ppb	1.3525	374.7	-1.3672
Pb 220.353	1.6917b	ppb	8.3795	495.3	1.5001
Sb 206.834	1.2045b	ppb	1.9480	161.7	6.4594
Se 196.026	-0.9850b	ppb	1.3520	137.3	2.5428
Si 288.158	205.455b	ppb	2.9972	1.5	1494.39
Sn 189.925	-6.5471b	ppb	3.7747	57.7	-0.6500
Sr 216.596	38.7436b	ppb	2.0838	5.4	120.255
Ti 334.941	0.0050b	ppb	0.1322	2671.2	-24.0496
Tl 190.794	-1.7036b	ppb	11.6167	681.9	-1.8110
V 292.401	-0.1979b	ppb	0.3091	156.2	-15.1530
Zn 206.200	3.2577b	ppb	2.5691	78.9	1.6922

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	527.697	521.790	520.498
Al 308.215	10398.0	10412.0	10348.8
As 188.980	504.352	516.085	515.664
B 249.678	530.063	533.698	532.392
Ba 389.178	505.299	503.607	502.633
Be 313.042	537.225	537.818	534.642
Ca 370.602	10389	10408	10343
Cd 226.502	521.457	523.755	520.508
Co 228.615	522.845	526.167	519.470
Cr 267.716	517.380	517.406	515.152
Cu 324.754	529.308	530.098	526.820
Fe 271.441	10352.6	10378.8	10279.2
K 766.491	10089.1	10144.4	10056.2
Mg 279.078	10503.8	10503.7	10423.3
Mn 257.610	521.359	522.453	517.999
Mo 202.032	514.440	513.773	511.953
Na 330.237	10777.7	10606.8	10781.1
Ni 231.604	524.600	530.116	518.673
Pb 220.353	501.787	517.958	524.067
Sb 206.834	507.596	500.445	500.876
Se 196.026	542.945	517.064	542.965
Si 288.158	5252.51	5244.36	5214.15
Sn 189.925	510.863	509.228	516.115
Sr 216.596	513.139	513.285	510.441
Ti 334.941	513.355	513.937	510.720
Tl 190.794	528.204	523.206	498.427
V 292.401	527.090	530.068	524.411
Zn 206.200	1057.62	1049.54	1040.24

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	523.328	ppb	3.8380	0.7	15853.1	104.66563
Al 308.215	10386.3	ppb	33.1973	0.3	20543.2	103.86286
As 188.980	512.034	ppb	6.6562	1.3	137.315	102.40674
B 249.678	532.051	ppb	1.8414	0.3	3625.20	106.41018

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	503.846	ppb	1.3490	0.3	3148.07	100.76924
Be 313.042	536.562	ppb	1.6885	0.3	432530	107.31236
Ca 370.602	10380	ppb	33.29	0.3	17383	103.80093
Cd 226.502	521.907	ppb	1.6694	0.3	6719.93	104.38139
Co 228.615	522.828	ppb	3.3482	0.6	2058.49	104.56551
Cr 267.716	516.646	ppb	1.2939	0.3	8657.28	103.32915
Cu 324.754	528.742	ppb	1.7105	0.3	16459.0	105.74837
Fe 271.441	10336.9	ppb	51.6289	0.5	5760.42	103.31731
K 766.491	10096.6	ppb	44.6036	0.4	205389	100.96573
Mg 279.078	10476.9	ppb	46.4734	0.4	14025.3	104.76939
Mn 257.610	520.603	ppb	2.3211	0.4	43237.1	104.12065
Mo 202.032	513.389	ppb	1.2873	0.3	870.226	102.67775
Na 330.237	10721.9	ppb	99.6376	0.9	310.177	107.21873
Ni 231.604	524.463	ppb	5.7226	1.1	586.138	104.89262
Pb 220.353	514.604	ppb	11.5125	2.2	195.122	102.92075
Sb 206.834	502.972	ppb	4.0100	0.8	188.496	100.59445
Se 196.026	534.325	ppb	14.9483	2.8	103.540	106.86495
Si 288.158	5237.00	ppb	20.2105	0.4	25114.6	104.74009
Sn 189.925	512.068	ppb	3.5982	0.7	130.412	102.41370
Sr 216.596	512.289	ppb	1.6015	0.3	1496.28	102.45773
Ti 334.941	512.670	ppb	1.7142	0.3	45479.3	102.53406
Tl 190.794	516.613	ppb	15.9461	3.1	122.152	103.32253
V 292.401	527.190	ppb	2.8296	0.5	5311.78	105.43794
Zn 206.200	1049.13	ppb	8.6982	0.8	578.605	104.91319

Cont Calib Blank (CCB)

4/19/2019, 4:23:27 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3897u	0.2939	0.2219
Al 308.215	6.3001	3.9362	6.6772
As 188.980	0.3183	-1.6974u	-1.5526u
B 249.678	15.2361	13.8368	12.3237
Ba 389.178	-2.9421u	-3.2951u	1.0355
Be 313.042	0.0991	0.0937	0.0907
Ca 370.602	0.3287	-0.4004u	1.316
Cd 226.502	-0.4101u	-0.1555u	0.4916
Co 228.615	0.6005	-0.3023u	0.5564
Cr 267.716	-0.2389u	-0.1623u	0.0793
Cu 324.754	0.1414	0.2631	0.4048
Fe 271.441	3.7845	-7.1700u	-5.7005u
K 766.491	-2.0992	-1.8985	-1.6276
Mg 279.078	0.0924	9.6216	7.9710
Mn 257.610	0.2053	0.2233	0.1309
Mo 202.032	-0.0132u	0.2085	0.8320
Na 330.237	144.770	308.301	-152.482u
Ni 231.604	-1.4022u	-0.2333u	-0.5521u
Pb 220.353	-4.4021u	0.5906	-2.4059u
Sb 206.834	-1.6766u	4.9517	1.5591
Se 196.026	-4.9608u	1.6347	-14.0349u
Si 288.158	6.7554	7.4415	5.5121
Sn 189.925	-3.1533u	-2.1925u	-4.8128u
Sr 216.596	0.6988	-1.2789u	-0.0382u
Ti 334.941	0.1611	0.1861	0.2712

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Label	Replicates Concentration		
Tl 190.794	-15.8158u	-19.4722u	-4.7290u
V 292.401	0.7785	0.8545	0.3532
Zn 206.200	0.8025	-0.9572u	1.0661

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0420	ppb	0.3756	893.5	-39.4445	0.04204
Al 308.215	5.6378	ppb	1.4857	26.4	218.175	5.63785
As 188.980	-0.9773	ppb	1.1243	115.0	0.4453	-0.97726
B 249.678	13.7989	ppb	1.4565	10.6	88.7004	13.79886
Ba 389.178	-1.7339	ppb	2.4049	138.7	-47.5392	-1.73392
Be 313.042	0.0945	ppb	0.0042	4.5	-250.604	0.09450
Ca 370.602	0.4146	ppb	0.8612	207.7	25.80	0.41460
Cd 226.502	-0.0247	ppb	0.4649	1885.7	3.6302	-0.02465
Co 228.615	0.2849	ppb	0.5090	178.7	-11.2398	0.28487
Cr 267.716	-0.1073	ppb	0.1661	154.8	11.7587	-0.10731
Cu 324.754	0.2698	ppb	0.1318	48.9	444.256	0.26979
Fe 271.441	-3.0287	ppb	5.9460	196.3	15.5626	-3.02867
K 766.491	-1.8751	ppb	0.2367	12.6	278.571	-1.87507
Mg 279.078	5.8950	ppb	5.0925	86.4	29.5755	5.89497
Mn 257.610	0.1865	ppb	0.0490	26.3	42.0288	0.18650
Mo 202.032	0.3425	ppb	0.4382	128.0	4.5819	0.34246
Na 330.237	100.196	ppb	233.603	233.1	40.2690	100.19641
Ni 231.604	-0.7292	ppb	0.6043	82.9	-2.5897	-0.72919
Pb 220.353	-2.0725	ppb	2.5130	121.3	0.0714	-2.07247
Sb 206.834	1.6114	ppb	3.3144	205.7	6.5368	1.61142
Se 196.026	-5.7870	ppb	7.8674	136.0	1.6307	-5.78697
Si 288.158	6.5697	ppb	0.9780	14.9	566.122	6.56968
Sn 189.925	-3.3862	ppb	1.3256	39.1	0.1376	-3.38617
Sr 216.596	-0.2061	ppb	0.9995	484.9	6.5657	-0.20610
Ti 334.941	0.2061	ppb	0.0577	28.0	-7.0712	0.20612
Tl 190.794	-13.3390	ppb	7.6773	57.6	-4.6129	-13.33899Z
V 292.401	0.6621	ppb	0.2702	40.8	-6.0542	0.66205
Zn 206.200	0.3038	ppb	1.1000	362.0	0.0624	0.30384

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Rack 2, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1994	0.2377	-0.3666u
Al 308.215	8.3068	5.9518	6.9185
As 188.980	-1.1782u	0.7329	-0.3069u
B 249.678	84.1724	85.8247	85.1781
Ba 389.178	63.3366	63.2525	62.8124
Be 313.042	-0.0670u	-0.0837u	-0.0664u
Ca 370.602	4742	4759	4757
Cd 226.502	-0.3914u	0.2238	-0.0185u
Co 228.615	0.8716	0.4578	0.0399
Cr 267.716	0.3861	0.9014	0.7800
Cu 324.754	0.8380	0.5465	1.2825
Fe 271.441	-2.7971u	-21.1680u	-2.5091u
K 766.491	278.076	278.342	277.670
Mg 279.078	1499.35	1504.59	1500.01
Mn 257.610	12.8870	13.0030	13.0013
Mo 202.032	-0.3771u	0.8285	0.1462

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Label	Replicates Concentration		
Na 330.237	113388x	114001x	113257x
Ni 231.604	-1.1767u	0.3904	1.0766
Pb 220.353	-2.3700u	-6.1589u	-0.5666u
Sb 206.834	-4.0652u	-3.7404u	-4.0345u
Se 196.026	-7.7878u	1.7984	-4.6165u
Si 288.158	156.210	157.949	159.277
Sn 189.925	-11.0639u	-2.8971u	-1.5884u
Sr 216.596	46.9918	46.4279	44.6228
Ti 334.941	-0.1942u	0.0012	-0.1322u
Tl 190.794	-20.8361u	-13.3316u	-14.0551u
V 292.401	0.1670	-0.0030u	0.9507
Zn 206.200	-0.2413u	-0.1939u	0.5570

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0235b	ppb	0.3384	1439.7	-40.1346
Al 308.215	7.0590b	ppb	1.1838	16.8	220.940
As 188.980	-0.2507b	ppb	0.9568	381.6	0.6393
B 249.678	85.0584b	ppb	0.8326	1.0	576.466
Ba 389.178	63.1338b	ppb	0.2815	0.4	361.917
Be 313.042	-0.0724b	ppb	0.0098	13.5	-389.665
Ca 370.602	4753b	ppb	9.548	0.2	7971
Cd 226.502	-0.0620b	ppb	0.3099	499.6	2.9498
Co 228.615	0.4564b	ppb	0.4158	91.1	-10.5575
Cr 267.716	0.6892b	ppb	0.2694	39.1	25.7420
Cu 324.754	0.8890b	ppb	0.3706	41.7	463.007
Fe 271.441	-8.8247b	ppb	10.6906	121.1	12.3580
K 766.491	278.030b	ppb	0.3384	0.1	6041.78
Mg 279.078	1501.31b	ppb	2.8524	0.2	2029.28
Mn 257.610	12.9637b	ppb	0.0665	0.5	1106.55
Mo 202.032	0.1992b	ppb	0.6046	303.5	4.3402
Na 330.237	113548xb	ppb	397.237	0.3	3106.39
Ni 231.604	0.0968b	ppb	1.1550	1193.6	-1.6632
Pb 220.353	-3.0318b	ppb	2.8543	94.1	-0.2910
Sb 206.834	-3.9467b	ppb	0.1793	4.5	4.5813
Se 196.026	-3.5353b	ppb	4.8837	138.1	2.0564
Si 288.158	157.812b	ppb	1.5383	1.0	1271.73
Sn 189.925	-5.1831b	ppb	5.1348	99.1	-0.3055
Sr 216.596	46.0142b	ppb	1.2375	2.7	141.486
Ti 334.941	-0.1084b	ppb	0.0998	92.1	-33.5843
Tl 190.794	-16.0743b	ppb	4.1397	25.8	-5.2649
V 292.401	0.3716b	ppb	0.5087	136.9	-9.2891
Zn 206.200	0.0406b	ppb	0.4479	1103.2	-0.0831

680-167559-e-10-e (Samp)

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Rack 2, Tube 12

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1224	-0.6363u	-0.0038u
Al 308.215	24.6758	25.4295	23.9199
As 188.980	2.8633	4.0899	3.7454
B 249.678	79.7073	79.4764	79.6008
Ba 389.178	78.0102	77.8386	81.3616
Be 313.042	-0.0737u	-0.0546u	-0.0638u
Ca 370.602	9215	9222	9220

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Label	Replicates Concentration		
Cd 226.502	-0.1727u	-0.1348u	-0.1456u
Co 228.615	3.7855	2.7924	2.6948
Cr 267.716	0.4592	0.8637	0.7778
Cu 324.754	1.0956	0.8938	0.9519
Fe 271.441	3.2558	0.4693	11.8742
K 766.491	244.718	246.296	246.519
Mg 279.078	3404.09	3396.02	3383.95
Mn 257.610	128.650	128.850	128.943
Mo 202.032	0.4859	0.5298	0.5151
Na 330.237	115983x	115761x	115948x
Ni 231.604	2.6033	3.1683	1.7944
Pb 220.353	-0.1013u	1.5067	-7.7340u
Sb 206.834	1.1184	0.9555	-1.5090u
Se 196.026	20.8788	-0.8839u	-4.7129u
Si 288.158	1053.10	1054.13	1060.77
Sn 189.925	-5.1672u	-5.1411u	-2.8901u
Sr 216.596	52.5426	52.1771	53.0724
Ti 334.941	0.0633	-0.3119u	-0.0177
Tl 190.794	-7.1923u	-11.0246u	-3.2208u
V 292.401	0.0167u	-0.4213u	0.3597
Zn 206.200	-1.1017u	1.9827	-1.1350u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1726b	ppb	0.4065	235.6	-45.9155
Al 308.215	24.6751b	ppb	0.7548	3.1	255.397
As 188.980	3.5662b	ppb	0.6326	17.7	1.6584
B 249.678	79.5948b	ppb	0.1156	0.1	539.053
Ba 389.178	79.0702b	ppb	1.9863	2.5	464.183
Be 313.042	-0.0640b	ppb	0.0095	14.9	-382.481
Ca 370.602	9219b	ppb	3.487	0.0	15440
Cd 226.502	-0.1510b	ppb	0.0195	12.9	1.8348
Co 228.615	3.0909b	ppb	0.6035	19.5	-0.1252
Cr 267.716	0.7002b	ppb	0.2131	30.4	26.1166
Cu 324.754	0.9805b	ppb	0.1039	10.6	465.791
Fe 271.441	5.1998b	ppb	5.9458	114.3	20.2081
K 766.491	245.844b	ppb	0.9817	0.4	5343.01
Mg 279.078	3394.69b	ppb	10.1327	0.3	4560.12
Mn 257.610	128.814b	ppb	0.1496	0.1	10717.2
Mo 202.032	0.5103b	ppb	0.0224	4.4	4.8651
Na 330.237	115897xb	ppb	119.369	0.1	3169.85
Ni 231.604	2.5220b	ppb	0.6906	27.4	1.0553
Pb 220.353	-2.1095b	ppb	4.9368	234.0	0.0629
Sb 206.834	0.1883b	ppb	1.4721	781.9	6.0858
Se 196.026	5.0940b	ppb	13.8034	271.0	3.6941
Si 288.158	1056.00b	ppb	4.1623	0.4	5464.00
Sn 189.925	-4.3995b	ppb	1.3072	29.7	-0.1072
Sr 216.596	52.5974b	ppb	0.4502	0.9	160.692
Ti 334.941	-0.0888b	ppb	0.1974	222.4	-26.9241
Tl 190.794	-7.1459b	ppb	3.9021	54.6	-3.1017
V 292.401	-0.0150b	ppb	0.3915	2613.1	-13.2749
Zn 206.200	-0.0847b	ppb	1.7905	2114.3	-0.1525

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167559-e-11-c (Samp) **4/19/2019, 4:35:36 PM** **Rack 2, Tube 13****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.7306u	-0.0909u	0.3875
Al 308.215	6.6385	8.9546	9.0058
As 188.980	4.2938	3.0072	3.7205
B 249.678	90.0911	88.6932	88.8926
Ba 389.178	48.6607	47.4800	49.4448
Be 313.042	-0.0993u	-0.0810u	-0.0973u
Ca 370.602	5903	5841	5865
Cd 226.502	-0.0035u	-0.0190u	-0.2720u
Co 228.615	0.0949	0.4263	1.1212
Cr 267.716	0.5433	0.1441	1.0504
Cu 324.754	0.7334	0.9104	0.3766
Fe 271.441	-18.2475u	-13.0533u	12.5428
K 766.491	208.810	207.876	207.735
Mg 279.078	2593.91	2569.73	2588.22
Mn 257.610	8.4594	8.4959	8.4764
Mo 202.032	-0.3355u	0.0024	-1.0598u
Na 330.237	115830x	114319x	115232x
Ni 231.604	-0.3772u	-0.0097u	3.6702
Pb 220.353	-2.5295u	-1.3595u	-4.9806u
Sb 206.834	-5.3098u	5.7781	0.5914
Se 196.026	-17.1963u	-3.9687u	10.0525
Si 288.158	239.612	231.826	236.446
Sn 189.925	0.6105	-0.9795u	-1.3220u
Sr 216.596	54.6681	51.6412	51.5518
Ti 334.941	0.0547	-0.0371	0.1011
Tl 190.794	-13.0777u	-0.8735u	0.1844
V 292.401	0.2049	0.2833	-0.4956u
Zn 206.200	-2.0589u	-1.1723u	1.7779

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1447b	ppb	0.5610	387.8	-45.2773
Al 308.215	8.1996b	ppb	1.3522	16.5	223.150
As 188.980	3.6738b	ppb	0.6446	17.5	1.6873
B 249.678	89.2257b	ppb	0.7561	0.8	604.987
Ba 389.178	48.5285b	ppb	0.9891	2.0	271.270
Be 313.042	-0.0925b	ppb	0.0101	10.9	-405.776
Ca 370.602	5870b	ppb	31.56	0.5	9839
Cd 226.502	-0.0982b	ppb	0.1508	153.6	2.4924
Co 228.615	0.5475b	ppb	0.5238	95.7	-10.1869
Cr 267.716	0.5793b	ppb	0.4542	78.4	23.9073
Cu 324.754	0.6735b	ppb	0.2719	40.4	456.463
Fe 271.441	-6.2527b	ppb	16.4832	263.6	13.7896
K 766.491	208.140b	ppb	0.5839	0.3	4576.09
Mg 279.078	2583.95b	ppb	12.6408	0.5	3477.15
Mn 257.610	8.4772b	ppb	0.0183	0.2	738.607
Mo 202.032	-0.4643b	ppb	0.5427	116.9	3.2205
Na 330.237	115127xb	ppb	761.277	0.7	3149.05
Ni 231.604	1.0944b	ppb	2.2382	204.5	-0.5442
Pb 220.353	-2.9566b	ppb	1.8479	62.5	-0.2627
Sb 206.834	0.3532b	ppb	5.5478	1570.7	6.1302
Se 196.026	-3.7042b	ppb	13.6263	367.9	2.0241
Si 288.158	235.961b	ppb	3.9157	1.7	1636.47

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.5637b	ppb	1.0312	182.9	0.8622
Sr 216.596	52.6204b	ppb	1.7740	3.4	160.778
Ti 334.941	0.0396b	ppb	0.0703	177.8	-17.6651
Tl 190.794	-4.5889b	ppb	7.3705	160.6	-2.5152
V 292.401	-0.0024b	ppb	0.4289	17570.5	-13.0277
Zn 206.200	-0.4844b	ppb	2.0088	414.7	-0.3729

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1862	-0.2329u	-0.1611u
Al 308.215	5.5281	8.5025	13.8431
As 188.980	3.6260	1.5778	0.2879
B 249.678	91.7201	91.5755	92.5012
Ba 389.178	47.4842	49.1697	49.3681
Be 313.042	-0.0910u	-0.0961u	-0.0923u
Ca 370.602	8114	8111	8111
Cd 226.502	0.0436	-0.3561u	-0.1173u
Co 228.615	1.5027	0.3244	0.4981
Cr 267.716	-0.2533u	0.6722	0.1931
Cu 324.754	0.4527	1.0257	1.3150
Fe 271.441	-9.2818u	-1.4382u	0.2481
K 766.491	260.982	260.634	260.535
Mg 279.078	3404.40	3419.31	3406.68
Mn 257.610	34.1180	34.1141	34.1019
Mo 202.032	-0.3042u	-0.7799u	0.1366
Na 330.237	115482x	115359x	115391x
Ni 231.604	6.6341	2.7053	0.5390
Pb 220.353	4.2017	0.4439	-6.0976u
Sb 206.834	-5.3372u	-9.2099u	-6.9146u
Se 196.026	-16.5353u	-14.9766u	17.3978
Si 288.158	257.835	257.111	260.217
Sn 189.925	1.4282	4.8666	-1.2074u
Sr 216.596	65.9170	65.2425	65.0954
Ti 334.941	-0.0683	-0.0353	0.0770
Tl 190.794	-1.3316u	-12.3160u	-4.3645u
V 292.401	0.2550	0.1480	0.2035
Zn 206.200	1.0949	0.2116	1.5556

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0693b	ppb	0.2242	323.6	-42.9821
Al 308.215	9.2912b	ppb	4.2132	45.3	225.297
As 188.980	1.8306b	ppb	1.6833	92.0	1.1951
B 249.678	91.9323b	ppb	0.4980	0.5	623.511
Ba 389.178	48.6740b	ppb	1.0352	2.1	273.086
Be 313.042	-0.0931b	ppb	0.0026	2.8	-406.021
Ca 370.602	8112b	ppb	1.825	0.0	13588
Cd 226.502	-0.1433b	ppb	0.2011	140.4	1.9185
Co 228.615	0.7751b	ppb	0.6361	82.1	-9.2929
Cr 267.716	0.2040b	ppb	0.4628	226.9	17.6695
Cu 324.754	0.9311b	ppb	0.4388	47.1	464.281
Fe 271.441	-3.4906b	ppb	5.0857	145.7	15.3226
K 766.491	260.717b	ppb	0.2350	0.1	5657.73

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	3410.13b	ppb	8.0295	0.2	4581.74
Mn 257.610	34.1113b	ppb	0.0084	0.0	2866.63
Mo 202.032	-0.3158b	ppb	0.4583	145.1	3.4710
Na 330.237	115411xb	ppb	63.6324	0.1	3156.71
Ni 231.604	3.2928b	ppb	3.0897	93.8	1.9220
Pb 220.353	-0.4840b	ppb	5.2120	1076.8	0.6747
Sb 206.834	-7.1539b	ppb	1.9474	27.2	3.4919
Se 196.026	-4.7047b	ppb	19.1572	407.2	1.8379
Si 288.158	258.388b	ppb	1.6252	0.6	1741.28
Sn 189.925	1.6958b	ppb	3.0458	179.6	1.4333
Sr 216.596	65.4183b	ppb	0.4381	0.7	198.121
Ti 334.941	-0.0089b	ppb	0.0762	859.3	-19.8009
Tl 190.794	-6.0040b	ppb	5.6728	94.5	-2.8487
V 292.401	0.2022b	ppb	0.0535	26.5	-10.9900
Zn 206.200	0.9540b	ppb	0.6830	71.6	0.4210

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Rack 2, Tube 15

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1933u	0.2665	-0.0725u
Al 308.215	17.5138	18.3011	13.0351
As 188.980	-0.7301u	1.4364	5.2422
B 249.678	65.2456	65.1941	65.1566
Ba 389.178	73.3341	77.8573	74.1673
Be 313.042	-0.0937u	-0.1030u	-0.0852u
Ca 370.602	6203	6211	6201
Cd 226.502	-0.4185u	-0.3254u	-0.1575u
Co 228.615	2.3224	1.3471	1.0974
Cr 267.716	0.3171	0.1602	0.3266
Cu 324.754	1.5090	1.3479	0.7416
Fe 271.441	8.9886	3.5058	5.6029
K 766.491	146.991	147.409	145.152
Mg 279.078	1966.86	1968.51	1960.41
Mn 257.610	29.9204	29.9231	29.7510
Mo 202.032	-0.1074u	-2.2434u	1.1649
Na 330.237	111345x	111610x	111264x
Ni 231.604	1.7864	4.2144	1.7730
Pb 220.353	4.7269	-2.5550u	-8.9176u
Sb 206.834	-4.8913u	3.8036	-9.0717u
Se 196.026	13.5418	-8.7443u	-0.3949u
Si 288.158	456.116	459.170	456.727
Sn 189.925	-0.3293u	3.6614	-14.5904u
Sr 216.596	51.2632	51.9556	50.7068
Ti 334.941	0.0497	-0.2390u	-0.2577u
Tl 190.794	-22.6344u	-2.6204u	-11.5295u
V 292.401	-1.3488u	-0.5537u	0.1102
Zn 206.200	1.2899	2.8713	4.2004

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0002b	ppb	0.2384	105635.4	-40.8315
Al 308.215	16.2833b	ppb	2.8405	17.4	238.958
As 188.980	1.9828b	ppb	3.0234	152.5	1.2357
B 249.678	65.1988b	ppb	0.0447	0.1	440.522

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	75.1195b	ppb	2.4073	3.2	437.776
Be 313.042	-0.0940b	ppb	0.0089	9.5	-406.804
Ca 370.602	6205b	ppb	5.313	0.1	10400
Cd 226.502	-0.3005b	ppb	0.1323	44.0	-0.0934
Co 228.615	1.5890b	ppb	0.6473	40.7	-6.0716
Cr 267.716	0.2679b	ppb	0.0934	34.9	18.7113
Cu 324.754	1.1995b	ppb	0.4047	33.7	472.420
Fe 271.441	6.0324b	ppb	2.7665	45.9	20.6146
K 766.491	146.517b	ppb	1.2006	0.8	3331.85
Mg 279.078	1965.26b	ppb	4.2783	0.2	2649.55
Mn 257.610	29.8648b	ppb	0.0986	0.3	2509.30
Mo 202.032	-0.3953b	ppb	1.7223	435.7	3.3370
Na 330.237	111406xb	ppb	181.060	0.2	3048.47
Ni 231.604	2.5913b	ppb	1.4057	54.2	1.1343
Pb 220.353	-2.2486b	ppb	6.8274	303.6	0.0060
Sb 206.834	-3.3865b	ppb	6.5682	194.0	4.7818
Se 196.026	1.4675b	ppb	11.2592	767.2	3.0011
Si 288.158	457.338b	ppb	1.6161	0.4	2669.75
Sn 189.925	-3.7528b	ppb	9.5954	255.7	0.0558
Sr 216.596	51.3085b	ppb	0.6256	1.2	156.932
Ti 334.941	-0.1490b	ppb	0.1723	115.6	-35.9301
Tl 190.794	-12.2614b	ppb	10.0271	81.8	-4.3484
V 292.401	-0.5975b	ppb	0.7305	122.3	-19.1466
Zn 206.200	2.7872b	ppb	1.4570	52.3	1.4328

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Rack 2, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0146	0.2989	-0.2271u
Al 308.215	5.7955	7.5895	5.8073
As 188.980	3.3282	1.4103	7.8902
B 249.678	77.9983	78.3979	78.2657
Ba 389.178	82.6720	83.3581	80.4769
Be 313.042	-0.1119u	-0.1047u	-0.0697u
Ca 370.602	6679	6635	6642
Cd 226.502	0.1594	0.0811	-0.2910u
Co 228.615	1.5566	0.7673	0.8443
Cr 267.716	0.0584	0.2722	0.7605
Cu 324.754	1.5661	1.1630	1.0041
Fe 271.441	-3.8598u	5.3970	-11.3325u
K 766.491	148.327	147.723	147.511
Mg 279.078	2223.99	2213.92	2206.24
Mn 257.610	6.7577	6.6932	6.5926
Mo 202.032	0.1569	-0.5112u	1.5109
Na 330.237	116424x	115534x	115886x
Ni 231.604	-0.0232u	2.2248	-0.6093u
Pb 220.353	1.6235	-5.2262u	-7.0514u
Sb 206.834	1.9202	-1.6572u	-4.6214u
Se 196.026	-12.0137u	4.4472	-17.4214u
Si 288.158	183.445	184.055	182.250
Sn 189.925	-1.2272u	-5.1465u	-1.7159u
Sr 216.596	59.6166	61.1050	59.8520
Ti 334.941	-0.0461u	-0.0539u	-0.1270u

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Label	Replicates Concentration		
Tl 190.794	-26.4054u	-5.8318u	-2.5672u
V 292.401	-0.2865u	0.0593	0.9155
Zn 206.200	-1.8588u	2.3216	1.2718

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0288b	ppb	0.2633	914.1	-40.0349
Al 308.215	6.3974b	ppb	1.0324	16.1	219.644
As 188.980	4.2096b	ppb	3.3287	79.1	1.8303
B 249.678	78.2206b	ppb	0.2036	0.3	529.661
Ba 389.178	82.1690b	ppb	1.5050	1.8	482.371
Be 313.042	-0.0954b	ppb	0.0225	23.6	-408.118
Ca 370.602	6652b	ppb	23.91	0.4	11147
Cd 226.502	-0.0168b	ppb	0.2406	1428.9	3.5303
Co 228.615	1.0561b	ppb	0.4352	41.2	-8.1829
Cr 267.716	0.3637b	ppb	0.3599	99.0	20.3027
Cu 324.754	1.2444b	ppb	0.2897	23.3	473.774
Fe 271.441	-3.2651b	ppb	8.3806	256.7	15.4524
K 766.491	147.854b	ppb	0.4235	0.3	3350.44
Mg 279.078	2214.72b	ppb	8.9005	0.4	2983.38
Mn 257.610	6.6812b	ppb	0.0832	1.2	588.380
Mo 202.032	0.3855b	ppb	1.0302	267.2	4.6547
Na 330.237	115948xb	ppb	448.354	0.4	3171.22
Ni 231.604	0.5308b	ppb	1.4961	281.9	-1.1767
Pb 220.353	-3.5513b	ppb	4.5735	128.8	-0.4881
Sb 206.834	-1.4528b	ppb	3.2756	225.5	5.4753
Se 196.026	-8.3293b	ppb	11.3904	136.8	1.1521
Si 288.158	183.250b	ppb	0.9181	0.5	1390.83
Sn 189.925	-2.6966b	ppb	2.1358	79.2	0.3232
Sr 216.596	60.1912b	ppb	0.8001	1.3	182.866
Ti 334.941	-0.0757b	ppb	0.0446	59.0	-28.8630
Tl 190.794	-11.6015b	ppb	12.9241	111.4	-4.1950
V 292.401	0.2294b	ppb	0.6188	269.7	-10.7513
Zn 206.200	0.5782b	ppb	2.1748	376.2	0.2134

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Rack 2, Tube 17

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4205u	0.0004u	-0.4698u
Al 308.215	6.8971	9.1491	6.9751
As 188.980	2.4938	0.3016	-1.3896u
B 249.678	81.3592	81.3718	81.7509
Ba 389.178	68.6335	70.6111	71.0221
Be 313.042	-0.0917u	-0.1005u	-0.0810u
Ca 370.602	6180	6213	6228
Cd 226.502	-0.0828u	-0.1181u	0.1422
Co 228.615	0.5596	-0.0032u	-0.6835u
Cr 267.716	0.4324	0.1616	-0.1111u
Cu 324.754	1.2372	1.2857	1.3189
Fe 271.441	-1.8600u	11.1267	-0.0788u
K 766.491	183.786	185.298	184.953
Mg 279.078	1779.45	1802.37	1800.32
Mn 257.610	20.2808	20.3087	20.2029
Mo 202.032	0.0391	-0.4564u	-0.3158u

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Label	Replicates Concentration		
Na 330.237	123106x	123361x	123941x
Ni 231.604	2.9216	2.8269	2.0526
Pb 220.353	-6.9139u	-5.0492u	9.0632
Sb 206.834	7.3058	-12.0589u	1.2070
Se 196.026	-6.0692u	-5.5078u	0.4124
Si 288.158	221.166	220.337	221.490
Sn 189.925	0.4440	-6.7809u	2.2533
Sr 216.596	51.2501	51.4518	52.4279
Ti 334.941	-0.1628u	-0.0559u	-0.0999u
Tl 190.794	-7.7028u	-3.6926u	7.3315
V 292.401	0.3538	-0.0323u	1.0936
Zn 206.200	3.7468	2.1278	1.7855

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2966b	ppb	0.2584	87.1	-49.8625
Al 308.215	7.6738b	ppb	1.2782	16.7	222.142
As 188.980	0.4686b	ppb	1.9471	415.5	0.8314
B 249.678	81.4940b	ppb	0.2226	0.3	552.069
Ba 389.178	70.0889b	ppb	1.2770	1.8	405.963
Be 313.042	-0.0911b	ppb	0.0098	10.7	-404.997
Ca 370.602	6207b	ppb	24.37	0.4	10403
Cd 226.502	-0.0196b	ppb	0.1412	720.8	3.4766
Co 228.615	-0.0423b	ppb	0.6225	1469.8	-12.5342
Cr 267.716	0.1610b	ppb	0.2717	168.8	16.9736
Cu 324.754	1.2806b	ppb	0.0411	3.2	474.864
Fe 271.441	3.0626b	ppb	7.0402	229.9	18.9197
K 766.491	184.679b	ppb	0.7926	0.4	4063.84
Mg 279.078	1794.05b	ppb	12.6841	0.7	2420.68
Mn 257.610	20.2641b	ppb	0.0549	0.3	1712.80
Mo 202.032	-0.2444b	ppb	0.2554	104.5	3.5916
Na 330.237	123469xb	ppb	427.753	0.3	3374.49
Ni 231.604	2.6004b	ppb	0.4767	18.3	1.1460
Pb 220.353	-0.9666b	ppb	8.7360	903.8	0.4916
Sb 206.834	-1.1820b	ppb	9.9009	837.6	5.6312
Se 196.026	-3.7215b	ppb	3.5911	96.5	2.0220
Si 288.158	220.998b	ppb	0.5947	0.3	1567.32
Sn 189.925	-1.3612b	ppb	4.7800	351.2	0.6615
Sr 216.596	51.7100b	ppb	0.6299	1.2	158.108
Ti 334.941	-0.1062b	ppb	0.0537	50.6	-32.8410
Tl 190.794	-1.3546b	ppb	7.7850	574.7	-1.7383
V 292.401	0.4717b	ppb	0.5721	121.3	-8.2832
Zn 206.200	2.5534b	ppb	1.0476	41.0	1.3035

680-167674-a-1-b (Samp)

4/19/2019, 4:54:51 PM

Rack 2, Tube 18

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1322u	0.1649	-0.4912u
Al 308.215	3.6143	5.4138	6.8308
As 188.980	0.9166	-0.0129u	0.7127
B 249.678	13.1569	14.2774	13.4946
Ba 389.178	17.9298	17.3654	18.4366
Be 313.042	-0.1277u	-0.1402u	-0.1288u
Ca 370.602	119358	119298	119280

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.1874u	0.0244	0.0919
Co 228.615	-1.3973u	3.0924	-0.4020u
Cr 267.716	0.9894	0.6255	0.6274
Cu 324.754	30.0491	30.4084	30.2360
Fe 271.441	-8.6148u	9.1007	14.6982
K 766.491	266.211	265.261	264.682
Mg 279.078	19.0036	8.6490	12.0168
Mn 257.610	-0.1197u	-0.0544u	-0.1605u
Mo 202.032	2.1618	3.2756	3.7453
Na 330.237	129843x	130188x	130141x
Ni 231.604	0.5199	-1.4727u	-0.3177u
Pb 220.353	2230.18	2218.14	2207.11
Sb 206.834	1.6609	-8.0444u	4.0855
Se 196.026	7.9893	-1.7633u	4.8866
Si 288.158	94.7323	94.0551	97.5873
Sn 189.925	-7.7677u	-6.7380u	-6.1407u
Sr 216.596	67.4239	67.8766	67.2949
Ti 334.941	0.0942	0.2861	0.2631
Tl 190.794	1.7757	2.4157	-0.3843u
V 292.401	-0.6464u	-0.1910u	0.3550
Zn 206.200	1.1301	-4.4479u	-1.2735u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1529b	ppb	0.3285	214.9	-45.6493
Al 308.215	5.2863b	ppb	1.6120	30.5	217.500
As 188.980	0.5388b	ppb	0.4886	90.7	0.8499
B 249.678	13.6430b	ppb	0.5748	4.2	87.6395
Ba 389.178	17.9106b	ppb	0.5358	3.0	75.9738
Be 313.042	-0.1322b	ppb	0.0069	5.2	-421.931
Ca 370.602	119312b	ppb	40.79	0.0	199502
Cd 226.502	-0.0237b	ppb	0.1458	615.3	3.4184
Co 228.615	0.4310b	ppb	2.3579	547.1	-10.6852
Cr 267.716	0.7474b	ppb	0.2096	28.0	26.7919
Cu 324.754	30.2312b	ppb	0.1797	0.6	1351.83
Fe 271.441	5.0614b	ppb	12.1701	240.4	20.0421
K 766.491	265.385b	ppb	0.7719	0.3	5736.56
Mg 279.078	13.2231b	ppb	5.2817	39.9	39.3780
Mn 257.610	-0.1115b	ppb	0.0535	48.0	17.6806
Mo 202.032	3.0609b	ppb	0.8133	26.6	9.1699
Na 330.237	130058xb	ppb	186.912	0.1	3552.59
Ni 231.604	-0.4235b	ppb	1.0005	236.2	-2.2468
Pb 220.353	2218.48b	ppb	11.5377	0.5	840.954
Sb 206.834	-0.7660b	ppb	6.4188	838.0	5.7599
Se 196.026	3.7042b	ppb	4.9826	134.5	3.4199
Si 288.158	95.4583b	ppb	1.8746	2.0	981.478
Sn 189.925	-6.8821b	ppb	0.8230	12.0	-0.7332
Sr 216.596	67.5318b	ppb	0.3055	0.5	204.274
Ti 334.941	0.2144b	ppb	0.1048	48.9	-9.2356
Tl 190.794	1.2690b	ppb	1.4671	115.6	-1.1151
V 292.401	-0.1608b	ppb	0.5014	311.8	-14.9667
Zn 206.200	-1.5305b	ppb	2.7978	182.8	-0.9500

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167577-a-1-e (Samp) **4/19/2019, 4:58:42 PM** **Rack 2, Tube 19****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6294u	0.0880	0.1732
Al 308.215	33.0638	27.7514	29.6389
As 188.980	4.5444	1.4039	6.7561
B 249.678	9.0186	7.0074	7.1052
Ba 389.178	125.556	125.270	124.058
Be 313.042	0.4498	0.4494	0.4474
Ca 370.602	2398	2402	2383
Cd 226.502	1.8384	2.2966	1.9844
Co 228.615	10.3974	10.6171	9.4693
Cr 267.716	0.6585	-0.1248u	0.0509
Cu 324.754	15.4975	16.1119	15.9914
Fe 271.441	-5.9504u	-2.8192u	0.0856
K 766.491	506.222	508.029	501.653
Mg 279.078	962.392	959.063	942.704
Mn 257.610	426.964	428.082	422.443
Mo 202.032	-1.3026u	-0.5683u	-0.2577u
Na 330.237	123539x	123454x	122224x
Ni 231.604	2.9193	5.7176	4.9137
Pb 220.353	128.751	124.865	122.447
Sb 206.834	2.8484	-4.3817u	-3.2173u
Se 196.026	-1.9661u	0.5214	-2.8805u
Si 288.158	521.254	524.253	511.597
Sn 189.925	-8.9901u	1.4808	-18.3779u
Sr 216.596	12.7753	12.4472	11.9556
Ti 334.941	-0.1597u	-0.2817u	0.0801
Tl 190.794	-9.1876u	-14.3563u	-1.7723u
V 292.401	-0.1055u	0.0394	-0.4268u
Zn 206.200	103.183	99.2575	101.834

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1228b	ppb	0.4409	359.1	-43.7073
Al 308.215	30.1514b	ppb	2.6931	8.9	266.073
As 188.980	4.2348b	ppb	2.6895	63.5	1.8371
B 249.678	7.7104b	ppb	1.1340	14.7	47.0210
Ba 389.178	124.961b	ppb	0.7954	0.6	750.029
Be 313.042	0.4489b	ppb	0.0013	0.3	30.0306
Ca 370.602	2395b	ppb	10.08	0.4	4035
Cd 226.502	2.0398b	ppb	0.2341	11.5	29.9294
Co 228.615	10.1613b	ppb	0.6092	6.0	27.9026
Cr 267.716	0.1948b	ppb	0.4110	211.0	18.1492
Cu 324.754	15.8669b	ppb	0.3256	2.1	916.680
Fe 271.441	-2.8947b	ppb	3.0187	104.3	15.9708
K 766.491	505.301b	ppb	3.2858	0.7	10694.0
Mg 279.078	954.720b	ppb	10.5383	1.1	1294.12
Mn 257.610	425.830b	ppb	2.9856	0.7	35329.7
Mo 202.032	-0.7095b	ppb	0.5366	75.6	2.8066
Na 330.237	123072xb	ppb	736.074	0.6	3362.60
Ni 231.604	4.5168b	ppb	1.4407	31.9	3.2869
Pb 220.353	125.354b	ppb	3.1805	2.5	48.3448
Sb 206.834	-1.5835b	ppb	3.8820	245.2	5.4452
Se 196.026	-1.4418b	ppb	1.7605	122.1	2.4900
Si 288.158	519.035b	ppb	6.6132	1.3	2957.38

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-8.6290b	ppb	9.9343	115.1	-1.1754
Sr 216.596	12.3927b	ppb	0.4126	3.3	43.3352
Ti 334.941	-0.1204b	ppb	0.1841	152.8	-36.3102
Tl 190.794	-8.4388b	ppb	6.3253	75.0	-3.3443
V 292.401	-0.1643b	ppb	0.2386	145.2	-14.7128
Zn 206.200	101.425b	ppb	1.9945	2.0	55.8668

680-167577-a-2-c (Samp) 4/19/2019, 5:02:33 PM Rack 2, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4333u	-0.0048	-0.5255u
Al 308.215	20.1097	13.8522	15.3907
As 188.980	3.8603	8.7705	0.8417
B 249.678	51.4978	50.6674	52.3929
Ba 389.178	129.029	129.526	131.336
Be 313.042	0.4093	0.4050	0.3859
Ca 370.602	3108	3043	3090
Cd 226.502	3.4335	3.1536	3.1649
Co 228.615	11.0694	10.2286	11.2639
Cr 267.716	0.2427	0.4815	0.8335
Cu 324.754	24.7968	24.4778	25.5336
Fe 271.441	9.4391	16.5697	2.5216
K 766.491	593.603	583.043	597.317
Mg 279.078	905.011	895.809	916.714
Mn 257.610	350.733	345.111	351.362
Mo 202.032	-1.7305u	1.3443	-0.8814u
Na 330.237	122695x	120683x	122916x
Ni 231.604	6.7337	6.9238	7.4480
Pb 220.353	635.002	618.809	621.417
Sb 206.834	2.4441	-0.0359u	-5.1816u
Se 196.026	5.5774	-13.9726u	-6.0369u
Si 288.158	319.462	309.712	320.859
Sn 189.925	-8.8838u	-6.0454u	-8.7335u
Sr 216.596	15.4083	16.0506	16.7262
Ti 334.941	-0.1919u	-0.1572u	-0.1480u
Tl 190.794	-14.2349u	-8.0441u	-11.1728u
V 292.401	-0.1315u	0.4604	-0.3599u
Zn 206.200	156.960	157.348	157.080

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3212b	ppb	0.2779	86.5	-49.8886
Al 308.215	16.4509b	ppb	3.2607	19.8	239.273
As 188.980	4.4909b	ppb	4.0018	89.1	1.9054
B 249.678	51.5194b	ppb	0.8629	1.7	346.879
Ba 389.178	129.964b	ppb	1.2143	0.9	781.430
Be 313.042	0.4000b	ppb	0.0125	3.1	-9.2621
Ca 370.602	3080b	ppb	33.38	1.1	5180
Cd 226.502	3.2507b	ppb	0.1584	4.9	45.4862
Co 228.615	10.8540b	ppb	0.5503	5.1	30.6460
Cr 267.716	0.5192b	ppb	0.2972	57.2	23.4552
Cu 324.754	24.9361b	ppb	0.5415	2.2	1191.39
Fe 271.441	9.5101b	ppb	7.0243	73.9	22.8618
K 766.491	591.321b	ppb	7.4055	1.3	12484.1

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	905.845b	ppb	10.4776	1.2	1229.54
Mn 257.610	349.069b	ppb	3.4416	1.0	28966.3
Mo 202.032	-0.4225b	ppb	1.5879	375.8	3.2908
Na 330.237	122098xb	ppb	1230.21	1.0	3335.65
Ni 231.604	7.0352b	ppb	0.3699	5.3	6.1115
Pb 220.353	625.076b	ppb	8.6945	1.4	237.577
Sb 206.834	-0.9245b	ppb	3.8897	420.8	5.6525
Se 196.026	-4.8107b	ppb	9.8325	204.4	1.8477
Si 288.158	316.678b	ppb	6.0725	1.9	2012.78
Sn 189.925	-7.8875b	ppb	1.5972	20.2	-0.9881
Sr 216.596	16.0617b	ppb	0.6591	4.1	54.0299
Ti 334.941	-0.1657b	ppb	0.0231	14.0	-40.4285
Tl 190.794	-11.1506b	ppb	3.0955	27.8	-4.0104
V 292.401	-0.0104b	ppb	0.4234	4083.8	-13.1729
Zn 206.200	157.130b	ppb	0.1988	0.1	86.6075

Cont Calib Verif (CCV)

4/19/2019, 5:06:27 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	506.696	506.736	508.844
Al 308.215	10027.8	10091.9	10060.9
As 188.980	497.955	498.550	511.087
B 249.678	510.339	519.045	517.446
Ba 389.178	486.571	489.993	486.480
Be 313.042	520.388	524.330	522.502
Ca 370.602	9998	10083	10066
Cd 226.502	500.540	505.708	505.489
Co 228.615	505.214	507.419	508.473
Cr 267.716	495.570	499.581	497.474
Cu 324.754	504.664	512.165	510.935
Fe 271.441	9977.58	10116.7	10046.6
K 766.491	9738.63	9830.35	9799.94
Mg 279.078	10156.7	10221.7	10197.7
Mn 257.610	502.547	506.583	505.008
Mo 202.032	493.563	499.708	496.385
Na 330.237	10331.6	10474.7	10468.2
Ni 231.604	507.682	514.071	510.947
Pb 220.353	506.392	503.173	506.337
Sb 206.834	497.872	481.072	486.311
Se 196.026	505.967	534.072	535.599
Si 288.158	5087.28	5124.62	5101.92
Sn 189.925	491.707	508.991	502.250
Sr 216.596	496.258	497.114	499.870
Ti 334.941	493.885	496.948	495.575
Tl 190.794	502.408	489.355	502.382
V 292.401	508.591	512.828	510.709
Zn 206.200	1013.54	1016.99	1025.30

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	507.425	ppb	1.2288	0.2	15370.2	101.48507
Al 308.215	10060.2	ppb	32.0348	0.3	19904.7	100.60180
As 188.980	502.530	ppb	7.4158	1.5	134.781	100.50607
B 249.678	515.610	ppb	4.6342	0.9	3512.96	103.12199

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	487.681	ppb	2.0021	0.4	3045.94	97.53629
Be 313.042	522.407	ppb	1.9725	0.4	421111	104.48135
Ca 370.602	10049	ppb	45.07	0.4	16829	100.49044
Cd 226.502	503.912	ppb	2.9223	0.6	6488.49	100.78249
Co 228.615	507.035	ppb	1.6633	0.3	1995.94	101.40707
Cr 267.716	497.542	ppb	2.0063	0.4	8337.67	99.50838
Cu 324.754	509.255	ppb	4.0230	0.8	15868.5	101.85094
Fe 271.441	10047.0	ppb	69.5666	0.7	5599.29	100.41951
K 766.491	9789.64	ppb	46.7199	0.5	199176	97.89642
Mg 279.078	10192.0	ppb	32.8766	0.3	13644.5	101.92024
Mn 257.610	504.713	ppb	2.0343	0.4	41918.2	100.94257
Mo 202.032	496.552	ppb	3.0759	0.6	841.816	99.31034
Na 330.237	10424.8	ppb	80.8017	0.8	302.684	104.24841
Ni 231.604	510.900	ppb	3.1948	0.6	570.937	102.18002
Pb 220.353	505.300	ppb	1.8428	0.4	191.617	101.06008
Sb 206.834	488.418	ppb	8.5958	1.8	183.177	97.68369
Se 196.026	525.213	ppb	16.6847	3.2	101.820	105.04250
Si 288.158	5104.60	ppb	18.8166	0.4	24492.6	102.09210
Sn 189.925	500.983	ppb	8.7115	1.7	127.610	100.19657
Sr 216.596	497.747	ppb	1.8871	0.4	1454.02	99.54942
Ti 334.941	495.469	ppb	1.5343	0.3	43952.6	99.09387
Tl 190.794	498.048	ppb	7.5285	1.5	117.709	99.60967
V 292.401	510.709	ppb	2.1188	0.4	5145.27	102.14186
Zn 206.200	1018.61	ppb	6.0449	0.6	561.770	101.86121

Cont Calib Blank (CCB)

4/19/2019, 5:10:19 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1880u	0.7592	0.3669
Al 308.215	6.9375	6.8246	4.2992
As 188.980	3.9482	-0.2208u	2.3147
B 249.678	13.7743	13.2347	11.8650
Ba 389.178	-1.7089u	1.2056	0.6697
Be 313.042	0.0067	-0.0048u	-0.0191u
Ca 370.602	-8.066u	-7.950u	-8.067u
Cd 226.502	-0.2144u	-0.1942u	-0.2590u
Co 228.615	0.6789	0.5668	-0.0921u
Cr 267.716	0.1639	-0.1667u	-0.1700u
Cu 324.754	1.2789	0.5985	0.6892
Fe 271.441	-7.4269u	-1.6867u	-4.9132u
K 766.491	-0.5243	-2.6515u	-0.3968
Mg 279.078	5.6895	-0.5162u	-3.2629u
Mn 257.610	0.0455	0.1142	0.0424
Mo 202.032	0.7646	-0.2384u	0.4173
Na 330.237	162.159	274.590	241.119
Ni 231.604	0.5244	0.9371	0.1644
Pb 220.353	-3.0737u	2.7817	-9.5757u
Sb 206.834	-0.7885u	-1.8775u	-1.1215u
Se 196.026	-13.8338u	8.9066	4.9828
Si 288.158	10.6891	8.6198	9.2257
Sn 189.925	2.1426	-10.5457u	0.4749
Sr 216.596	-0.0048u	-1.2707u	-0.0958u
Ti 334.941	0.1734	0.0372	-0.1818u

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Label	Replicates Concentration		
Tl 190.794	6.8078	-7.6829u	-12.3566u
V 292.401	0.5212	0.1656	-0.2368u
Zn 206.200	-3.3909u	-0.6315u	-0.2506u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3127	ppb	0.4759	152.2	-31.2212	0.31271
Al 308.215	6.0204	ppb	1.4917	24.8	218.903	6.02045
As 188.980	2.0141	ppb	2.1007	104.3	1.2441	2.01406
B 249.678	12.9580	ppb	0.9843	7.6	82.9452	12.95803
Ba 389.178	0.0555	ppb	1.5513	2796.1	-36.2954	0.05548
Be 313.042	-0.0057	ppb	0.0129	226.6	-331.445	-0.00571
Ca 370.602	-8.028	ppb	0.0672	0.8	11.67	-8.02779
Cd 226.502	-0.2225	ppb	0.0332	14.9	1.0905	-0.22250
Co 228.615	0.3845	ppb	0.4165	108.3	-10.8435	0.38453
Cr 267.716	-0.0576	ppb	0.1918	333.0	12.5909	-0.05761
Cu 324.754	0.8555	ppb	0.3694	43.2	461.995	0.85552
Fe 271.441	-4.6756	ppb	2.8775	61.5	14.6559	-4.67564
K 766.491	-1.1909	ppb	1.2666	106.4	250.737	-1.19087
Mg 279.078	0.6368	ppb	4.5862	720.2	22.5445	0.63682
Mn 257.610	0.0674	ppb	0.0406	60.3	32.1324	0.06737
Mo 202.032	0.3145	ppb	0.5093	161.9	4.5348	0.31452
Na 330.237	225.956	ppb	57.7290	25.5	43.6860	225.95613
Ni 231.604	0.5420	ppb	0.3866	71.3	-1.1638	0.54200
Pb 220.353	-3.2892	ppb	6.1815	187.9	-0.3893	-3.28921
Sb 206.834	-1.2625	ppb	0.5580	44.2	5.5841	-1.26250
Se 196.026	0.0185	ppb	12.1558	65680.2	2.7251	0.01851
Si 288.158	9.5116	ppb	1.0638	11.2	579.905	9.51156
Sn 189.925	-2.6427	ppb	6.8948	260.9	0.3254	-2.64273
Sr 216.596	-0.4571	ppb	0.7061	154.5	5.8327	-0.45710
Ti 334.941	0.0096	ppb	0.1792	1867.7	-24.5170	0.00960
Tl 190.794	-4.4106	ppb	9.9925	226.6	-2.4747	-4.41057
V 292.401	0.1500	ppb	0.3792	252.8	-11.2436	0.15000
Zn 206.200	-1.4243	ppb	1.7137	120.3	-0.8913	-1.42435

lb2 680-566725/15-c (Samp) 4/19/2019, 5:15:30 PM Rack 2, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3389u	-0.5741u	-0.2105u
Al 308.215	4.4786	13.0169	7.6930
As 188.980	6.1632	-0.3629u	14.2152
B 249.678	15.7489	16.4845	14.7691
Ba 389.178	-3.4723u	0.2653	-1.4759u
Be 313.042	-0.0827u	-0.0908u	-0.0752u
Ca 370.602	127.1	121.2	118.5
Cd 226.502	-0.3294u	-0.0669u	-0.1223u
Co 228.615	-0.2976u	-1.2080u	1.7424
Cr 267.716	-0.3968u	0.1485	0.3122
Cu 324.754	1.5427	1.4195	0.9651
Fe 271.441	10.0010	-8.1864u	-11.1564u
K 766.491	24.6047	25.5563	23.1308
Mg 279.078	21.6254	26.4569	13.8477
Mn 257.610	0.1403	0.2148	0.1470
Mo 202.032	0.7280	1.3196	-0.6716u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	130790x	131229x	127768x
Ni 231.604	-0.9350u	0.0965	-0.1794u
Pb 220.353	3.7855	-6.0908u	-11.6824u
Sb 206.834	1.6696	-9.5302u	0.7109
Se 196.026	0.0270	-12.2284u	5.4196
Si 288.158	15.3866	15.7281	10.3506
Sn 189.925	-13.8165u	-8.5600u	-1.6661u
Sr 216.596	0.4647	0.8874	-1.1080u
Ti 334.941	-0.1765u	-0.0483u	-0.0541u
Tl 190.794	0.5564	-7.8094u	1.1041
V 292.401	0.8581	0.3916	-0.7665u
Zn 206.200	0.9795	1.3712	2.8976

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3745b	ppb	0.1844	49.2	-52.0947
Al 308.215	8.3962b	ppb	4.3123	51.4	223.550
As 188.980	6.6718b	ppb	7.3024	109.5	2.4878
B 249.678	15.6675b	ppb	0.8606	5.5	101.499
Ba 389.178	-1.5610b	ppb	1.8702	119.8	-46.4410
Be 313.042	-0.0829b	ppb	0.0078	9.4	-399.565
Ca 370.602	122.3b	ppb	4.392	3.6	229.5
Cd 226.502	-0.1729b	ppb	0.1384	80.0	1.4887
Co 228.615	0.0789b	ppb	1.5108	1914.4	-12.0549
Cr 267.716	0.0213b	ppb	0.3712	1741.2	14.6438
Cu 324.754	1.3091b	ppb	0.3042	23.2	475.733
Fe 271.441	-3.1139b	ppb	11.4545	367.8	15.5075
K 766.491	24.4306b	ppb	1.2221	5.0	774.630
Mg 279.078	20.6433b	ppb	6.3617	30.8	49.2977
Mn 257.610	0.1674b	ppb	0.0412	24.6	40.2517
Mo 202.032	0.4587b	ppb	1.0225	222.9	4.7782
Na 330.237	129929xb	ppb	1883.98	1.5	3549.07
Ni 231.604	-0.3393b	ppb	0.5340	157.4	-2.1521
Pb 220.353	-4.6625b	ppb	7.8322	168.0	-0.9090
Sb 206.834	-2.3832b	ppb	6.2080	260.5	5.1950
Se 196.026	-2.2606b	ppb	9.0437	400.1	2.2955
Si 288.158	13.8218b	ppb	3.0109	21.8	599.783
Sn 189.925	-8.0142b	ppb	6.0936	76.0	-1.0193
Sr 216.596	0.0814b	ppb	1.0515	1292.4	7.4029
Ti 334.941	-0.0930b	ppb	0.0724	77.9	-36.4811
Tl 190.794	-2.0496b	ppb	4.9956	243.7	-1.9091
V 292.401	0.1610b	ppb	0.8365	519.5	-11.4837
Zn 206.200	1.7494b	ppb	1.0134	57.9	0.8600

lb 680-566936/1-c (Samp)

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Rack 2, Tube 22

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1976u	-0.6647u	0.3342
Al 308.215	4.7785	4.8509	-6.9909u
As 188.980	7.1892	10.1907	2.7399
B 249.678	3.9423	3.4160	4.2487
Ba 389.178	-3.2727u	-0.0003	0.0823
Be 313.042	-0.1260u	-0.0985u	-0.1120u
Ca 370.602	16.65	19.20	6.555

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Label	Replicates Concentration		
Cd 226.502	-0.2850u	-0.1025u	-0.2898u
Co 228.615	-0.4444u	0.2873	0.0112
Cr 267.716	0.1147	-0.2614u	0.1227
Cu 324.754	0.6338	1.0550	0.8229
Fe 271.441	-11.6490u	9.3706	-0.2376u
K 766.491	7.8128	7.9478	7.1049
Mg 279.078	3.6739	7.9260	8.1997
Mn 257.610	-0.0256u	-0.1301u	-0.1540u
Mo 202.032	-0.0984u	-0.1115u	-1.4039u
Na 330.237	129223x	128679x	127403x
Ni 231.604	-0.0609u	1.6191	-1.5817u
Pb 220.353	-5.4336u	-2.1223u	-6.7762u
Sb 206.834	4.0639	-1.8535u	0.5705
Se 196.026	-1.0448u	-1.7986u	4.9065
Si 288.158	8.9251	5.6288	7.7834
Sn 189.925	-3.3770u	-3.9709u	-7.3563u
Sr 216.596	0.2530	-0.6729u	-3.0507u
Ti 334.941	-0.2006u	-0.0031u	-0.0527u
Tl 190.794	-16.4224u	-5.8879u	-10.2864u
V 292.401	0.4793	0.3366	0.3865
Zn 206.200	1.9484	0.7765	-0.9053u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1761b	ppb	0.4998	283.9	-46.0678
Al 308.215	0.8795b	ppb	6.8161	775.0	208.848
As 188.980	6.7066b	ppb	3.7488	55.9	2.4971
B 249.678	3.8690b	ppb	0.4212	10.9	20.7282
Ba 389.178	-1.0636b	ppb	1.9136	179.9	-43.3209
Be 313.042	-0.1122b	ppb	0.0137	12.2	-423.087
Ca 370.602	14.13b	ppb	6.687	47.3	48.72
Cd 226.502	-0.2258b	ppb	0.1068	47.3	0.8300
Co 228.615	-0.0486b	ppb	0.3695	759.9	-12.5569
Cr 267.716	-0.0080b	ppb	0.2195	2734.0	14.1445
Cu 324.754	0.8372b	ppb	0.2110	25.2	461.433
Fe 271.441	-0.8387b	ppb	10.5227	1254.7	16.7602
K 766.491	7.6218b	ppb	0.4527	5.9	460.635
Mg 279.078	6.5999b	ppb	2.5377	38.5	30.5215
Mn 257.610	-0.1032b	ppb	0.0683	66.1	17.7900
Mo 202.032	-0.5379b	ppb	0.7500	139.4	3.0961
Na 330.237	128435xb	ppb	934.433	0.7	3508.71
Ni 231.604	-0.0078b	ppb	1.6011	20414.4	-1.7801
Pb 220.353	-4.7774b	ppb	2.3953	50.1	-0.9528
Sb 206.834	0.9270b	ppb	2.9748	320.9	6.3135
Se 196.026	0.6877b	ppb	3.6730	534.1	2.8513
Si 288.158	7.4457b	ppb	1.6739	22.5	570.118
Sn 189.925	-4.9014b	ppb	2.1466	43.8	-0.2328
Sr 216.596	-1.1569b	ppb	1.7042	147.3	3.7963
Ti 334.941	-0.0855b	ppb	0.1028	120.2	-35.8139
Tl 190.794	-10.8656b	ppb	5.2911	48.7	-4.0208
V 292.401	0.4008b	ppb	0.0724	18.1	-8.9935
Zn 206.200	0.6065b	ppb	1.4344	236.5	0.2296

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167477-d-1-c (Samp) **4/19/2019, 5:23:54 PM** **Rack 2, Tube 23****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2959u	-0.2690u	0.0660
Al 308.215	-0.9037u	6.7506	2.6602
As 188.980	4.2548	3.3124	6.9715
B 249.678	40.2591	39.7484	41.1166
Ba 389.178	35.6879	35.9499	35.4721
Be 313.042	-0.1287u	-0.1154u	-0.1220u
Ca 370.602	14706	14714	14675
Cd 226.502	-0.3425u	-0.6795u	0.1379
Co 228.615	0.3047	0.6238	2.0293
Cr 267.716	-0.5387u	0.2698	-0.4564u
Cu 324.754	1.2029	1.5153	1.9300
Fe 271.441	17.2845	-0.9196u	-4.2800u
K 766.491	5843.68	5828.15	5828.91
Mg 279.078	8232.46	8243.28	8230.28
Mn 257.610	82.3079	82.7027	81.9811
Mo 202.032	1.8922	0.4960	0.1140
Na 330.237	185126x	184382x	184049x
Ni 231.604	0.1630	-0.1259u	-0.9069u
Pb 220.353	-0.3903u	-3.7148u	-5.4580u
Sb 206.834	5.9787	-3.2187u	5.6534
Se 196.026	-3.8333u	-1.9691u	-16.1110u
Si 288.158	298.545	301.511	298.977
Sn 189.925	-5.6902u	-5.4748u	-2.4796u
Sr 216.596	116.698	116.527	116.248
Ti 334.941	-0.2402u	-0.1588	-0.1963
Tl 190.794	-4.7755u	-13.7120u	-12.0054u
V 292.401	-0.1487u	0.5920	0.2408
Zn 206.200	2.1657	-2.5723u	-2.6599u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1663b	ppb	0.2016	121.2	-46.0391
Al 308.215	2.8357b	ppb	3.8302	135.1	212.680
As 188.980	4.8462b	ppb	1.8999	39.2	2.0003
B 249.678	40.3747b	ppb	0.6914	1.7	270.610
Ba 389.178	35.7033b	ppb	0.2393	0.7	196.799
Be 313.042	-0.1220b	ppb	0.0066	5.4	-431.688
Ca 370.602	14698b	ppb	20.67	0.1	24601
Cd 226.502	-0.2947b	ppb	0.4108	139.4	-0.1173
Co 228.615	0.9859b	ppb	0.9176	93.1	-8.4628
Cr 267.716	-0.2418b	ppb	0.4449	184.0	10.6760
Cu 324.754	1.5494b	ppb	0.3647	23.5	483.019
Fe 271.441	4.0283b	ppb	11.6025	288.0	19.4890
K 766.491	5833.58b	ppb	8.7596	0.2	120375
Mg 279.078	8235.34b	ppb	6.9619	0.1	11034.1
Mn 257.610	82.3306b	ppb	0.3613	0.4	6881.48
Mo 202.032	0.8341b	ppb	0.9361	112.2	5.4116
Na 330.237	184519xb	ppb	551.161	0.3	5024.48
Ni 231.604	-0.2899b	ppb	0.5535	190.9	-2.0974
Pb 220.353	-3.1877b	ppb	2.5747	80.8	-0.3471
Sb 206.834	2.8045b	ppb	5.2187	186.1	6.9635
Se 196.026	-7.3045b	ppb	7.6834	105.2	1.3525
Si 288.158	299.678b	ppb	1.6021	0.5	1934.19

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-4.5482b	ppb	1.7947	39.5	-0.1380
Sr 216.596	116.491b	ppb	0.2270	0.2	347.213
Ti 334.941	-0.1984b	ppb	0.0407	20.5	-25.5310
Tl 190.794	-10.1643b	ppb	4.7442	46.7	-3.8349
V 292.401	0.2280b	ppb	0.3705	162.5	-10.9252
Zn 206.200	-1.0222b	ppb	2.7611	270.1	-0.6693

680-167693-a-2-b (Samp) 4/19/2019, 5:28:07 PM Rack 2, Tube 24

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5768	-0.2448u	-0.4734u
Al 308.215	13.3103	7.2983	14.4419
As 188.980	2.1466	1.1338	3.0095
B 249.678	24.4747	23.6714	24.2406
Ba 389.178	-2.2589u	-2.6235u	1.4830
Be 313.042	-0.1197u	-0.1289u	-0.1227u
Ca 370.602	4222	4270	4231
Cd 226.502	-0.2343u	-0.2930u	0.0561
Co 228.615	0.6076	2.6915	0.2117
Cr 267.716	-0.5088u	-0.2967u	-0.1136u
Cu 324.754	2.1578	1.0390	0.7924
Fe 271.441	14.3332	30.3129	31.1700
K 766.491	744.539	751.775	747.292
Mg 279.078	1336.18	1353.26	1332.67
Mn 257.610	14.0108	14.2290	14.0352
Mo 202.032	2.1361	2.0940	2.5967
Na 330.237	12155.7	11798.2	11785.8
Ni 231.604	0.2135	0.0888	1.2032
Pb 220.353	-0.5603u	-5.4599u	-7.1400u
Sb 206.834	-4.5718u	-3.1461u	4.6911
Se 196.026	-1.5315u	2.0162	-1.2108u
Si 288.158	597.367	606.082	602.385
Sn 189.925	0.7950	-9.9408u	1.2575
Sr 216.596	19.3228	20.5889	19.9534
Ti 334.941	0.0882	-0.0125	0.0158
Tl 190.794	-10.0731u	-4.6299u	-18.8868u
V 292.401	0.0241	-0.0514u	-0.3904u
Zn 206.200	3.4223	-0.7841u	3.0968

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0471	ppb	0.5523	1171.9	-42.2035
Al 308.215	11.6835	ppb	3.8396	32.9	230.010
As 188.980	2.0966	ppb	0.9388	44.8	1.2658
B 249.678	24.1289	ppb	0.4131	1.7	159.382
Ba 389.178	-1.1331	ppb	2.2730	200.6	-42.2913
Be 313.042	-0.1238	ppb	0.0047	3.8	-426.783
Ca 370.602	4241	ppb	25.44	0.6	7116
Cd 226.502	-0.1571	ppb	0.1869	119.0	1.9559
Co 228.615	1.1702	ppb	1.3322	113.8	-7.7529
Cr 267.716	-0.3064	ppb	0.1978	64.6	8.5196
Cu 324.754	1.3297	ppb	0.7276	54.7	476.407
Fe 271.441	25.2720	ppb	9.4830	37.5	31.2577
K 766.491	747.869	ppb	3.6522	0.5	15718.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1340.70	ppb	11.0136	0.8	1814.48
Mn 257.610	14.0916	ppb	0.1196	0.8	1199.65
Mo 202.032	2.2756	ppb	0.2789	12.3	7.8442
Na 330.237	11913.3	ppb	210.071	1.8	359.523
Ni 231.604	0.5018	ppb	0.6106	121.7	-1.2095
Pb 220.353	-4.3867	ppb	3.4186	77.9	-0.8057
Sb 206.834	-1.0089	ppb	4.9876	494.3	5.6031
Se 196.026	-0.2420	ppb	1.9623	810.7	2.6774
Si 288.158	601.944	ppb	4.3738	0.7	3344.88
Sn 189.925	-2.6295	ppb	6.3361	241.0	0.3300
Sr 216.596	19.9550	ppb	0.6330	3.2	65.3888
Ti 334.941	0.0305	ppb	0.0519	170.2	-19.4098
Tl 190.794	-11.1966	ppb	7.1945	64.3	-4.0984
V 292.401	-0.1392	ppb	0.2208	158.6	-14.3887
Zn 206.200	1.9116	ppb	2.3403	122.4	0.9498

mb 680-566910/1-a (Samp)

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Rack 2, Tube 25

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4731u	0.6501	-0.3289u
Al 308.215	3.4281	-1.0228u	10.6670
As 188.980	1.3329	-0.5287u	2.5295
B 249.678	-1.4978u	-2.2133u	-1.2697u
Ba 389.178	3.1914	-3.0234u	-1.2333u
Be 313.042	-0.1167u	-0.1272u	-0.1183u
Ca 370.602	2.335	4.213	-6.984u
Cd 226.502	-0.3984u	-0.2387u	-0.0550u
Co 228.615	-0.6903u	-0.5503u	-0.8973u
Cr 267.716	0.2728	-0.1420u	0.0736
Cu 324.754	0.0661	0.9526	0.9840
Fe 271.441	9.3394	1.6707	1.8416
K 766.491	-0.4746	-2.4659u	-1.4012
Mg 279.078	-3.9404u	2.0833	0.3409
Mn 257.610	0.1281	0.1178	0.0455
Mo 202.032	1.7547	-1.1688u	-0.1877u
Na 330.237	39.4943	562.163	152.153
Ni 231.604	-1.0625u	-3.5518u	-0.1391u
Pb 220.353	-3.7527u	-5.6703u	-7.8291u
Sb 206.834	0.4181	3.7983	-9.4306u
Se 196.026	1.0667	-7.5795u	0.0004
Si 288.158	3.3890	6.0289	4.8864
Sn 189.925	-1.2468u	1.3116	-7.2038u
Sr 216.596	1.1838	-0.0096u	-0.1867u
Ti 334.941	-0.1000u	-0.1158u	-0.1917u
Tl 190.794	-4.6743u	0.5635	-24.5168u
V 292.401	-0.3398u	-0.4333u	0.0885
Zn 206.200	-2.9385u	-2.1978u	-0.9339u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0506	ppb	0.6111	1207.3	-42.2614
Al 308.215	4.3575	ppb	5.9001	135.4	215.638
As 188.980	1.1112	ppb	1.5411	138.7	1.0030
B 249.678	-1.6602	ppb	0.4923	29.7	-17.1167

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.3551	ppb	3.1991	900.8	-38.8771
Be 313.042	-0.1207	ppb	0.0057	4.7	-424.231
Ca 370.602	-0.1451	ppb	5.997	4131.3	24.84
Cd 226.502	-0.2307	ppb	0.1718	74.5	0.9893
Co 228.615	-0.7126	ppb	0.1746	24.5	-15.1890
Cr 267.716	0.0681	ppb	0.2075	304.5	14.6964
Cu 324.754	0.6676	ppb	0.5211	78.1	456.299
Fe 271.441	4.2839	ppb	4.3790	102.2	19.5715
K 766.491	-1.4472	ppb	0.9964	68.9	274.421
Mg 279.078	-0.5054	ppb	3.0997	613.3	21.0169
Mn 257.610	0.0971	ppb	0.0450	46.3	34.5969
Mo 202.032	0.1327	ppb	1.4878	1120.9	4.2281
Na 330.237	251.270	ppb	275.070	109.5	44.3853
Ni 231.604	-1.5845	ppb	1.7652	111.4	-3.5483
Pb 220.353	-5.7507	ppb	2.0394	35.5	-1.3212
Sb 206.834	-1.7381	ppb	6.8730	395.4	5.3788
Se 196.026	-2.1708	ppb	4.7143	217.2	2.3124
Si 288.158	4.7681	ppb	1.3239	27.8	557.813
Sn 189.925	-2.3797	ppb	4.3693	183.6	0.3920
Sr 216.596	0.3292	ppb	0.7454	226.5	8.1427
Ti 334.941	-0.1359	ppb	0.0490	36.1	-37.4247
Tl 190.794	-9.5425	ppb	13.2299	138.6	-3.7043
V 292.401	-0.2282	ppb	0.2782	121.9	-15.0786
Zn 206.200	-2.0234	ppb	1.0136	50.1	-1.2221

ics 680-566910/2-a (Samp)

4/19/2019, 5:36:31 PM

Rack 2, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	114.325	113.122	114.028
Al 308.215	10920.0	10838.1	10901.2
As 188.980	218.714	210.748	216.787
B 249.678	443.721	446.187	449.162
Ba 389.178	216.614	214.985	218.186
Be 313.042	114.449	113.531	114.205
Ca 370.602	10746	10661	10714
Cd 226.502	111.208	109.523	110.854
Co 228.615	108.833	110.087	111.247
Cr 267.716	217.395	215.043	216.223
Cu 324.754	226.124	220.094	224.103
Fe 271.441	10796.6	10713.0	10768.7
K 766.491	18562.6	18368.2	18508.9
Mg 279.078	10832.4	10753.7	10799.6
Mn 257.610	884.827	877.891	883.971
Mo 202.032	213.650	217.145	217.084
Na 330.237	125638x	124821x	125840x
Ni 231.604	224.215	216.911	221.673
Pb 220.353	1087.45	1081.67	1100.74
Sb 206.834	100.642	103.272	101.210
Se 196.026	206.578	221.805	221.636
Si 288.158	0.6350	-1.8784	-3.1904
Sn 189.925	209.652	219.119	207.525
Sr 216.596	212.381	211.041	212.370
Ti 334.941	855.154	849.079	853.563

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	91.6150	87.9353	84.9776
V 292.401	220.112	219.401	220.491
Zn 206.200	217.423	217.873	221.945

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	113.825b	ppb	0.6270	0.6	3415.00
Al 308.215	10886.4b	ppb	42.9170	0.4	21510.8
As 188.980	215.417b	ppb	4.1560	1.9	58.1613
B 249.678	446.356b	ppb	2.7245	0.6	3038.29
Ba 389.178	216.595b	ppb	1.6006	0.7	1341.99
Be 313.042	114.062b	ppb	0.4755	0.4	91680.2
Ca 370.602	10707b	ppb	42.53	0.4	17939
Cd 226.502	110.528b	ppb	0.8886	0.8	1439.60
Co 228.615	110.056b	ppb	1.2070	1.1	428.091
Cr 267.716	216.220b	ppb	1.1758	0.5	3633.70
Cu 324.754	223.440b	ppb	3.0692	1.4	7208.35
Fe 271.441	10759.4b	ppb	42.5197	0.4	5978.32
K 766.491	18479.9b	ppb	100.370	0.5	380150
Mg 279.078	10795.2b	ppb	39.5608	0.4	14447.2
Mn 257.610	882.230b	ppb	3.7814	0.4	73221.4
Mo 202.032	215.960b	ppb	2.0004	0.9	368.310
Na 330.237	125433xb	ppb	539.765	0.4	3416.96
Ni 231.604	220.933b	ppb	3.7080	1.7	245.987
Pb 220.353	1089.96b	ppb	9.7795	0.9	413.077
Sb 206.834	101.708b	ppb	1.3840	1.4	43.3311
Se 196.026	216.673b	ppb	8.7428	4.0	43.6951
Si 288.158	-1.4779b	ppb	1.9439	131.5	616.123
Sn 189.925	212.099b	ppb	6.1718	2.9	54.6103
Sr 216.596	211.930b	ppb	0.7702	0.4	623.912
Ti 334.941	852.599b	ppb	3.1498	0.4	75631.3
Tl 190.794	88.1760b	ppb	3.3252	3.8	19.4461
V 292.401	220.001b	ppb	0.5535	0.3	2211.72
Zn 206.200	219.080b	ppb	2.4910	1.1	120.699

lb 680-565993/1-c (Samp)

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Rack 2, Tube 27

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5205	-0.1012u	-0.1278u
Al 308.215	7.7652	14.9195	5.9560
As 188.980	1.3791	4.0321	-1.4593u
B 249.678	15.2281	14.7231	13.1171
Ba 389.178	-1.5741u	-0.4038u	-2.5156u
Be 313.042	-0.1307u	-0.1129u	-0.1191u
Ca 370.602	29.22	12.89	27.06
Cd 226.502	-0.0639u	-0.3088u	-0.3745u
Co 228.615	0.5038	1.4990	-0.1766u
Cr 267.716	-0.3876u	-0.1447u	0.1095
Cu 324.754	1.1448	1.0840	1.0834
Fe 271.441	-7.0453u	2.4173	4.6907
K 766.491	10.9504	8.8265	9.7556
Mg 279.078	28.5356	34.9481	35.3766
Mn 257.610	0.1273	0.1781	0.1414
Mo 202.032	0.5574	2.8526	1.2425

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	110526x	111533x	111393x
Ni 231.604	0.4105	1.6283	-0.1922u
Pb 220.353	-1.7450u	-6.1923u	1.0836
Sb 206.834	-2.7886u	-6.0269u	-7.8753u
Se 196.026	4.6596	-4.5775u	-17.6713u
Si 288.158	6.0770	8.3376	9.6393
Sn 189.925	-4.0567u	-11.6320u	3.1323
Sr 216.596	0.3981	-0.0101u	-0.4887u
Ti 334.941	0.1181	-0.0618u	0.0452
Tl 190.794	-13.3870u	4.6002	-2.7648u
V 292.401	-0.4283u	0.4907	0.6262
Zn 206.200	1.3624	1.0677	3.8297

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0972b	ppb	0.3668	377.6	-37.7704
Al 308.215	9.5469b	ppb	4.7400	49.6	225.820
As 188.980	1.3173b	ppb	2.7462	208.5	1.0579
B 249.678	14.3561b	ppb	1.1023	7.7	92.5067
Ba 389.178	-1.4978b	ppb	1.0580	70.6	-46.0217
Be 313.042	-0.1209b	ppb	0.0090	7.5	-429.448
Ca 370.602	23.06b	ppb	8.871	38.5	63.63
Cd 226.502	-0.2491b	ppb	0.1637	65.7	0.5677
Co 228.615	0.6088b	ppb	0.8427	138.4	-9.9654
Cr 267.716	-0.1409b	ppb	0.2486	176.4	11.8248
Cu 324.754	1.1041b	ppb	0.0353	3.2	469.543
Fe 271.441	0.0209b	ppb	6.2242	29760.2	17.2581
K 766.491	9.8442b	ppb	1.0647	10.8	497.112
Mg 279.078	32.9534b	ppb	3.8319	11.6	65.7600
Mn 257.610	0.1489b	ppb	0.0262	17.6	38.8173
Mo 202.032	1.5508b	ppb	1.1783	76.0	6.6212
Na 330.237	111151xb	ppb	545.684	0.5	3041.58
Ni 231.604	0.6155b	ppb	0.9274	150.7	-1.0813
Pb 220.353	-2.2846b	ppb	3.6678	160.5	-0.0094
Sb 206.834	-5.5636b	ppb	2.5748	46.3	4.0464
Se 196.026	-5.8631b	ppb	11.2208	191.4	1.6164
Si 288.158	8.0179b	ppb	1.8025	22.5	572.992
Sn 189.925	-4.1855b	ppb	7.3830	176.4	-0.0535
Sr 216.596	-0.0336b	ppb	0.4438	1322.8	7.0559
Ti 334.941	0.0339b	ppb	0.0905	267.3	-24.7789
Tl 190.794	-3.8505b	ppb	9.0426	234.8	-2.3411
V 292.401	0.2295b	ppb	0.5737	249.9	-10.8104
Zn 206.200	2.0866b	ppb	1.5167	72.7	1.0462

680-167417-d-1-f (Samp)

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Rack 2, Tube 28

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0641u	-0.1592u	-0.3487u
Al 308.215	35.7543	32.4380	36.2787
As 188.980	6.2839	-0.5130u	6.9738
B 249.678	6.7696	5.9230	5.9838
Ba 389.178	17.2172	19.9737	18.3371
Be 313.042	-0.1066u	-0.1037u	-0.1006u
Ca 370.602	20108	20073	20075

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.1426	0.4748	0.6775
Co 228.615	1.3010	2.3077	1.4724
Cr 267.716	0.0341	-0.4366u	0.0003
Cu 324.754	1.1322	1.5066	1.5932
Fe 271.441	-11.0593u	12.2263	13.8932
K 766.491	536.595	537.246	534.045
Mg 279.078	254.002	252.634	251.757
Mn 257.610	82.6337	82.3526	82.0430
Mo 202.032	1.6558	0.1551	-0.0280u
Na 330.237	120534x	120232x	119907x
Ni 231.604	2.6130	2.5460	1.2031
Pb 220.353	11.8555	15.6441	13.0765
Sb 206.834	6.9342	-2.3394u	2.7912
Se 196.026	-3.7042u	-26.7647u	1.8719
Si 288.158	404.812	401.941	400.469
Sn 189.925	-14.1460u	-5.9995u	-6.4947u
Sr 216.596	38.9248	36.2352	36.1343
Ti 334.941	-0.1235u	0.0759	-0.1897u
Tl 190.794	-8.6598u	-13.5004u	-12.6184u
V 292.401	0.3444	0.2176	1.1517
Zn 206.200	10.5486	7.6218	6.5523

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1907b	ppb	0.1449	76.0	-46.4849
Al 308.215	34.8237b	ppb	2.0826	6.0	275.258
As 188.980	4.2482b	ppb	4.1377	97.4	1.8406
B 249.678	6.2255b	ppb	0.4722	7.6	36.8548
Ba 389.178	18.5093b	ppb	1.3863	7.5	80.0011
Be 313.042	-0.1037b	ppb	0.0030	2.9	-412.902
Ca 370.602	20085b	ppb	19.38	0.1	33607
Cd 226.502	0.4317b	ppb	0.2701	62.6	9.2916
Co 228.615	1.6937b	ppb	0.5386	31.8	-5.6596
Cr 267.716	-0.1341b	ppb	0.2625	195.8	12.1140
Cu 324.754	1.4107b	ppb	0.2450	17.4	478.813
Fe 271.441	5.0201b	ppb	13.9501	277.9	20.0714
K 766.491	535.962b	ppb	1.6917	0.3	11350.7
Mg 279.078	252.798b	ppb	1.1313	0.4	358.920
Mn 257.610	82.3431b	ppb	0.2954	0.4	6853.33
Mo 202.032	0.5943b	ppb	0.9238	155.4	5.0069
Na 330.237	120224xb	ppb	313.758	0.3	3286.72
Ni 231.604	2.1207b	ppb	0.7954	37.5	0.6061
Pb 220.353	13.5254b	ppb	1.9338	14.3	5.9815
Sb 206.834	2.4620b	ppb	4.6456	188.7	6.8308
Se 196.026	-9.5324b	ppb	15.1819	159.3	0.9325
Si 288.158	402.408b	ppb	2.2090	0.5	2413.51
Sn 189.925	-8.8801b	ppb	4.5672	51.4	-1.2391
Sr 216.596	37.0981b	ppb	1.5828	4.3	115.449
Ti 334.941	-0.0791b	ppb	0.1382	174.7	-34.4264
Tl 190.794	-11.5929b	ppb	2.5781	22.2	-4.1768
V 292.401	0.5712b	ppb	0.5067	88.7	-7.2853
Zn 206.200	8.2409b	ppb	2.0688	25.1	4.4427

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167417-d-1-f (Samp) **4/19/2019, 5:49:05 PM** **Rack 2, Tube 29****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.3258	-0.1880u	-0.0234u
Al 308.215	10.9116	11.9485	10.9063
As 188.980	1.4121	4.1794	0.2767
B 249.678	0.6233	-0.7228u	-0.8626u
Ba 389.178	0.5658	0.6467	2.7727
Be 313.042	-0.1079u	-0.1147u	-0.1347u
Ca 370.602	4077	4053	3990
Cd 226.502	0.4887	-0.3392u	-0.2159u
Co 228.615	-0.2729u	0.5899	-0.2613u
Cr 267.716	-0.1000u	0.0568	-0.9937u
Cu 324.754	0.9488	1.3251	1.5845
Fe 271.441	-9.9586u	11.4546	15.5562
K 766.491	95.9156	96.8900	94.6265
Mg 279.078	52.7989	57.9601	53.0224
Mn 257.610	16.8768	16.7451	16.4833
Mo 202.032	-0.6428u	-1.5054u	0.2060
Na 330.237	23259.5	22739.5	22346.1
Ni 231.604	1.3171	2.0330	0.7444
Pb 220.353	6.9506	-0.4102u	-4.1020u
Sb 206.834	3.1682	-1.8856u	-0.6957u
Se 196.026	-2.0406u	7.5489	-10.0487u
Si 288.158	86.3637	87.5071	84.3107
Sn 189.925	-0.3347u	-3.5486u	-9.1821u
Sr 216.596	6.9491	4.9512	8.5923
Ti 334.941	-0.0812u	-0.0945u	-0.1249u
Tl 190.794	3.3391	-8.4986u	-0.0582u
V 292.401	-0.3356u	-0.2822u	0.7783
Zn 206.200	0.0937	0.6226	2.5701

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0381	ppb	0.2624	687.8	-39.5564
Al 308.215	11.2555	ppb	0.6002	5.3	229.128
As 188.980	1.9561	ppb	2.0074	102.6	1.2287
B 249.678	-0.3207	ppb	0.8205	255.8	-7.9482
Ba 389.178	1.3284	ppb	1.2515	94.2	-28.2315
Be 313.042	-0.1191	ppb	0.0140	11.7	-423.263
Ca 370.602	4040	ppb	45.29	1.1	6780
Cd 226.502	-0.0221	ppb	0.4467	2019.2	3.6281
Co 228.615	0.0186	ppb	0.4948	2666.8	-12.2856
Cr 267.716	-0.3456	ppb	0.5667	163.9	7.9254
Cu 324.754	1.2862	ppb	0.3196	24.9	475.024
Fe 271.441	5.6840	ppb	13.7013	241.0	20.3763
K 766.491	95.8107	ppb	1.1354	1.2	2241.75
Mg 279.078	54.5938	ppb	2.9174	5.3	94.5315
Mn 257.610	16.7017	ppb	0.2003	1.2	1411.25
Mo 202.032	-0.6474	ppb	0.8557	132.2	2.9114
Na 330.237	22781.7	ppb	458.163	2.0	653.275
Ni 231.604	1.3648	ppb	0.6457	47.3	-0.2403
Pb 220.353	0.8128	ppb	5.6269	692.3	1.1650
Sb 206.834	0.1956	ppb	2.6422	1350.7	6.1032
Se 196.026	-1.5135	ppb	8.8106	582.1	2.4379
Si 288.158	86.0605	ppb	1.6196	1.9	936.945

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-4.3551	ppb	4.4785	102.8	-0.1051
Sr 216.596	6.8309	ppb	1.8234	26.7	27.1123
Ti 334.941	-0.1002	ppb	0.0224	22.4	-34.6122
Tl 190.794	-1.7392	ppb	6.0953	350.5	-1.8314
V 292.401	0.0535	ppb	0.6283	1173.8	-12.2112
Zn 206.200	1.0955	ppb	1.3042	119.1	0.4994

680-167417-d-1-f (Samp) 4/19/2019, 5:53:17 PM Rack 2, Tube 30

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.9580	55.1178	55.6751
Al 308.215	5257.13	5244.99	5287.59
As 188.980	94.5969	94.8380	104.339
B 249.678	215.138	216.886	220.235
Ba 389.178	122.178	124.266	125.491
Be 313.042	54.8698	54.8236	55.1585
Ca 370.602	25384	25348	25514
Cd 226.502	53.1675	54.2655	53.9638
Co 228.615	55.2473	54.2034	55.5068
Cr 267.716	103.924	104.977	105.779
Cu 324.754	109.067	108.611	109.951
Fe 271.441	5171.88	5137.81	5167.30
K 766.491	9471.46	9468.21	9533.61
Mg 279.078	5454.31	5442.76	5475.68
Mn 257.610	603.040	603.187	606.820
Mo 202.032	103.963	101.287	105.468
Na 330.237	128130x	128363x	128413x
Ni 231.604	105.231	108.796	109.874
Pb 220.353	532.757	519.531	541.340
Sb 206.834	55.0091	43.1494	41.2862
Se 196.026	100.095	125.175	96.8839
Si 288.158	405.369	408.243	408.549
Sn 189.925	94.7716	103.683	89.9155
Sr 216.596	138.057	140.991	139.984
Ti 334.941	409.091	408.982	411.882
Tl 190.794	26.2676	42.7890	43.2672
V 292.401	106.264	105.688	105.767
Zn 206.200	116.799	117.112	114.792

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.2503b	ppb	0.3765	0.7	1636.89
Al 308.215	5263.24b	ppb	21.9462	0.4	10506.7
As 188.980	97.9247b	ppb	5.5564	5.7	26.8226
B 249.678	217.419b	ppb	2.5902	1.2	1477.06
Ba 389.178	123.978b	ppb	1.6747	1.4	751.224
Be 313.042	54.9506b	ppb	0.1815	0.3	43998.6
Ca 370.602	25416b	ppb	87.27	0.3	42526
Cd 226.502	53.7989b	ppb	0.5673	1.1	702.544
Co 228.615	54.9858b	ppb	0.6899	1.3	207.610
Cr 267.716	104.893b	ppb	0.9301	0.9	1770.41
Cu 324.754	109.209b	ppb	0.6812	0.6	3746.08
Fe 271.441	5159.00b	ppb	18.4897	0.4	2875.57
K 766.491	9491.09b	ppb	36.8537	0.4	195424

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5457.58b	ppb	16.7021	0.3	7313.04
Mn 257.610	604.349b	ppb	2.1415	0.4	50155.4
Mo 202.032	103.573b	ppb	2.1172	2.0	178.721
Na 330.237	128302xb	ppb	151.383	0.1	3499.90
Ni 231.604	107.967b	ppb	2.4299	2.3	119.304
Pb 220.353	531.210b	ppb	10.9865	2.1	201.771
Sb 206.834	46.4816b	ppb	7.4436	16.0	23.0701
Se 196.026	107.385b	ppb	15.4905	14.4	23.0435
Si 288.158	407.387b	ppb	1.7544	0.4	2478.76
Sn 189.925	96.1233b	ppb	6.9824	7.3	25.2996
Sr 216.596	139.678b	ppb	1.4909	1.1	413.980
Ti 334.941	409.985b	ppb	1.6437	0.4	36354.4
Tl 190.794	37.4412b	ppb	9.6796	25.9	7.4658
V 292.401	105.906b	ppb	0.3124	0.3	1057.88
Zn 206.200	116.235b	ppb	1.2588	1.1	63.9929

Cont Calib Verif (CCV)

4/19/2019, 5:57:30 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	508.501	511.459	509.849
Al 308.215	10082.7	10056.9	10086.5
As 188.980	498.128	498.862	506.741
B 249.678	517.738	517.774	520.792
Ba 389.178	489.132	485.617	486.013
Be 313.042	524.591	523.417	524.510
Ca 370.602	10081	10049	10076
Cd 226.502	503.959	501.297	505.444
Co 228.615	511.043	509.182	513.032
Cr 267.716	497.190	498.187	497.609
Cu 324.754	514.352	511.698	510.078
Fe 271.441	10064.2	10087.6	10079.7
K 766.491	9797.81	9803.83	9814.09
Mg 279.078	10226.3	10198.9	10221.9
Mn 257.610	505.059	503.935	504.837
Mo 202.032	491.466	495.004	491.256
Na 330.237	10565.4	10634.9	10611.0
Ni 231.604	511.356	509.624	505.991
Pb 220.353	507.190	507.890	508.995
Sb 206.834	506.065	488.849	497.462
Se 196.026	527.496	515.035	512.266
Si 288.158	5115.94	5109.46	5107.22
Sn 189.925	503.969	506.416	503.456
Sr 216.596	495.761	499.084	500.236
Ti 334.941	496.030	494.457	495.549
Tl 190.794	503.814	492.770	492.705
V 292.401	510.170	509.661	510.166
Zn 206.200	1031.60	1020.11	1024.44

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	509.936	ppb	1.4808	0.3	15446.4	101.98722
Al 308.215	10075.4	ppb	16.1199	0.2	19934.4	100.75377
As 188.980	501.243	ppb	4.7752	1.0	134.437	100.24868
B 249.678	518.768	ppb	1.7530	0.3	3534.58	103.75368

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	486.921	ppb	1.9251	0.4	3041.17	97.38411
Be 313.042	524.173	ppb	0.6555	0.1	422536	104.83455
Ca 370.602	10069	ppb	17.30	0.2	16862	100.68564
Cd 226.502	503.567	ppb	2.1012	0.4	6484.05	100.71333
Co 228.615	511.086	ppb	1.9252	0.4	2012.02	102.21717
Cr 267.716	497.662	ppb	0.5009	0.1	8339.69	99.53242
Cu 324.754	512.043	ppb	2.1579	0.4	15952.9	102.40857
Fe 271.441	10077.2	ppb	11.9020	0.1	5616.15	100.72131
K 766.491	9805.25	ppb	8.2311	0.1	199512	98.05245
Mg 279.078	10215.7	ppb	14.7030	0.1	13676.2	102.15707
Mn 257.610	504.610	ppb	0.5950	0.1	41909.8	100.92207
Mo 202.032	492.575	ppb	2.1062	0.4	835.106	98.51507
Na 330.237	10603.8	ppb	35.3102	0.3	307.450	106.03770
Ni 231.604	508.990	ppb	2.7382	0.5	568.790	101.79808
Pb 220.353	508.025	ppb	0.9099	0.2	192.648	101.60495
Sb 206.834	497.458	ppb	8.6081	1.7	186.335	99.49168
Se 196.026	518.266	ppb	8.1129	1.6	100.510	103.65318
Si 288.158	5110.88	ppb	4.5300	0.1	24521.7	102.21753
Sn 189.925	504.614	ppb	1.5819	0.3	128.528	100.92272
Sr 216.596	498.361	ppb	2.3236	0.5	1455.85	99.67213
Ti 334.941	495.345	ppb	0.8061	0.2	43941.7	99.06908
Tl 190.794	496.430	ppb	6.3950	1.3	117.324	99.28592
V 292.401	509.999	ppb	0.2928	0.1	5138.24	101.99975
Zn 206.200	1025.39	ppb	5.8042	0.6	565.508	102.53854

Cont Calib Blank (CCB)

4/19/2019, 6:01:43 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0842u	-0.3326u	-0.1423u
Al 308.215	5.0335	-2.0646u	8.5470
As 188.980	2.3538	-2.1120u	1.3993
B 249.678	14.0675	12.4276	11.1453
Ba 389.178	-0.3000u	-1.2369u	1.5871
Be 313.042	0.0106	-0.0123u	-0.0273u
Ca 370.602	-9.945u	-3.528u	-15.81u
Cd 226.502	0.6564	-0.0039u	-0.0898u
Co 228.615	0.5804	1.2316	1.2618
Cr 267.716	0.0855	0.2456	-0.3369u
Cu 324.754	0.5215	0.5552	1.2696
Fe 271.441	-0.3463u	-1.4945u	8.3735
K 766.491	-1.2672	-3.2274u	-2.0926
Mg 279.078	2.0557	2.0152	4.9955
Mn 257.610	0.0120	0.0679	-0.0650u
Mo 202.032	0.1297	0.4851	0.0459
Na 330.237	-178.431u	-58.3814u	65.1983
Ni 231.604	-2.5582u	1.0988	-2.4394u
Pb 220.353	-11.4113u	-12.1788u	-9.6859u
Sb 206.834	0.7052	0.1950u	-0.1985u
Se 196.026	-8.9490u	-3.7420u	-7.5489u
Si 288.158	6.3480	5.5950	7.1714
Sn 189.925	-1.8356u	-1.6581u	1.1218
Sr 216.596	-0.6928u	0.9713	-2.2811u
Ti 334.941	0.2814	0.0311	0.0560

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Label	Replicates Concentration		
Tl 190.794	-20.4405u	-1.8104u	-7.2725u
V 292.401	-0.4519u	0.6188	-0.2686u
Zn 206.200	-2.0741u	0.3059	0.9945

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1864	ppb	0.1299	69.7	-46.3781	-0.18637
Al 308.215	3.8386	ppb	5.4058	140.8	214.636	3.83863
As 188.980	0.5470	ppb	2.3517	429.9	0.8523	0.54704
B 249.678	12.5468	ppb	1.4648	11.7	80.1266	12.54679
Ba 389.178	0.0167	ppb	1.4384	8606.3	-36.5351	0.01671
Be 313.042	-0.0096	ppb	0.0191	197.9	-334.622	-0.00964
Ca 370.602	-9.760	ppb	6.142	62.9	8.774	-9.75988
Cd 226.502	0.1876	ppb	0.4083	217.7	6.3599	0.18757
Co 228.615	1.0246	ppb	0.3850	37.6	-8.3070	1.02462
Cr 267.716	-0.0019	ppb	0.3009	15755.0	13.5225	-0.00191
Cu 324.754	0.7821	ppb	0.4225	54.0	459.775	0.78214
Fe 271.441	2.1776	ppb	5.3965	247.8	18.4661	2.17756
K 766.491	-2.1958	ppb	0.9842	44.8	265.085	-2.19576
Mg 279.078	3.0221	ppb	1.7091	56.6	25.7355	3.02215
Mn 257.610	0.0050	ppb	0.0667	1334.8	26.9744	0.00500
Mo 202.032	0.2203	ppb	0.2332	105.9	4.3757	0.22026
Na 330.237	-57.2045	ppb	121.819	213.0	36.0133	-57.20452
Ni 231.604	-1.2996	ppb	2.0779	159.9	-3.2302	-1.29961
Pb 220.353	-11.0920	ppb	1.2768	11.5	-3.3443	-11.09200Z
Sb 206.834	0.2339	ppb	0.4531	193.7	6.0619	0.23388
Se 196.026	-6.7466	ppb	2.6947	39.9	1.4498	-6.74663
Si 288.158	6.3715	ppb	0.7885	12.4	565.142	6.37146
Sn 189.925	-0.7906	ppb	1.6586	209.8	0.7935	-0.79061
Sr 216.596	-0.6675	ppb	1.6263	243.6	5.2240	-0.66754
Ti 334.941	0.1228	ppb	0.1379	112.3	-14.4643	0.12284
Tl 190.794	-9.8411	ppb	9.5770	97.3	-3.7753	-9.84113
V 292.401	-0.0339	ppb	0.5727	1688.9	-13.1218	-0.03391
Zn 206.200	-0.2579	ppb	1.6102	624.4	-0.2476	-0.25789

680-167417-d-1-g ms (Samp)

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Rack 2, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	2.5663	2.1755	2.5098
Al 308.215	49.3599	46.5492	49.4704
As 188.980	311.813	325.009	323.342
B 249.678	323.294	329.248	329.424
Ba 389.178	327.017	323.895	325.140
Be 313.042	164.844	165.616	165.350
Ca 370.602	16180	16293	16295
Cd 226.502	158.660	158.698	159.514
Co 228.615	157.589	159.113	160.074
Cr 267.716	154.747	156.216	155.420
Cu 324.754	162.446	160.198	161.007
Fe 271.441	318.530	335.694	314.971
K 766.491	503.980	504.245	505.021
Mg 279.078	329.191	329.946	326.590
Mn 257.610	223.499	224.909	224.198
Mo 202.032	154.057	154.285	157.633

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Label	Replicates Concentration		
Na 330.237	95624.3	96128.3	96397.5
Ni 231.604	157.965	161.660	160.243
Pb 220.353	157.517	160.596	166.017
Sb 206.834	162.507	165.615	164.551
Se 196.026	321.896	335.589	311.378
Si 288.158	644.158	649.105	647.136
Sn 189.925	306.441	298.714	320.515
Sr 216.596	184.372	185.377	184.278
Ti 334.941	155.429	156.069	156.082
Tl 190.794	306.557	319.775	291.981
V 292.401	158.500	160.040	159.002
Zn 206.200	174.896	171.818	166.191

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.4172	ppb	0.2112	8.7	32.4808
Al 308.215	48.4598	ppb	1.6556	3.4	307.653
As 188.980	320.055	ppb	7.1863	2.2	86.1387
B 249.678	327.322	ppb	3.4897	1.1	2234.36
Ba 389.178	325.351	ppb	1.5714	0.5	2009.64
Be 313.042	165.270	ppb	0.3924	0.2	132998
Ca 370.602	16256	ppb	65.99	0.4	27210
Cd 226.502	158.958	ppb	0.4825	0.3	2044.70
Co 228.615	158.926	ppb	1.2532	0.8	617.158
Cr 267.716	155.461	ppb	0.7358	0.5	2614.87
Cu 324.754	161.217	ppb	1.1388	0.7	5321.04
Fe 271.441	323.065	ppb	11.0808	3.4	202.492
K 766.491	504.416	ppb	0.5408	0.1	9054.18
Mg 279.078	328.576	ppb	1.7604	0.5	458.814
Mn 257.610	224.202	ppb	0.7050	0.3	18616.1
Mo 202.032	155.325	ppb	2.0018	1.3	266.112
Na 330.237	96050.0	ppb	392.494	0.4	2630.08
Ni 231.604	159.956	ppb	1.8641	1.2	177.535
Pb 220.353	161.377	ppb	4.3034	2.7	61.8928
Sb 206.834	164.224	ppb	1.5798	1.0	66.5174
Se 196.026	322.954	ppb	12.1403	3.8	63.6246
Si 288.158	646.800	ppb	2.4909	0.4	3608.58
Sn 189.925	308.557	ppb	11.0530	3.6	78.9858
Sr 216.596	184.676	ppb	0.6093	0.3	544.005
Ti 334.941	155.860	ppb	0.3734	0.2	13799.1
Tl 190.794	306.104	ppb	13.9024	4.5	71.9873
V 292.401	159.180	ppb	0.7854	0.5	1594.46
Zn 206.200	170.969	ppb	4.4141	2.6	94.1594

680-167417-d-1-h msd (Samp) 4/19/2019, 6:10:05 PM Rack 2, Tube 32

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	2.6472	2.3171	1.8108
Al 308.215	63.6082	58.1128	58.9225
As 188.980	309.585	306.097	318.304
B 249.678	321.501	325.261	326.212
Ba 389.178	319.783	318.568	319.847
Be 313.042	160.901	161.467	162.414
Ca 370.602	16308	16354	16461

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Label	Replicates Concentration		
Cd 226.502	153.466	155.014	155.872
Co 228.615	155.766	156.902	155.622
Cr 267.716	151.722	151.817	153.464
Cu 324.754	157.292	156.823	158.109
Fe 271.441	311.119	318.473	320.872
K 766.491	502.467	504.174	506.579
Mg 279.078	385.076	386.668	388.405
Mn 257.610	219.819	220.647	221.751
Mo 202.032	153.859	150.481	151.918
Na 330.237	96114.3	96874.6	97054.1
Ni 231.604	154.024	159.863	158.863
Pb 220.353	161.286	160.230	160.038
Sb 206.834	153.154	156.014	161.359
Se 196.026	319.799	323.007	309.367
Si 288.158	636.401	637.093	642.753
Sn 189.925	304.674	295.469	308.960
Sr 216.596	180.571	181.652	182.284
Ti 334.941	151.296	151.942	152.587
Tl 190.794	292.443	300.882	310.326
V 292.401	155.473	153.733	156.787
Zn 206.200	165.575	164.545	167.422

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.2584	ppb	0.4213	18.7	27.6651
Al 308.215	60.2145	ppb	2.9668	4.9	330.512
As 188.980	311.329	ppb	6.2872	2.0	83.8093
B 249.678	324.324	ppb	2.4910	0.8	2213.85
Ba 389.178	319.399	ppb	0.7207	0.2	1972.29
Be 313.042	161.594	ppb	0.7641	0.5	130033
Ca 370.602	16374	ppb	78.39	0.5	27407
Cd 226.502	154.784	ppb	1.2192	0.8	1991.12
Co 228.615	156.097	ppb	0.7014	0.4	605.945
Cr 267.716	152.334	ppb	0.9795	0.6	2562.57
Cu 324.754	157.408	ppb	0.6510	0.4	5205.63
Fe 271.441	316.821	ppb	5.0820	1.6	198.919
K 766.491	504.407	ppb	2.0660	0.4	9104.32
Mg 279.078	386.716	ppb	1.6652	0.4	536.599
Mn 257.610	220.739	ppb	0.9692	0.4	18329.2
Mo 202.032	152.086	ppb	1.6954	1.1	260.646
Na 330.237	96681.0	ppb	498.915	0.5	2647.23
Ni 231.604	157.584	ppb	3.1226	2.0	174.876
Pb 220.353	160.518	ppb	0.6722	0.4	61.5691
Sb 206.834	156.842	ppb	4.1649	2.7	63.8419
Se 196.026	317.391	ppb	7.1318	2.2	62.5755
Si 288.158	638.749	ppb	3.4851	0.5	3570.16
Sn 189.925	303.035	ppb	6.8930	2.3	77.5902
Sr 216.596	181.502	ppb	0.8664	0.5	534.790
Ti 334.941	151.941	ppb	0.6455	0.4	13451.7
Tl 190.794	301.217	ppb	8.9461	3.0	70.8149
V 292.401	155.331	ppb	1.5320	1.0	1555.54
Zn 206.200	165.847	ppb	1.4576	0.9	91.3349

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1109u	0.0552	0.2042
Al 308.215	17.7376	18.1686	21.3577
As 188.980	6.5936	1.3735	7.6803
B 249.678	21.3729	19.3385	17.8948
Ba 389.178	12.4670	8.9517	12.2871
Be 313.042	-0.0882u	-0.1065u	-0.1021u
Ca 370.602	1211	1209	1229
Cd 226.502	-0.0791u	0.1967	0.1338
Co 228.615	0.5076	0.2958	1.6333
Cr 267.716	0.0791	-0.2699u	-0.3029u
Cu 324.754	0.6903	1.0948	1.0541
Fe 271.441	-15.1923u	11.7569	-0.9471u
K 766.491	250.961	255.019	256.896
Mg 279.078	104.840	102.000	102.930
Mn 257.610	8.0063	8.0388	8.1330
Mo 202.032	-0.5954u	2.4615	0.3226
Na 330.237	104009x	104454x	105540x
Ni 231.604	0.5496	0.7415	-1.4714u
Pb 220.353	1.8858	-4.3678u	-7.8813u
Sb 206.834	1.1365	-3.2792u	0.9787
Se 196.026	3.3091	3.4668	2.6053
Si 288.158	265.506	271.158	268.275
Sn 189.925	-4.4212u	9.9688	-3.0724u
Sr 216.596	5.3272	4.4458	4.2999
Ti 334.941	0.0026u	-0.1383u	-0.1948u
Tl 190.794	-12.2401u	-8.6938u	-9.1004u
V 292.401	0.3349	-0.3524u	0.1894
Zn 206.200	-0.0226u	-0.7304u	-0.8756u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0495b	ppb	0.1577	318.3	-39.2167
Al 308.215	19.0880b	ppb	1.9774	10.4	244.472
As 188.980	5.2158b	ppb	3.3716	64.6	2.0989
B 249.678	19.5354b	ppb	1.7474	8.9	127.962
Ba 389.178	11.2353b	ppb	1.9797	17.6	34.1080
Be 313.042	-0.0989b	ppb	0.0096	9.7	-411.250
Ca 370.602	1216b	ppb	11.16	0.9	2059
Cd 226.502	0.0838b	ppb	0.1446	172.5	4.8467
Co 228.615	0.8122b	ppb	0.7189	88.5	-9.1559
Cr 267.716	-0.1645b	ppb	0.2116	128.6	11.4050
Cu 324.754	0.9464b	ppb	0.2227	23.5	464.760
Fe 271.441	-1.4608b	ppb	13.4819	922.9	16.4518
K 766.491	254.292b	ppb	3.0331	1.2	5544.35
Mg 279.078	103.257b	ppb	1.4476	1.4	159.695
Mn 257.610	8.0594b	ppb	0.0658	0.8	694.844
Mo 202.032	0.7295b	ppb	1.5686	215.0	5.2352
Na 330.237	104668xb	ppb	787.554	0.8	2866.39
Ni 231.604	-0.0601b	ppb	1.2260	2039.9	-1.8397
Pb 220.353	-3.4544b	ppb	4.9472	143.2	-0.4518
Sb 206.834	-0.3880b	ppb	2.5051	645.7	5.8428
Se 196.026	3.1271b	ppb	0.4587	14.7	3.3119
Si 288.158	268.313b	ppb	2.8262	1.1	1787.63

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	0.8250b	ppb	7.9474	963.3	1.2122
Sr 216.596	4.6910b	ppb	0.5558	11.8	20.8576
Ti 334.941	-0.1101b	ppb	0.1017	92.3	-37.2156
Tl 190.794	-10.0114b	ppb	1.9408	19.4	-3.8145
V 292.401	0.0573b	ppb	0.3622	632.0	-12.5176
Zn 206.200	-0.5429b	ppb	0.4564	84.1	-0.4049

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1763	-0.4068u	-0.2167u
Al 308.215	9.1159	8.4296	2.7718
As 188.980	3.5402	6.4597	6.3655
B 249.678	36.6198	37.5151	36.4645
Ba 389.178	71.8762	71.5322	69.7560
Be 313.042	-0.1278u	-0.1241u	-0.1299u
Ca 370.602	52124	52179	51803
Cd 226.502	-0.3669u	-0.0878u	0.0247
Co 228.615	1.3339	-0.8836u	0.0385
Cr 267.716	0.5973	-0.0486u	0.8010
Cu 324.754	0.8918	0.9434	0.2835
Fe 271.441	-8.5034u	-3.0970u	3.6809
K 766.491	346.147	345.437	344.322
Mg 279.078	5913.26	5933.48	5862.25
Mn 257.610	2.4274	2.4985	2.4752
Mo 202.032	-0.6633u	-0.5425u	0.2193
Na 330.237	107008x	107263x	106447x
Ni 231.604	-0.7231u	-1.8205u	-1.8098u
Pb 220.353	-2.9087u	4.8911	-6.6955u
Sb 206.834	6.5205	-6.0081u	2.2057
Se 196.026	5.3032	5.3892	-6.8426u
Si 288.158	705.755	702.651	700.250
Sn 189.925	2.9971	-1.9193u	-7.4358u
Sr 216.596	65.1106	63.6327	63.1789
Ti 334.941	-0.0822	-0.0562	-0.0946
Tl 190.794	-9.2997u	-14.2235u	-10.7764u
V 292.401	-0.1095u	0.1385	0.1376
Zn 206.200	1.6105	3.7585	0.3810

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1491b	ppb	0.2974	199.5	-45.5081
Al 308.215	6.7724b	ppb	3.4816	51.4	220.366
As 188.980	5.4551b	ppb	1.6590	30.4	2.1629
B 249.678	36.8665b	ppb	0.5671	1.5	246.591
Ba 389.178	71.0548b	ppb	1.1378	1.6	416.521
Be 313.042	-0.1272b	ppb	0.0029	2.3	-426.578
Ca 370.602	52035b	ppb	203.5	0.4	87023
Cd 226.502	-0.1433b	ppb	0.2016	140.7	1.9499
Co 228.615	0.1629b	ppb	1.1140	683.7	-11.7135
Cr 267.716	0.4499b	ppb	0.4435	98.6	21.6892
Cu 324.754	0.7062b	ppb	0.3670	52.0	457.462
Fe 271.441	-2.6398b	ppb	6.1050	231.3	15.7746
K 766.491	345.302b	ppb	0.9200	0.3	7423.40

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5903.00b	ppb	36.7064	0.6	7915.80
Mn 257.610	2.4670b	ppb	0.0363	1.5	252.839
Mo 202.032	-0.3289b	ppb	0.4786	145.5	3.4490
Na 330.237	106906xb	ppb	417.861	0.4	2926.85
Ni 231.604	-1.4511b	ppb	0.6305	43.4	-3.3996
Pb 220.353	-1.5710b	ppb	5.9080	376.1	0.2615
Sb 206.834	0.9060b	ppb	6.3646	702.5	6.2907
Se 196.026	1.2832b	ppb	7.0374	548.4	2.9638
Si 288.158	702.885b	ppb	2.7599	0.4	3815.57
Sn 189.925	-2.1193b	ppb	5.2193	246.3	0.4682
Sr 216.596	63.9741b	ppb	1.0101	1.6	193.927
Ti 334.941	-0.0777b	ppb	0.0196	25.2	-19.1641
Tl 190.794	-11.4332b	ppb	2.5268	22.1	-4.1560
V 292.401	0.0555b	ppb	0.1429	257.3	-12.4224
Zn 206.200	1.9167b	ppb	1.7094	89.2	0.9522

lb2 680-565993/5-c (Samp)

4/19/2019, 6:22:41 PM

Rack 2, Tube 35

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1127u	0.1976	-0.4690u
Al 308.215	5.0551	9.8092	6.1965
As 188.980	-0.1471u	-2.7842u	1.8033
B 249.678	95.2387	95.4270	94.5772
Ba 389.178	-1.0896u	-0.3311u	1.4687
Be 313.042	-0.1175u	-0.1116u	-0.0977u
Ca 370.602	704.7	705.0	698.5
Cd 226.502	-0.0272u	0.1314	0.2629
Co 228.615	-0.0931u	1.1420	1.1334
Cr 267.716	-0.1343u	0.0509	0.3938
Cu 324.754	1.1435	1.1117	0.9284
Fe 271.441	-21.0538u	5.1006	0.9767
K 766.491	109.568	111.231	109.716
Mg 279.078	84.7944	91.0295	84.7781
Mn 257.610	0.0528	0.0697	0.0407
Mo 202.032	-0.5952u	1.4070	0.4026
Na 330.237	125891x	126950x	125241x
Ni 231.604	-0.3417u	1.0434	-2.1316u
Pb 220.353	-1.0640u	-2.4699u	5.9184
Sb 206.834	-1.3612u	-0.5718u	-3.1137u
Se 196.026	-4.6072u	4.7107	0.4398
Si 288.158	39.5934	42.9151	39.6498
Sn 189.925	-4.8164u	-3.5767u	-0.4790u
Sr 216.596	2.0869	2.1423	2.8184
Ti 334.941	-0.0892u	-0.2171u	-0.0909u
Tl 190.794	-0.3043u	-10.8410u	-8.5883u
V 292.401	-0.0902u	0.0649	0.5742
Zn 206.200	4.6089	0.9338	-2.1290u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1280b	ppb	0.3336	260.6	-44.6152
Al 308.215	7.0202b	ppb	2.4818	35.4	220.856
As 188.980	-0.3760b	ppb	2.3023	612.3	0.6059
B 249.678	95.0810b	ppb	0.4463	0.5	645.057

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.0160b	ppb	1.3140	8227.4	-36.4472
Be 313.042	-0.1089b	ppb	0.0101	9.3	-420.288
Ca 370.602	702.7b	ppb	3.690	0.5	1200
Cd 226.502	0.1224b	ppb	0.1453	118.7	5.3061
Co 228.615	0.7274b	ppb	0.7106	97.7	-9.4845
Cr 267.716	0.1034b	ppb	0.2679	259.0	15.9961
Cu 324.754	1.0612b	ppb	0.1161	10.9	468.224
Fe 271.441	-4.9922b	ppb	14.0617	281.7	14.4911
K 766.491	110.172b	ppb	0.9204	0.8	2555.87
Mg 279.078	86.8673b	ppb	3.6046	4.1	137.861
Mn 257.610	0.0544b	ppb	0.0146	26.8	31.1557
Mo 202.032	0.4048b	ppb	1.0011	247.3	4.6871
Na 330.237	126028xb	ppb	862.401	0.7	3443.65
Ni 231.604	-0.4767b	ppb	1.5918	333.9	-2.3068
Pb 220.353	0.7948b	ppb	4.4925	565.2	1.1571
Sb 206.834	-1.6822b	ppb	1.3010	77.3	5.4188
Se 196.026	0.1811b	ppb	4.6643	2575.3	2.7558
Si 288.158	40.7194b	ppb	1.9017	4.7	725.626
Sn 189.925	-2.9574b	ppb	2.2340	75.5	0.2583
Sr 216.596	2.3492b	ppb	0.4073	17.3	14.0273
Ti 334.941	-0.1324b	ppb	0.0734	55.4	-39.7137
Tl 190.794	-6.5779b	ppb	5.5486	84.4	-2.9938
V 292.401	0.1829b	ppb	0.3476	190.0	-11.2292
Zn 206.200	1.1379b	ppb	3.3736	296.5	0.5227

lb 680-565784/1-f (Samp)

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Rack 2, Tube 36

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0395u	0.0944	-0.0405u
Al 308.215	8.6748	1.4439	0.3403
As 188.980	1.0216	2.8645	-1.9200u
B 249.678	20.9114	18.7103	18.6870
Ba 389.178	-0.5291u	0.3568	-1.5620u
Be 313.042	-0.1200u	-0.1075u	-0.1106u
Ca 370.602	124.6	127.6	125.0
Cd 226.502	-0.6173u	0.0370	-0.5186u
Co 228.615	0.0604	1.0294	1.2011
Cr 267.716	0.1278	-0.1538u	-0.2835u
Cu 324.754	1.1046	0.8002	0.7000
Fe 271.441	-4.7721u	-5.2742u	5.6581
K 766.491	26.4492	22.8976	23.3003
Mg 279.078	23.1064	18.5511	18.1977
Mn 257.610	-0.0116u	-0.0413u	-0.0222u
Mo 202.032	1.5132	-1.3562u	-0.1801u
Na 330.237	132395x	128640x	127026x
Ni 231.604	-1.7673u	1.7608	1.6155
Pb 220.353	0.8046	1.9792	-13.3315u
Sb 206.834	-0.0121u	-8.4373u	-2.1654u
Se 196.026	2.1376	0.6521	-15.4151u
Si 288.158	11.2329	5.8522	3.9524
Sn 189.925	-11.4709u	4.6223	3.6836
Sr 216.596	-1.2000u	-1.1701u	-0.0454u
Ti 334.941	0.0550	-0.1098u	0.0374

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-20.0652u	-9.4062u	-13.3643u
V 292.401	0.2118	0.3734	0.3465
Zn 206.200	0.5788	-0.5400u	-2.0390u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0048b	ppb	0.0776	1615.6	-40.5702
Al 308.215	3.4864b	ppb	4.5271	129.9	213.946
As 188.980	0.6554b	ppb	2.4132	368.2	0.8813
B 249.678	19.4362b	ppb	1.2776	6.6	127.293
Ba 389.178	-0.5781b	ppb	0.9603	166.1	-40.2580
Be 313.042	-0.1127b	ppb	0.0065	5.8	-423.573
Ca 370.602	125.7b	ppb	1.621	1.3	235.3
Cd 226.502	-0.3663b	ppb	0.3528	96.3	-0.9906
Co 228.615	0.7636b	ppb	0.6150	80.5	-9.3407
Cr 267.716	-0.1032b	ppb	0.2103	203.8	12.5581
Cu 324.754	0.8683b	ppb	0.2107	24.3	462.378
Fe 271.441	-1.4627b	ppb	6.1719	421.9	16.4496
K 766.491	24.2157b	ppb	1.9448	8.0	824.426
Mg 279.078	19.9517b	ppb	2.7378	13.7	48.3758
Mn 257.610	-0.0250b	ppb	0.0151	60.1	24.3166
Mo 202.032	-0.0077b	ppb	1.4424	18682.1	3.9910
Na 330.237	129354xb	ppb	2754.68	2.1	3533.55
Ni 231.604	0.5363b	ppb	1.9963	372.2	-1.1705
Pb 220.353	-3.5159b	ppb	8.5208	242.4	-0.4750
Sb 206.834	-3.5383b	ppb	4.3771	123.7	4.7143
Se 196.026	-4.2084b	ppb	9.7336	231.3	1.9283
Si 288.158	7.0125b	ppb	3.7764	53.9	568.180
Sn 189.925	-1.0550b	ppb	9.0326	856.1	0.7394
Sr 216.596	-0.8052b	ppb	0.6581	81.7	4.8191
Ti 334.941	-0.0058b	ppb	0.0905	1560.4	-28.7331
Tl 190.794	-14.2786b	ppb	5.3880	37.7	-4.8375
V 292.401	0.3106b	ppb	0.0866	27.9	-9.9424
Zn 206.200	-0.6667b	ppb	1.3135	197.0	-0.4732

680-167132-c-1-k (Samp)

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Rack 2, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3896	0.2654	-0.5513u
Al 308.215	6.2864	3.6587	5.2042
As 188.980	1.0830	-1.3041u	-0.4291u
B 249.678	10.5299	10.7712	10.6217
Ba 389.178	2.0079	3.3429	2.6170
Be 313.042	-0.1307u	-0.1109u	-0.1113u
Ca 370.602	5895	5857	5856
Cd 226.502	-0.3001u	-0.1005u	-0.1743u
Co 228.615	0.7947	1.5915	2.2766
Cr 267.716	0.1704	0.2258	-0.1220u
Cu 324.754	0.8703	1.5818	1.4653
Fe 271.441	-6.3743u	7.0373	7.9648
K 766.491	89.5359	89.8639	88.4704
Mg 279.078	536.109	533.019	531.877
Mn 257.610	4.6821	4.9009	4.8463
Mo 202.032	0.2091	-0.3999u	-0.9019u

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Label	Replicates Concentration		
Na 330.237	2911.17	2693.18	2947.62
Ni 231.604	3.0187	-1.3197u	0.9969
Pb 220.353	-4.1970u	-0.9713u	-0.1508u
Sb 206.834	-11.0800u	-5.5563u	10.3766
Se 196.026	2.2374	10.7804	12.4050
Si 288.158	258.627	252.459	253.494
Sn 189.925	-6.2648u	-4.2011u	-3.5450u
Sr 216.596	20.4924	20.8778	21.3629
Ti 334.941	0.1088	-0.2938u	-0.2337u
Tl 190.794	-10.7017u	12.0281	-6.0932u
V 292.401	0.6255	0.4957	-0.2365u
Zn 206.200	-0.5974u	0.5964	0.9071

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0346	ppb	0.5112	1478.0	-39.7343
Al 308.215	5.0498	ppb	1.3206	26.2	217.001
As 188.980	-0.2168	ppb	1.2076	557.1	0.6484
B 249.678	10.6410	ppb	0.1218	1.1	67.0793
Ba 389.178	2.6560	ppb	0.6683	25.2	-19.3633
Be 313.042	-0.1176	ppb	0.0113	9.6	-420.959
Ca 370.602	5869	ppb	22.71	0.4	9838
Cd 226.502	-0.1916	ppb	0.1009	52.7	1.4940
Co 228.615	1.5542	ppb	0.7417	47.7	-6.2064
Cr 267.716	0.0914	ppb	0.1869	204.5	15.1061
Cu 324.754	1.3058	ppb	0.3817	29.2	475.630
Fe 271.441	2.8759	ppb	8.0244	279.0	18.8762
K 766.491	89.2901	ppb	0.7286	0.8	2118.00
Mg 279.078	533.668	ppb	2.1892	0.4	735.324
Mn 257.610	4.8098	ppb	0.1139	2.4	427.244
Mo 202.032	-0.3642	ppb	0.5564	152.8	3.3893
Na 330.237	2850.66	ppb	137.591	4.8	114.616
Ni 231.604	0.8986	ppb	2.1709	241.6	-0.7647
Pb 220.353	-1.7730	ppb	2.1389	120.6	0.1847
Sb 206.834	-2.0866	ppb	11.1412	533.9	5.2870
Se 196.026	8.4743	ppb	5.4620	64.5	4.3196
Si 288.158	254.860	ppb	3.3033	1.3	1724.64
Sn 189.925	-4.6703	ppb	1.4193	30.4	-0.1867
Sr 216.596	20.9110	ppb	0.4362	2.1	68.2131
Ti 334.941	-0.1396	ppb	0.2172	155.6	-36.4134
Tl 190.794	-1.5889	ppb	12.0157	756.2	-1.7977
V 292.401	0.2949	ppb	0.4647	157.6	-9.7504
Zn 206.200	0.3020	ppb	0.7943	263.0	0.0615

680-167132-c-1-l ms (Samp) 4/19/2019, 6:35:18 PM Rack 2, Tube 38

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	4.1876	3.7456	3.3932
Al 308.215	3.8624	7.2730	5.8062
As 188.980	322.207	334.273	331.511
B 249.678	341.956	346.051	346.191
Ba 389.178	324.400	324.036	323.599
Be 313.042	173.276	173.910	173.379
Ca 370.602	5047	5057	5040

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Label	Replicates Concentration		
Cd 226.502	166.274	166.131	164.598
Co 228.615	169.594	168.324	166.290
Cr 267.716	163.434	163.979	163.153
Cu 324.754	167.784	168.674	166.950
Fe 271.441	337.638	336.213	318.838
K 766.491	150.586	150.455	151.765
Mg 279.078	419.874	423.531	421.932
Mn 257.610	170.690	171.009	170.276
Mo 202.032	164.171	162.140	163.677
Na 330.237	2250.40	2282.71	2282.57
Ni 231.604	165.535	169.109	167.695
Pb 220.353	158.569	163.996	154.001
Sb 206.834	176.266	171.986	154.162
Se 196.026	338.231	343.317	325.885
Si 288.158	534.998	536.300	537.517
Sn 189.925	304.914	325.945	329.744
Sr 216.596	181.714	179.620	181.281
Ti 334.941	161.421	162.085	161.748
Tl 190.794	318.082	318.058	323.345
V 292.401	166.438	167.085	165.947
Zn 206.200	170.195	169.802	172.617

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	3.7755	ppb	0.3980	10.5	73.6666
Al 308.215	5.6472	ppb	1.7108	30.3	224.180
As 188.980	329.330	ppb	6.3217	1.9	88.6141
B 249.678	344.733	ppb	2.4058	0.7	2353.52
Ba 389.178	324.011	ppb	0.4011	0.1	2001.34
Be 313.042	173.522	ppb	0.3400	0.2	139657
Ca 370.602	5048	ppb	8.165	0.2	8471
Cd 226.502	165.668	ppb	0.9287	0.6	2131.01
Co 228.615	168.069	ppb	1.6665	1.0	653.366
Cr 267.716	163.522	ppb	0.4199	0.3	2749.10
Cu 324.754	167.803	ppb	0.8620	0.5	5520.62
Fe 271.441	330.896	ppb	10.4668	3.2	207.188
K 766.491	150.935	ppb	0.7216	0.5	1717.92
Mg 279.078	421.779	ppb	1.8329	0.4	584.007
Mn 257.610	170.658	ppb	0.3674	0.2	14178.1
Mo 202.032	163.330	ppb	1.0590	0.6	279.620
Na 330.237	2271.89	ppb	18.6122	0.8	95.5224
Ni 231.604	167.446	ppb	1.7999	1.1	185.930
Pb 220.353	158.855	ppb	5.0037	3.1	60.9314
Sb 206.834	167.471	ppb	11.7234	7.0	67.7703
Se 196.026	335.811	ppb	8.9647	2.7	66.0432
Si 288.158	536.272	ppb	1.2595	0.2	3095.06
Sn 189.925	320.201	ppb	13.3747	4.2	81.9195
Sr 216.596	180.872	ppb	1.1057	0.6	532.789
Ti 334.941	161.751	ppb	0.3323	0.2	14324.1
Tl 190.794	319.829	ppb	3.0456	1.0	75.2655
V 292.401	166.490	ppb	0.5707	0.3	1668.46
Zn 206.200	170.871	ppb	1.5242	0.9	94.1015

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680-167132-c-1-m msd (Samp) 4/19/2019, 6:39:29 PM Rack 2, Tube 39**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	18.8397	19.6298	19.7082
Al 308.215	6.7122	11.3129	3.1952
As 188.980	325.388	320.053	318.972
B 249.678	345.284	346.341	345.570
Ba 389.178	318.478	318.702	318.995
Be 313.042	169.691	169.974	169.928
Ca 370.602	5158	5172	5179
Cd 226.502	162.032	162.347	161.364
Co 228.615	164.191	161.562	163.013
Cr 267.716	158.720	158.895	159.187
Cu 324.754	159.893	161.828	162.655
Fe 271.441	334.158	341.392	306.253
K 766.491	150.223	150.174	149.887
Mg 279.078	434.235	435.909	437.700
Mn 257.610	167.149	167.301	167.451
Mo 202.032	160.324	159.220	163.566
Na 330.237	2476.17	2509.09	2176.26
Ni 231.604	162.333	164.612	161.705
Pb 220.353	139.949	149.478	160.794
Sb 206.834	164.905	164.193	160.383
Se 196.026	345.002	324.660	316.562
Si 288.158	532.014	539.928	534.319
Sn 189.925	329.503	318.810	307.558
Sr 216.596	177.216	177.918	178.078
Ti 334.941	158.226	158.871	158.306
Tl 190.794	319.594	314.324	301.954
V 292.401	162.208	163.542	163.486
Zn 206.200	161.930	165.698	172.380

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	19.3926	ppb	0.4804	2.5	548.043
Al 308.215	7.0734	ppb	4.0709	57.6	226.851
As 188.980	321.471	ppb	3.4350	1.1	86.5160
B 249.678	345.732	ppb	0.5470	0.2	2360.36
Ba 389.178	318.725	ppb	0.2594	0.1	1968.12
Be 313.042	169.864	ppb	0.1516	0.1	136707
Ca 370.602	5169	ppb	10.98	0.2	8674
Cd 226.502	161.914	ppb	0.5020	0.3	2082.83
Co 228.615	162.922	ppb	1.3168	0.8	632.967
Cr 267.716	158.934	ppb	0.2360	0.1	2672.35
Cu 324.754	161.459	ppb	1.4173	0.9	5328.44
Fe 271.441	327.268	ppb	18.5550	5.7	204.982
K 766.491	150.095	ppb	0.1815	0.1	1749.06
Mg 279.078	435.948	ppb	1.7329	0.4	602.989
Mn 257.610	167.300	ppb	0.1513	0.1	13899.7
Mo 202.032	161.036	ppb	2.2589	1.4	275.750
Na 330.237	2387.17	ppb	183.394	7.7	98.7246
Ni 231.604	162.883	ppb	1.5299	0.9	180.816
Pb 220.353	150.074	ppb	10.4354	7.0	57.6076
Sb 206.834	163.160	ppb	2.4318	1.5	66.1760
Se 196.026	328.741	ppb	14.6529	4.5	64.7102
Si 288.158	535.420	ppb	4.0707	0.8	3090.45

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	318.624	ppb	10.9738	3.4	81.5208
Sr 216.596	177.737	ppb	0.4584	0.3	523.689
Ti 334.941	158.468	ppb	0.3513	0.2	14032.8
Tl 190.794	311.957	ppb	9.0550	2.9	73.3776
V 292.401	163.079	ppb	0.7544	0.5	1633.97
Zn 206.200	166.669	ppb	5.2924	3.2	91.7848

680-167150-a-1-f (Samp) 4/19/2019, 6:43:41 PM Rack 2, Tube 40

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2244u	1.0558	0.5210
Al 308.215	22.7186	20.1785	16.9865
As 188.980	-3.2095u	0.8042	1.4952
B 249.678	20.9815	18.6741	17.8705
Ba 389.178	1.6189	0.5203	-2.8019u
Be 313.042	-0.1109u	-0.1306u	-0.1024u
Ca 370.602	485.3	488.4	481.4
Cd 226.502	-0.0069u	-0.3755u	-0.2029u
Co 228.615	0.9160	1.8021	2.6830
Cr 267.716	14.0381	14.2157	14.3299
Cu 324.754	0.8462	0.8558	1.2259
Fe 271.441	-3.5722u	-15.9621u	17.8221
K 766.491	396.889	406.155	396.708
Mg 279.078	245.453	250.051	242.900
Mn 257.610	-0.0235u	0.0387	-0.0197u
Mo 202.032	6.6683	4.6016	6.1022
Na 330.237	72547.1	73782.9	72428.7
Ni 231.604	-2.8742u	-1.2082u	0.5125
Pb 220.353	-12.0055u	-3.0216u	0.1230
Sb 206.834	-8.5710u	5.8289	2.6297
Se 196.026	-2.1469u	-9.9489u	5.0062
Si 288.158	1776.93	1822.95	1773.38
Sn 189.925	-2.9781u	1.0175	-2.9850u
Sr 216.596	0.7637	1.9258	-0.4404u
Ti 334.941	-0.0593u	-0.0668u	-0.0221u
Tl 190.794	-7.2290u	-8.0368u	-12.1819u
V 292.401	2.1423	1.6811	0.6035
Zn 206.200	3.6671	0.1319	-1.0450u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4508	ppb	0.6430	142.6	-27.0287
Al 308.215	19.9612	ppb	2.8722	14.4	246.275
As 188.980	-0.3034	ppb	2.5404	837.4	0.6239
B 249.678	19.1753	ppb	1.6150	8.4	125.501
Ba 389.178	-0.2209	ppb	2.3017	1042.1	-37.7560
Be 313.042	-0.1147	ppb	0.0145	12.6	-422.908
Ca 370.602	485.0	ppb	3.496	0.7	836.0
Cd 226.502	-0.1951	ppb	0.1844	94.5	1.3179
Co 228.615	1.8003	ppb	0.8835	49.1	-5.2734
Cr 267.716	14.1945	ppb	0.1470	1.0	251.412
Cu 324.754	0.9760	ppb	0.2165	22.2	465.730
Fe 271.441	-0.5707	ppb	17.0909	2994.5	16.9890
K 766.491	399.918	ppb	5.4026	1.4	8531.45

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	246.135	ppb	3.6237	1.5	350.849
Mn 257.610	-0.0015	ppb	0.0349	2289.5	27.1971
Mo 202.032	5.7907	ppb	1.0680	18.4	13.7766
Na 330.237	72919.6	ppb	750.024	1.0	2008.33
Ni 231.604	-1.1899	ppb	1.6934	142.3	-3.1079
Pb 220.353	-4.9680	ppb	6.2942	126.7	-1.0258
Sb 206.834	-0.0375	ppb	7.5614	20187.9	6.0265
Se 196.026	-2.3632	ppb	7.4799	316.5	2.2761
Si 288.158	1791.09	ppb	27.6495	1.5	8895.32
Sn 189.925	-1.6485	ppb	2.3089	140.1	0.5839
Sr 216.596	0.7497	ppb	1.1832	157.8	9.3037
Ti 334.941	-0.0494	ppb	0.0240	48.5	-30.7401
Tl 190.794	-9.1492	ppb	2.6572	29.0	-3.6101
V 292.401	1.4756	ppb	0.7897	53.5	1.3913
Zn 206.200	0.9180	ppb	2.4524	267.2	0.3935

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	509.001	513.601	510.754
Al 308.215	10053.7	10079.1	10122.1
As 188.980	497.382	509.957	502.759
B 249.678	513.978	518.083	523.568
Ba 389.178	484.341	484.855	486.344
Be 313.042	523.228	525.549	526.381
Ca 370.602	10029	10073	10071
Cd 226.502	501.595	505.007	506.421
Co 228.615	507.040	510.052	508.298
Cr 267.716	495.777	498.015	498.675
Cu 324.754	510.029	515.953	517.753
Fe 271.441	10043.1	10130.9	10128.9
K 766.491	9785.45	9823.48	9839.75
Mg 279.078	10199.3	10249.6	10264.9
Mn 257.610	502.891	505.598	505.887
Mo 202.032	492.931	496.582	498.631
Na 330.237	10546.5	10501.5	10116.6
Ni 231.604	510.821	513.629	514.896
Pb 220.353	509.260	512.450	501.945
Sb 206.834	487.166	497.734	491.604
Se 196.026	524.997	510.188	514.484
Si 288.158	5114.95	5128.85	5121.53
Sn 189.925	494.248	493.490	494.528
Sr 216.596	493.782	499.275	496.859
Ti 334.941	493.374	495.111	495.410
Tl 190.794	484.461	508.216	486.423
V 292.401	507.466	510.568	511.625
Zn 206.200	1017.69	1033.41	1033.52

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	511.119	ppb	2.3215	0.5	15482.4	102.22380
Al 308.215	10084.9	ppb	34.5645	0.3	19953.2	100.84949
As 188.980	503.366	ppb	6.3095	1.3	135.003	100.67323
B 249.678	518.543	ppb	4.8117	0.9	3533.01	103.70860

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	485.180	ppb	1.0398	0.2	3030.26	97.03603
Be 313.042	525.053	ppb	1.6342	0.3	423245	105.01051
Ca 370.602	10058	ppb	24.64	0.2	16844	100.57876
Cd 226.502	504.341	ppb	2.4811	0.5	6494.02	100.86819
Co 228.615	508.464	ppb	1.5127	0.3	2001.59	101.69270
Cr 267.716	497.489	ppb	1.5190	0.3	8336.79	99.49780
Cu 324.754	514.578	ppb	4.0412	0.8	16029.8	102.91566
Fe 271.441	10101.0	ppb	50.1425	0.5	5629.23	100.95913
K 766.491	9816.23	ppb	27.8650	0.3	199751	98.16229
Mg 279.078	10237.9	ppb	34.3688	0.3	13705.9	102.37943
Mn 257.610	504.792	ppb	1.6527	0.3	41924.9	100.95847
Mo 202.032	496.048	ppb	2.8874	0.6	840.967	99.20966
Na 330.237	10388.2	ppb	236.299	2.3	301.587	103.88174
Ni 231.604	513.115	ppb	2.0857	0.4	573.420	102.62306
Pb 220.353	507.885	ppb	5.3858	1.1	192.594	101.57700
Sb 206.834	492.168	ppb	5.3064	1.1	184.464	98.43353
Se 196.026	516.557	ppb	7.6192	1.5	100.188	103.31130
Si 288.158	5121.78	ppb	6.9513	0.1	24572.7	102.43551
Sn 189.925	494.089	ppb	0.5372	0.1	125.868	98.81776
Sr 216.596	496.639	ppb	2.7527	0.6	1450.76	99.32775
Ti 334.941	494.632	ppb	1.0994	0.2	43878.4	98.92635
Tl 190.794	493.033	ppb	13.1855	2.7	116.508	98.60667
V 292.401	509.887	ppb	2.1616	0.4	5136.77	101.97735
Zn 206.200	1028.21	ppb	9.1060	0.9	567.064	102.82060

Cont Calib Blank (CCB)

4/19/2019, 6:52:07 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3328u	0.1456	-0.2757u
Al 308.215	14.5042	10.3815	2.9712
As 188.980	2.1308	4.6198	0.9263
B 249.678	12.6904	11.1519	9.8364
Ba 389.178	-0.3055u	-1.0870u	-1.6883u
Be 313.042	0.0097	-0.0147u	-0.0402u
Ca 370.602	-5.727u	-3.645u	-7.372u
Cd 226.502	-0.2930u	0.1820	0.1438
Co 228.615	-0.2541u	1.1733	-0.4417u
Cr 267.716	0.2778	0.1504	0.0264
Cu 324.754	0.7633	0.8769	1.1468
Fe 271.441	-19.5138u	1.2352	-2.0317u
K 766.491	-1.5769	-2.2259	-4.2006u
Mg 279.078	2.9749	1.1694	2.0400
Mn 257.610	0.0879	0.0931	-0.0997u
Mo 202.032	-0.4395u	1.0402	-0.0608u
Na 330.237	264.252	-7.8573u	-43.7323u
Ni 231.604	1.5421	1.0010	-0.7079u
Pb 220.353	-6.2214u	1.4317	-2.3955u
Sb 206.834	-1.8897u	9.4423	1.8790
Se 196.026	-2.8331u	6.3362	-3.5346u
Si 288.158	11.7038	8.3340	6.0844
Sn 189.925	-9.0223u	-8.9890u	-5.0013u
Sr 216.596	0.0714	-0.0648u	-1.3680u
Ti 334.941	0.2287	0.0912	0.0703

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Label	Replicates Concentration		
Tl 190.794	-6.9991u	-18.9958u	-1.9590u
V 292.401	0.3107	0.8455	0.7725
Zn 206.200	-0.0200u	-1.6952u	1.3171

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1543	ppb	0.2613	169.3	-45.4061	-0.15430
Al 308.215	9.2856	ppb	5.8441	62.9	225.307	9.28562
As 188.980	2.5590	ppb	1.8836	73.6	1.3895	2.55895
B 249.678	11.2262	ppb	1.4284	12.7	71.0829	11.22620
Ba 389.178	-1.0269	ppb	0.6933	67.5	-43.0921	-1.02694
Be 313.042	-0.0150	ppb	0.0249	165.6	-338.987	-0.01505
Ca 370.602	-5.581	ppb	1.868	33.5	15.76	-5.58106
Cd 226.502	0.0109	ppb	0.2639	2411.2	4.0996	0.01094
Co 228.615	0.1592	ppb	0.8833	555.0	-11.7382	0.15916
Cr 267.716	0.1515	ppb	0.1257	83.0	16.0895	0.15153
Cu 324.754	0.9290	ppb	0.1970	21.2	464.223	0.92898
Fe 271.441	-6.7701	ppb	11.1566	164.8	13.4883	-6.77007
K 766.491	-2.6678	ppb	1.3665	51.2	254.808	-2.66781
Mg 279.078	2.0614	ppb	0.9029	43.8	24.4491	2.06144
Mn 257.610	0.0271	ppb	0.1098	405.1	28.8167	0.02711
Mo 202.032	0.1799	ppb	0.7687	427.2	4.3075	0.17994
Na 330.237	70.8875	ppb	168.417	237.6	39.4842	70.88754
Ni 231.604	0.6117	ppb	1.1744	192.0	-1.0852	0.61174
Pb 220.353	-2.3951	ppb	3.8266	159.8	-0.0510	-2.39505
Sb 206.834	3.1439	ppb	5.7709	183.6	7.0856	3.14388
Se 196.026	-0.0105	ppb	5.5076	52509.2	2.7197	-0.01049
Si 288.158	8.7074	ppb	2.8283	32.5	576.125	8.70741
Sn 189.925	-7.6709	ppb	2.3120	30.1	-0.9453	-7.67088
Sr 216.596	-0.4538	ppb	0.7947	175.1	5.8412	-0.45381
Ti 334.941	0.1301	ppb	0.0861	66.2	-13.8204	0.13007
Tl 190.794	-9.3180	ppb	8.7519	93.9	-3.6504	-9.31797
V 292.401	0.6429	ppb	0.2900	45.1	-6.2428	0.64289
Zn 206.200	-0.1327	ppb	1.5093	1137.5	-0.1785	-0.13269

mb 680-566961/1-a (Samp)

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Rack 2, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8456u	0.4079	-0.2244u
Al 308.215	10.2825	7.3279	14.7283
As 188.980	4.7202	1.9926	2.9312
B 249.678	1.5336	0.0842	0.2925
Ba 389.178	-1.2855u	-1.6469u	3.1927
Be 313.042	-0.1183u	-0.1040u	-0.1063u
Ca 370.602	5.388	-3.231u	-0.6802u
Cd 226.502	-0.0164u	-0.7062u	-0.1974u
Co 228.615	1.9875	0.7011	0.9002
Cr 267.716	-0.1945u	-0.1169u	0.3831
Cu 324.754	1.2425	0.3082	0.8577
Fe 271.441	4.4777	-2.5610u	-7.3592u
K 766.491	4.1150	4.0137	3.3086
Mg 279.078	1.9526	7.5398	-2.8242u
Mn 257.610	0.0080	-0.0599u	0.0412
Mo 202.032	1.0567	0.1199	1.3613

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	235.903	402.998	-3.8421u
Ni 231.604	0.7618	3.9340	-0.9119u
Pb 220.353	-7.9489u	-7.2561u	-7.6229u
Sb 206.834	-0.6709u	-3.0576u	2.9896
Se 196.026	1.8186	-1.9940u	9.8056
Si 288.158	9.4689	8.9858	8.7536
Sn 189.925	-7.5337u	-3.0558u	6.7284
Sr 216.596	-0.6028u	-1.6577u	1.0352
Ti 334.941	-0.0038u	-0.0226u	0.0605
Tl 190.794	-6.9153u	2.0082	6.2897
V 292.401	0.1706	-0.5055u	-0.2051u
Zn 206.200	0.9309	4.3106	0.0345

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2207	ppb	0.6268	284.0	-47.4230
Al 308.215	10.7796	ppb	3.7252	34.6	228.207
As 188.980	3.2147	ppb	1.3857	43.1	1.5646
B 249.678	0.6368	ppb	0.7836	123.1	-1.3971
Ba 389.178	0.0867	ppb	2.6959	3107.8	-36.0929
Be 313.042	-0.1095	ppb	0.0077	7.0	-415.250
Ca 370.602	0.4924	ppb	4.428	899.3	25.91
Cd 226.502	-0.3066	ppb	0.3576	116.6	0.0186
Co 228.615	1.1962	ppb	0.6924	57.9	-7.6296
Cr 267.716	0.0239	ppb	0.3135	1310.8	13.9573
Cu 324.754	0.8028	ppb	0.4696	58.5	460.405
Fe 271.441	-1.8142	ppb	5.9536	328.2	16.2641
K 766.491	3.8125	ppb	0.4393	11.5	338.619
Mg 279.078	2.2227	ppb	5.1873	233.4	24.6647
Mn 257.610	-0.0035	ppb	0.0516	1453.6	26.2688
Mo 202.032	0.8460	ppb	0.6470	76.5	5.4317
Na 330.237	211.686	ppb	204.498	96.6	43.2751
Ni 231.604	1.2613	ppb	2.4613	195.1	-0.3575
Pb 220.353	-7.6093	ppb	0.3466	4.6	-2.0256
Sb 206.834	-0.2463	ppb	3.0459	1236.7	5.9626
Se 196.026	3.2101	ppb	6.0216	187.6	3.3268
Si 288.158	9.0694	ppb	0.3649	4.0	578.074
Sn 189.925	-1.2870	ppb	7.2937	566.7	0.6681
Sr 216.596	-0.4085	ppb	1.3569	332.2	5.9759
Ti 334.941	0.0113	ppb	0.0436	384.1	-24.3608
Tl 190.794	0.4609	ppb	6.7371	1461.8	-1.3082
V 292.401	-0.1800	ppb	0.3387	188.2	-14.6225
Zn 206.200	1.7587	ppb	2.2551	128.2	0.8651

ics 680-566961/2-a (Samp)

4/19/2019, 7:00:30 PM

Rack 2, Tube 42

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.3067	55.0511	55.5730
Al 308.215	5204.71	5197.22	5184.22
As 188.980	106.357	122.039	107.072
B 249.678	213.736	214.047	215.564
Ba 389.178	100.461	104.044	103.123
Be 313.042	55.9803	55.8640	55.8733
Ca 370.602	5183	5184	5186

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Label	Replicates Concentration		
Cd 226.502	54.3540	54.0484	53.5193
Co 228.615	54.5026	53.0199	55.1081
Cr 267.716	104.645	105.160	105.452
Cu 324.754	108.862	109.108	108.610
Fe 271.441	5183.26	5218.96	5233.92
K 766.491	7802.72	7782.97	7788.46
Mg 279.078	5287.79	5278.37	5283.56
Mn 257.610	428.221	427.760	428.063
Mo 202.032	102.814	105.360	102.728
Na 330.237	5494.93	5462.01	5505.83
Ni 231.604	106.793	107.626	105.679
Pb 220.353	530.114	513.745	539.139
Sb 206.834	46.2379	44.1081	51.5072
Se 196.026	86.4277	112.751	95.3233
Si 288.158	0.2509	2.4404	2.5316
Sn 189.925	95.1218	96.2636	98.5258
Sr 216.596	105.219	102.775	101.442
Ti 334.941	410.805	410.506	410.085
Tl 190.794	19.6792	32.7886	23.9658
V 292.401	107.145	105.822	106.056
Zn 206.200	107.872	106.405	107.690

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.3103	ppb	0.2610	0.5	1638.50
Al 308.215	5195.38	ppb	10.3651	0.2	10374.0
As 188.980	111.823	ppb	8.8547	7.9	30.5335
B 249.678	214.449	ppb	0.9779	0.5	1456.66
Ba 389.178	102.543	ppb	1.8605	1.8	616.294
Be 313.042	55.9059	ppb	0.0646	0.1	44771.9
Ca 370.602	5184	ppb	1.644	0.0	8699
Cd 226.502	53.9739	ppb	0.4223	0.8	705.093
Co 228.615	54.2102	ppb	1.0743	2.0	204.544
Cr 267.716	105.086	ppb	0.4089	0.4	1772.67
Cu 324.754	108.860	ppb	0.2491	0.2	3735.51
Fe 271.441	5212.05	ppb	26.0304	0.5	2904.90
K 766.491	7791.38	ppb	10.1899	0.1	160491
Mg 279.078	5283.24	ppb	4.7201	0.1	7081.69
Mn 257.610	428.015	ppb	0.2343	0.1	35537.4
Mo 202.032	103.634	ppb	1.4957	1.4	178.825
Na 330.237	5487.59	ppb	22.8114	0.4	180.740
Ni 231.604	106.700	ppb	0.9770	0.9	117.883
Pb 220.353	527.666	ppb	12.8728	2.4	200.418
Sb 206.834	47.2844	ppb	3.8089	8.1	23.2846
Se 196.026	98.1672	ppb	13.3900	13.6	21.2895
Si 288.158	1.7410	ppb	1.2912	74.2	585.340
Sn 189.925	96.6371	ppb	1.7325	1.8	25.4174
Sr 216.596	103.146	ppb	1.9156	1.9	307.348
Ti 334.941	410.465	ppb	0.3617	0.1	36399.3
Tl 190.794	25.4779	ppb	6.6842	26.2	4.5599
V 292.401	106.341	ppb	0.7060	0.7	1062.63
Zn 206.200	107.322	ppb	0.7998	0.7	59.0748

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167634-b-5-d (Samp) **4/19/2019, 7:04:41 PM** **Rack 2, Tube 43****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0057u	-0.0037u	0.1874
Al 308.215	981.054	984.652	994.008
As 188.980	5.6836	5.8388	2.4941
B 249.678	177.528	180.461	181.341
Ba 389.178	43.7225	43.9708	39.7918
Be 313.042	-0.0600u	-0.0757u	-0.0843u
Ca 370.602	9811	9906	9931
Cd 226.502	-0.1386u	-0.3420u	-0.5106u
Co 228.615	0.1396	1.4168	1.1135
Cr 267.716	1.8719	1.5293	1.9238
Cu 324.754	4.5153	4.5262	4.8012
Fe 271.441	610.983	624.926	654.752
K 766.491	4567.18	4610.20	4610.00
Mg 279.078	4651.67	4689.38	4713.54
Mn 257.610	24.5060	24.6665	24.5808
Mo 202.032	0.5707	4.4769	2.1430
Na 330.237	303884x	305382x	307130x
Ni 231.604	0.8131	1.4965	1.5335
Pb 220.353	-11.8888u	-2.4280u	-4.0367u
Sb 206.834	-2.5895u	1.1316	4.4534
Se 196.026	3.3463	15.0418	3.6118
Si 288.158	2199.29	2205.08	2231.04
Sn 189.925	-6.4162u	-10.1504u	-2.6138u
Sr 216.596	52.2904	50.1494	50.4832
Ti 334.941	23.6954	22.4466	23.6770
Tl 190.794	0.1678	-17.0066u	2.4382
V 292.401	2.4056	1.5227	2.2300
Zn 206.200	5.8513	5.0640	3.5987

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0631b	ppb	0.1077	170.6	-39.0882
Al 308.215	986.571b	ppb	6.6870	0.7	2137.07
As 188.980	4.6722b	ppb	1.8879	40.4	1.9518
B 249.678	179.777b	ppb	1.9964	1.1	1224.14
Ba 389.178	42.4950b	ppb	2.3444	5.5	235.906
Be 313.042	-0.0733b	ppb	0.0123	16.8	-398.540
Ca 370.602	9883b	ppb	63.60	0.6	16547
Cd 226.502	-0.3304b	ppb	0.1862	56.4	0.2089
Co 228.615	0.8900b	ppb	0.6673	75.0	-8.6948
Cr 267.716	1.7750b	ppb	0.2144	12.1	45.0783
Cu 324.754	4.6142b	ppb	0.1620	3.5	575.989
Fe 271.441	630.220b	ppb	22.3597	3.5	366.127
K 766.491	4595.79b	ppb	24.7805	0.5	94863.2
Mg 279.078	4684.86b	ppb	31.1815	0.7	6286.37
Mn 257.610	24.5844b	ppb	0.0803	0.3	2082.04
Mo 202.032	2.3969b	ppb	1.9654	82.0	8.0413
Na 330.237	305466xb	ppb	1624.66	0.5	8292.95
Ni 231.604	1.2810b	ppb	0.4057	31.7	-0.3348
Pb 220.353	-6.1178b	ppb	5.0621	82.7	-1.4874
Sb 206.834	0.9985b	ppb	3.5233	352.9	6.3937
Se 196.026	7.3333b	ppb	6.6771	91.1	4.1090
Si 288.158	2211.80b	ppb	16.9096	0.8	10859.3

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-6.3935b	ppb	3.7684	58.9	-0.5925
Sr 216.596	50.9743b	ppb	1.1519	2.3	156.016
Ti 334.941	23.2730b	ppb	0.7157	3.1	2044.53
Tl 190.794	-4.8002b	ppb	10.6318	221.5	-2.5915
V 292.401	2.0528b	ppb	0.4674	22.8	7.2721
Zn 206.200	4.8380b	ppb	1.1432	23.6	2.5650

680-167634-b-5-e ms (Samp) 4/19/2019, 7:08:53 PM Rack 2, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.6851	54.9381	54.3228
Al 308.215	5429.86	5414.28	5439.04
As 188.980	97.6367	108.842	102.277
B 249.678	400.740	400.541	405.041
Ba 389.178	167.738	161.059	166.775
Be 313.042	54.7798	54.5359	54.8651
Ca 370.602	15783	15716	15796
Cd 226.502	53.3330	52.4796	52.8799
Co 228.615	55.2168	52.5223	52.5004
Cr 267.716	103.650	103.810	103.309
Cu 324.754	112.377	110.764	112.038
Fe 271.441	5259.41	5245.92	5258.15
K 766.491	18890.9	18812.6	18892.9
Mg 279.078	12271.1	12231.6	12293.9
Mn 257.610	450.641	447.910	451.295
Mo 202.032	107.153	107.989	106.640
Na 330.237	315307x	312989x	315646x
Ni 231.604	103.562	105.309	108.482
Pb 220.353	509.999	511.007	525.090
Sb 206.834	49.4479	52.7167	53.1006
Se 196.026	103.679	106.878	90.7941
Si 288.158	1248.95	1234.56	1252.87
Sn 189.925	95.9806	107.480	103.135
Sr 216.596	172.731	170.712	169.200
Ti 334.941	408.056	406.623	409.284
Tl 190.794	35.0032	42.7169	52.0627
V 292.401	105.521	105.532	105.376
Zn 206.200	111.571	106.154	105.594

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.6487b	ppb	0.3093	0.6	1618.18
Al 308.215	5427.73b	ppb	12.5216	0.2	10828.5
As 188.980	102.919b	ppb	5.6303	5.5	28.1555
B 249.678	402.107b	ppb	2.5426	0.6	2741.15
Ba 389.178	165.191b	ppb	3.6100	2.2	1017.77
Be 313.042	54.7269b	ppb	0.1708	0.3	43807.7
Ca 370.602	15765b	ppb	43.31	0.3	26390
Cd 226.502	52.8975b	ppb	0.4269	0.8	690.783
Co 228.615	53.4132b	ppb	1.5620	2.9	201.333
Cr 267.716	103.589b	ppb	0.2558	0.2	1749.43
Cu 324.754	111.726b	ppb	0.8504	0.8	3822.39
Fe 271.441	5254.49b	ppb	7.4504	0.1	2928.37
K 766.491	18865.5b	ppb	45.7888	0.2	388331

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	12265.5b	ppb	31.5363	0.3	16418.9
Mn 257.610	449.949b	ppb	1.7957	0.4	37380.7
Mo 202.032	107.261b	ppb	0.6807	0.6	184.945
Na 330.237	314647xb	ppb	1446.13	0.5	8536.28
Ni 231.604	105.784b	ppb	2.4943	2.4	116.857
Pb 220.353	515.365b	ppb	8.4366	1.6	195.760
Sb 206.834	51.7551b	ppb	2.0073	3.9	24.9627
Se 196.026	100.450b	ppb	8.5143	8.5	21.7220
Si 288.158	1245.46b	ppb	9.6442	0.8	6391.13
Sn 189.925	102.199b	ppb	5.8065	5.7	26.8534
Sr 216.596	170.881b	ppb	1.7714	1.0	505.042
Ti 334.941	407.988b	ppb	1.3319	0.3	36190.9
Tl 190.794	43.2609b	ppb	8.5427	19.7	8.8217
V 292.401	105.476b	ppb	0.0870	0.1	1052.77
Zn 206.200	107.773b	ppb	3.3011	3.1	59.3240

680-167634-b-5-f msd (Samp) 4/19/2019, 7:13:05 PM Rack 2, Tube 45
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.3208	54.0851	54.9078
Al 308.215	8052.00	8021.16	8046.91
As 188.980	97.8807	116.072	113.551
B 249.678	405.967	405.851	406.208
Ba 389.178	150.231	151.240	156.487
Be 313.042	55.0203	54.8117	55.0680
Ca 370.602	15707	15608	15726
Cd 226.502	52.4264	52.5234	52.9257
Co 228.615	51.8059	53.4209	52.2651
Cr 267.716	107.797	107.627	107.666
Cu 324.754	112.036	111.599	111.828
Fe 271.441	6890.06	6842.75	6862.20
K 766.491	15493.7	15464.0	15521.0
Mg 279.078	10534.9	10500.2	10542.0
Mn 257.610	448.007	445.899	448.243
Mo 202.032	107.141	105.051	104.734
Na 330.237	319648x	318544x	322052x
Ni 231.604	106.109	105.647	106.044
Pb 220.353	516.490	520.880	515.837
Sb 206.834	48.0353	66.3828	49.2360
Se 196.026	90.7172	112.933	106.053
Si 288.158	4976.27	4949.70	4984.81
Sn 189.925	103.196	98.2207	95.0574
Sr 216.596	159.274	158.405	159.531
Ti 334.941	456.456	461.157	455.197
Tl 190.794	30.3632	36.2699	39.0205
V 292.401	110.492	109.699	111.080
Zn 206.200	108.442	109.332	115.012

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.4379b	ppb	0.4237	0.8	1611.49
Al 308.215	8040.02b	ppb	16.5349	0.2	15938.7
As 188.980	109.168b	ppb	9.8559	9.0	29.8198
B 249.678	406.009b	ppb	0.1822	0.0	2766.20

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	152.653b	ppb	3.3584	2.2	937.748
Be 313.042	54.9667b	ppb	0.1363	0.2	44001.3
Ca 370.602	15680b	ppb	63.70	0.4	26246
Cd 226.502	52.6252b	ppb	0.2647	0.5	689.854
Co 228.615	52.4973b	ppb	0.8322	1.6	198.061
Cr 267.716	107.697b	ppb	0.0889	0.1	1818.33
Cu 324.754	111.821b	ppb	0.2188	0.2	3825.50
Fe 271.441	6865.00b	ppb	23.7799	0.3	3819.88
K 766.491	15492.9b	ppb	28.4674	0.2	318955
Mg 279.078	10525.7b	ppb	22.4075	0.2	14091.7
Mn 257.610	447.383b	ppb	1.2907	0.3	37163.6
Mo 202.032	105.642b	ppb	1.3078	1.2	182.194
Na 330.237	320081xb	ppb	1793.52	0.6	8682.57
Ni 231.604	105.933b	ppb	0.2504	0.2	117.025
Pb 220.353	517.735b	ppb	2.7429	0.5	196.589
Sb 206.834	54.5514b	ppb	10.2639	18.8	25.9341
Se 196.026	103.235b	ppb	11.3731	11.0	22.2533
Si 288.158	4970.26b	ppb	18.3085	0.4	23777.6
Sn 189.925	98.8246b	ppb	4.1026	4.2	26.0012
Sr 216.596	159.070b	ppb	0.5897	0.4	470.775
Ti 334.941	457.603b	ppb	3.1413	0.7	40587.5
Tl 190.794	35.2178b	ppb	4.4234	12.6	6.8235
V 292.401	110.424b	ppb	0.6933	0.6	1103.46
Zn 206.200	110.929b	ppb	3.5644	3.2	61.0669

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Rack 2, Tube 46

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4437	0.6187	0.6632
Al 308.215	18.9619	16.7942	8.3479
As 188.980	0.5075	14.2253	3.9038
B 249.678	32.0814	31.4540	29.3069
Ba 389.178	20.4890	17.4888	15.6326
Be 313.042	-0.1175u	-0.1312u	-0.1239u
Ca 370.602	63849	63880	63871
Cd 226.502	-0.4084u	-0.0110	0.0399
Co 228.615	2.9062	2.0428	3.0021
Cr 267.716	0.4434	0.2538	0.3434
Cu 324.754	7.8287	9.6514	10.1621
Fe 271.441	124.665	122.843	127.682
K 766.491	896.424	898.145	898.889
Mg 279.078	20859.6	20863.4	20860.8
Mn 257.610	1086.69	1088.61	1087.60
Mo 202.032	0.2601	2.3589	0.4257
Na 330.237	19208.2	19694.8	19194.0
Ni 231.604	0.3520	-1.5987u	-1.9408u
Pb 220.353	16.8691	-15.0215u	-2.2461u
Sb 206.834	3.5462	3.1067	-4.7175u
Se 196.026	5.8231	-16.0594u	29.7474
Si 288.158	16650.3	16671.8	16655.7
Sn 189.925	1.1208	-0.9037u	-4.1691u
Sr 216.596	202.167	201.857	203.452
Ti 334.941	-0.0656	-0.2512	-0.3068

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-5.6693u	3.3915	-7.7455u
V 292.401	-0.0779u	0.1405	0.6851
Zn 206.200	20.9489	23.8509	19.7333

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5752	ppb	0.1160	20.2	-22.0404
Al 308.215	14.7013	ppb	5.6080	38.1	235.900
As 188.980	6.2122	ppb	7.1443	115.0	2.3646
B 249.678	30.9475	ppb	1.4549	4.7	205.949
Ba 389.178	17.8702	ppb	2.4506	13.7	98.4805
Be 313.042	-0.1242	ppb	0.0069	5.5	-418.828
Ca 370.602	63867	ppb	16.17	0.0	106820
Cd 226.502	-0.1265	ppb	0.2455	194.1	2.5764
Co 228.615	2.6504	ppb	0.5283	19.9	-1.8682
Cr 267.716	0.3469	ppb	0.0949	27.3	21.1141
Cu 324.754	9.2140	ppb	1.2267	13.3	715.203
Fe 271.441	125.063	ppb	2.4444	2.0	86.5555
K 766.491	897.819	ppb	1.2647	0.1	18751.9
Mg 279.078	20861.3	ppb	1.9471	0.0	27908.6
Mn 257.610	1087.63	ppb	0.9567	0.1	90264.8
Mo 202.032	1.0149	ppb	1.1669	115.0	5.7152
Na 330.237	19365.7	ppb	285.142	1.5	560.695
Ni 231.604	-1.0625	ppb	1.2368	116.4	-2.9658
Pb 220.353	-0.1328	ppb	16.0500	12082.7	0.8546
Sb 206.834	0.6451	ppb	4.6494	720.7	6.2591
Se 196.026	6.5037	ppb	22.9110	352.3	4.0507
Si 288.158	16659.3	ppb	11.1413	0.1	78286.7
Sn 189.925	-1.3174	ppb	2.6691	202.6	0.6623
Sr 216.596	202.492	ppb	0.8456	0.4	598.276
Ti 334.941	-0.2079	ppb	0.1263	60.8	10.3964
Tl 190.794	-3.3411	ppb	5.9223	177.3	-1.9891
V 292.401	0.2492	ppb	0.3930	157.7	-10.2211
Zn 206.200	21.5110	ppb	2.1155	9.8	11.7659

mb 680-567107/1-a (Samp) 4/19/2019, 7:21:29 PM Rack 2, Tube 47

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8439u	0.8230	0.4454
Al 308.215	6.4826	5.3937	4.7871
As 188.980	7.6887	1.0869	2.1775
B 249.678	1.3624	-0.1221u	1.2971
Ba 389.178	-2.1558u	-0.6532u	-2.1127u
Be 313.042	-0.1306u	-0.1261u	-0.1149u
Ca 370.602	-5.648u	4.373	10.29
Cd 226.502	0.0051	0.1848	-0.2482u
Co 228.615	1.6338	0.4566	-0.3531u
Cr 267.716	-0.1315u	-0.0632u	0.0796
Cu 324.754	0.5576	1.4400	0.4746
Fe 271.441	-3.2031u	-9.8130u	-9.2407u
K 766.491	-0.0289	-1.4260	-0.3401
Mg 279.078	0.7102	6.1839	6.2088
Mn 257.610	0.0468	-0.0152u	0.1411
Mo 202.032	0.4168	0.4357	-0.1133u

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Label	Replicates Concentration		
Na 330.237	393.891	310.746	168.689
Ni 231.604	1.5701	-0.6710u	-1.8011u
Pb 220.353	3.9040	-2.4466u	-6.9656u
Sb 206.834	2.8494	4.2496	-4.0362u
Se 196.026	-7.1900u	11.1215	1.1554
Si 288.158	14.0803	15.8978	12.2464
Sn 189.925	-0.5051u	-4.9946u	1.0601
Sr 216.596	-0.8656u	0.1472	-0.4928u
Ti 334.941	-0.0345u	0.0003	-0.1072u
Tl 190.794	-3.9397u	-9.5447u	-4.5721u
V 292.401	-0.3175u	0.8608	0.1806
Zn 206.200	-1.3546u	0.0848	-3.0696u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1415	ppb	0.8740	617.6	-36.4196
Al 308.215	5.5545	ppb	0.8591	15.5	217.994
As 188.980	3.6510	ppb	3.5390	96.9	1.6812
B 249.678	0.8458	ppb	0.8389	99.2	0.0363
Ba 389.178	-1.6406	ppb	0.8553	52.1	-46.9498
Be 313.042	-0.1239	ppb	0.0081	6.6	-426.761
Ca 370.602	3.006	ppb	8.058	268.1	30.12
Cd 226.502	-0.0195	ppb	0.2175	1118.0	3.7009
Co 228.615	0.5791	ppb	0.9991	172.5	-10.0710
Cr 267.716	-0.0384	ppb	0.1078	280.9	12.9140
Cu 324.754	0.8240	ppb	0.5350	64.9	461.038
Fe 271.441	-7.4190	ppb	3.6622	49.4	13.1364
K 766.491	-0.5983	ppb	0.7335	122.6	291.033
Mg 279.078	4.3676	ppb	3.1674	72.5	27.5334
Mn 257.610	0.0576	ppb	0.0787	136.7	31.3480
Mo 202.032	0.2464	ppb	0.3117	126.5	4.4199
Na 330.237	291.109	ppb	113.878	39.1	45.4625
Ni 231.604	-0.3006	ppb	1.7158	570.7	-2.1090
Pb 220.353	-1.8360	ppb	5.4605	297.4	0.1609
Sb 206.834	1.0209	ppb	4.4353	434.4	6.3476
Se 196.026	1.6956	ppb	9.1677	540.7	3.0413
Si 288.158	14.0748	ppb	1.8257	13.0	601.011
Sn 189.925	-1.4798	ppb	3.1428	212.4	0.6194
Sr 216.596	-0.4037	ppb	0.5122	126.9	5.9914
Ti 334.941	-0.0471	ppb	0.0548	116.4	-29.5354
Tl 190.794	-6.0188	ppb	3.0698	51.0	-2.8599
V 292.401	0.2413	ppb	0.5915	245.1	-10.2992
Zn 206.200	-1.4465	ppb	1.5792	109.2	-0.9035

lcs 680-567107/2-a (Samp)

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Rack 2, Tube 48

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.5473	56.1410	56.8602
Al 308.215	5299.67	5288.82	5288.77
As 188.980	115.916	109.050	109.544
B 249.678	217.632	219.551	221.369
Ba 389.178	108.525	105.590	104.303
Be 313.042	56.7736	56.6120	56.7806
Ca 370.602	5278	5286	5287

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Label	Replicates Concentration		
Cd 226.502	54.5499	54.4752	55.0575
Co 228.615	54.4211	53.2145	55.4850
Cr 267.716	106.323	106.984	107.286
Cu 324.754	110.276	110.066	111.935
Fe 271.441	5295.94	5316.50	5323.00
K 766.491	8152.46	8134.90	8156.80
Mg 279.078	5401.13	5385.30	5397.19
Mn 257.610	435.546	434.556	436.297
Mo 202.032	105.532	104.905	109.066
Na 330.237	5714.25	5344.25	5570.56
Ni 231.604	105.715	105.630	105.883
Pb 220.353	526.338	532.515	529.611
Sb 206.834	45.6658	55.5367	45.4282
Se 196.026	112.906	115.504	118.712
Si 288.158	7.8482	3.9224	7.4126
Sn 189.925	109.482	98.5724	103.976
Sr 216.596	106.117	106.056	106.535
Ti 334.941	417.828	417.389	418.344
Tl 190.794	38.2503	26.9473	36.4362
V 292.401	108.597	107.316	108.623
Zn 206.200	104.341	108.392	113.045

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	56.1829	ppb	0.6575	1.2	1664.98
Al 308.215	5292.42	ppb	6.2767	0.1	10563.9
As 188.980	111.503	ppb	3.8298	3.4	30.4475
B 249.678	219.517	ppb	1.8687	0.9	1491.25
Ba 389.178	106.139	ppb	2.1635	2.0	639.068
Be 313.042	56.7221	ppb	0.0954	0.2	45430.3
Ca 370.602	5284	ppb	5.270	0.1	8866
Cd 226.502	54.6942	ppb	0.3168	0.6	714.490
Co 228.615	54.3735	ppb	1.1360	2.1	205.231
Cr 267.716	106.864	ppb	0.4925	0.5	1802.44
Cu 324.754	110.759	ppb	1.0236	0.9	3793.06
Fe 271.441	5311.82	ppb	14.1269	0.3	2960.16
K 766.491	8148.05	ppb	11.5972	0.1	167771
Mg 279.078	5394.54	ppb	8.2385	0.2	7230.43
Mn 257.610	435.466	ppb	0.8733	0.2	36155.7
Mo 202.032	106.501	ppb	2.2433	2.1	183.661
Na 330.237	5543.02	ppb	186.532	3.4	182.149
Ni 231.604	105.743	ppb	0.1285	0.1	116.809
Pb 220.353	529.488	ppb	3.0902	0.6	201.104
Sb 206.834	48.8769	ppb	5.7688	11.8	23.9371
Se 196.026	115.707	ppb	2.9082	2.5	24.5971
Si 288.158	6.3944	ppb	2.1518	33.7	608.055
Sn 189.925	104.010	ppb	5.4549	5.2	27.2809
Sr 216.596	106.236	ppb	0.2603	0.2	316.366
Ti 334.941	417.854	ppb	0.4782	0.1	37055.0
Tl 190.794	33.8779	ppb	6.0703	17.9	6.5690
V 292.401	108.179	ppb	0.7471	0.7	1081.22
Zn 206.200	108.593	ppb	4.3552	4.0	59.7748

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680-167634-a-5-f (Samp) **4/19/2019, 7:29:54 PM** **Rack 2, Tube 49****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2058u	0.1740	0.2276
Al 308.215	2689.67	2686.91	2691.64
As 188.980	2.5428	-0.4246u	-2.6101u
B 249.678	187.390	185.007	186.118
Ba 389.178	56.9921	60.1145	56.6854
Be 313.042	-0.0227u	-0.0132u	-0.0273u
Ca 370.602	10400	10304	10319
Cd 226.502	0.0745	-0.2076u	-0.1659u
Co 228.615	-0.5980u	0.6788	-0.3747u
Cr 267.716	3.7684	4.3985	3.9296
Cu 324.754	5.0772	5.0861	4.9834
Fe 271.441	1514.52	1516.29	1507.45
K 766.491	7004.48	6973.84	6956.38
Mg 279.078	5960.84	5914.48	5910.35
Mn 257.610	30.3868	29.9520	30.0096
Mo 202.032	3.5602	4.2353	5.0464
Na 330.237	307171x	307230x	309119x
Ni 231.604	4.3214	1.0500	-0.4755u
Pb 220.353	-3.5676u	3.3330	-10.9255u
Sb 206.834	3.3540	3.2914	1.4456
Se 196.026	-23.5596u	-0.9090u	-7.7918u
Si 288.158	5306.47	5307.54	5304.65
Sn 189.925	-10.1330u	2.6760	-12.2352u
Sr 216.596	58.6997	60.0695	59.5412
Ti 334.941	82.4134	80.1537	82.4408
Tl 190.794	-5.7404u	-11.7770u	-6.4074u
V 292.401	5.7317	5.2717	4.0311
Zn 206.200	3.0731	2.8417	7.7484

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0653b	ppb	0.2363	362.0	-39.2704
Al 308.215	2689.41b	ppb	2.3743	0.1	5468.15
As 188.980	-0.1640b	ppb	2.5863	1577.1	0.6578
B 249.678	186.172b	ppb	1.1925	0.6	1267.00
Ba 389.178	57.9306b	ppb	1.8975	3.3	334.685
Be 313.042	-0.0211b	ppb	0.0072	34.2	-356.441
Ca 370.602	10341b	ppb	51.43	0.5	17314
Cd 226.502	-0.0997b	ppb	0.1523	152.7	4.5928
Co 228.615	-0.0979b	ppb	0.6819	696.2	-12.1964
Cr 267.716	4.0322b	ppb	0.3273	8.1	82.9707
Cu 324.754	5.0489b	ppb	0.0569	1.1	589.322
Fe 271.441	1512.75b	ppb	4.6769	0.3	854.651
K 766.491	6978.23b	ppb	24.3491	0.3	143929
Mg 279.078	5928.55b	ppb	28.0352	0.5	7949.18
Mn 257.610	30.1161b	ppb	0.2361	0.8	2546.71
Mo 202.032	4.2806b	ppb	0.7442	17.4	11.2096
Na 330.237	307840xb	ppb	1108.04	0.4	8356.56
Ni 231.604	1.6320b	ppb	2.4508	150.2	0.0597
Pb 220.353	-3.7200b	ppb	7.1305	191.7	-0.6224
Sb 206.834	2.6970b	ppb	1.0842	40.2	6.9676
Se 196.026	-10.7535b	ppb	11.6121	108.0	0.7036
Si 288.158	5306.22b	ppb	1.4597	0.0	25304.7

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-6.5640b	ppb	8.0709	123.0	-0.6354
Sr 216.596	59.4368b	ppb	0.6909	1.2	180.804
Ti 334.941	81.6693b	ppb	1.3126	1.6	7227.88
Tl 190.794	-7.9749b	ppb	3.3096	41.5	-3.3905
V 292.401	5.0115b	ppb	0.8796	17.6	37.5403
Zn 206.200	4.5544b	ppb	2.7685	60.8	2.4092

680-167634-a-5-f (Samp) 4/19/2019, 7:34:06 PM Rack 2, Tube 50

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4129	0.6453	0.8611
Al 308.215	-55.0519u	-55.2481u	-53.0076u
As 188.980	0.1992	-0.7788u	-2.0242u
B 249.678	3.2770	2.3987	1.5091
Ba 389.178	-1.5512u	-1.6195u	-2.2821u
Be 313.042	0.1412	0.1387	0.1296
Ca 370.602	-12.22u	-6.797u	-12.76u
Cd 226.502	0.0245	-0.0565u	-0.1887u
Co 228.615	0.7298	1.4908	1.3136
Cr 267.716	-0.2017u	-0.0149u	0.2130
Cu 324.754	-8.3634u	-8.3750u	-7.8334u
Fe 271.441	-0.4488u	-1.2527u	-13.1513u
K 766.491	-4.3737u	-5.2443u	-5.5237u
Mg 279.078	-12.2722u	-9.3203u	-11.7403u
Mn 257.610	-0.1683u	-0.1138u	-0.1776u
Mo 202.032	-1.3094u	-0.7752u	0.0525
Na 330.237	-227.063u	-352.531u	-224.689u
Ni 231.604	-0.5095u	-0.4505u	2.2333
Pb 220.353	-0.3011u	-6.6831u	-7.8876u
Sb 206.834	-9.1234u	-3.3292u	-3.0489u
Se 196.026	-11.2335u	-8.1082u	-4.5630u
Si 288.158	-40.3436u	-45.7646u	-47.1468u
Sn 189.925	-1.5016u	-4.0929u	-1.2823u
Sr 216.596	-0.4665u	-1.0431u	-1.1582u
Ti 334.941	-0.0544u	-0.2653u	-0.2028u
Tl 190.794	-1.4357u	-2.5631u	-6.0421u
V 292.401	0.7903	0.3319	0.4065
Zn 206.200	-1.1561u	0.3498	-2.0703u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6398	ppb	0.2241	35.0	-21.2836
Al 308.215	-54.4358	ppb	1.2408	2.3	100.637
As 188.980	-0.8679	ppb	1.1144	128.4	0.4747
B 249.678	2.3949	ppb	0.8840	36.9	10.6699
Ba 389.178	-1.8176	ppb	0.4037	22.2	-48.0950
Be 313.042	0.1365	ppb	0.0061	4.5	-216.621
Ca 370.602	-10.59	ppb	3.297	31.1	7.427
Cd 226.502	-0.0736	ppb	0.1076	146.2	2.9577
Co 228.615	1.1781	ppb	0.3982	33.8	-7.6916
Cr 267.716	-0.0012	ppb	0.2077	17598.4	13.5296
Cu 324.754	-8.1906	ppb	0.3094	3.8	187.966
Fe 271.441	-4.9509	ppb	7.1131	143.7	14.5310
K 766.491	-5.0472	ppb	0.5998	11.9	167.084

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	-11.1109	ppb	1.5734	14.2	6.8550
Mn 257.610	-0.1532	ppb	0.0345	22.5	13.7912
Mo 202.032	-0.6774	ppb	0.6862	101.3	2.8611
Na 330.237	-268.095	ppb	73.1337	27.3	30.3323
Ni 231.604	0.4245	ppb	1.5668	369.1	-1.2963
Pb 220.353	-4.9572	ppb	4.0771	82.2	-1.0197
Sb 206.834	-5.1671	ppb	3.4291	66.4	4.2173
Se 196.026	-7.9682	ppb	3.3375	41.9	1.2194
Si 288.158	-44.4183uv	ppb	3.5959	8.1	328.053
Sn 189.925	-2.2923	ppb	1.5632	68.2	0.4140
Sr 216.596	-0.8893	ppb	0.3707	41.7	4.5790
Ti 334.941	-0.1742	ppb	0.1083	62.2	-40.8387
Tl 190.794	-3.3470	ppb	2.4012	71.7	-2.2182
V 292.401	0.5095	ppb	0.2460	48.3	-7.5116
Zn 206.200	-0.9589	ppb	1.2220	127.4	-0.6344

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	516.513	524.069	519.718
Al 308.215	10234.3	10341.8	10218.8
As 188.980	514.876	522.096	502.144
B 249.678	519.913	531.886	527.693
Ba 389.178	489.206	494.263	488.228
Be 313.042	535.132	539.991	534.406
Ca 370.602	10201	10319	10217
Cd 226.502	509.019	515.376	508.221
Co 228.615	515.810	522.851	515.166
Cr 267.716	502.613	507.591	501.601
Cu 324.754	515.748	521.807	522.013
Fe 271.441	10334.1	10398.0	10281.8
K 766.491	9967.40	10035.9	9917.39
Mg 279.078	10430.3	10545.8	10404.5
Mn 257.610	510.687	516.990	510.615
Mo 202.032	501.255	507.901	498.927
Na 330.237	10661.3	10607.8	10184.8
Ni 231.604	517.826	524.669	518.146
Pb 220.353	525.145	525.266	508.325
Sb 206.834	504.871	504.589	497.348
Se 196.026	522.000	545.335	542.961
Si 288.158	5219.78	5268.07	5201.58
Sn 189.925	500.744	496.983	516.373
Sr 216.596	503.531	504.129	502.384
Ti 334.941	500.041	505.080	499.494
Tl 190.794	530.957	514.929	499.806
V 292.401	516.224	521.559	516.240
Zn 206.200	1045.01	1060.40	1029.56

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	520.100	ppb	3.7928	0.7	15755.1	104.01994
Al 308.215	10265.0	ppb	66.9944	0.7	20305.6	102.64994
As 188.980	513.039	ppb	10.1019	2.0	137.584	102.60770
B 249.678	526.497	ppb	6.0752	1.2	3587.27	105.29948

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	490.566	ppb	3.2393	0.7	3064.44	98.11313
Be 313.042	536.510	ppb	3.0363	0.6	432489	107.30196
Ca 370.602	10246	ppb	64.25	0.6	17158	102.45643
Cd 226.502	510.872	ppb	3.9211	0.8	6578.15	102.17439
Co 228.615	517.943	ppb	4.2632	0.8	2039.15	103.58854
Cr 267.716	503.935	ppb	3.2065	0.6	8444.64	100.78700
Cu 324.754	519.856	ppb	3.5589	0.7	16189.7	103.97118
Fe 271.441	10338.0	ppb	58.2239	0.6	5760.79	103.32797
K 766.491	9973.56	ppb	59.4851	0.6	202889	99.73562
Mg 279.078	10460.2	ppb	75.2770	0.7	14003.0	104.60183
Mn 257.610	512.764	ppb	3.6601	0.7	42586.8	102.55280
Mo 202.032	502.695	ppb	4.6569	0.9	852.180	100.53893
Na 330.237	10484.7	ppb	261.028	2.5	303.895	104.84664
Ni 231.604	520.214	ppb	3.8614	0.7	581.376	104.04272
Pb 220.353	519.579	ppb	9.7461	1.9	197.012	103.91575
Sb 206.834	502.270	ppb	4.2643	0.8	188.188	100.45393
Se 196.026	536.765	ppb	12.8422	2.4	103.999	107.35301
Si 288.158	5229.81	ppb	34.3586	0.7	25079.0	104.59621
Sn 189.925	504.700	ppb	10.2827	2.0	128.550	100.94003
Sr 216.596	503.348	ppb	0.8869	0.2	1470.27	100.66960
Ti 334.941	501.538	ppb	3.0793	0.6	44491.6	100.30766
Tl 190.794	515.230	ppb	15.5779	3.0	121.821	103.04610
V 292.401	518.008	ppb	3.0753	0.6	5218.89	103.60152
Zn 206.200	1044.99	ppb	15.4213	1.5	576.322	104.49910

Cont Calib Blank (CCB)

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Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0855u	-0.2557u	0.6242
Al 308.215	5.4202	14.9998	9.4919
As 188.980	0.2460	-0.7695u	3.6822
B 249.678	13.8139	12.2302	9.7585
Ba 389.178	0.8163	-1.1666u	-1.5230u
Be 313.042	-0.0170u	-0.0090u	-0.0098u
Ca 370.602	-6.467u	-6.032u	1.382
Cd 226.502	-0.6322u	-0.2374u	-0.1541u
Co 228.615	0.5038	0.2897	0.7647
Cr 267.716	-0.0538u	-0.3673u	0.2876
Cu 324.754	-0.4038u	0.3212	0.9283
Fe 271.441	-7.2796u	-0.0002	15.1618
K 766.491	1.0730	2.0810	0.5052
Mg 279.078	1.3903	-0.9510u	3.7848
Mn 257.610	0.0223	0.0766	0.0382
Mo 202.032	3.2095	0.0012	0.1125
Na 330.237	88.9791	174.147	210.380
Ni 231.604	-2.2262u	-0.1513u	-0.9798u
Pb 220.353	-5.6009u	0.8481	-7.0353u
Sb 206.834	-1.2744u	1.5226	-0.7793u
Se 196.026	-13.8383u	-4.4155u	-6.4686u
Si 288.158	12.1947	10.4864	9.0110
Sn 189.925	-2.8999u	-1.3254u	0.6271
Sr 216.596	-1.7314u	0.3366	-0.2320u
Ti 334.941	0.0996	0.2794	-0.0438u

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Label	Replicates Concentration		
Tl 190.794	3.0688	-8.3226u	-0.9233u
V 292.401	0.9578	0.6573	0.4654
Zn 206.200	-3.1340u	0.1186	0.8155

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0943	ppb	0.4667	494.9	-37.8560	0.09431
Al 308.215	9.9706	ppb	4.8077	48.2	226.653	9.97060
As 188.980	1.0529	ppb	2.3330	221.6	0.9873	1.05287
B 249.678	11.9342	ppb	2.0438	17.1	75.9301	11.93420
Ba 389.178	-0.6244	ppb	1.2604	201.8	-40.5620	-0.62442
Be 313.042	-0.0119	ppb	0.0044	37.0	-336.495	-0.01192
Ca 370.602	-3.706	ppb	4.411	119.0	18.89	-3.70566
Cd 226.502	-0.3413	ppb	0.2554	74.8	-0.4232	-0.34126
Co 228.615	0.5194	ppb	0.2379	45.8	-10.3144	0.51940
Cr 267.716	-0.0445	ppb	0.3276	735.9	12.8104	-0.04451
Cu 324.754	0.2819	ppb	0.6670	236.6	444.630	0.28191
Fe 271.441	2.6273	ppb	11.4491	435.8	18.7064	2.62734
K 766.491	1.2198	ppb	0.7981	65.4	277.951	1.21978
Mg 279.078	1.4080	ppb	2.3679	168.2	23.5754	1.40802
Mn 257.610	0.0457	ppb	0.0279	61.0	30.3574	0.04574
Mo 202.032	1.1077	ppb	1.8210	164.4	5.8733	1.10773
Na 330.237	157.835	ppb	62.3226	39.5	41.8317	157.83534
Ni 231.604	-1.1191	ppb	1.0444	93.3	-3.0274	-1.11909
Pb 220.353	-3.9294	ppb	4.1991	106.9	-0.6321	-3.92937
Sb 206.834	-0.1770	ppb	1.4926	843.1	5.9960	-0.17703
Se 196.026	-8.2408	ppb	4.9551	60.1	1.1682	-8.24078
Si 288.158	10.5641	ppb	1.5933	15.1	584.717	10.56405
Sn 189.925	-1.1994	ppb	1.7669	147.3	0.6902	-1.19943
Sr 216.596	-0.5423	ppb	1.0683	197.0	5.5838	-0.54225
Ti 334.941	0.1117	ppb	0.1619	144.9	-15.4509	0.11173
Tl 190.794	-2.0590	ppb	5.7800	280.7	-1.9118	-2.05902
V 292.401	0.6935	ppb	0.2482	35.8	-5.7584	0.69350
Zn 206.200	-0.7333	ppb	2.1080	287.5	-0.5100	-0.73328

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Rack 2, Tube 51

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	61.0799	59.9546	56.9762
Al 308.215	8717.94	8507.52	8269.80
As 188.980	110.738	116.490	103.234
B 249.678	415.926	410.876	407.942
Ba 389.178	173.933	168.267	165.130
Be 313.042	60.3074	58.3812	56.2872
Ca 370.602	15969	15799	15589
Cd 226.502	57.6297	56.2452	54.0265
Co 228.615	58.0573	58.3669	55.6258
Cr 267.716	119.168	114.670	110.989
Cu 324.754	123.302	119.471	115.777
Fe 271.441	7261.94	7086.85	6883.49
K 766.491	18452.5	18104.2	17764.9
Mg 279.078	11615.8	11420.0	11208.0
Mn 257.610	602.662	583.887	564.301
Mo 202.032	119.685	113.062	107.376

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	317072x	314444x	315581x
Ni 231.604	120.586	111.154	110.084
Pb 220.353	580.574	548.740	538.040
Sb 206.834	62.9529	49.2758	52.8070
Se 196.026	109.892	107.759	91.7797
Si 288.158	5645.34	5531.88	5508.66
Sn 189.925	116.559	113.895	96.9335
Sr 216.596	170.877	168.063	165.882
Ti 334.941	539.998	524.575	512.762
Tl 190.794	48.8966	37.5624	37.1018
V 292.401	120.132	118.867	114.484
Zn 206.200	121.930	119.090	113.582

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	59.3369b	ppb	2.1204	3.6	1760.40
Al 308.215	8498.42b	ppb	224.205	2.6	16835.6
As 188.980	110.154b	ppb	6.6475	6.0	30.0814
B 249.678	411.581b	ppb	4.0385	1.0	2804.16
Ba 389.178	169.110b	ppb	4.4616	2.6	1042.28
Be 313.042	58.3252b	ppb	2.0107	3.4	46710.7
Ca 370.602	15785b	ppb	190.4	1.2	26425
Cd 226.502	55.9671b	ppb	1.8176	3.2	733.037
Co 228.615	57.3500b	ppb	1.5012	2.6	217.751
Cr 267.716	114.942b	ppb	4.0961	3.6	1939.76
Cu 324.754	119.516b	ppb	3.7626	3.1	4058.71
Fe 271.441	7077.43b	ppb	189.402	2.7	3937.68
K 766.491	18107.2b	ppb	343.793	1.9	372712
Mg 279.078	11414.6b	ppb	203.948	1.8	15279.0
Mn 257.610	583.616b	ppb	19.1820	3.3	48461.4
Mo 202.032	113.374b	ppb	6.1604	5.4	195.240
Na 330.237	315699xb	ppb	1317.92	0.4	8563.43
Ni 231.604	113.941b	ppb	5.7793	5.1	126.004
Pb 220.353	555.785b	ppb	22.1249	4.0	210.985
Sb 206.834	55.0119b	ppb	7.1001	12.9	26.1927
Se 196.026	103.144b	ppb	9.8991	9.6	22.2497
Si 288.158	5561.96b	ppb	73.1355	1.3	26543.6
Sn 189.925	109.129b	ppb	10.6454	9.8	28.6051
Sr 216.596	168.274b	ppb	2.5041	1.5	497.544
Ti 334.941	525.778b	ppb	13.6578	2.6	46637.5
Tl 190.794	41.1869b	ppb	6.6808	16.2	8.2764
V 292.401	117.828b	ppb	2.9640	2.5	1178.46
Zn 206.200	118.201b	ppb	4.2445	3.6	65.0759

680-167634-a-5-g ms (Samp) 4/19/2019, 7:50:54 PM Rack 2, Tube 52

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.1299	55.4233	55.5759
Al 308.215	8102.14	8074.27	8058.39
As 188.980	109.828	105.842	110.454
B 249.678	409.874	409.038	411.183
Ba 389.178	163.168	162.842	162.185
Be 313.042	55.2039	55.1815	55.2885
Ca 370.602	15584	15535	15553

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	53.3797	52.9684	52.8981
Co 228.615	53.3274	55.2020	54.9261
Cr 267.716	108.069	108.513	108.370
Cu 324.754	112.975	112.035	112.212
Fe 271.441	6733.37	6723.27	6725.00
K 766.491	17421.8	17404.3	17448.1
Mg 279.078	11145.5	11112.4	11143.3
Mn 257.610	453.220	452.766	454.564
Mo 202.032	107.142	103.955	107.478
Na 330.237	314742x	317446x	320319x
Ni 231.604	106.236	105.330	108.515
Pb 220.353	523.969	522.208	526.864
Sb 206.834	51.3198	56.9632	45.1981
Se 196.026	94.7753	112.259	129.536
Si 288.158	5322.51	5308.42	5280.08
Sn 189.925	101.349	100.985	89.5965
Sr 216.596	163.723	162.528	164.887
Ti 334.941	484.096	482.867	482.036
Tl 190.794	37.0665	36.4520	45.1824
V 292.401	110.650	110.732	110.389
Zn 206.200	110.969	112.962	113.376

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.3764b	ppb	0.2267	0.4	1639.98
Al 308.215	8078.26b	ppb	22.1480	0.3	16013.5
As 188.980	108.708b	ppb	2.5018	2.3	29.6973
B 249.678	410.032b	ppb	1.0811	0.3	2793.90
Ba 389.178	162.732b	ppb	0.5010	0.3	1001.72
Be 313.042	55.2247b	ppb	0.0564	0.1	44209.4
Ca 370.602	15557b	ppb	24.37	0.2	26041
Cd 226.502	53.0821b	ppb	0.2602	0.5	695.480
Co 228.615	54.4852b	ppb	1.0121	1.9	206.125
Cr 267.716	108.317b	ppb	0.2268	0.2	1828.71
Cu 324.754	112.407b	ppb	0.4995	0.4	3843.25
Fe 271.441	6727.21b	ppb	5.3978	0.1	3743.68
K 766.491	17424.7b	ppb	22.0309	0.1	358679
Mg 279.078	11133.7b	ppb	18.4964	0.2	14904.8
Mn 257.610	453.517b	ppb	0.9348	0.2	37674.6
Mo 202.032	106.191b	ppb	1.9443	1.8	183.122
Na 330.237	317502xb	ppb	2788.74	0.9	8612.64
Ni 231.604	106.693b	ppb	1.6413	1.5	117.876
Pb 220.353	524.347b	ppb	2.3512	0.4	199.094
Sb 206.834	51.1604b	ppb	5.8842	11.5	24.7904
Se 196.026	112.190b	ppb	17.3805	15.5	23.9415
Si 288.158	5303.67b	ppb	21.6087	0.4	25334.7
Sn 189.925	97.3100b	ppb	6.6825	6.9	25.6181
Sr 216.596	163.712b	ppb	1.1795	0.7	484.278
Ti 334.941	483.000b	ppb	1.0367	0.2	42842.0
Tl 190.794	39.5670b	ppb	4.8728	12.3	7.8737
V 292.401	110.591b	ppb	0.1791	0.2	1105.13
Zn 206.200	112.436b	ppb	1.2870	1.1	61.8978

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167634-a-5-h msd (Samp) 4/19/2019, 7:55:06 PM Rack 2, Tube 53**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	55.3026	55.1509	54.9491
Al 308.215	5283.71	5278.42	5275.66
As 188.980	100.121	105.135	96.8564
B 249.678	401.768	403.072	403.158
Ba 389.178	156.772	153.805	155.324
Be 313.042	53.0199	53.0538	52.9472
Ca 370.602	15308	15341	15294
Cd 226.502	51.8046	50.4823	50.8332
Co 228.615	51.5171	53.2115	51.6351
Cr 267.716	100.180	101.127	100.166
Cu 324.754	108.744	108.227	108.093
Fe 271.441	5161.02	5122.13	5132.65
K 766.491	17746.9	17749.5	17687.2
Mg 279.078	11264.1	11291.1	11255.1
Mn 257.610	436.726	436.845	435.591
Mo 202.032	104.855	101.245	100.942
Na 330.237	315820x	315665x	313901x
Ni 231.604	106.655	102.425	100.818
Pb 220.353	498.884	503.388	501.397
Sb 206.834	40.6595	46.2754	48.5615
Se 196.026	98.3715	108.754	85.3553
Si 288.158	1202.23	1193.22	1193.76
Sn 189.925	107.784	94.2167	97.4833
Sr 216.596	164.550	159.531	160.092
Ti 334.941	398.679	397.454	396.529
Tl 190.794	39.1452	27.1718	29.5088
V 292.401	102.374	103.591	103.631
Zn 206.200	105.644	105.960	108.425

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.1342b	ppb	0.1773	0.3	1632.98
Al 308.215	5279.26b	ppb	4.0912	0.1	10538.0
As 188.980	100.704b	ppb	4.1700	4.1	27.5654
B 249.678	402.666b	ppb	0.7791	0.2	2745.15
Ba 389.178	155.300b	ppb	1.4837	1.0	954.439
Be 313.042	53.0070b	ppb	0.0545	0.1	42420.4
Ca 370.602	15315b	ppb	24.11	0.2	25636
Cd 226.502	51.0400b	ppb	0.6850	1.3	666.681
Co 228.615	52.1212b	ppb	0.9460	1.8	196.189
Cr 267.716	100.491b	ppb	0.5506	0.5	1697.56
Cu 324.754	108.355b	ppb	0.3440	0.3	3720.17
Fe 271.441	5138.60b	ppb	20.1164	0.4	2864.16
K 766.491	17727.9b	ppb	35.2723	0.2	364942
Mg 279.078	11270.1b	ppb	18.7259	0.2	15087.8
Mn 257.610	436.387b	ppb	0.6921	0.2	36252.6
Mo 202.032	102.348b	ppb	2.1768	2.1	176.656
Na 330.237	315128xb	ppb	1066.03	0.3	8549.38
Ni 231.604	103.299b	ppb	3.0151	2.9	114.070
Pb 220.353	501.223b	ppb	2.2570	0.5	190.412
Sb 206.834	45.1655b	ppb	4.0662	9.0	22.6001
Se 196.026	97.4936b	ppb	11.7240	12.0	21.1627
Si 288.158	1196.41b	ppb	5.0547	0.4	6160.66

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	99.8279b	ppb	7.0810	7.1	26.2543
Sr 216.596	161.391b	ppb	2.7499	1.7	477.387
Ti 334.941	397.554b	ppb	1.0786	0.3	35262.8
Tl 190.794	31.9419b	ppb	6.3467	19.9	6.1156
V 292.401	103.199b	ppb	0.7146	0.7	1029.96
Zn 206.200	106.676b	ppb	1.5226	1.4	58.7203

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1226u	-0.5893u	-0.2004u
Al 308.215	42.7533	48.9981	40.8157
As 188.980	2.0043	-0.9357u	4.0236
B 249.678	12.6105	11.6915	8.9345
Ba 389.178	1.5100	-0.2302u	1.2757
Be 313.042	-0.1003u	-0.1345u	-0.1039u
Ca 370.602	127.7	132.2	134.9
Cd 226.502	0.0375	-0.3709u	-0.1871u
Co 228.615	1.7509	0.9897	1.1015
Cr 267.716	1.4352	1.0742	1.9027
Cu 324.754	0.8146	2.0416	2.2380
Fe 271.441	1061.36	1092.52	1093.50
K 766.491	19.4468	20.7959	21.3983
Mg 279.078	15.9296	17.8320	23.4251
Mn 257.610	9.3580	9.7070	9.4626
Mo 202.032	-1.1202u	-0.2134u	-0.0522u
Na 330.237	524.691	420.164	175.578
Ni 231.604	0.1637	-0.2650u	4.2750
Pb 220.353	-0.4805u	3.8792	1.0230
Sb 206.834	-0.1871u	-7.1224u	-7.8308u
Se 196.026	-1.9470u	8.6774	-10.9857u
Si 288.158	57.8119	68.1577	63.8080
Sn 189.925	-3.4645u	0.9093	-3.7904u
Sr 216.596	-0.4772u	0.5594	0.4647
Ti 334.941	0.8137	1.1544	0.8617
Tl 190.794	-13.2815u	-2.3538u	-11.0529u
V 292.401	0.1163	0.6500	0.9545
Zn 206.200	2.9656	5.3995	5.4138

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3041	ppb	0.2500	82.2	-50.1355
Al 308.215	44.1890	ppb	4.2760	9.7	293.601
As 188.980	1.6974	ppb	2.4938	146.9	1.1566
B 249.678	11.0788	ppb	1.9131	17.3	68.9659
Ba 389.178	0.8518	ppb	0.9443	110.9	-30.8008
Be 313.042	-0.1129	ppb	0.0188	16.6	-417.877
Ca 370.602	131.6	ppb	3.625	2.8	243.5
Cd 226.502	-0.1735	ppb	0.2045	117.9	3.3989
Co 228.615	1.2807	ppb	0.4110	32.1	-7.3039
Cr 267.716	1.4707	ppb	0.4154	28.2	38.2617
Cu 324.754	1.6981	ppb	0.7714	45.4	487.695
Fe 271.441	1082.46	ppb	18.2781	1.7	616.471
K 766.491	20.5470	ppb	0.9993	4.9	732.152

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	19.0622	ppb	3.8962	20.4	47.0816
Mn 257.610	9.5092	ppb	0.1791	1.9	815.628
Mo 202.032	-0.4619	ppb	0.5757	124.6	3.2116
Na 330.237	373.478	ppb	179.178	48.0	47.5427
Ni 231.604	1.3912	ppb	2.5066	180.2	-0.2118
Pb 220.353	1.4739	ppb	2.2145	150.3	1.3779
Sb 206.834	-5.0468	ppb	4.2235	83.7	4.2287
Se 196.026	-1.4185	ppb	9.8422	693.9	2.4596
Si 288.158	63.2592	ppb	5.1947	8.2	830.990
Sn 189.925	-2.1152	ppb	2.6244	124.1	0.4588
Sr 216.596	0.1823	ppb	0.5731	314.4	7.8306
Ti 334.941	0.9433	ppb	0.1844	19.5	58.3522
Tl 190.794	-8.8961	ppb	5.7743	64.9	-3.5954
V 292.401	0.5736	ppb	0.4243	74.0	-6.8317
Zn 206.200	4.5930	ppb	1.4094	30.7	2.4310

X (Samp) **4/19/2019, 8:03:30 PM** **Rack 2, Tube 55**
 Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	10.3434	11.0657	11.3001
Al 308.215	224.524	223.845	229.775
As 188.980	19.9023	22.6482	15.0283
B 249.678	107.248	109.691	111.709
Ba 389.178	12.1644	12.5386	10.2436
Be 313.042	4.3381	4.4146	4.4919
Ca 370.602	532.4	535.2	546.9
Cd 226.502	5.4738	5.0871	5.7213
Co 228.615	10.4073	11.0968	11.1939
Cr 267.716	10.6861	10.3771	10.1316
Cu 324.754	22.8113	24.2105	23.4800
Fe 271.441	70.6083	59.9558	59.4106
K 766.491	943.468	960.334	980.366
Mg 279.078	540.818	546.393	556.041
Mn 257.610	11.0632	11.0242	11.4075
Mo 202.032	10.8091	10.0678	11.0520
Na 330.237	1135.25	1334.12	1382.97
Ni 231.604	41.8960	43.9806	43.0794
Pb 220.353	6.1531	11.6910	-2.3121u
Sb 206.834	17.9812	24.0323	16.5976
Se 196.026	2.8630	34.0132	11.5591
Si 288.158	18.9375	24.6006	26.3666
Sn 189.925	47.3026	42.5383	46.4131
Sr 216.596	10.0297	11.9868	9.5084
Ti 334.941	10.3495	10.3880	10.8208
Tl 190.794	15.0081	25.2565	32.3359
V 292.401	10.3316	11.6126	11.5222
Zn 206.200	17.9942	23.4423	21.6238

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.9031	ppb	0.4987	4.6	290.446
Al 308.215	226.048	ppb	3.2457	1.4	649.706
As 188.980	19.1929	ppb	3.8592	20.1	5.8292
B 249.678	109.549	ppb	2.2341	2.0	744.038

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	11.6489	ppb	1.2313	10.6	37.2348
Be 313.042	4.4148	ppb	0.0769	1.7	3234.45
Ca 370.602	538.2	ppb	7.715	1.4	925.2
Cd 226.502	5.4274	ppb	0.3196	5.9	73.7096
Co 228.615	10.8993	ppb	0.4288	3.9	30.7979
Cr 267.716	10.3983	ppb	0.2779	2.7	187.515
Cu 324.754	23.5006	ppb	0.6998	3.0	1148.03
Fe 271.441	63.3249	ppb	6.3135	10.0	52.7257
K 766.491	961.389	ppb	18.4717	1.9	19934.6
Mg 279.078	547.751	ppb	7.7014	1.4	754.049
Mn 257.610	11.1650	ppb	0.2110	1.9	954.313
Mo 202.032	10.6430	ppb	0.5127	4.8	21.9634
Na 330.237	1284.11	ppb	131.215	10.2	71.9280
Ni 231.604	42.9853	ppb	1.0455	2.4	46.4425
Pb 220.353	5.1773	ppb	7.0523	136.2	2.8098
Sb 206.834	19.5370	ppb	3.9540	20.2	13.1082
Se 196.026	16.1451	ppb	16.0735	99.6	5.7664
Si 288.158	23.3015	ppb	3.8812	16.7	650.622
Sn 189.925	45.4180	ppb	2.5332	5.6	12.4722
Sr 216.596	10.5083	ppb	1.3067	12.4	37.5544
Ti 334.941	10.5194	ppb	0.2616	2.5	909.186
Tl 190.794	24.2002	ppb	8.7121	36.0	4.3814
V 292.401	11.1555	ppb	0.7149	6.4	99.9071
Zn 206.200	21.0201	ppb	2.7738	13.2	11.4890

Cont Calib Verif (CCV)

4/19/2019, 8:07:43 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	525.413	513.685	518.300
Al 308.215	10264.3	10194.0	10203.8
As 188.980	511.822	500.567	502.286
B 249.678	526.333	528.089	528.724
Ba 389.178	490.338	489.076	486.292
Be 313.042	535.495	531.857	532.358
Ca 370.602	10227	10159	10175
Cd 226.502	510.653	507.273	507.397
Co 228.615	516.086	512.973	512.418
Cr 267.716	505.843	503.082	501.974
Cu 324.754	522.604	518.322	519.837
Fe 271.441	10255.5	10217.6	10256.3
K 766.491	9936.72	9878.61	9894.16
Mg 279.078	10419.1	10344.8	10381.8
Mn 257.610	512.340	508.213	509.282
Mo 202.032	498.017	498.586	507.157
Na 330.237	10908.9	10750.1	10681.5
Ni 231.604	520.820	513.567	514.631
Pb 220.353	510.487	504.964	500.777
Sb 206.834	512.377	500.046	500.856
Se 196.026	528.651	535.674	522.058
Si 288.158	5229.16	5179.25	5185.27
Sn 189.925	495.940	499.119	502.882
Sr 216.596	506.494	494.975	500.174
Ti 334.941	501.804	499.368	499.655

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	494.858	492.650	515.633
V 292.401	517.412	513.243	512.812
Zn 206.200	1037.68	1038.08	1040.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	519.133	ppb	5.9081	1.1	15725.7	103.82652
Al 308.215	10220.7	ppb	38.0683	0.4	20218.9	102.20685
As 188.980	504.892	ppb	6.0633	1.2	135.409	100.97834
B 249.678	527.716	ppb	1.2384	0.2	3595.69	105.54311
Ba 389.178	488.569	ppb	2.0699	0.4	3051.80	97.71378
Be 313.042	533.236	ppb	1.9718	0.4	429848	106.64729
Ca 370.602	10187	ppb	35.69	0.4	17060	101.87143
Cd 226.502	508.441	ppb	1.9169	0.4	6546.81	101.68821
Co 228.615	513.825	ppb	1.9771	0.4	2022.83	102.76509
Cr 267.716	503.633	ppb	1.9926	0.4	8439.58	100.72664
Cu 324.754	520.254	ppb	2.1712	0.4	16201.8	104.05089
Fe 271.441	10243.1	ppb	22.1353	0.2	5708.14	102.38026
K 766.491	9903.17	ppb	30.0819	0.3	201503	99.03165
Mg 279.078	10381.9	ppb	37.1280	0.4	13898.4	103.81933
Mn 257.610	509.945	ppb	2.1421	0.4	42352.8	101.98900
Mo 202.032	501.253	ppb	5.1206	1.0	849.749	100.25066
Na 330.237	10780.2	ppb	116.612	1.1	311.983	107.80165
Ni 231.604	516.339	ppb	3.9168	0.8	577.033	103.26787
Pb 220.353	505.410	ppb	4.8702	1.0	191.650	101.08191
Sb 206.834	504.426	ppb	6.8973	1.4	188.848	100.88526
Se 196.026	528.794	ppb	6.8087	1.3	102.496	105.75883
Si 288.158	5197.89	ppb	27.2466	0.5	24929.4	103.95789
Sn 189.925	499.314	ppb	3.4754	0.7	127.188	99.86275
Sr 216.596	500.547	ppb	5.7688	1.2	1462.11	100.10949
Ti 334.941	500.276	ppb	1.3311	0.3	44379.5	100.05517
Tl 190.794	501.047	ppb	12.6799	2.5	118.425	100.20940
V 292.401	514.489	ppb	2.5404	0.5	5183.12	102.89778
Zn 206.200	1038.79	ppb	1.5890	0.2	572.899	103.87864

Cont Calib Blank (CCB) 4/19/2019, 8:11:55 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2740	-0.1180u	0.0684
Al 308.215	4.5158	10.1798	5.8907
As 188.980	5.4337	3.4138	0.2550
B 249.678	12.5464	12.2298	10.9617
Ba 389.178	1.1052	0.7116	1.6506
Be 313.042	0.0269	0.0031	-0.0179u
Ca 370.602	-3.668u	-8.203u	-5.684u
Cd 226.502	0.2180	0.1289	-0.3700u
Co 228.615	0.4970	2.6654	-0.3252u
Cr 267.716	-0.3059u	-0.2269u	0.1082
Cu 324.754	0.2236	0.2843	1.2560
Fe 271.441	22.1246	0.4708	-13.0206u
K 766.491	-0.2422	-1.1625	-1.9677
Mg 279.078	2.8866	1.5666	-1.7607u
Mn 257.610	0.0573	0.1298	0.0172
Mo 202.032	0.4604	0.7510	0.9526

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	-126.516u	-200.611u	88.3073
Ni 231.604	1.3944	0.9943	-0.4373u
Pb 220.353	-0.7495u	-10.4842u	-7.7426u
Sb 206.834	1.8535	0.6151	1.2161
Se 196.026	-11.3799u	-0.4185u	3.8225
Si 288.158	6.3392	8.1143	7.5506
Sn 189.925	-2.8773u	-4.3892u	3.1167
Sr 216.596	0.8632	-1.2224u	0.7047
Ti 334.941	0.1975	0.2664	0.0032
Tl 190.794	-5.1148u	-6.2990u	-10.2283u
V 292.401	0.6040	-1.0345u	0.3384
Zn 206.200	1.0770	-3.3198u	-1.5615u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0748	ppb	0.1961	262.1	-38.4505	0.07479
Al 308.215	6.8621	ppb	2.9543	43.1	220.550	6.86209
As 188.980	3.0342	ppb	2.6101	86.0	1.5164	3.03418
B 249.678	11.9126	ppb	0.8386	7.0	75.7843	11.91263
Ba 389.178	1.1558	ppb	0.4716	40.8	-29.3705	1.15578
Be 313.042	0.0041	ppb	0.0224	553.6	-323.599	0.00405
Ca 370.602	-5.852	ppb	2.272	38.8	15.31	-5.85177
Cd 226.502	-0.0077	ppb	0.3169	4099.3	3.8557	-0.00773
Co 228.615	0.9457	ppb	1.5450	163.4	-8.6230	0.94573
Cr 267.716	-0.1415	ppb	0.2199	155.4	11.1874	-0.14150
Cu 324.754	0.5879	ppb	0.5793	98.5	453.900	0.58795
Fe 271.441	3.1916	ppb	17.7299	555.5	19.0305	3.19160
K 766.491	-1.1241	ppb	0.8634	76.8	273.575	-1.12413
Mg 279.078	0.8975	ppb	2.3948	266.8	22.8927	0.89747
Mn 257.610	0.0681	ppb	0.0571	83.8	32.2137	0.06810
Mo 202.032	0.7213	ppb	0.2475	34.3	5.2214	0.72134
Na 330.237	-79.6067	ppb	150.063	188.5	35.4266	-79.60670
Ni 231.604	0.6505	ppb	0.9630	148.1	-1.0426	0.65047
Pb 220.353	-6.3255	ppb	5.0197	79.4	-1.5395	-6.32545Z
Sb 206.834	1.2282	ppb	0.6193	50.4	6.4285	1.22820
Se 196.026	-2.6586	ppb	7.8449	295.1	2.2205	-2.65865
Si 288.158	7.3347	ppb	0.9071	12.4	569.561	7.33471
Sn 189.925	-1.3833	ppb	3.9697	287.0	0.6437	-1.38327
Sr 216.596	0.1152	ppb	1.1611	1008.1	7.4982	0.11517
Ti 334.941	0.1557	ppb	0.1365	87.7	-11.5429	0.15569
Tl 190.794	-7.2141	ppb	2.6767	37.1	-3.1463	-7.21406
V 292.401	-0.0307	ppb	0.8794	2864.8	-13.1070	-0.03070
Zn 206.200	-1.2681	ppb	2.2130	174.5	-0.8049	-1.26810

mb 680-566650/1-a (Samp)

4/19/2019, 8:16:07 PM

Rack 3, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1855u	0.5126	-0.9233u
Al 308.215	22.7722	21.9833	15.9309
As 188.980	7.8851	1.6042	5.7625
B 249.678	2.7734	1.4162	0.9615
Ba 389.178	-0.9737u	0.8851	-0.4010u
Be 313.042	-0.1283u	-0.1131u	-0.1151u
Ca 370.602	34.23	33.70	38.32

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Label	Replicates Concentration		
Cd 226.502	-0.2490u	-0.2506u	-0.5534u
Co 228.615	1.3821	0.7194	1.9523
Cr 267.716	0.7990	0.5510	0.4227
Cu 324.754	1.4070	1.9657	1.7890
Fe 271.441	10.3966	30.3266	39.2443
K 766.491	27.3512	25.8156	25.3829
Mg 279.078	11.5834	10.0538	1.2101
Mn 257.610	0.2667	0.3289	0.2969
Mo 202.032	1.3998	-1.1446u	0.9665
Na 330.237	313.070	208.648	231.814
Ni 231.604	1.5650	-0.1706u	-1.3565u
Pb 220.353	1.3926	-4.6042u	-10.1245u
Sb 206.834	-6.0232u	6.5951	-3.6764u
Se 196.026	-19.9683u	-8.6438u	-16.8747u
Si 288.158	21.4953	21.7412	17.2640
Sn 189.925	10.6285	5.9114	11.4578
Sr 216.596	-1.1800u	0.1416	-0.3366u
Ti 334.941	0.9389	0.7815	0.8487
Tl 190.794	0.7607	-2.8586u	-1.6078u
V 292.401	0.3871	-0.0402u	0.2118
Zn 206.200	54.9863	52.3580	53.5168

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1987	ppb	0.7181	361.3	-46.7602
Al 308.215	20.2288	ppb	3.7429	18.5	246.704
As 188.980	5.0839	ppb	3.1949	62.8	2.0636
B 249.678	1.7170	ppb	0.9426	54.9	5.9762
Ba 389.178	-0.1632	ppb	0.9519	583.2	-37.6465
Be 313.042	-0.1189	ppb	0.0083	6.9	-422.776
Ca 370.602	35.42	ppb	2.528	7.1	84.29
Cd 226.502	-0.3510	ppb	0.1753	49.9	-0.5191
Co 228.615	1.3513	ppb	0.6170	45.7	-7.0151
Cr 267.716	0.5909	ppb	0.1913	32.4	23.4432
Cu 324.754	1.7206	ppb	0.2856	16.6	488.215
Fe 271.441	26.6559	ppb	14.7700	55.4	32.0146
K 766.491	26.1832	ppb	1.0343	4.0	816.925
Mg 279.078	7.6158	ppb	5.5999	73.5	31.8722
Mn 257.610	0.2975	ppb	0.0311	10.5	51.2808
Mo 202.032	0.4072	ppb	1.3613	334.3	4.6910
Na 330.237	251.177	ppb	54.8379	21.8	43.7359
Ni 231.604	0.0126	ppb	1.4694	11619.9	-1.7580
Pb 220.353	-4.4454	ppb	5.7602	129.6	-0.8283
Sb 206.834	-1.0348	ppb	6.7111	648.5	5.6625
Se 196.026	-15.1622	ppb	5.8532	38.6	-0.1365
Si 288.158	20.1668	ppb	2.5169	12.5	630.428
Sn 189.925	9.3326	ppb	2.9917	32.1	3.3520
Sr 216.596	-0.4583	ppb	0.6691	146.0	5.8296
Ti 334.941	0.8564	ppb	0.0790	9.2	50.6216
Tl 190.794	-1.2352	ppb	1.8382	148.8	-1.7154
V 292.401	0.1862	ppb	0.2148	115.3	-10.9288
Zn 206.200	53.6204	ppb	1.3172	2.5	29.4853

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ics 680-566650/2-a (Samp) 4/19/2019, 8:20:19 PM Rack 3, Tube 2
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.3419	50.7510	50.7908
Al 308.215	4867.35	4908.37	4847.98
As 188.980	104.116	89.8312	89.5651
B 249.678	194.900	196.635	196.549
Ba 389.178	97.8942	93.8741	97.8644
Be 313.042	52.0282	52.3211	51.8863
Ca 370.602	4855	4884	4834
Cd 226.502	49.5666	50.4315	50.1960
Co 228.615	50.6589	52.3668	51.3114
Cr 267.716	98.8014	99.0461	97.8145
Cu 324.754	103.276	102.806	101.881
Fe 271.441	4953.89	4977.52	4924.17
K 766.491	7369.88	7429.51	7369.66
Mg 279.078	4937.62	4976.49	4921.90
Mn 257.610	400.756	403.049	400.115
Mo 202.032	94.9904	97.0686	95.6479
Na 330.237	5221.47	5272.98	4712.50
Ni 231.604	97.0842	102.942	102.865
Pb 220.353	483.267	496.747	482.813
Sb 206.834	49.0660	51.3370	42.1752
Se 196.026	109.119	95.3366	105.221
Si 288.158	20.7942	24.4520	20.6464
Sn 189.925	102.794	100.726	103.475
Sr 216.596	94.7930	97.5117	95.0484
Ti 334.941	385.705	388.204	384.849
Tl 190.794	36.0965	31.9448	32.5878
V 292.401	98.8247	98.3825	97.8007
Zn 206.200	138.216	145.676	138.741

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9613	ppb	0.3303	0.6	1506.44
Al 308.215	4874.57	ppb	30.8362	0.6	9746.15
As 188.980	94.5040	ppb	8.3251	8.8	25.9110
B 249.678	196.028	ppb	0.9780	0.5	1330.88
Ba 389.178	96.5443	ppb	2.3124	2.4	578.082
Be 313.042	52.0785	ppb	0.2217	0.4	41684.4
Ca 370.602	4858	ppb	24.95	0.5	8153
Cd 226.502	50.0647	ppb	0.4472	0.9	654.444
Co 228.615	51.4457	ppb	0.8618	1.7	193.475
Cr 267.716	98.5540	ppb	0.6520	0.7	1663.34
Cu 324.754	102.655	ppb	0.7097	0.7	3547.42
Fe 271.441	4951.86	ppb	26.7335	0.5	2760.74
K 766.491	7389.69	ppb	34.4933	0.5	152189
Mg 279.078	4945.33	ppb	28.1045	0.6	6630.13
Mn 257.610	401.307	ppb	1.5428	0.4	33321.5
Mo 202.032	95.9023	ppb	1.0622	1.1	165.781
Na 330.237	5068.98	ppb	309.794	6.1	169.268
Ni 231.604	100.964	ppb	3.3600	3.3	111.450
Pb 220.353	487.609	ppb	7.9167	1.6	185.264
Sb 206.834	47.5261	ppb	4.7711	10.0	23.3918
Se 196.026	103.226	ppb	7.1045	6.9	22.2393
Si 288.158	21.9642	ppb	2.1558	9.8	678.111

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	102.332	ppb	1.4313	1.4	26.8566
Sr 216.596	95.7844	ppb	1.5013	1.6	285.929
Ti 334.941	386.253	ppb	1.7432	0.5	34250.7
Tl 190.794	33.5430	ppb	2.2346	6.7	6.4977
V 292.401	98.3360	ppb	0.5136	0.5	981.669
Zn 206.200	140.877	ppb	4.1639	3.0	77.5953

680-167559-e-10-a (Samp) **4/19/2019, 8:24:32 PM** **Rack 3, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.4966u	3.0991	2.0440u
Al 308.215	269530	269102	269016
As 188.980	8.9146	5.4813	13.7664
B 249.678	15.5100u	14.8100u	14.7555u
Ba 389.178	1799.04	1800.57	1800.68
Be 313.042	4.0555	4.0627	4.0797
Ca 370.602	76414	76379	76355
Cd 226.502	1.6919	1.6550	1.4591
Co 228.615	332.941	330.894	329.148
Cr 267.716	795.786	795.233	795.512
Cu 324.754	1009.69	1023.27	1003.32
Fe 271.441	393274	392808	391463
K 766.491	25191.1	25106.5	25109.0
Mg 279.078	121089	120993	120591
Mn 257.610	6539.62	6539.02	6525.24
Mo 202.032	8.0289	4.6119	4.6447
Na 330.237	3552.56u	3689.56u	3258.09u
Ni 231.604	558.708	557.948	560.878
Pb 220.353	38.5304u	44.2231	56.2579
Sb 206.834	-21.5563	-6.1690	-18.7527
Se 196.026	-20.1419u	-0.1126	-2.4955
Si 288.158	1931.94	1928.09	1924.61
Sn 189.925	15.2107	-5.3574u	-1.0872u
Sr 216.596	424.032	424.538	425.316
Ti 334.941	17864.5	17873.0	17868.7
Tl 190.794	22.4107u	21.7382u	31.6447u
V 292.401	1195.07	1193.87	1194.28
Zn 206.200	658.429	660.060	651.317

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.2132	ppb	0.8145	36.8	-53.9899
Al 308.215	269216	ppb	274.948	0.1	526868
As 188.980	9.3874	ppb	4.1627	44.3	2.1227
B 249.678	15.0252	ppb	0.4208	2.8	-308.043
Ba 389.178	1800.10	ppb	0.9151	0.1	11583.4
Be 313.042	4.0660	ppb	0.0124	0.3	2997.29
Ca 370.602	76383	ppb	29.77	0.0	127540
Cd 226.502	1.6020	ppb	0.1252	7.8	639.587
Co 228.615	330.994	ppb	1.8988	0.6	1426.48
Cr 267.716	795.511	ppb	0.2762	0.0	13374.6
Cu 324.754	1012.09	ppb	10.1890	1.0	31156.4
Fe 271.441	392515	ppb	940.501	0.2	217314
K 766.491	25135.5	ppb	48.1330	0.2	517747

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	120891	ppb	263.812	0.2	161573
Mn 257.610	6534.63	ppb	8.1341	0.1	542731
Mo 202.032	5.7618	ppb	1.9634	34.1	8.8927
Na 330.237	3500.07	ppb	220.473	6.3	-51.4880
Ni 231.604	559.178	ppb	1.5206	0.3	625.267
Pb 220.353	46.3371	ppb	9.0508	19.5	2.0901
Sb 206.834	-15.4927	ppb	8.1953	52.9	8.8651
Se 196.026	-7.5833	ppb	10.9411	144.3	3.5345
Si 288.158	1928.21	ppb	3.6677	0.2	10379.4
Sn 189.925	2.9220	ppb	10.8543	371.5	1.7319
Sr 216.596	424.629	ppb	0.6471	0.2	1290.01
Ti 334.941	17868.7	ppb	4.2671	0.0	1585368
Tl 190.794	25.2645	ppb	5.5356	21.9	-11.3175
V 292.401	1194.41	ppb	0.6117	0.1	12229.5
Zn 206.200	656.602	ppb	4.6490	0.7	362.665

680-167559-e-10-a (Samp)

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Rack 3, Tube 4

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7842	-0.1410u	1.1009
Al 308.215	52301.3	52428.1	52444.3
As 188.980	4.1860	16.0570	9.4545
B 249.678	1.4241u	1.3676u	1.0219u
Ba 389.178	357.610	356.672	356.579
Be 313.042	0.7124	0.6989	0.6901
Ca 370.602	15428	15484	15465
Cd 226.502	-0.2093	-0.0155	0.6916
Co 228.615	68.2641	65.3195	67.0593
Cr 267.716	160.195	162.329	161.194
Cu 324.754	193.910	197.801	192.238
Fe 271.441	78987.8	79107.4	79377.9
K 766.491	4756.01	4758.48	4769.27
Mg 279.078	24129.8	24232.6	24237.9
Mn 257.610	1311.59	1313.77	1313.38
Mo 202.032	-0.9474u	-0.3910u	2.5237
Na 330.237	443.163u	548.771u	956.451u
Ni 231.604	112.629	112.989	108.972
Pb 220.353	16.4369	-2.5582u	-0.9885u
Sb 206.834	-6.2854u	1.3697	-6.9290u
Se 196.026	3.2665	18.4460	8.8169
Si 288.158	381.143	383.182	383.987
Sn 189.925	1.0479	3.7656	-4.7154u
Sr 216.596	87.2904	82.8748	87.0796
Ti 334.941	3629.26	3638.03	3637.34
Tl 190.794	15.3728	4.9035u	-0.6237u
V 292.401	239.011	239.709	239.120
Zn 206.200	132.657	140.166	135.309

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5813	ppb	0.6453	111.0	-39.4167
Al 308.215	52391.2	ppb	78.2860	0.1	102699
As 188.980	9.8992	ppb	5.9480	60.1	3.1287
B 249.678	1.2712	ppb	0.2178	17.1	-79.1890

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	356.954	ppb	0.5705	0.2	2268.62
Be 313.042	0.7005	ppb	0.0112	1.6	247.119
Ca 370.602	15459	ppb	28.29	0.2	25832
Cd 226.502	0.1556	ppb	0.4742	304.8	130.558
Co 228.615	66.8809	ppb	1.4804	2.2	278.515
Cr 267.716	161.239	ppb	1.0673	0.7	2721.64
Cu 324.754	194.650	ppb	2.8540	1.5	6345.00
Fe 271.441	79157.7	ppb	199.874	0.3	43839.1
K 766.491	4761.25	ppb	7.0535	0.1	98282.2
Mg 279.078	24200.1	ppb	60.9663	0.3	32361.4
Mn 257.610	1312.91	ppb	1.1620	0.1	109066
Mo 202.032	0.3951	ppb	1.8643	471.9	3.6910
Na 330.237	649.462	ppb	271.054	41.7	17.7918
Ni 231.604	111.530	ppb	2.2229	2.0	123.292
Pb 220.353	4.2967	ppb	10.5430	245.4	-0.8186
Sb 206.834	-3.9482	ppb	4.6167	116.9	6.3364
Se 196.026	10.1765	ppb	7.6805	75.5	5.0935
Si 288.158	382.771	ppb	1.4658	0.4	2493.23
Sn 189.925	0.0327	ppb	4.3306	13244.7	1.0016
Sr 216.596	85.7483	ppb	2.4907	2.9	266.273
Ti 334.941	3634.87	ppb	4.8746	0.1	322476
Tl 190.794	6.5509	ppb	8.1245	124.0	-3.0866
V 292.401	239.280	ppb	0.3759	0.2	2440.09
Zn 206.200	136.044	ppb	3.8084	2.8	75.0576

680-167559-e-10-a (Samp)

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Rack 3, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	58.4479	58.3097	58.0179
Al 308.215	269671	269262	269208
As 188.980	114.735	117.303	117.399
B 249.678	230.273	229.984	231.460
Ba 389.178	1872.97	1863.50	1872.55
Be 313.042	60.4329	60.2911	60.2668
Ca 370.602	80211	79980	80001
Cd 226.502	55.4668	55.8972	55.3617
Co 228.615	376.398	376.621	376.473
Cr 267.716	888.050	886.628	886.415
Cu 324.754	1096.08	1095.75	1098.77
Fe 271.441	387746	386895	387765
K 766.491	32620.3	32518.4	32587.0
Mg 279.078	124064	123598	123626
Mn 257.610	6932.79	6902.34	6916.01
Mo 202.032	110.907	110.701	110.251
Na 330.237	9230.52	9056.28	9200.82
Ni 231.604	662.723	655.058	661.432
Pb 220.353	567.839	570.550	564.366
Sb 206.834	52.1729	41.9314	39.8481
Se 196.026	116.083	106.694	90.7884
Si 288.158	1885.66	1874.60	1884.18
Sn 189.925	116.164	111.487	103.877
Sr 216.596	524.389	521.182	521.993
Ti 334.941	17939.6	17901.6	17913.7

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Label	Replicates Concentration		
Tl 190.794	45.0595u	59.2781u	75.5993
V 292.401	1280.92	1273.98	1278.25
Zn 206.200	756.963	751.691	743.260

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	58.2585	ppb	0.2196	0.4	1649.62
Al 308.215	269380	ppb	253.616	0.1	527192
As 188.980	116.479	ppb	1.5110	1.3	30.7117
B 249.678	230.572	ppb	0.7823	0.3	1171.34
Ba 389.178	1869.68	ppb	5.3500	0.3	12022.7
Be 313.042	60.3302	ppb	0.0897	0.1	48384.1
Ca 370.602	80064	ppb	127.5	0.2	133707
Cd 226.502	55.5752	ppb	0.2838	0.5	1326.41
Co 228.615	376.497	ppb	0.1134	0.0	1606.02
Cr 267.716	887.031	ppb	0.8889	0.1	14905.7
Cu 324.754	1096.87	ppb	1.6552	0.2	33724.8
Fe 271.441	387469	ppb	496.627	0.1	214523
K 766.491	32575.2	ppb	51.9772	0.2	670617
Mg 279.078	123763	ppb	261.476	0.2	165409
Mn 257.610	6917.05	ppb	15.2497	0.2	574441
Mo 202.032	110.620	ppb	0.3354	0.3	185.891
Na 330.237	9162.54	ppb	93.2149	1.0	100.533
Ni 231.604	659.738	ppb	4.1036	0.6	738.041
Pb 220.353	567.585	ppb	3.1002	0.5	199.603
Sb 206.834	44.6508	ppb	6.5971	14.8	30.6020
Se 196.026	104.522	ppb	12.7865	12.2	24.6876
Si 288.158	1881.48	ppb	6.0007	0.3	10185.0
Sn 189.925	110.510	ppb	6.2013	5.6	28.9236
Sr 216.596	522.521	ppb	1.6678	0.3	1573.79
Ti 334.941	17918.3	ppb	19.4337	0.1	1589772
Tl 190.794	59.9789	ppb	15.2819	25.5	-2.7312
V 292.401	1277.72	ppb	3.4999	0.3	13068.4
Zn 206.200	750.638	ppb	6.9117	0.9	414.502

680-167559-e-10-b ms (Samp) 4/19/2019, 8:37:10 PM Rack 3, Tube 6

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.0364	52.0024	50.8029
Al 308.215	267544	267662	267635
As 188.980	92.3505	103.430	92.2895
B 249.678	196.675	197.647	197.011
Ba 389.178	1723.52	1725.84	1723.67
Be 313.042	53.7790	53.7468	53.8638
Ca 370.602	78916	78894	79040
Cd 226.502	49.8204	50.1154	49.9799
Co 228.615	330.306	326.389	325.857
Cr 267.716	867.970	867.620	867.470
Cu 324.754	1026.45	1026.47	1030.96
Fe 271.441	372235	372188	373830
K 766.491	31699.8	31713.1	31734.1
Mg 279.078	116103	116039	116522
Mn 257.610	5602.10	5593.36	5605.26
Mo 202.032	85.5252	88.0878	89.1978

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Label	Replicates Concentration		
Na 330.237	8543.46	8257.50	8716.07
Ni 231.604	612.691	607.126	614.707
Pb 220.353	506.684	503.401	506.644
Sb 206.834	28.7109	32.1956	27.9509
Se 196.026	97.2560	80.8473	90.3275
Si 288.158	2111.67	2110.05	2118.64
Sn 189.925	98.5085	102.364	94.3495
Sr 216.596	516.160	519.445	513.940
Ti 334.941	18562.5	18583.7	18580.7
Tl 190.794	60.2907u	44.8169u	44.9481u
V 292.401	1240.66	1242.01	1243.56
Zn 206.200	716.569	693.072	705.745

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.2805	ppb	0.6359	1.2	1437.24
Al 308.215	267613	ppb	61.8495	0.0	523735
As 188.980	96.0233	ppb	6.4144	6.7	25.2943
B 249.678	197.111	ppb	0.4939	0.3	958.167
Ba 389.178	1724.34	ppb	1.2978	0.1	11094.0
Be 313.042	53.7966	ppb	0.0604	0.1	43114.0
Ca 370.602	78950	ppb	78.97	0.1	131864
Cd 226.502	49.9719	ppb	0.1477	0.3	1230.37
Co 228.615	327.518	ppb	2.4294	0.7	1417.64
Cr 267.716	867.687	ppb	0.2562	0.0	14579.3
Cu 324.754	1027.96	ppb	2.5995	0.3	31634.5
Fe 271.441	372751	ppb	934.473	0.3	206374
K 766.491	31715.7	ppb	17.2809	0.1	653001
Mg 279.078	116221	ppb	262.171	0.2	155338
Mn 257.610	5600.24	ppb	6.1635	0.1	465255
Mo 202.032	87.6036	ppb	1.8836	2.2	147.234
Na 330.237	8505.68	ppb	231.610	2.7	77.8492
Ni 231.604	611.508	ppb	3.9264	0.6	683.975
Pb 220.353	505.576	ppb	1.8840	0.4	176.505
Sb 206.834	29.6192	ppb	2.2634	7.6	24.9221
Se 196.026	89.4769	ppb	8.2373	9.2	21.6637
Si 288.158	2113.45	ppb	4.5631	0.2	11294.9
Sn 189.925	98.4072	ppb	4.0080	4.1	25.8648
Sr 216.596	516.515	ppb	2.7694	0.5	1554.92
Ti 334.941	18575.7	ppb	11.4621	0.1	1648064
Tl 190.794	50.0186	ppb	8.8962	17.8	-4.7230
V 292.401	1242.07	ppb	1.4540	0.1	12709.3
Zn 206.200	705.129	ppb	11.7607	1.7	389.365

680-167559-e-10-c ms (Samp) 4/19/2019, 8:41:22 PM Rack 3, Tube 7
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.7436	54.8154	55.5577
Al 308.215	265633	265810	265924
As 188.980	91.7298	93.8736	95.8445
B 249.678	207.304	207.643	210.202
Ba 389.178	1721.83	1717.42	1719.08
Be 313.042	56.6000	56.6149	56.7549
Ca 370.602	88759	88658	88692

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Label	Replicates Concentration		
Cd 226.502	52.2916	52.3491	52.9174
Co 228.615	323.128	319.259	321.573
Cr 267.716	850.685	850.172	851.437
Cu 324.754	1031.90	1032.90	1038.05
Fe 271.441	374710	374593	375119
K 766.491	32047.2	32036.5	32073.9
Mg 279.078	115580	115602	115606
Mn 257.610	5902.74	5895.90	5902.69
Mo 202.032	91.6464	93.0609	96.7780
Na 330.237	9357.88	8944.78	8818.71
Ni 231.604	630.502	629.928	621.448
Pb 220.353	525.584	546.001	552.537
Sb 206.834	20.8759	10.7151	18.0896
Se 196.026	94.4234	86.2625	90.1366
Si 288.158	2341.27	2345.94	2348.81
Sn 189.925	112.620	109.693	89.2200
Sr 216.596	523.823	522.692	523.522
Ti 334.941	18514.7	18520.4	18549.8
Tl 190.794	59.6546u	33.0498u	38.9159u
V 292.401	1240.45	1239.77	1241.84
Zn 206.200	697.391	695.008	696.872

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.3723	ppb	0.4911	0.9	1561.81
Al 308.215	265789	ppb	146.554	0.1	520166
As 188.980	93.8160	ppb	2.0579	2.2	24.7008
B 249.678	208.383	ppb	1.5842	0.8	1033.66
Ba 389.178	1719.44	ppb	2.2235	0.1	11063.2
Be 313.042	56.6566	ppb	0.0855	0.2	45422.2
Ca 370.602	88703	ppb	51.07	0.1	148172
Cd 226.502	52.5194	ppb	0.3459	0.7	1265.51
Co 228.615	321.320	ppb	1.9470	0.6	1392.64
Cr 267.716	850.764	ppb	0.6364	0.1	14296.8
Cu 324.754	1034.28	ppb	3.2976	0.3	31826.5
Fe 271.441	374807	ppb	276.374	0.1	207512
K 766.491	32052.5	ppb	19.2926	0.1	659970
Mg 279.078	115596	ppb	13.8795	0.0	154499
Mn 257.610	5900.44	ppb	3.9317	0.1	490139
Mo 202.032	93.8284	ppb	2.6505	2.8	157.721
Na 330.237	9040.46	ppb	282.033	3.1	92.7008
Ni 231.604	627.292	ppb	5.0699	0.8	701.689
Pb 220.353	541.374	ppb	14.0592	2.6	190.031
Sb 206.834	16.5602	ppb	5.2503	31.7	20.2544
Se 196.026	90.2742	ppb	4.0822	4.5	21.8489
Si 288.158	2345.34	ppb	3.8046	0.2	12376.6
Sn 189.925	103.844	ppb	12.7494	12.3	27.2390
Sr 216.596	523.346	ppb	0.5855	0.1	1574.91
Ti 334.941	18528.3	ppb	18.8467	0.1	1643859
Tl 190.794	43.8734	ppb	13.9781	31.9	-6.2076
V 292.401	1240.68	ppb	1.0565	0.1	12694.9
Zn 206.200	696.424	ppb	1.2531	0.2	384.573

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167559-e-11-a (Samp) **4/19/2019, 8:45:35 PM** **Rack 3, Tube 8****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	2.8530	1.1589u	2.9990
Al 308.215	234275	234784	234098
As 188.980	17.1689	12.4889	10.4171
B 249.678	15.1791u	15.4155u	13.3952u
Ba 389.178	1702.84	1697.05	1701.06
Be 313.042	6.1527	6.1348	6.1310
Ca 370.602	80746	80762	80732
Cd 226.502	1.7654	2.8830	2.4398
Co 228.615	289.267	290.444	290.352
Cr 267.716	422.871	422.654	421.320
Cu 324.754	756.104	761.350	758.896
Fe 271.441	418383	420977	418483
K 766.491	30168.0	30267.9	30137.1
Mg 279.078	131497	131842	131401
Mn 257.610	5978.51	5996.28	5980.89
Mo 202.032	2.5873u	2.2137u	1.7153u
Na 330.237	2425.67u	2172.49u	2306.39u
Ni 231.604	284.123	288.302	286.989
Pb 220.353	32.3211u	37.6742u	43.4544u
Sb 206.834	-3.2424	-18.2636	-25.9305u
Se 196.026	2.7124	-16.1414u	0.5077
Si 288.158	1687.84	1703.21	1686.44
Sn 189.925	1.3373	13.3936	6.2251
Sr 216.596	472.582	475.097	472.084
Ti 334.941	16312.1	16307.8	16299.0
Tl 190.794	13.2254u	16.0832u	26.2810u
V 292.401	1329.01	1333.99	1333.28
Zn 206.200	651.622	650.922	648.984

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.3370	ppb	1.0229	43.8	-54.2076
Al 308.215	234386	ppb	356.042	0.2	458740
As 188.980	13.3583	ppb	3.4588	25.9	3.1354
B 249.678	14.6633	ppb	1.1045	7.5	-336.910
Ba 389.178	1700.32	ppb	2.9661	0.2	10979.0
Be 313.042	6.1395	ppb	0.0116	0.2	4672.51
Ca 370.602	80747	ppb	14.68	0.0	134754
Cd 226.502	2.3627	ppb	0.5628	23.8	688.138
Co 228.615	290.021	ppb	0.6545	0.2	1251.31
Cr 267.716	422.282	ppb	0.8395	0.2	7131.05
Cu 324.754	758.783	ppb	2.6250	0.3	23487.4
Fe 271.441	419281	ppb	1469.80	0.4	232130
K 766.491	30191.0	ppb	68.3840	0.2	621833
Mg 279.078	131580	ppb	231.878	0.2	175879
Mn 257.610	5985.23	ppb	9.6491	0.2	497218
Mo 202.032	2.1721	ppb	0.4375	20.1	2.5094
Na 330.237	2301.52	ppb	126.662	5.5	-70.6313
Ni 231.604	286.471	ppb	2.1374	0.7	319.361
Pb 220.353	37.8166	ppb	5.5680	14.7	-1.7236
Sb 206.834	-15.8122	ppb	11.5410	73.0	7.8176
Se 196.026	-4.3071	ppb	10.3079	239.3	4.2063
Si 288.158	1692.50	ppb	9.3066	0.5	9205.41

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	6.9853	ppb	6.0640	86.8	2.7587
Sr 216.596	473.254	ppb	1.6153	0.3	1436.16
Ti 334.941	16306.3	ppb	6.6410	0.0	1446797
Tl 190.794	18.5299	ppb	6.8631	37.0	-14.1857
V 292.401	1332.09	ppb	2.6934	0.2	13634.3
Zn 206.200	650.509	ppb	1.3665	0.2	359.568

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.5297u	1.1509u	1.0676u
Al 308.215	233856	233972	233878
As 188.980	4.1861	11.1213	3.0675u
B 249.678	10.1298u	10.7923u	8.8794u
Ba 389.178	1384.70	1384.26	1386.85
Be 313.042	3.1991	3.2045	3.1981
Ca 370.602	61108	61107	61118
Cd 226.502	1.7816	2.0945	2.0211
Co 228.615	261.725	262.714	259.628
Cr 267.716	459.671	459.862	459.687
Cu 324.754	880.844	886.415	891.621
Fe 271.441	363458	365149	364758
K 766.491	35639.6	35699.9	35614.6
Mg 279.078	146885	146999	146754
Mn 257.610	5452.21	5478.55	5472.81
Mo 202.032	6.8648	3.7347	4.0206
Na 330.237	1743.60u	1963.78u	1764.10u
Ni 231.604	491.569	480.301	480.178
Pb 220.353	46.5319	35.9650u	23.1056u
Sb 206.834	-14.0777	-18.0831	-20.3181u
Se 196.026	-20.5231u	0.6650	12.9930
Si 288.158	2124.90	2133.15	2130.35
Sn 189.925	0.5701	1.8009	24.5760
Sr 216.596	445.327	451.801	450.231
Ti 334.941	11733.5	11770.7	11741.1
Tl 190.794	22.2517u	0.9146u	16.7569u
V 292.401	1118.42	1123.38	1122.00
Zn 206.200	725.730	725.864	712.142

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.2494	ppb	0.2463	19.7	-73.3086
Al 308.215	233902	ppb	61.6919	0.0	457787
As 188.980	6.1250	ppb	4.3629	71.2	1.3451
B 249.678	9.9339	ppb	0.9714	9.8	-313.833
Ba 389.178	1385.27	ppb	1.3824	0.1	8992.03
Be 313.042	3.2006	ppb	0.0035	0.1	2293.53
Ca 370.602	61111	ppb	5.944	0.0	101913
Cd 226.502	1.9657	ppb	0.1636	8.3	600.954
Co 228.615	261.356	ppb	1.5761	0.6	1104.16
Cr 267.716	459.740	ppb	0.1062	0.0	7749.64
Cu 324.754	886.294	ppb	5.3894	0.6	27341.2
Fe 271.441	364455	ppb	885.420	0.2	201778
K 766.491	35651.3	ppb	43.8517	0.1	734197

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	146879	ppb	122.336	0.1	196345
Mn 257.610	5467.85	ppb	13.8515	0.3	454274
Mo 202.032	4.8734	ppb	1.7306	35.5	7.7383
Na 330.237	1823.82	ppb	121.637	6.7	-40.9993
Ni 231.604	484.016	ppb	6.5413	1.4	541.012
Pb 220.353	35.2008	ppb	11.7318	33.3	-0.2784
Sb 206.834	-17.4930	ppb	3.1618	18.1	6.5805
Se 196.026	-2.2884	ppb	16.9521	740.8	4.3156
Si 288.158	2129.47	ppb	4.1993	0.2	11028.2
Sn 189.925	8.9824	ppb	13.5185	150.5	3.2634
Sr 216.596	449.120	ppb	3.3773	0.8	1358.56
Ti 334.941	11748.4	ppb	19.6148	0.2	1042528
Tl 190.794	13.3078	ppb	11.0788	83.3	-13.1828
V 292.401	1121.27	ppb	2.5588	0.2	11465.0
Zn 206.200	721.246	ppb	7.8839	1.1	398.466

680-167559-f-13-a (Samp)

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Rack 3, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.6604u	0.3474u	0.9737u
Al 308.215	245852	246321	246071
As 188.980	19.9527	13.7937	9.8094
B 249.678	9.7264u	10.5330u	9.9435u
Ba 389.178	1703.71	1711.09	1705.71
Be 313.042	6.3293	6.3668	6.3650
Ca 370.602	43875	44060	44008
Cd 226.502	2.3243	2.9696	1.2109
Co 228.615	276.822	278.589	277.334
Cr 267.716	132.093	133.455	131.964
Cu 324.754	1388.17	1403.19	1408.74
Fe 271.441	477943	477916	475402
K 766.491	13467.8	13465.9	13434.4
Mg 279.078	121905	122298	122024
Mn 257.610	5562.95	5569.11	5552.26
Mo 202.032	2.4870u	3.4926u	5.3025
Na 330.237	1318.12u	1262.64u	1019.67u
Ni 231.604	276.059	279.488	280.570
Pb 220.353	35.9517u	38.2931u	22.8851u
Sb 206.834	-21.2670u	-15.0178	-0.7503
Se 196.026	-2.8428	-9.7687	-25.8592u
Si 288.158	2275.15	2275.40	2267.57
Sn 189.925	7.4775	10.6537	8.6201
Sr 216.596	474.408	473.599	473.760
Ti 334.941	14916.3	14914.2	14921.7
Tl 190.794	11.4309u	17.1482u	37.6271u
V 292.401	1775.86	1777.96	1775.90
Zn 206.200	929.355	919.808	922.002

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9938	ppb	0.6567	66.1	-104.220
Al 308.215	246081	ppb	234.755	0.1	481631
As 188.980	14.5186	ppb	5.1104	35.2	3.3046
B 249.678	10.0677	ppb	0.4174	4.1	-428.823

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1706.84	ppb	3.8181	0.2	11035.5
Be 313.042	6.3537	ppb	0.0212	0.3	4851.04
Ca 370.602	43981	ppb	95.63	0.2	73155
Cd 226.502	2.1683	ppb	0.8897	41.0	777.241
Co 228.615	277.582	ppb	0.9087	0.3	1189.73
Cr 267.716	132.504	ppb	0.8260	0.6	2286.20
Cu 324.754	1400.03	ppb	10.6372	0.8	42918.7
Fe 271.441	477087	ppb	1459.69	0.3	264130
K 766.491	13456.0	ppb	18.7355	0.1	277398
Mg 279.078	122076	ppb	201.385	0.2	163172
Mn 257.610	5561.44	ppb	8.5239	0.2	462068
Mo 202.032	3.7607	ppb	1.4267	37.9	4.4243
Na 330.237	1200.15	ppb	158.738	13.2	-93.1770
Ni 231.604	278.706	ppb	2.3553	0.8	310.665
Pb 220.353	32.3767	ppb	8.3029	25.6	-5.6528
Sb 206.834	-12.3450	ppb	10.5162	85.2	8.9294
Se 196.026	-12.8235	ppb	11.8084	92.1	2.8034
Si 288.158	2272.71	ppb	4.4532	0.2	11846.8
Sn 189.925	8.9171	ppb	1.6088	18.0	3.2468
Sr 216.596	473.922	ppb	0.4284	0.1	1444.97
Ti 334.941	14917.4	ppb	3.8779	0.0	1323570
Tl 190.794	22.0687	ppb	13.7739	62.4	-15.9678
V 292.401	1776.57	ppb	1.1994	0.1	18163.5
Zn 206.200	923.722	ppb	5.0002	0.5	510.633

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	513.460	513.214	506.844
Al 308.215	10274.1	10194.7	10161.1
As 188.980	504.343	498.896	491.222
B 249.678	517.890	518.148	518.361
Ba 389.178	488.229	487.340	483.904
Be 313.042	531.489	528.381	526.601
Ca 370.602	10185	10095	10049
Cd 226.502	507.219	503.454	502.175
Co 228.615	512.510	506.794	505.774
Cr 267.716	504.806	502.122	500.269
Cu 324.754	513.757	515.837	508.401
Fe 271.441	10237.7	10199.1	10203.3
K 766.491	9889.59	9822.50	9818.73
Mg 279.078	10351.0	10290.5	10237.7
Mn 257.610	510.268	506.619	504.505
Mo 202.032	502.545	499.489	496.233
Na 330.237	10518.9	10907.7	10347.6
Ni 231.604	512.243	513.202	505.186
Pb 220.353	498.891	488.225	502.567
Sb 206.834	495.091	495.513	480.139
Se 196.026	528.464	527.658	536.726
Si 288.158	5173.00	5137.77	5126.32
Sn 189.925	498.030	516.130	490.368
Sr 216.596	496.143	499.200	493.044
Ti 334.941	508.043	504.677	501.060

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	494.344	503.297	506.471
V 292.401	513.125	508.745	507.414
Zn 206.200	1033.61	1020.90	1014.93

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	511.173	ppb	3.7508	0.7	15484.0	102.23457
Al 308.215	10210.0	ppb	58.0089	0.6	20197.7	102.09975
As 188.980	498.154	ppb	6.5918	1.3	133.611	99.63073
B 249.678	518.133	ppb	0.2356	0.0	3530.16	103.62656
Ba 389.178	486.491	ppb	2.2840	0.5	3038.65	97.29818
Be 313.042	528.824	ppb	2.4741	0.5	426288	105.76473
Ca 370.602	10110	ppb	68.90	0.7	16930	101.09550
Cd 226.502	504.283	ppb	2.6222	0.5	6493.35	100.85655
Co 228.615	508.359	ppb	3.6309	0.7	2001.23	101.67185
Cr 267.716	502.399	ppb	2.2811	0.5	8418.94	100.47978
Cu 324.754	512.665	ppb	3.8364	0.7	15971.9	102.53300
Fe 271.441	10213.4	ppb	21.1975	0.2	5691.45	102.08266
K 766.491	9843.61	ppb	39.8688	0.4	200279	98.43606
Mg 279.078	10293.1	ppb	56.6638	0.6	13779.6	102.93063
Mn 257.610	507.131	ppb	2.9153	0.6	42119.4	101.42613
Mo 202.032	499.422	ppb	3.1565	0.6	846.661	99.88449
Na 330.237	10591.4	ppb	287.043	2.7	307.030	105.91406
Ni 231.604	510.210	ppb	4.3779	0.9	570.161	102.04204
Pb 220.353	496.561	ppb	7.4494	1.5	188.303	99.31215
Sb 206.834	490.248	ppb	8.7565	1.8	183.849	98.04951
Se 196.026	530.949	ppb	5.0187	0.9	102.902	106.18986
Si 288.158	5145.69	ppb	24.3318	0.5	24685.3	102.91389
Sn 189.925	501.509	ppb	13.2286	2.6	127.743	100.30187
Sr 216.596	496.129	ppb	3.0777	0.6	1449.27	99.22585
Ti 334.941	504.593	ppb	3.4924	0.7	44762.3	100.91862
Tl 190.794	501.371	ppb	6.2889	1.3	118.502	100.27412
V 292.401	509.762	ppb	2.9880	0.6	5135.40	101.95230
Zn 206.200	1023.15	ppb	9.5420	0.9	564.270	102.31455

Cont Calib Blank (CCB) 4/19/2019, 9:02:26 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1426u	-0.1927u	-0.4690u
Al 308.215	13.2207	10.9771	7.0577
As 188.980	1.3111	5.9059	10.1463
B 249.678	11.2203	10.8328	8.2177
Ba 389.178	-1.6565u	-0.7983u	-0.6407u
Be 313.042	0.0299	0.0200	-0.0008u
Ca 370.602	-1.359u	3.374	-8.409u
Cd 226.502	0.1155	0.0969	0.0604
Co 228.615	0.4963	1.6262	1.1204
Cr 267.716	-0.1543u	-0.0867u	-0.0070u
Cu 324.754	0.6977	-0.6381u	0.6452
Fe 271.441	30.1484	-0.3756u	13.6354
K 766.491	1.4008	0.5506	-0.8057
Mg 279.078	12.3864	4.7956	5.9461
Mn 257.610	0.1847	0.1566	0.0193
Mo 202.032	0.0021	1.3217	1.1896

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Label	Replicates Concentration		
Na 330.237	-34.1888u	300.851	-124.951u
Ni 231.604	0.1623	-3.6352u	-1.5681u
Pb 220.353	-5.3477u	-1.5095u	-3.8278u
Sb 206.834	7.0214	-3.4738u	8.5589
Se 196.026	-0.0928u	-7.2546u	-9.1856u
Si 288.158	9.5235	7.1577	7.0809
Sn 189.925	-4.8502u	-6.2879u	-7.5329u
Sr 216.596	0.6005	1.0314	-0.9247u
Ti 334.941	0.7476	0.9180	0.6325
Tl 190.794	-11.5487u	-8.4315u	-0.3523u
V 292.401	0.0620	0.5836	0.1841
Zn 206.200	2.5434	2.1929	-1.8509u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2681	ppb	0.1758	65.6	-48.8688	-0.26812
Al 308.215	10.4185	ppb	3.1193	29.9	227.526	10.41852
As 188.980	5.7878	ppb	4.4188	76.3	2.2516	5.78777
B 249.678	10.0903	ppb	1.6332	16.2	63.3039	10.09027
Ba 389.178	-1.0318	ppb	0.5467	53.0	-43.1173	-1.03182
Be 313.042	0.0164	ppb	0.0156	95.6	-313.701	0.01636
Ca 370.602	-2.131	ppb	5.929	278.2	21.53	-2.13131
Cd 226.502	0.0909	ppb	0.0280	30.8	5.1319	0.09094
Co 228.615	1.0810	ppb	0.5660	52.4	-8.0873	1.08100
Cr 267.716	-0.0827	ppb	0.0737	89.1	12.1728	-0.08269
Cu 324.754	0.2349	ppb	0.7565	322.0	443.215	0.23493
Fe 271.441	14.4694	ppb	15.2791	105.6	25.2725	14.46938
K 766.491	0.3819	ppb	1.1128	291.4	308.841	0.38191
Mg 279.078	7.7094	ppb	4.0911	53.1	32.0013	7.70935
Mn 257.610	0.1202	ppb	0.0885	73.6	36.5560	0.12019
Mo 202.032	0.8378	ppb	0.7267	86.7	5.4178	0.83781
Na 330.237	47.2371	ppb	224.275	474.8	38.8303	47.23712
Ni 231.604	-1.6803	ppb	1.9012	113.1	-3.6574	-1.68035
Pb 220.353	-3.5617	ppb	1.9329	54.3	-0.4933	-3.56168
Sb 206.834	4.0355	ppb	6.5485	162.3	7.4111	4.03550
Se 196.026	-5.5110	ppb	4.7906	86.9	1.6828	-5.51099
Si 288.158	7.9207	ppb	1.3886	17.5	572.510	7.92073
Sn 189.925	-6.2237	ppb	1.3425	21.6	-0.5796	-6.22365
Sr 216.596	0.2357	ppb	1.0278	436.0	7.8537	0.23573
Ti 334.941	0.7660	ppb	0.1436	18.8	42.5994	0.76603
Tl 190.794	-6.7775	ppb	5.7785	85.3	-3.0421	-6.77752
V 292.401	0.2766	ppb	0.2728	98.7	-10.0251	0.27658
Zn 206.200	0.9618	ppb	2.4422	253.9	0.4254	0.96180

680-167559-f-14-a (Samp)

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Rack 3, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9911u	2.8144u	1.4246u
Al 308.215	241279	241878	240738
As 188.980	5.4113	16.3325	8.4632
B 249.678	16.0460u	12.1568u	13.4594u
Ba 389.178	1707.23	1712.79	1704.83
Be 313.042	6.3579	6.3675	6.3121
Ca 370.602	54873	55003	54610

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Label	Replicates Concentration		
Cd 226.502	2.6424	3.2541	2.1283
Co 228.615	477.474	480.708	476.844
Cr 267.716	185.465	184.808	183.918
Cu 324.754	1497.82	1491.81	1491.37
Fe 271.441	506817	509325	507561
K 766.491	11778.4	11807.5	11743.2
Mg 279.078	113436	113716	113157
Mn 257.610	6031.58	6048.63	6022.73
Mo 202.032	2.5789u	2.8555u	1.7732u
Na 330.237	1198.70u	1183.81u	1354.68u
Ni 231.604	351.781	351.061	351.635
Pb 220.353	31.5672u	38.6797u	35.2890u
Sb 206.834	-13.8417	-5.1065	-16.8614
Se 196.026	-2.2593	5.1019	13.5449
Si 288.158	1912.86	1916.40	1913.51
Sn 189.925	3.0690	3.8465	1.1871
Sr 216.596	494.577	497.500	493.354
Ti 334.941	15095.8	15091.7	15046.6
Tl 190.794	30.5258u	10.0048u	14.2744u
V 292.401	1894.72	1898.12	1889.09
Zn 206.200	797.160	789.339	790.151

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.7434	ppb	0.9525	54.6	-86.3911
Al 308.215	241298	ppb	570.221	0.2	472279
As 188.980	10.0690	ppb	5.6349	56.0	2.0294
B 249.678	13.8874	ppb	1.9796	14.3	-435.418
Ba 389.178	1708.28	ppb	4.0820	0.2	11049.1
Be 313.042	6.3458	ppb	0.0296	0.5	4848.81
Ca 370.602	54829	ppb	200.0	0.4	91249
Cd 226.502	2.6749	ppb	0.5636	21.1	832.675
Co 228.615	478.342	ppb	2.0730	0.4	1985.42
Cr 267.716	184.730	ppb	0.7763	0.4	3163.07
Cu 324.754	1493.67	ppb	3.6000	0.2	45759.9
Fe 271.441	507901	ppb	1287.95	0.3	281195
K 766.491	11776.4	ppb	32.1902	0.3	242871
Mg 279.078	113436	ppb	279.500	0.2	151614
Mn 257.610	6034.31	ppb	13.1645	0.2	501259
Mo 202.032	2.4025	ppb	0.5623	23.4	1.7382
Na 330.237	1245.73	ppb	94.6432	7.6	-92.6840
Ni 231.604	351.492	ppb	0.3805	0.1	392.140
Pb 220.353	35.1786	ppb	3.5575	10.1	-5.6837
Sb 206.834	-11.9365	ppb	6.1046	51.1	9.6582
Se 196.026	5.4625	ppb	7.9083	144.8	6.4264
Si 288.158	1914.26	ppb	1.8842	0.1	10178.7
Sn 189.925	2.7009	ppb	1.3674	50.6	1.6757
Sr 216.596	495.144	ppb	2.1303	0.4	1510.32
Ti 334.941	15078.0	ppb	27.2955	0.2	1337797
Tl 190.794	18.2683	ppb	10.8278	59.3	-18.1112
V 292.401	1893.97	ppb	4.5605	0.2	19360.4
Zn 206.200	792.217	ppb	4.3001	0.5	438.102

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2290u	0.7149u	0.9356u
Al 308.215	121952	122104	122747
As 188.980	2.1073u	3.4484	4.0235
B 249.678	5.9839u	5.7310u	5.0081u
Ba 389.178	948.941	954.057	958.184
Be 313.042	3.9109	3.8944	3.8891
Ca 370.602	36943	36990	37200
Cd 226.502	0.8938	0.7941	1.1049
Co 228.615	339.582	338.492	341.146
Cr 267.716	102.045	102.267	103.424
Cu 324.754	830.228	843.695	853.128
Fe 271.441	244773	244250	245383
K 766.491	7267.38	7274.63	7319.22
Mg 279.078	62006.4	62138.2	62368.9
Mn 257.610	6021.61	6024.12	6052.34
Mo 202.032	2.7164	5.7669	3.1705
Na 330.237	783.883u	780.584u	365.203u
Ni 231.604	224.011	223.758	227.537
Pb 220.353	16.7938u	25.0973u	32.2951
Sb 206.834	-4.3118	-3.4341	-14.3022u
Se 196.026	0.1354	13.0443	14.1957
Si 288.158	2702.41	2700.11	2727.63
Sn 189.925	3.1819	17.7664	1.7658
Sr 216.596	301.490	304.996	303.216
Ti 334.941	10004.4	10022.8	10061.9
Tl 190.794	11.3818u	-0.8672u	21.4136u
V 292.401	790.090	786.012	792.897
Zn 206.200	450.819	458.030	453.236

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4739	ppb	0.6186	130.5	-71.8289
Al 308.215	122268	ppb	421.783	0.3	239405
As 188.980	3.1931	ppb	0.9833	30.8	0.8971
B 249.678	5.5743	ppb	0.5064	9.1	-221.529
Ba 389.178	953.727	ppb	4.6304	0.5	6134.61
Be 313.042	3.8982	ppb	0.0114	0.3	2843.28
Ca 370.602	37044	ppb	136.9	0.4	61845
Cd 226.502	0.9309	ppb	0.1587	17.0	399.868
Co 228.615	339.740	ppb	1.3340	0.4	1403.99
Cr 267.716	102.579	ppb	0.7406	0.7	1764.96
Cu 324.754	842.350	ppb	11.5088	1.4	25990.7
Fe 271.441	244802	ppb	566.906	0.2	135544
K 766.491	7287.08	ppb	28.0708	0.4	150332
Mg 279.078	62171.2	ppb	183.484	0.3	83079.3
Mn 257.610	6032.69	ppb	17.0649	0.3	500677
Mo 202.032	3.8846	ppb	1.6458	42.4	7.5226
Na 330.237	643.223	ppb	240.778	37.4	-49.6478
Ni 231.604	225.102	ppb	2.1127	0.9	250.461
Pb 220.353	24.7287	ppb	7.7572	31.4	0.3562
Sb 206.834	-7.3494	ppb	6.0373	82.1	7.3142
Se 196.026	9.1252	ppb	7.8066	85.6	6.0297
Si 288.158	2710.05	ppb	15.2665	0.6	13655.6

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	7.5714	ppb	8.8575	117.0	2.9068
Sr 216.596	303.234	ppb	1.7530	0.6	920.032
Ti 334.941	10029.7	ppb	29.3558	0.3	889839
Tl 190.794	10.6427	ppb	11.1588	104.8	-8.3910
V 292.401	789.666	ppb	3.4618	0.4	8081.14
Zn 206.200	454.028	ppb	3.6699	0.8	250.939

680-167559-a-18-b (Samp) 4/19/2019, 9:15:03 PM Rack 3, Tube 13

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	4.1564	1.3204u	1.0776u
Al 308.215	236703	237802	236313
As 188.980	24.8225	19.6030	46.6025
B 249.678	13.3612u	15.2914u	14.8467u
Ba 389.178	1194.53	1200.63	1189.20
Be 313.042	4.6589	4.6612	4.6669
Ca 370.602	37919	38078	37853
Cd 226.502	1.6894	1.3186	0.8022
Co 228.615	371.142	374.488	375.937
Cr 267.716	586.159	588.244	583.737
Cu 324.754	537.744	538.734	538.778
Fe 271.441	431091	432652	429975
K 766.491	11611.6	11643.4	11596.1
Mg 279.078	66601.8	66799.7	66464.3
Mn 257.610	13421.5	13492.4	13412.8
Mo 202.032	3.4667	6.2339	4.9743
Na 330.237	2279.74u	2350.23u	1873.67u
Ni 231.604	202.684	200.947	202.550
Pb 220.353	163.752	165.304	151.736
Sb 206.834	-10.4129	-16.1812	-9.3158
Se 196.026	2.0232	-10.1013	-4.6514
Si 288.158	3635.37	3630.55	3606.18
Sn 189.925	11.2299	8.5368	27.5471
Sr 216.596	223.729	221.914	224.399
Ti 334.941	7008.77	7036.04	6963.44
Tl 190.794	32.7665u	34.1943u	-1.0054u
V 292.401	1284.00	1287.02	1285.09
Zn 206.200	515.756	524.739	521.686

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.1848	ppb	1.7118	78.3	-35.6008
Al 308.215	236939	ppb	772.460	0.3	463734
As 188.980	30.3426	ppb	14.3212	47.2	7.6235
B 249.678	14.4998	ppb	1.0108	7.0	-352.715
Ba 389.178	1194.79	ppb	5.7181	0.5	7736.09
Be 313.042	4.6623	ppb	0.0041	0.1	3473.44
Ca 370.602	37950	ppb	115.9	0.3	63100
Cd 226.502	1.2701	ppb	0.4456	35.1	698.378
Co 228.615	373.856	ppb	2.4597	0.7	1512.29
Cr 267.716	586.047	ppb	2.2553	0.4	9876.71
Cu 324.754	538.419	ppb	0.5847	0.1	16815.4
Fe 271.441	431239	ppb	1344.34	0.3	238751
K 766.491	11617.0	ppb	24.1379	0.2	239480

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	66621.9	ppb	168.585	0.3	88934.4
Mn 257.610	13442.2	ppb	43.6339	0.3	1114993
Mo 202.032	4.8916	ppb	1.3855	28.3	6.9404
Na 330.237	2167.88	ppb	257.216	11.9	10.8014
Ni 231.604	202.060	ppb	0.9666	0.5	224.605
Pb 220.353	160.264	ppb	7.4259	4.6	45.7833
Sb 206.834	-11.9699	ppb	3.6881	30.8	10.0213
Se 196.026	-4.2432	ppb	6.0726	143.1	4.9792
Si 288.158	3624.04	ppb	15.6487	0.4	17780.1
Sn 189.925	15.7713	ppb	10.2867	65.2	4.9792
Sr 216.596	223.348	ppb	1.2859	0.6	708.654
Ti 334.941	7002.75	ppb	36.6730	0.5	621343
Tl 190.794	21.9851	ppb	19.9232	90.6	-12.3907
V 292.401	1285.37	ppb	1.5315	0.1	13117.9
Zn 206.200	520.727	ppb	4.5674	0.9	287.888

680-167559-a-19-b (Samp)

4/19/2019, 9:19:15 PM

Rack 3, Tube 14

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	2.5088u	1.3979u	1.4486u
Al 308.215	266951	267398	266929
As 188.980	34.6339	6.3000	20.6281
B 249.678	11.2821u	10.0882u	13.1378u
Ba 389.178	1784.28	1781.46	1777.44
Be 313.042	4.0239	4.0314	4.0504
Ca 370.602	53187	53235	53165
Cd 226.502	2.1464	2.9101	2.3598
Co 228.615	335.898	336.844	337.400
Cr 267.716	459.726	460.611	459.910
Cu 324.754	1056.35	1050.63	1035.92
Fe 271.441	444901	445806	445615
K 766.491	32481.1	32521.1	32542.4
Mg 279.078	138874	138856	138775
Mn 257.610	6227.18	6226.17	6218.94
Mo 202.032	10.3766	14.1502	10.5662
Na 330.237	2231.52u	2480.78u	2476.78u
Ni 231.604	357.949	359.784	362.812
Pb 220.353	57.8821	48.0897	67.3115
Sb 206.834	-6.9239	-0.9886	-15.9070
Se 196.026	-24.3310u	-14.3934u	-6.2683
Si 288.158	2152.76	2155.14	2157.10
Sn 189.925	9.3483	7.0146	10.1513
Sr 216.596	284.312	283.345	280.770
Ti 334.941	14676.9	14688.7	14711.5
Tl 190.794	21.1324u	7.4228u	20.9097u
V 292.401	1427.34	1426.57	1426.97
Zn 206.200	671.653	666.385	663.379

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.7851	ppb	0.6273	35.1	-72.8707
Al 308.215	267093	ppb	264.702	0.1	522722
As 188.980	20.5207	ppb	14.1673	69.0	4.9714
B 249.678	11.5027	ppb	1.5367	13.4	-386.952

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1781.06	ppb	3.4417	0.2	11506.9
Be 313.042	4.0352	ppb	0.0137	0.3	2973.13
Ca 370.602	53196	ppb	35.48	0.1	88616
Cd 226.502	2.4721	ppb	0.3941	15.9	733.937
Co 228.615	336.714	ppb	0.7597	0.2	1422.93
Cr 267.716	460.082	ppb	0.4668	0.1	7764.86
Cu 324.754	1047.63	ppb	10.5393	1.0	32241.2
Fe 271.441	445441	ppb	476.801	0.1	246612
K 766.491	32514.9	ppb	31.1089	0.1	669657
Mg 279.078	138835	ppb	52.4085	0.0	185573
Mn 257.610	6224.09	ppb	4.4945	0.1	517037
Mo 202.032	11.6977	ppb	2.1261	18.2	18.2450
Na 330.237	2396.36	ppb	142.771	6.0	-54.2778
Ni 231.604	360.181	ppb	2.4558	0.7	402.020
Pb 220.353	57.7611	ppb	9.6115	16.6	5.0249
Sb 206.834	-7.9398	ppb	7.5109	94.6	11.1162
Se 196.026	-14.9976	ppb	9.0465	60.3	2.3275
Si 288.158	2155.00	ppb	2.1725	0.1	11286.6
Sn 189.925	8.8381	ppb	1.6294	18.4	3.2270
Sr 216.596	282.809	ppb	1.8309	0.6	883.023
Ti 334.941	14692.4	ppb	17.5598	0.1	1303653
Tl 190.794	16.4883	ppb	7.8517	47.6	-15.8340
V 292.401	1426.96	ppb	0.3838	0.0	14593.7
Zn 206.200	667.139	ppb	4.1881	0.6	368.786

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Rack 3, Tube 15

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.7990u	1.1720u	3.1184
Al 308.215	210622	211289	211441
As 188.980	30.6724	29.4703	15.3435
B 249.678	17.3947u	18.3008u	18.5409u
Ba 389.178	1197.69	1200.74	1199.31
Be 313.042	4.9629	4.9598	4.9772
Ca 370.602	39492	39647	39672
Cd 226.502	2.7154	3.0287	2.7208
Co 228.615	212.335	214.730	215.403
Cr 267.716	444.870	447.053	446.208
Cu 324.754	612.739	605.858	614.439
Fe 271.441	406243	407968	407365
K 766.491	20195.0	20237.7	20249.8
Mg 279.078	62891.6	63031.8	63051.2
Mn 257.610	5779.25	5805.12	5800.46
Mo 202.032	8.0458	6.3151	4.8526
Na 330.237	1141.35u	1074.34u	1430.88u
Ni 231.604	189.348	193.404	195.274
Pb 220.353	737.069	746.702	755.793
Sb 206.834	-15.1524	-17.8019	-14.5657
Se 196.026	11.1260	0.7567	5.4758
Si 288.158	3111.76	3122.47	3119.60
Sn 189.925	16.7905	19.2508	8.0796
Sr 216.596	204.720	203.483	201.856
Ti 334.941	9693.10	9720.31	9718.01

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Label	Replicates Concentration		
Tl 190.794	21.0669u	22.5066u	6.6966u
V 292.401	1293.17	1297.34	1292.05
Zn 206.200	1297.44	1286.49	1286.81

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.0298	ppb	0.9935	48.9	-53.0342
Al 308.215	211117	ppb	435.476	0.2	413223
As 188.980	25.1621	ppb	8.5244	33.9	6.3140
B 249.678	18.0788	ppb	0.6045	3.3	-302.522
Ba 389.178	1199.25	ppb	1.5302	0.1	7749.44
Be 313.042	4.9666	ppb	0.0093	0.2	3719.35
Ca 370.602	39604	ppb	97.20	0.2	65847
Cd 226.502	2.8216	ppb	0.1793	6.4	677.995
Co 228.615	214.156	ppb	1.6130	0.8	900.510
Cr 267.716	446.043	ppb	1.1007	0.2	7522.85
Cu 324.754	611.012	ppb	4.5435	0.7	19009.7
Fe 271.441	407192	ppb	875.259	0.2	225434
K 766.491	20227.5	ppb	28.8157	0.1	416755
Mg 279.078	62991.5	ppb	87.0718	0.1	84162.0
Mn 257.610	5794.94	ppb	13.7858	0.2	481074
Mo 202.032	6.4045	ppb	1.5985	25.0	9.7855
Na 330.237	1215.52	ppb	189.487	15.6	-47.2726
Ni 231.604	192.675	ppb	3.0294	1.6	214.210
Pb 220.353	746.521	ppb	9.3632	1.3	267.993
Sb 206.834	-15.8400	ppb	1.7242	10.9	7.7430
Se 196.026	5.7861	ppb	5.1916	89.7	6.0464
Si 288.158	3117.94	ppb	5.5401	0.2	15546.5
Sn 189.925	14.7070	ppb	5.8698	39.9	4.7102
Sr 216.596	203.353	ppb	1.4366	0.7	647.416
Ti 334.941	9710.47	ppb	15.0900	0.2	861526
Tl 190.794	16.7567	ppb	8.7420	52.2	-14.2121
V 292.401	1294.19	ppb	2.7851	0.2	13219.8
Zn 206.200	1290.25	ppb	6.2326	0.5	712.578

680-167559-a-21-b (Samp)

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Rack 3, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1914u	2.3853u	0.1194u
Al 308.215	221223	221892	219806
As 188.980	15.8239	17.0461	21.2489
B 249.678	16.3259u	16.4969u	16.8557u
Ba 389.178	1142.32	1142.72	1136.23
Be 313.042	6.3615	6.3946	6.3435
Ca 370.602	27538	27657	27463
Cd 226.502	1.8653	2.9571	1.9330
Co 228.615	192.719	192.403	193.046
Cr 267.716	396.420	399.777	395.554
Cu 324.754	595.094	596.952	587.520
Fe 271.441	498383	503035	499331
K 766.491	22570.4	22750.8	22526.7
Mg 279.078	52871.5	53140.0	52700.4
Mn 257.610	5014.54	5050.32	5007.58
Mo 202.032	1.4016u	6.3157	5.4343

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Label	Replicates Concentration		
Na 330.237	1303.55u	922.169u	951.382u
Ni 231.604	177.791	181.127	180.392
Pb 220.353	238.118	220.052	241.423
Sb 206.834	-11.6338	-14.7173	-18.2184
Se 196.026	-12.2708	-21.0700u	-3.3250
Si 288.158	3225.48	3247.78	3228.86
Sn 189.925	7.3212	28.1457	16.1492
Sr 216.596	149.692	151.868	148.233
Ti 334.941	9416.37	9448.99	9345.00
Tl 190.794	27.6780u	4.2737u	23.4943u
V 292.401	1598.38	1610.14	1596.03
Zn 206.200	1456.77	1463.94	1449.34

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.2320	ppb	1.1335	92.0	-94.5502
Al 308.215	220974	ppb	1065.33	0.5	432514
As 188.980	18.0396	ppb	2.8457	15.8	4.1693
B 249.678	16.5595	ppb	0.2704	1.6	-408.017
Ba 389.178	1140.42	ppb	3.6378	0.3	7408.63
Be 313.042	6.3665	ppb	0.0259	0.4	4854.32
Ca 370.602	27553	ppb	97.89	0.4	45530
Cd 226.502	2.2518	ppb	0.6117	27.2	814.014
Co 228.615	192.723	ppb	0.3214	0.2	811.170
Cr 267.716	397.250	ppb	2.2306	0.6	6712.49
Cu 324.754	593.189	ppb	4.9964	0.8	18484.7
Fe 271.441	500250	ppb	2458.48	0.5	276948
K 766.491	22616.0	ppb	118.798	0.5	465978
Mg 279.078	52904.0	ppb	221.568	0.4	70677.7
Mn 257.610	5024.15	ppb	22.9317	0.5	417196
Mo 202.032	4.3839	ppb	2.6200	59.8	5.2360
Na 330.237	1059.03	ppb	212.258	20.0	-54.2975
Ni 231.604	179.770	ppb	1.7530	1.0	199.754
Pb 220.353	233.197	ppb	11.5040	4.9	70.4435
Sb 206.834	-14.8565	ppb	3.2945	22.2	9.2027
Se 196.026	-12.2220	ppb	8.8726	72.6	2.9607
Si 288.158	3234.04	ppb	12.0212	0.4	16074.1
Sn 189.925	17.2054	ppb	10.4524	60.8	5.3415
Sr 216.596	149.931	ppb	1.8290	1.2	502.294
Ti 334.941	9403.46	ppb	53.1827	0.6	834265
Tl 190.794	18.4820	ppb	12.4813	67.5	-18.0699
V 292.401	1601.52	ppb	7.5628	0.5	16354.5
Zn 206.200	1456.68	ppb	7.2972	0.5	804.655

680-167559-a-22-d (Samp)

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Rack 3, Tube 17

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	2.4913	1.6868u	0.7730u
Al 308.215	206760	206506	207207
As 188.980	5.5986	11.6954	9.6342
B 249.678	8.3065u	9.9113u	9.0456u
Ba 389.178	1581.78	1581.68	1584.31
Be 313.042	3.8462	3.8322	3.8390
Ca 370.602	45653	45644	45825

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	2.0105	1.8439	2.1241
Co 228.615	216.114	216.256	216.063
Cr 267.716	275.642	277.014	275.779
Cu 324.754	688.977	692.391	687.262
Fe 271.441	381200	380493	383117
K 766.491	36834.9	36716.9	36916.4
Mg 279.078	106333	106294	106536
Mn 257.610	4812.61	4806.67	4829.00
Mo 202.032	5.0971	4.8418	4.9538
Na 330.237	1621.50u	1728.84u	1369.55u
Ni 231.604	198.224	194.477	195.713
Pb 220.353	42.8959	60.9827	50.6908
Sb 206.834	-3.7019	-15.1816	-7.9762
Se 196.026	3.0528	-11.5246u	-21.2026u
Si 288.158	2404.60	2399.44	2412.73
Sn 189.925	4.3099	22.0061	12.3957
Sr 216.596	263.793	262.495	263.194
Ti 334.941	12185.5	12177.0	12201.4
Tl 190.794	16.7691u	37.0388u	23.8726u
V 292.401	1148.12	1146.93	1151.44
Zn 206.200	653.325	655.637	659.337

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.6503	ppb	0.8597	52.1	-65.1270
Al 308.215	206824	ppb	354.773	0.2	404821
As 188.980	8.9761	ppb	3.1012	34.6	2.0709
B 249.678	9.0878	ppb	0.8032	8.8	-337.137
Ba 389.178	1582.59	ppb	1.4911	0.1	10195.8
Be 313.042	3.8391	ppb	0.0070	0.2	2806.39
Ca 370.602	45707	ppb	101.8	0.2	76131
Cd 226.502	1.9928	ppb	0.1409	7.1	626.305
Co 228.615	216.144	ppb	0.0997	0.0	927.668
Cr 267.716	276.145	ppb	0.7555	0.3	4679.03
Cu 324.754	689.543	ppb	2.6107	0.4	21384.6
Fe 271.441	381604	ppb	1357.89	0.4	211269
K 766.491	36822.8	ppb	100.331	0.3	758277
Mg 279.078	106388	ppb	130.078	0.1	142207
Mn 257.610	4816.09	ppb	11.5622	0.2	400115
Mo 202.032	4.9642	ppb	0.1279	2.6	7.6867
Na 330.237	1573.30	ppb	184.431	11.7	-51.4880
Ni 231.604	196.138	ppb	1.9092	1.0	218.088
Pb 220.353	51.5231	ppb	9.0721	17.6	5.3169
Sb 206.834	-8.9532	ppb	5.8019	64.8	9.2527
Se 196.026	-9.8914	ppb	12.2099	123.4	2.8910
Si 288.158	2405.59	ppb	6.7032	0.3	12337.7
Sn 189.925	12.9039	ppb	8.8591	68.7	4.2545
Sr 216.596	263.161	ppb	0.6499	0.2	818.963
Ti 334.941	12188.0	ppb	12.3724	0.1	1081411
Tl 190.794	25.8935	ppb	10.2848	39.7	-11.0884
V 292.401	1148.83	ppb	2.3361	0.2	11751.8
Zn 206.200	656.100	ppb	3.0330	0.5	362.655

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167544-a-1-a (Samp) **4/19/2019, 9:36:05 PM** **Rack 3, Tube 18****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.8390	1.2299	0.9185
Al 308.215	17363.5	17408.8	17404.4
As 188.980	6.6792	2.7490	14.6436
B 249.678	52.5186	51.9674	52.9032
Ba 389.178	809.870	812.658	810.432
Be 313.042	0.5351	0.5045	0.5340
Ca 370.602	16599	16696	16679
Cd 226.502	1.5907	1.0668	1.9428
Co 228.615	8.3765	10.2305	8.5554
Cr 267.716	48.4422	48.9820	49.7402
Cu 324.754	211.057	210.216	208.250
Fe 271.441	34449.7	34529.1	34462.3
K 766.491	3660.03	3673.72	3670.09
Mg 279.078	3793.61	3800.96	3813.88
Mn 257.610	8978.47	9053.18	9013.48
Mo 202.032	64.2926	63.2446	64.3416
Na 330.237	3426.25	3274.54	3458.84
Ni 231.604	31.2318	31.1340	26.8912
Pb 220.353	15.0631	22.4203	23.4551
Sb 206.834	-1.5648	-1.7428	-2.4854u
Se 196.026	7.9868	2.1100	-10.2699u
Si 288.158	1857.57	1863.82	1862.74
Sn 189.925	16.1405	25.5577	28.3658
Sr 216.596	122.878	122.198	121.895
Ti 334.941	344.191	343.111	340.704
Tl 190.794	-7.7145u	-12.1748u	-7.9699u
V 292.401	39.6535	40.0347	39.8018
Zn 206.200	514.982	514.308	524.157

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9958	ppb	0.2066	20.7	-0.7909
Al 308.215	17392.2	ppb	24.9524	0.1	34231.3
As 188.980	8.0239	ppb	6.0602	75.5	2.7474
B 249.678	52.4631	ppb	0.4704	0.9	317.781
Ba 389.178	810.987	ppb	1.4743	0.2	5081.16
Be 313.042	0.5245	ppb	0.0173	3.3	94.4969
Ca 370.602	16658	ppb	51.41	0.3	27959
Cd 226.502	1.5334	ppb	0.4408	28.7	77.6781
Co 228.615	9.0541	ppb	1.0227	11.3	24.7451
Cr 267.716	49.0548	ppb	0.6521	1.3	850.831
Cu 324.754	209.841	ppb	1.4405	0.7	6799.25
Fe 271.441	34480.4	ppb	42.6486	0.1	19104.5
K 766.491	3667.95	ppb	7.0922	0.2	75764.9
Mg 279.078	3802.82	ppb	10.2609	0.3	5012.37
Mn 257.610	9015.04	ppb	37.3835	0.4	747386
Mo 202.032	63.9596	ppb	0.6197	1.0	111.534
Na 330.237	3386.54	ppb	98.3536	2.9	118.682
Ni 231.604	29.7523	ppb	2.4783	8.3	31.6012
Pb 220.353	20.3128	ppb	4.5757	22.5	7.7085
Sb 206.834	-1.9310	ppb	0.4883	25.3	6.0239
Se 196.026	-0.0577	ppb	9.3194	16153.9	3.7027
Si 288.158	1861.37	ppb	3.3422	0.2	9249.32

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	23.3547	ppb	6.4035	27.4	6.8962
Sr 216.596	122.324	ppb	0.5035	0.4	367.485
Ti 334.941	342.668	ppb	1.7851	0.5	30381.6
Tl 190.794	-9.2864	ppb	2.5047	27.0	-3.2670
V 292.401	39.8300	ppb	0.1922	0.5	390.797
Zn 206.200	517.816	ppb	5.5024	1.1	285.704

680-167544-c-2-a (Samp) 4/19/2019, 9:40:18 PM Rack 3, Tube 19

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	9.9250	9.7293	11.0667
Al 308.215	17999.0	17958.3	18131.5
As 188.980	11.8593	19.0939	13.0917
B 249.678	50.1385	50.0410	51.4099
Ba 389.178	1234.92	1230.23	1239.57
Be 313.042	1.1840	1.1929	1.2051
Ca 370.602	17331	17287	17463
Cd 226.502	2.4777	2.0989	2.3480
Co 228.615	10.3047	9.6544	8.8269
Cr 267.716	50.3393	49.9850	51.0675
Cu 324.754	883.805	890.804	898.249
Fe 271.441	59362.4	59137.0	59767.4
K 766.491	2352.90	2347.74	2371.11
Mg 279.078	4565.33	4549.35	4598.33
Mn 257.610	3463.99	3453.55	3484.45
Mo 202.032	15.2815	12.9071	14.1227
Na 330.237	603.003u	1027.30	1364.62
Ni 231.604	24.9742	26.0848	28.1786
Pb 220.353	80.8704	77.2832	87.5438
Sb 206.834	14.5514	21.4487	28.2493
Se 196.026	25.1921	22.8476	12.2310
Si 288.158	2777.65	2766.30	2801.18
Sn 189.925	78.3442	82.5979	69.0647
Sr 216.596	179.887	178.779	179.626
Ti 334.941	294.657	296.123	296.972
Tl 190.794	-3.9696u	-3.7926u	-14.7117u
V 292.401	35.5873	34.5609	35.8652
Zn 206.200	1496.74	1498.32	1514.10

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.2403	ppb	0.7223	7.1	265.051
Al 308.215	18029.6	ppb	90.5556	0.5	35478.1
As 188.980	14.6817	ppb	3.8705	26.4	4.4637
B 249.678	50.5298	ppb	0.7638	1.5	278.733
Ba 389.178	1234.91	ppb	4.6658	0.4	7757.99
Be 313.042	1.1940	ppb	0.0106	0.9	638.494
Ca 370.602	17360	ppb	91.85	0.5	29008
Cd 226.502	2.3082	ppb	0.1925	8.3	126.458
Co 228.615	9.5954	ppb	0.7407	7.7	26.3860
Cr 267.716	50.4639	ppb	0.5519	1.1	868.102
Cu 324.754	890.953	ppb	7.2234	0.8	27433.9
Fe 271.441	59422.3	ppb	319.457	0.5	32911.1
K 766.491	2357.25	ppb	12.2753	0.5	48833.6

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	4571.01	ppb	24.9772	0.5	6095.91
Mn 257.610	3467.33	ppb	15.7189	0.5	287518
Mo 202.032	14.1038	ppb	1.1873	8.4	27.0989
Na 330.237	998.306	ppb	381.634	38.2	42.1824
Ni 231.604	26.4125	ppb	1.6271	6.2	27.8543
Pb 220.353	81.8991	ppb	5.2071	6.4	29.9200
Sb 206.834	21.4164	ppb	6.8490	32.0	14.5475
Se 196.026	20.0902	ppb	6.9065	34.4	7.0818
Si 288.158	2781.71	ppb	17.7912	0.6	13540.6
Sn 189.925	76.6689	ppb	6.9204	9.0	20.3703
Sr 216.596	179.431	ppb	0.5793	0.3	537.633
Ti 334.941	295.917	ppb	1.1715	0.4	26236.7
Tl 190.794	-7.4913	ppb	6.2536	83.5	-5.1574
V 292.401	35.3378	ppb	0.6870	1.9	349.924
Zn 206.200	1503.05	ppb	9.6015	0.6	829.469

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Rack 3, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.7196	1.5464	0.6990
Al 308.215	17524.5	17431.5	17531.4
As 188.980	9.9981	23.6700	3.6571
B 249.678	54.8096	54.4477	54.9692
Ba 389.178	889.070	879.749	882.833
Be 313.042	0.6372	0.6097	0.5948
Ca 370.602	16951	16807	16949
Cd 226.502	1.8227	2.3712	2.1821
Co 228.615	9.2354	7.0513	7.2013
Cr 267.716	46.3308	46.6756	46.0229
Cu 324.754	284.466	286.164	286.015
Fe 271.441	31618.1	31403.8	31524.5
K 766.491	3464.87	3447.28	3471.81
Mg 279.078	3472.69	3446.47	3456.43
Mn 257.610	8535.35	8481.85	8555.47
Mo 202.032	61.4775	62.1283	59.7605
Na 330.237	3161.15	2907.74	2965.79
Ni 231.604	23.1813	26.6189	29.3601
Pb 220.353	24.6465	31.5655	23.8374
Sb 206.834	1.8854	4.5252	12.0383
Se 196.026	18.9300	36.3431	20.3690
Si 288.158	2225.38	2214.68	2223.45
Sn 189.925	29.0218	20.3251	20.6898
Sr 216.596	131.994	133.024	131.242
Ti 334.941	346.010	346.935	344.749
Tl 190.794	3.4114	-6.6756u	-6.3796u
V 292.401	35.0911	34.3898	35.8791
Zn 206.200	652.610	649.099	661.440

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.3217	ppb	0.5462	41.3	8.6887
Al 308.215	17495.8	ppb	55.8002	0.3	34433.6
As 188.980	12.4417	ppb	10.2278	82.2	3.9352
B 249.678	54.7422	ppb	0.2672	0.5	336.374

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	883.884	ppb	4.7482	0.5	5537.83
Be 313.042	0.6139	ppb	0.0215	3.5	166.821
Ca 370.602	16902	ppb	82.33	0.5	28365
Cd 226.502	2.1253	ppb	0.2786	13.1	80.7797
Co 228.615	7.8294	ppb	1.2200	15.6	20.0097
Cr 267.716	46.3431	ppb	0.3265	0.7	804.496
Cu 324.754	285.548	ppb	0.9404	0.3	9091.88
Fe 271.441	31515.5	ppb	107.420	0.3	17463.2
K 766.491	3461.32	ppb	12.6436	0.4	71505.3
Mg 279.078	3458.53	ppb	13.2371	0.4	4556.92
Mn 257.610	8524.22	ppb	38.0514	0.4	706696
Mo 202.032	61.1221	ppb	1.2233	2.0	106.780
Na 330.237	3011.56	ppb	132.759	4.4	107.065
Ni 231.604	26.3868	ppb	3.0959	11.7	27.8266
Pb 220.353	26.6831	ppb	4.2475	15.9	10.1954
Sb 206.834	6.1496	ppb	5.2678	85.7	8.8216
Se 196.026	25.2141	ppb	9.6649	38.3	8.4085
Si 288.158	2221.17	ppb	5.7032	0.3	10928.6
Sn 189.925	23.3455	ppb	4.9191	21.1	6.8939
Sr 216.596	132.087	ppb	0.8949	0.7	395.691
Ti 334.941	345.898	ppb	1.0972	0.3	30667.2
Tl 190.794	-3.2146	ppb	5.7402	178.6	-1.7879
V 292.401	35.1200	ppb	0.7451	2.1	342.943
Zn 206.200	654.383	ppb	6.3585	1.0	361.065

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	506.328	514.982	515.276
Al 308.215	10197.2	10273.9	10256.7
As 188.980	504.446	516.803	525.184
B 249.678	513.470	522.103	525.734
Ba 389.178	483.962	489.400	489.739
Be 313.042	528.381	532.729	533.237
Ca 370.602	10097	10194	10205
Cd 226.502	502.578	509.653	509.016
Co 228.615	507.105	514.164	510.840
Cr 267.716	501.883	507.229	507.574
Cu 324.754	508.789	515.878	516.045
Fe 271.441	10139.8	10245.7	10308.4
K 766.491	9864.72	9935.71	9960.76
Mg 279.078	10259.9	10354.3	10344.2
Mn 257.610	506.425	511.588	512.133
Mo 202.032	499.399	503.586	504.688
Na 330.237	10603.2	10690.0	10560.2
Ni 231.604	504.614	510.607	517.585
Pb 220.353	514.306	498.177	509.573
Sb 206.834	479.790	496.183	494.163
Se 196.026	518.437	527.783	529.323
Si 288.158	5207.67	5243.33	5239.47
Sn 189.925	517.981	494.335	503.595
Sr 216.596	493.955	502.077	502.926
Ti 334.941	500.557	505.367	505.843

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Label	Replicates Concentration		
Tl 190.794	500.799	494.652	510.789
V 292.401	508.224	512.329	513.385
Zn 206.200	1035.75	1043.60	1034.34

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	512.195	ppb	5.0835	1.0	15515.0	102.43910
Al 308.215	10242.6	ppb	40.2557	0.4	20261.7	102.42605
As 188.980	515.477	ppb	10.4320	2.0	138.236	103.09550
B 249.678	520.436	ppb	6.2998	1.2	3545.94	104.08712
Ba 389.178	487.701	ppb	3.2421	0.7	3046.33	97.54012
Be 313.042	531.449	ppb	2.6693	0.5	428406	106.28982
Ca 370.602	10165	ppb	59.64	0.6	17024	101.65342
Cd 226.502	507.082	ppb	3.9140	0.8	6529.27	101.41642
Co 228.615	510.703	ppb	3.5313	0.7	2010.46	102.14056
Cr 267.716	505.562	ppb	3.1908	0.6	8471.86	101.11248
Cu 324.754	513.571	ppb	4.1420	0.8	15999.4	102.71413
Fe 271.441	10231.3	ppb	85.1934	0.8	5701.48	102.26188
K 766.491	9920.40	ppb	49.8154	0.5	201832	99.20397
Mg 279.078	10319.5	ppb	51.8561	0.5	13814.9	103.19453
Mn 257.610	510.049	ppb	3.1501	0.6	42361.5	102.00978
Mo 202.032	502.557	ppb	2.7900	0.6	851.951	100.51149
Na 330.237	10617.8	ppb	66.1135	0.6	307.595	106.17802
Ni 231.604	510.935	ppb	6.4918	1.3	570.972	102.18705
Pb 220.353	507.352	ppb	8.2911	1.6	192.388	101.47039
Sb 206.834	490.045	ppb	8.9386	1.8	183.827	98.00901
Se 196.026	525.181	ppb	5.8909	1.1	101.815	105.03622
Si 288.158	5230.16	ppb	19.5667	0.4	25080.6	104.60314
Sn 189.925	505.304	ppb	11.9153	2.4	128.702	101.06073
Sr 216.596	499.652	ppb	4.9524	1.0	1459.51	99.93050
Ti 334.941	503.923	ppb	2.9241	0.6	44703.0	100.78452
Tl 190.794	502.080	ppb	8.1447	1.6	118.674	100.41600
V 292.401	511.313	ppb	2.7265	0.5	5150.80	102.26250
Zn 206.200	1037.89	ppb	4.9907	0.5	572.407	103.78945

Cont Calib Blank (CCB) 4/19/2019, 9:52:57 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9184u	0.5307	-0.1321u
Al 308.215	6.2415	7.4985	4.7303
As 188.980	0.4002	8.2054	13.1579
B 249.678	13.3615	11.3325	9.8459
Ba 389.178	-1.1019u	0.3472	-0.3123u
Be 313.042	0.0627	0.0166	0.0248
Ca 370.602	3.657	-3.697u	-3.856u
Cd 226.502	0.3535	-0.1999u	0.2132
Co 228.615	0.6146	0.5417	0.7520
Cr 267.716	-0.0824u	-0.4618u	-0.1769u
Cu 324.754	1.0869	-1.4238u	0.1862
Fe 271.441	-0.9761u	17.7368	9.8080
K 766.491	1.7874	0.3929	-0.3377
Mg 279.078	-2.0993u	4.0480	0.4554
Mn 257.610	0.2773	0.2299	0.1078
Mo 202.032	0.4705	1.2645	1.0592

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Label	Replicates Concentration		
Na 330.237	113.664	183.155	12.1200
Ni 231.604	-3.7419u	-1.8301u	-1.7822u
Pb 220.353	-2.3584u	0.5234	3.9739
Sb 206.834	-8.2885u	-2.1397u	1.5368
Se 196.026	-7.8722u	-6.7186u	3.2167
Si 288.158	16.7404	14.6497	12.7312
Sn 189.925	-3.0179u	4.7463	-8.8865u
Sr 216.596	1.2987	0.2887	-0.5334u
Ti 334.941	0.4656	0.3339	0.2400
Tl 190.794	1.0633	-2.4058u	-7.5939u
V 292.401	0.5954	-0.4329u	-0.5208u
Zn 206.200	-4.0510u	-1.1955u	2.6522

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1732	ppb	0.7254	418.7	-45.9831	-0.17324
Al 308.215	6.1568	ppb	1.3860	22.5	219.177	6.15677
As 188.980	7.2545	ppb	6.4318	88.7	2.6432	7.25451
B 249.678	11.5133	ppb	1.7648	15.3	73.0483	11.51331
Ba 389.178	-0.3557	ppb	0.7255	204.0	-38.8730	-0.35567
Be 313.042	0.0347	ppb	0.0246	70.8	-298.899	0.03470
Ca 370.602	-1.298	ppb	4.292	330.6	22.92	-1.29839
Cd 226.502	0.1222	ppb	0.2877	235.3	5.5278	0.12224
Co 228.615	0.6361	ppb	0.1068	16.8	-9.8524	0.63609
Cr 267.716	-0.2404	ppb	0.1975	82.2	9.5350	-0.24036
Cu 324.754	-0.0502	ppb	1.2720	2532.6	434.575	-0.05022
Fe 271.441	8.8562	ppb	9.3927	106.1	22.1523	8.85622
K 766.491	0.6142	ppb	1.0797	175.8	281.992	0.61418
Mg 279.078	0.8013	ppb	3.0882	385.4	22.7631	0.80134
Mn 257.610	0.2050	ppb	0.0875	42.7	43.5610	0.20499
Mo 202.032	0.9314	ppb	0.4122	44.3	5.5758	0.93139
Na 330.237	102.980	ppb	86.0164	83.5	40.3667	102.97953
Ni 231.604	-2.4514	ppb	1.1179	45.6	-4.5221	-2.45137
Pb 220.353	0.7130	ppb	3.1704	444.7	1.1258	0.71297
Sb 206.834	-2.9638	ppb	4.9642	167.5	4.9952	-2.96382
Se 196.026	-3.7914	ppb	6.0965	160.8	2.0070	-3.79138
Si 288.158	14.7071	ppb	2.0052	13.6	604.605	14.70710
Sn 189.925	-2.3860	ppb	6.8383	286.6	0.3903	-2.38604
Sr 216.596	0.3513	ppb	0.9177	261.2	8.1952	0.35130
Ti 334.941	0.3465	ppb	0.1133	32.7	5.3752	0.34649
Tl 190.794	-2.9788	ppb	4.3570	146.3	-2.1323	-2.97882
V 292.401	-0.1194	ppb	0.6206	519.7	-14.0416	-0.11941
Zn 206.200	-0.8648	ppb	3.3638	389.0	-0.5826	-0.86479

680-167544-c-4-a (Samp)

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Rack 3, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9577u	-0.6042u	-1.1429u
Al 308.215	254295	254025	254713
As 188.980	25.2157	30.4839	31.7663
B 249.678	14.4600	14.6590	14.8647
Ba 389.178	370.277	372.253	375.837
Be 313.042	1.7493	1.7483	1.7562
Ca 370.602	596010	599908	600851

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Label	Replicates Concentration		
Cd 226.502	0.2077	-0.5321	0.4722
Co 228.615	13.5861	15.2252	12.6986
Cr 267.716	102.508	102.016	103.206
Cu 324.754	82.9784	82.5224	83.3541
Fe 271.441	56981.4	57655.1	57489.7
K 766.491	1924.50	1926.31	1924.84
Mg 279.078	18295.5	18334.6	18356.5
Mn 257.610	14856.2	14875.1	14904.5
Mo 202.032	9.1885	9.6701	7.7287
Na 330.237	643.773	462.402	797.637
Ni 231.604	20.4365	20.1842	21.9720
Pb 220.353	14.6608	27.9679	14.1432
Sb 206.834	-2.7381	-4.7221u	-1.3601
Se 196.026	6.7931	-15.6188u	1.0864
Si 288.158	5929.13	5939.63	5945.65
Sn 189.925	12.4710	12.6252	12.2381
Sr 216.596	234.715	237.207	233.706
Ti 334.941	869.255	868.110	868.925
Tl 190.794	-10.1209u	-6.6381u	4.9597
V 292.401	145.458	144.121	145.875
Zn 206.200	123.268	125.378	127.293

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9016	ppb	0.2737	30.4	-52.4864
Al 308.215	254344	ppb	346.430	0.1	497740
As 188.980	29.1553	ppb	3.4715	11.9	8.3331
B 249.678	14.6612	ppb	0.2023	1.4	35.9375
Ba 389.178	372.789	ppb	2.8188	0.8	2351.80
Be 313.042	1.7513	ppb	0.0043	0.2	1186.91
Ca 370.602	598923	ppb	2567	0.4	1001508
Cd 226.502	0.0493	ppb	0.5205	1056.9	102.360
Co 228.615	13.8366	ppb	1.2818	9.3	47.7083
Cr 267.716	102.577	ppb	0.5976	0.6	1757.82
Cu 324.754	82.9516	ppb	0.4165	0.5	2958.25
Fe 271.441	57375.4	ppb	351.076	0.6	31778.9
K 766.491	1925.22	ppb	0.9638	0.1	39893.0
Mg 279.078	18328.8	ppb	30.8968	0.2	24333.7
Mn 257.610	14878.6	ppb	24.3310	0.2	1233535
Mo 202.032	8.8624	ppb	1.0110	11.4	18.2656
Na 330.237	634.604	ppb	167.806	26.4	43.2912
Ni 231.604	20.8642	ppb	0.9676	4.6	21.6622
Pb 220.353	18.9240	ppb	7.8365	41.4	5.9345
Sb 206.834	-2.9401	ppb	1.6900	57.5	6.1888
Se 196.026	-2.5798	ppb	11.6470	451.5	3.8724
Si 288.158	5938.13	ppb	8.3624	0.1	28293.1
Sn 189.925	12.4448	ppb	0.1949	1.6	4.1386
Sr 216.596	235.209	ppb	1.8020	0.8	700.224
Ti 334.941	868.763	ppb	0.5891	0.1	77091.6
Tl 190.794	-3.9331	ppb	7.8958	200.8	-1.6922
V 292.401	145.152	ppb	0.9165	0.6	1469.01
Zn 206.200	125.313	ppb	2.0132	1.6	69.1174

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

mb 680-566799/1-a (Samp) 4/19/2019, 10:01:21 PM Rack 3, Tube 22

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0651u	-0.4035u	-1.9066u
Al 308.215	17.2846	23.1523	19.1483
As 188.980	2.3126	5.1437	10.8852
B 249.678	-0.5558u	-0.5840u	-0.5890u
Ba 389.178	1.3446	-1.6864u	-2.4944u
Be 313.042	-0.1300u	-0.1209u	-0.1194u
Ca 370.602	36.38	37.97	39.73
Cd 226.502	0.3696	-0.0621u	-0.2103u
Co 228.615	-0.7150u	1.1439	1.3761
Cr 267.716	0.0281	0.0760	0.4470
Cu 324.754	1.3947	0.8064	0.1425
Fe 271.441	12.3736	2.2013	-15.7954u
K 766.491	11.0098	11.4564	9.8545
Mg 279.078	3.3822	-4.7043u	5.1641
Mn 257.610	1.0302	0.8002	0.8952
Mo 202.032	2.3808	0.2119	0.5745
Na 330.237	187.755	234.162	39.5567
Ni 231.604	0.4487	1.1649	-2.5891u
Pb 220.353	-12.0519u	-3.8886u	-1.2545u
Sb 206.834	-9.6910u	1.1615	1.1981
Se 196.026	-10.6249u	1.8214	20.1801
Si 288.158	16.4796	20.5862	18.6195
Sn 189.925	-9.5244u	-6.6909u	-0.8929u
Sr 216.596	-1.1494u	0.1290	0.0450
Ti 334.941	0.3150	0.2661	0.3004
Tl 190.794	-0.0492u	0.4636	5.1610
V 292.401	0.3020	-0.5128u	0.5350
Zn 206.200	-1.5302u	2.2696	-3.3027u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.1250	ppb	0.7534	67.0	-74.8953
Al 308.215	19.8617	ppb	2.9982	15.1	245.985
As 188.980	6.1138	ppb	4.3679	71.4	2.3387
B 249.678	-0.5763	ppb	0.0179	3.1	-9.7048
Ba 389.178	-0.9454	ppb	2.0239	214.1	-42.5767
Be 313.042	-0.1234	ppb	0.0057	4.6	-426.469
Ca 370.602	38.03	ppb	1.675	4.4	88.68
Cd 226.502	0.0324	ppb	0.3013	929.5	4.3783
Co 228.615	0.6017	ppb	1.1462	190.5	-9.9860
Cr 267.716	0.1837	ppb	0.2293	124.8	16.6301
Cu 324.754	0.7812	ppb	0.6265	80.2	459.757
Fe 271.441	-0.4068	ppb	14.2645	3506.5	17.0100
K 766.491	10.7736	ppb	0.8266	7.7	473.664
Mg 279.078	1.2807	ppb	5.2592	410.7	23.3940
Mn 257.610	0.9085	ppb	0.1156	12.7	101.895
Mo 202.032	1.0557	ppb	1.1618	110.0	5.7857
Na 330.237	153.825	ppb	101.643	66.1	41.7455
Ni 231.604	-0.3251	ppb	1.9931	613.0	-2.1363
Pb 220.353	-5.7317	ppb	5.6297	98.2	-1.3147
Sb 206.834	-2.4438	ppb	6.2763	256.8	5.2004
Se 196.026	3.7922	ppb	15.4968	408.6	3.4366
Si 288.158	18.5618	ppb	2.0539	11.1	621.886

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-5.7027	ppb	4.3998	77.2	-0.4479
Sr 216.596	-0.3252	ppb	0.7151	219.9	6.2129
Ti 334.941	0.2938	ppb	0.0251	8.5	0.7132
Tl 190.794	1.8585	ppb	2.8715	154.5	-0.9739
V 292.401	0.1081	ppb	0.5501	509.1	-11.7119
Zn 206.200	-0.8544	ppb	2.8469	333.2	-0.5768

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.2623	54.9818	54.6922
Al 308.215	5323.55	5340.08	5327.45
As 188.980	115.495	101.109	108.537
B 249.678	215.054	218.181	218.764
Ba 389.178	103.393	104.661	106.204
Be 313.042	56.8591	56.9875	56.8151
Ca 370.602	5283	5302	5282
Cd 226.502	54.8359	54.7630	54.4066
Co 228.615	54.3729	54.7250	55.4448
Cr 267.716	108.033	107.791	108.499
Cu 324.754	110.004	108.835	109.317
Fe 271.441	5345.41	5330.30	5374.39
K 766.491	8053.38	8064.57	8042.62
Mg 279.078	5396.05	5395.48	5380.76
Mn 257.610	439.674	440.025	439.184
Mo 202.032	106.035	107.238	106.368
Na 330.237	5443.79	5377.44	6031.97
Ni 231.604	108.104	106.208	106.107
Pb 220.353	528.202	533.219	530.616
Sb 206.834	53.4871	55.1176	52.3449
Se 196.026	112.968	119.455	112.243
Si 288.158	3.4442	5.9205	6.0448
Sn 189.925	100.255	118.660	113.143
Sr 216.596	103.923	105.304	104.452
Ti 334.941	421.647	422.409	421.141
Tl 190.794	35.7491	29.2346	34.3981
V 292.401	107.962	107.681	107.288
Zn 206.200	108.731	105.464	112.391

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.9788	ppb	0.2851	0.5	1628.42
Al 308.215	5330.36	ppb	8.6423	0.2	10638.1
As 188.980	108.380	ppb	7.1943	6.6	29.6135
B 249.678	217.333	ppb	1.9950	0.9	1476.34
Ba 389.178	104.753	ppb	1.4079	1.3	630.395
Be 313.042	56.8873	ppb	0.0896	0.2	45563.4
Ca 370.602	5289	ppb	11.17	0.2	8874
Cd 226.502	54.6685	ppb	0.2297	0.4	714.106
Co 228.615	54.8476	ppb	0.5463	1.0	207.109
Cr 267.716	108.108	ppb	0.3599	0.3	1823.26
Cu 324.754	109.385	ppb	0.5874	0.5	3751.47
Fe 271.441	5350.04	ppb	22.4051	0.4	2981.32
K 766.491	8053.52	ppb	10.9760	0.1	165816

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5390.76	ppb	8.6664	0.2	7225.33
Mn 257.610	439.627	ppb	0.4224	0.1	36500.8
Mo 202.032	106.547	ppb	0.6211	0.6	183.740
Na 330.237	5617.74	ppb	360.273	6.4	184.153
Ni 231.604	106.806	ppb	1.1249	1.1	118.002
Pb 220.353	530.679	ppb	2.5093	0.5	201.556
Sb 206.834	53.6499	ppb	1.3935	2.6	25.6288
Se 196.026	114.888	ppb	3.9711	3.5	24.4430
Si 288.158	5.1365	ppb	1.4669	28.6	603.172
Sn 189.925	110.686	ppb	9.4452	8.5	28.9680
Sr 216.596	104.560	ppb	0.6970	0.7	311.454
Ti 334.941	421.732	ppb	0.6383	0.2	37399.2
Tl 190.794	33.1273	ppb	3.4382	10.4	6.3913
V 292.401	107.644	ppb	0.3385	0.3	1075.66
Zn 206.200	108.862	ppb	3.4649	3.2	59.9231

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1313	-0.4449u	-0.5163u
Al 308.215	9.2374	6.4117	9.5457
As 188.980	-0.5360u	0.8757	5.3669
B 249.678	9.3599	9.1389	7.7475
Ba 389.178	5.3196	9.6663	8.0968
Be 313.042	-0.1275u	-0.1309u	-0.1333u
Ca 370.602	28820	28610	28806
Cd 226.502	-0.5418u	-0.5759u	-0.0860u
Co 228.615	0.8689	-0.2949u	0.6743
Cr 267.716	0.0877	-0.2599u	-0.0764u
Cu 324.754	0.9229	1.7536	1.8834
Fe 271.441	16.0193	24.9289	26.6905
K 766.491	2473.15	2462.82	2478.54
Mg 279.078	3969.18	3934.17	3948.88
Mn 257.610	0.4333	0.3189	0.3878
Mo 202.032	-1.6197u	0.0281	-1.5784u
Na 330.237	6712.43	6162.46	6258.98
Ni 231.604	-0.5927u	-0.7921u	-1.1203u
Pb 220.353	-7.1879u	-3.0129u	4.3194
Sb 206.834	5.4577	0.1099u	2.4805
Se 196.026	-3.2102u	-12.0363u	-5.3976u
Si 288.158	4243.97	4224.80	4246.68
Sn 189.925	11.0430	0.3718	-8.9670u
Sr 216.596	129.610	126.963	126.972
Ti 334.941	0.1728	0.0852	0.2031
Tl 190.794	-8.5966u	-11.8485u	-20.3275u
V 292.401	-0.3771u	-0.2505u	0.4160
Zn 206.200	4.5210	0.3809	2.4345

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2766	ppb	0.3551	128.3	-49.5628
Al 308.215	8.3983	ppb	1.7273	20.6	223.541
As 188.980	1.9022	ppb	3.0824	162.0	1.2142
B 249.678	8.7487	ppb	0.8741	10.0	54.1100

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	7.6942	ppb	2.2011	28.6	16.0934
Be 313.042	-0.1306	ppb	0.0029	2.2	-428.206
Ca 370.602	28745	ppb	117.4	0.4	48084
Cd 226.502	-0.4012	ppb	0.2735	68.2	-1.1581
Co 228.615	0.4161	ppb	0.6234	149.8	-10.7079
Cr 267.716	-0.0829	ppb	0.1739	209.9	12.2069
Cu 324.754	1.5200	ppb	0.5211	34.3	482.110
Fe 271.441	22.5462	ppb	5.7207	25.4	29.7234
K 766.491	2471.50	ppb	7.9883	0.3	51201.6
Mg 279.078	3950.74	ppb	17.5773	0.4	5305.05
Mn 257.610	0.3800	ppb	0.0576	15.2	72.8764
Mo 202.032	-1.0567	ppb	0.9397	88.9	2.2204
Na 330.237	6377.96	ppb	293.652	4.6	209.911
Ni 231.604	-0.8350	ppb	0.2664	31.9	-2.7086
Pb 220.353	-1.9605	ppb	5.8254	297.1	0.1132
Sb 206.834	2.6827	ppb	2.6796	99.9	6.8899
Se 196.026	-6.8814	ppb	4.5963	66.8	1.4246
Si 288.158	4238.48	ppb	11.9254	0.3	20317.2
Sn 189.925	0.8159	ppb	10.0124	1227.2	1.2002
Sr 216.596	127.848	ppb	1.5257	1.2	380.388
Ti 334.941	0.1537	ppb	0.0613	39.9	-1.4034
Tl 190.794	-13.5909	ppb	6.0565	44.6	-4.6741
V 292.401	-0.0705	ppb	0.4261	604.4	-13.4140
Zn 206.200	2.4455	ppb	2.0701	84.6	1.2443

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1450u	-0.5162u	-0.3807u
Al 308.215	5.0142	5.8610	0.2021
As 188.980	5.1492	4.1687	6.4825
B 249.678	-0.2310u	-0.6720u	-0.4017u
Ba 389.178	1.4504	-0.0668	-0.7299u
Be 313.042	-0.1073u	-0.1190u	-0.1198u
Ca 370.602	5850	5842	5816
Cd 226.502	-0.3291u	-0.0487u	0.4187
Co 228.615	0.1595	0.4389	0.6365
Cr 267.716	0.1930	-0.3362u	-0.1351u
Cu 324.754	1.2021	0.3710	0.6759
Fe 271.441	10.0820	2.4200	27.8968
K 766.491	533.095	530.122	529.425
Mg 279.078	799.890	805.676	802.135
Mn 257.610	0.1423	0.1422	0.1290
Mo 202.032	1.4145	-0.5895u	1.0354
Na 330.237	1460.02	1349.23	1107.43
Ni 231.604	-1.2049u	-1.6172u	0.0427
Pb 220.353	7.4795	-8.9809u	-9.8973u
Sb 206.834	4.5992	4.4108	-13.3870u
Se 196.026	1.3993	-7.9700u	2.3690
Si 288.158	877.764	873.291	869.699
Sn 189.925	-10.1324u	-6.3813u	-7.2374u
Sr 216.596	25.6104	25.1317	27.0087
Ti 334.941	0.2698	0.1070	0.1187

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Label	Replicates Concentration		
Tl 190.794	-13.5880u	-10.5098u	0.3140
V 292.401	0.7183	0.0388	0.3097
Zn 206.200	-0.9828u	-0.4009u	-0.5322u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3473	ppb	0.1878	54.1	-51.3647
Al 308.215	3.6924	ppb	3.0522	82.7	214.362
As 188.980	5.2668	ppb	1.1614	22.1	2.1125
B 249.678	-0.4349	ppb	0.2224	51.1	-8.7369
Ba 389.178	0.2179	ppb	1.1177	512.9	-34.3836
Be 313.042	-0.1153	ppb	0.0070	6.1	-419.133
Ca 370.602	5836	ppb	18.01	0.3	9782
Cd 226.502	0.0136	ppb	0.3778	2775.3	4.1380
Co 228.615	0.4116	ppb	0.2396	58.2	-10.7393
Cr 267.716	-0.0928	ppb	0.2671	287.8	12.0102
Cu 324.754	0.7497	ppb	0.4204	56.1	458.799
Fe 271.441	13.4662	ppb	13.0712	97.1	24.6960
K 766.491	530.881	ppb	1.9490	0.4	11209.6
Mg 279.078	802.567	ppb	2.9172	0.4	1094.97
Mn 257.610	0.1378	ppb	0.0076	5.5	40.9928
Mo 202.032	0.6201	ppb	1.0645	171.7	5.0504
Na 330.237	1305.56	ppb	180.307	13.8	72.8605
Ni 231.604	-0.9265	ppb	0.8643	93.3	-2.8111
Pb 220.353	-3.7996	ppb	9.7787	257.4	-0.5830
Sb 206.834	-1.4590	ppb	10.3303	708.0	5.5036
Se 196.026	-1.4006	ppb	5.7099	407.7	2.4577
Si 288.158	873.585	ppb	4.0405	0.5	4612.34
Sn 189.925	-7.9170	ppb	1.9657	24.8	-1.0074
Sr 216.596	25.9169	ppb	0.9753	3.8	82.8208
Ti 334.941	0.1652	ppb	0.0908	55.0	-8.6168
Tl 190.794	-7.9279	ppb	7.3018	92.1	-3.3176
V 292.401	0.3556	ppb	0.3421	96.2	-9.1856
Zn 206.200	-0.6386	ppb	0.3052	47.8	-0.4577

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Rack 3, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	59.1110	57.8936	58.2484
Al 308.215	5588.23	5539.29	5532.11
As 188.980	105.702	110.888	109.230
B 249.678	231.927	230.723	232.796
Ba 389.178	123.794	114.658	119.271
Be 313.042	59.4047	58.9763	58.9586
Ca 370.602	34270	34014	34050
Cd 226.502	57.4274	56.1863	55.4921
Co 228.615	57.1003	56.5559	57.7863
Cr 267.716	113.720	112.151	112.318
Cu 324.754	115.283	114.820	114.453
Fe 271.441	5660.94	5649.97	5641.89
K 766.491	11215.1	11141.8	11123.1
Mg 279.078	9539.15	9458.85	9477.88
Mn 257.610	562.324	558.831	559.584
Mo 202.032	111.756	112.811	109.829

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Label	Replicates Concentration		
Na 330.237	12330.0	11925.2	12143.8
Ni 231.604	113.229	112.685	108.524
Pb 220.353	554.894	555.376	547.778
Sb 206.834	45.5127	52.7851	52.2146
Se 196.026	104.372	113.394	115.685
Si 288.158	4282.39	4250.60	4250.38
Sn 189.925	115.900	101.795	111.505
Sr 216.596	238.369	241.401	236.964
Ti 334.941	442.590	439.420	439.322
Tl 190.794	27.3344	32.5722	48.7963
V 292.401	112.914	111.916	111.576
Zn 206.200	118.030	114.522	114.481

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	58.4177	ppb	0.6261	1.1	1732.58
Al 308.215	5553.21	ppb	30.5413	0.5	11074.2
As 188.980	108.607	ppb	2.6484	2.4	29.6726
B 249.678	231.815	ppb	1.0408	0.4	1575.21
Ba 389.178	119.241	ppb	4.5680	3.8	726.114
Be 313.042	59.1132	ppb	0.2526	0.4	47363.0
Ca 370.602	34112	ppb	138.3	0.4	57065
Cd 226.502	56.3686	ppb	0.9804	1.7	736.326
Co 228.615	57.1475	ppb	0.6166	1.1	216.321
Cr 267.716	112.730	ppb	0.8620	0.8	1900.82
Cu 324.754	114.852	ppb	0.4158	0.4	3917.17
Fe 271.441	5650.93	ppb	9.5611	0.2	3148.00
K 766.491	11160.0	ppb	48.5924	0.4	229761
Mg 279.078	9491.96	ppb	41.9629	0.4	12708.6
Mn 257.610	560.246	ppb	1.8385	0.3	46515.5
Mo 202.032	111.466	ppb	1.5123	1.4	192.037
Na 330.237	12133.0	ppb	202.647	1.7	359.976
Ni 231.604	111.479	ppb	2.5739	2.3	123.242
Pb 220.353	552.683	ppb	4.2545	0.8	209.881
Sb 206.834	50.1708	ppb	4.0441	8.1	24.4164
Se 196.026	111.150	ppb	5.9808	5.4	23.7507
Si 288.158	4261.13	ppb	18.4190	0.4	20468.0
Sn 189.925	109.733	ppb	7.2175	6.6	28.7279
Sr 216.596	238.911	ppb	2.2680	0.9	703.596
Ti 334.941	440.444	ppb	1.8590	0.4	39069.8
Tl 190.794	36.2343	ppb	11.1898	30.9	7.1512
V 292.401	112.135	ppb	0.6954	0.6	1121.04
Zn 206.200	115.677	ppb	2.0373	1.8	63.6817

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.3589	53.6888	52.3874
Al 308.215	5145.35	5107.54	5080.96
As 188.980	108.263	104.280	101.143
B 249.678	219.610	218.518	218.339
Ba 389.178	111.766	106.334	107.618
Be 313.042	54.9166	54.5191	54.3647
Ca 370.602	32976	32722	32607

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Label	Replicates Concentration		
Cd 226.502	52.4010	52.2036	51.1542
Co 228.615	52.2351	52.4774	53.8712
Cr 267.716	104.067	103.196	102.906
Cu 324.754	106.062	105.234	103.616
Fe 271.441	5165.40	5150.75	5108.41
K 766.491	10318.7	10277.8	10201.9
Mg 279.078	8968.14	8900.65	8895.33
Mn 257.610	420.367	417.003	416.220
Mo 202.032	102.709	104.184	101.966
Na 330.237	11313.7	11279.4	11709.0
Ni 231.604	105.301	102.984	102.870
Pb 220.353	510.700	498.304	518.797
Sb 206.834	48.2515	26.9715	56.7815
Se 196.026	102.452	98.4709	110.343
Si 288.158	4116.51	4081.98	4072.63
Sn 189.925	89.2123	103.607	100.353
Sr 216.596	226.000	223.889	220.378
Ti 334.941	405.366	402.688	401.681
Tl 190.794	23.2811	42.3633	31.8398
V 292.401	102.683	103.509	103.235
Zn 206.200	105.458	107.795	103.126

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.4784	ppb	1.0025	1.9	1582.45
Al 308.215	5111.28	ppb	32.3574	0.6	10209.4
As 188.980	104.562	ppb	3.5683	3.4	28.5954
B 249.678	218.822	ppb	0.6880	0.3	1486.76
Ba 389.178	108.573	ppb	2.8388	2.6	658.206
Be 313.042	54.6001	ppb	0.2847	0.5	43722.3
Ca 370.602	32768	ppb	188.7	0.6	54817
Cd 226.502	51.9196	ppb	0.6702	1.3	678.477
Co 228.615	52.8612	ppb	0.8830	1.7	199.151
Cr 267.716	103.390	ppb	0.6043	0.6	1744.31
Cu 324.754	104.970	ppb	1.2443	1.2	3617.65
Fe 271.441	5141.52	ppb	29.5954	0.6	2865.81
K 766.491	10266.1	ppb	59.2704	0.6	211390
Mg 279.078	8921.37	ppb	40.5929	0.5	11947.1
Mn 257.610	417.863	ppb	2.2033	0.5	34709.4
Mo 202.032	102.953	ppb	1.1292	1.1	177.678
Na 330.237	11434.1	ppb	238.738	2.1	341.560
Ni 231.604	103.719	ppb	1.3716	1.3	114.539
Pb 220.353	509.267	ppb	10.3212	2.0	193.458
Sb 206.834	44.0015	ppb	15.3527	34.9	22.1703
Se 196.026	103.755	ppb	6.0426	5.8	22.3413
Si 288.158	4090.37	ppb	23.1169	0.6	19666.9
Sn 189.925	97.7243	ppb	7.5489	7.7	25.6928
Sr 216.596	223.422	ppb	2.8398	1.3	658.457
Ti 334.941	403.245	ppb	1.9044	0.5	35768.5
Tl 190.794	32.4947	ppb	9.5579	29.4	6.2446
V 292.401	103.142	ppb	0.4212	0.4	1030.17
Zn 206.200	105.460	ppb	2.3343	2.2	58.0476

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680-167630-a-5-f msd (Samp) 4/19/2019, 10:26:37 PM Rack 3, Tube 28**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.3994	53.2482	52.7021
Al 308.215	5031.61	4977.00	5017.52
As 188.980	110.761	108.942	105.933
B 249.678	216.278	216.402	218.011
Ba 389.178	110.835	104.385	105.670
Be 313.042	53.7418	53.2172	53.6702
Ca 370.602	32033	31724	32000
Cd 226.502	51.5545	50.6446	51.3499
Co 228.615	51.2972	51.8740	51.2230
Cr 267.716	101.496	101.012	101.178
Cu 324.754	104.488	102.876	102.951
Fe 271.441	5098.59	5061.35	5064.75
K 766.491	10041.5	9951.28	10042.3
Mg 279.078	8752.71	8664.54	8722.19
Mn 257.610	412.316	408.000	412.661
Mo 202.032	98.9950	97.2961	101.861
Na 330.237	11314.6	11122.7	11030.2
Ni 231.604	97.6253	99.8940	100.557
Pb 220.353	496.199	492.256	510.408
Sb 206.834	56.9508	44.0703	51.5096
Se 196.026	96.1880	95.1624	88.3808
Si 288.158	4026.73	3984.91	4018.69
Sn 189.925	90.0527	101.873	98.4338
Sr 216.596	220.641	220.058	218.224
Ti 334.941	396.805	393.587	397.085
Tl 190.794	30.1855	26.0909	25.0684
V 292.401	102.210	99.9886	100.811
Zn 206.200	102.656	101.484	101.637

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.4499	ppb	0.9499	1.8	1551.24
Al 308.215	5008.71	ppb	28.3500	0.6	10008.7
As 188.980	108.545	ppb	2.4385	2.2	29.6596
B 249.678	216.897	ppb	0.9669	0.4	1473.66
Ba 389.178	106.963	ppb	3.4140	3.2	647.838
Be 313.042	53.5431	ppb	0.2845	0.5	42869.5
Ca 370.602	31919	ppb	169.8	0.5	53397
Cd 226.502	51.1830	ppb	0.4774	0.9	668.907
Co 228.615	51.4648	ppb	0.3564	0.7	193.580
Cr 267.716	101.229	ppb	0.2456	0.2	1708.14
Cu 324.754	103.438	ppb	0.9096	0.9	3571.20
Fe 271.441	5074.90	ppb	20.5844	0.4	2828.85
K 766.491	10011.7	ppb	52.3493	0.5	206175
Mg 279.078	8713.15	ppb	44.7708	0.5	11668.7
Mn 257.610	410.992	ppb	2.5974	0.6	34138.9
Mo 202.032	99.3842	ppb	2.3074	2.3	171.656
Na 330.237	11155.8	ppb	145.073	1.3	334.160
Ni 231.604	99.3587	ppb	1.5373	1.5	109.650
Pb 220.353	499.621	ppb	9.5476	1.9	189.810
Sb 206.834	50.8436	ppb	6.4660	12.7	24.5373
Se 196.026	93.2437	ppb	4.2425	4.5	20.3588
Si 288.158	4010.11	ppb	22.1892	0.6	19291.6

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	96.7865	ppb	6.0800	6.3	25.4557
Sr 216.596	219.641	ppb	1.2615	0.6	647.459
Ti 334.941	395.826	ppb	1.9435	0.5	35109.9
Tl 190.794	27.1149	ppb	2.7079	10.0	4.9573
V 292.401	101.003	ppb	1.1229	1.1	1008.58
Zn 206.200	101.926	ppb	0.6371	0.6	56.0984

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3982	0.0483	-0.0651u
Al 308.215	6.9487	8.3827	4.1419
As 188.980	92.3036	86.6219	94.3533
B 249.678	13.1482	12.1900	11.7291
Ba 389.178	21.4881	19.9467	18.8084
Be 313.042	-0.1042u	-0.1091u	-0.1060u
Ca 370.602	9118	9061	9062
Cd 226.502	-0.0720	0.3890	0.4238
Co 228.615	5.5927	5.6360	6.0333
Cr 267.716	0.2743	1.1288	0.5823
Cu 324.754	0.0535	1.3024	0.4723
Fe 271.441	14841.6	14890.0	14972.9
K 766.491	1950.56	1951.95	1946.62
Mg 279.078	1551.57	1552.75	1548.06
Mn 257.610	1262.67	1262.97	1262.77
Mo 202.032	0.5271	1.5900	-0.0604u
Na 330.237	4636.60	4910.21	4295.20
Ni 231.604	9.2690	8.9368	12.0635
Pb 220.353	-0.6597u	-5.9759u	-0.8661u
Sb 206.834	-6.9713u	0.1587	-7.9794u
Se 196.026	-2.9044u	6.4520	-13.2110u
Si 288.158	4277.47	4284.85	4271.94
Sn 189.925	-14.7267u	-12.0049u	-4.2144u
Sr 216.596	58.3909	57.7684	57.0978
Ti 334.941	0.0730	0.1378	-0.0461u
Tl 190.794	-9.4168u	-2.1848u	-11.8513u
V 292.401	0.1200	0.8609	-0.7351u
Zn 206.200	-0.1134u	3.5373	1.9634

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1271	ppb	0.2415	189.9	-37.4224
Al 308.215	6.4911	ppb	2.1571	33.2	220.285
As 188.980	91.0929	ppb	4.0053	4.4	24.9896
B 249.678	12.3558	ppb	0.7239	5.9	63.5208
Ba 389.178	20.0811	ppb	1.3449	6.7	97.7319
Be 313.042	-0.1064	ppb	0.0025	2.3	-411.925
Ca 370.602	9081	ppb	32.12	0.4	15201
Cd 226.502	0.2469	ppb	0.2768	112.1	30.1136
Co 228.615	5.7540	ppb	0.2429	4.2	10.0819
Cr 267.716	0.6618	ppb	0.4327	65.4	27.7885
Cu 324.754	0.6094	ppb	0.6357	104.3	457.232
Fe 271.441	14901.5	ppb	66.4044	0.4	8266.18
K 766.491	1949.71	ppb	2.7620	0.1	40432.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1550.79	ppb	2.4377	0.2	2082.75
Mn 257.610	1262.81	ppb	0.1528	0.0	104725
Mo 202.032	0.6855	ppb	0.8365	122.0	4.9860
Na 330.237	4614.00	ppb	308.126	6.7	161.687
Ni 231.604	10.0898	ppb	1.7174	17.0	9.5429
Pb 220.353	-2.5006	ppb	3.0115	120.4	-0.5341
Sb 206.834	-4.9307	ppb	4.4362	90.0	4.4762
Se 196.026	-3.2211	ppb	9.8353	305.3	2.2948
Si 288.158	4278.09	ppb	6.4757	0.2	20501.6
Sn 189.925	-10.3154	ppb	5.4560	52.9	-1.6133
Sr 216.596	57.7524	ppb	0.6467	1.1	177.435
Ti 334.941	0.0549	ppb	0.0933	169.9	-16.5016
Tl 190.794	-7.8177	ppb	5.0277	64.3	-3.6905
V 292.401	0.0819	ppb	0.7987	974.6	-11.0624
Zn 206.200	1.7958	ppb	1.8312	102.0	0.9179

680-167630-a-11-b (Samp)

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Rack 3, Tube 30

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1422u	-0.0375	-1.2374u
Al 308.215	11.9520	12.6914	9.1553
As 188.980	-2.2042u	10.3083	3.2788
B 249.678	156.520	156.478	156.595
Ba 389.178	12.2227	10.8153	13.5347
Be 313.042	-0.1354u	-0.1430u	-0.1255u
Ca 370.602	64918	64980	65005
Cd 226.502	-0.2844u	-0.1487u	-0.2582u
Co 228.615	0.5722	0.2565	-0.4240u
Cr 267.716	0.0240	-0.4709	0.5768
Cu 324.754	1.0693	1.6696	-0.0261u
Fe 271.441	377.904	384.431	393.323
K 766.491	6294.14	6298.71	6288.82
Mg 279.078	8934.33	8951.39	8951.26
Mn 257.610	10820.9	10845.0	10819.4
Mo 202.032	0.5954	-0.7873u	2.2798
Na 330.237	25350.0	25290.4	25775.0
Ni 231.604	6.0154	4.6869	4.7895
Pb 220.353	-6.9991u	0.4774	-10.6870u
Sb 206.834	4.7664	1.3831	-1.5982u
Se 196.026	-16.6679u	2.3998	-9.5853u
Si 288.158	10174.8	10207.2	10199.9
Sn 189.925	-2.4327u	-4.2576u	-7.3490u
Sr 216.596	663.044	660.496	662.232
Ti 334.941	-0.0419	-0.0447	0.0272
Tl 190.794	-6.1766	-3.9855	-3.8517
V 292.401	-0.0279u	-0.2698u	0.4066
Zn 206.200	1.5835	1.5353	3.8734

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8057	ppb	0.6670	82.8	-47.3341
Al 308.215	11.2662	ppb	1.8651	16.6	229.182
As 188.980	3.7943	ppb	6.2721	165.3	1.7184
B 249.678	156.531	ppb	0.0591	0.0	1065.31

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	12.1909	ppb	1.3600	11.2	49.9388
Be 313.042	-0.1346	ppb	0.0088	6.5	-428.404
Ca 370.602	64968	ppb	44.75	0.1	108805
Cd 226.502	-0.2304	ppb	0.0720	31.3	1.5540
Co 228.615	0.1349	ppb	0.5091	377.4	-11.8423
Cr 267.716	0.0433	ppb	0.5241	1209.3	30.7475
Cu 324.754	0.9042	ppb	0.8598	95.1	463.545
Fe 271.441	385.219	ppb	7.7398	2.0	230.480
K 766.491	6293.89	ppb	4.9507	0.1	129781
Mg 279.078	8945.66	ppb	9.8169	0.1	11874.8
Mn 257.610	10828.4	ppb	14.3396	0.1	897700
Mo 202.032	0.6960	ppb	1.5360	220.7	5.1742
Na 330.237	25471.8	ppb	264.229	1.0	725.941
Ni 231.604	5.1639	ppb	0.7392	14.3	4.0215
Pb 220.353	-5.7362	ppb	5.6883	99.2	-0.7958
Sb 206.834	1.5171	ppb	3.1844	209.9	6.6107
Se 196.026	-7.9511	ppb	9.6383	121.2	2.2444
Si 288.158	10194.0	ppb	16.9973	0.2	48112.6
Sn 189.925	-4.6798	ppb	2.4852	53.1	-0.1869
Sr 216.596	661.924	ppb	1.3017	0.2	1939.41
Ti 334.941	-0.0198	ppb	0.0407	205.8	-4.1761
Tl 190.794	-4.6713	ppb	1.3053	27.9	-0.2214
V 292.401	0.0363	ppb	0.3427	944.6	-12.4439
Zn 206.200	2.3308	ppb	1.3362	57.3	1.1815

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	506.544	509.833	506.693
Al 308.215	10160.0	10214.0	10148.9
As 188.980	502.200	522.484	492.705
B 249.678	516.177	522.278	522.961
Ba 389.178	488.363	488.007	481.660
Be 313.042	527.966	529.402	526.233
Ca 370.602	10090	10150	10073
Cd 226.502	502.394	504.705	500.925
Co 228.615	509.361	505.728	506.924
Cr 267.716	502.786	503.701	500.684
Cu 324.754	503.709	504.536	508.076
Fe 271.441	10199.8	10206.2	10153.4
K 766.491	9827.95	9852.19	9804.58
Mg 279.078	10261.9	10301.9	10208.5
Mn 257.610	508.006	508.342	505.523
Mo 202.032	500.528	501.511	496.807
Na 330.237	10575.6	10820.4	10495.5
Ni 231.604	506.229	511.398	508.480
Pb 220.353	503.575	496.320	505.247
Sb 206.834	500.990	481.267	486.530
Se 196.026	514.932	521.010	526.243
Si 288.158	5146.91	5144.98	5109.84
Sn 189.925	505.890	500.726	506.669
Sr 216.596	496.151	503.591	499.519
Ti 334.941	500.709	502.575	499.717

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Label	Replicates Concentration		
Tl 190.794	501.247	496.050	507.043
V 292.401	503.968	506.953	507.506
Zn 206.200	1035.54	1038.52	1034.70

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	507.690	ppb	1.8575	0.4	15378.2	101.53800
Al 308.215	10174.3	ppb	34.8237	0.3	20127.9	101.74320
As 188.980	505.796	ppb	15.2116	3.0	135.652	101.15926
B 249.678	520.472	ppb	3.7349	0.7	3546.29	104.09444
Ba 389.178	486.010	ppb	3.7713	0.8	3035.61	97.20197
Be 313.042	527.867	ppb	1.5865	0.3	425516	105.57345
Ca 370.602	10104	ppb	40.56	0.4	16922	101.04256
Cd 226.502	502.675	ppb	1.9056	0.4	6472.53	100.53493
Co 228.615	507.338	ppb	1.8516	0.4	1997.14	101.46758
Cr 267.716	502.390	ppb	1.5467	0.3	8418.79	100.47804
Cu 324.754	505.440	ppb	2.3197	0.5	15753.0	101.08809
Fe 271.441	10186.5	ppb	28.8361	0.3	5676.54	101.81406
K 766.491	9828.24	ppb	23.8065	0.2	199975	98.28241
Mg 279.078	10257.4	ppb	46.8645	0.5	13731.9	102.57412
Mn 257.610	507.290	ppb	1.5395	0.3	42132.5	101.45808
Mo 202.032	499.615	ppb	2.4811	0.5	846.988	99.92307
Na 330.237	10630.5	ppb	169.283	1.6	307.958	106.30495
Ni 231.604	508.702	ppb	2.5920	0.5	568.471	101.74049
Pb 220.353	501.714	ppb	4.7458	0.9	190.259	100.34278
Sb 206.834	489.596	ppb	10.2127	2.1	183.604	97.91912
Se 196.026	520.728	ppb	5.6608	1.1	100.975	104.14567
Si 288.158	5133.91	ppb	20.8652	0.4	24630.2	102.67818
Sn 189.925	504.428	ppb	3.2300	0.6	128.481	100.88568
Sr 216.596	499.754	ppb	3.7258	0.7	1459.84	99.95077
Ti 334.941	501.000	ppb	1.4511	0.3	44443.7	100.20008
Tl 190.794	501.447	ppb	5.4993	1.1	118.524	100.28933
V 292.401	506.142	ppb	1.9034	0.4	5098.45	101.22849
Zn 206.200	1036.25	ppb	2.0093	0.2	571.503	103.62527

Cont Calib Blank (CCB)

4/19/2019, 10:43:30 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0291u	0.5579	-0.1435u
Al 308.215	6.0373	2.8435	0.6723
As 188.980	8.0843	8.6858	3.8248
B 249.678	13.2356	12.2023	10.9521
Ba 389.178	-3.9724u	0.7606	-0.8850u
Be 313.042	0.0530	0.0270	0.0127
Ca 370.602	-3.978u	0.5051	-2.800u
Cd 226.502	0.2563	-0.0198u	0.0535
Co 228.615	1.9742	1.0398	1.7145
Cr 267.716	0.4540	0.5405	-0.5858u
Cu 324.754	0.4086	0.5603	-0.1931u
Fe 271.441	8.1117	3.7431	-3.3992u
K 766.491	1.0924	0.0602	1.4870
Mg 279.078	2.8978	8.8030	10.6837
Mn 257.610	0.3630	0.1417	0.1284
Mo 202.032	0.5471	1.4834	1.6622

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Label	Replicates Concentration		
Na 330.237	116.463	95.0531	141.832
Ni 231.604	-1.9449u	-2.8279u	0.8058
Pb 220.353	-0.3563u	-4.0881u	-0.1219u
Sb 206.834	-5.2196u	0.0903	-6.3498u
Se 196.026	7.8215	-4.6868u	-0.0274u
Si 288.158	6.5988	7.9918	6.2337
Sn 189.925	-1.6993u	-3.8731u	-4.1507u
Sr 216.596	1.0963	0.0542	-0.5384u
Ti 334.941	0.2012	0.2070	0.0608
Tl 190.794	-1.6885u	-9.8270u	3.5710
V 292.401	-0.4489u	-0.6113u	0.7534
Zn 206.200	0.8384	-0.3401u	-0.4499u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1284	ppb	0.3763	293.0	-36.8183	0.12842
Al 308.215	3.1844	ppb	2.6987	84.7	213.365	3.18437
As 188.980	6.8650	ppb	2.6500	38.6	2.5392	6.86497
B 249.678	12.1300	ppb	1.1435	9.4	77.2736	12.13001
Ba 389.178	-1.3656	ppb	2.4028	176.0	-45.2214	-1.36561
Be 313.042	0.0309	ppb	0.0204	66.1	-302.002	0.03089
Ca 370.602	-2.091	ppb	2.324	111.2	21.60	-2.09089
Cd 226.502	0.0967	ppb	0.1430	147.9	5.1937	0.09671
Co 228.615	1.5762	ppb	0.4824	30.6	-6.1307	1.57617
Cr 267.716	0.1362	ppb	0.6268	460.2	15.8345	0.13622
Cu 324.754	0.2586	ppb	0.3984	154.1	443.935	0.25859
Fe 271.441	2.8185	ppb	5.8109	206.2	18.8472	2.81852
K 766.491	0.8799	ppb	0.7368	83.7	296.599	0.87986
Mg 279.078	7.4615	ppb	4.0626	54.4	31.6706	7.46150
Mn 257.610	0.2110	ppb	0.1318	62.4	44.0651	0.21104
Mo 202.032	1.2309	ppb	0.5989	48.7	6.0814	1.23091
Na 330.237	117.783	ppb	23.4175	19.9	40.7535	117.78259
Ni 231.604	-1.3224	ppb	1.8952	143.3	-3.2564	-1.32235
Pb 220.353	-1.5221	ppb	2.2253	146.2	0.2793	-1.52207
Sb 206.834	-3.8264	ppb	3.4387	89.9	4.6791	-3.82635
Se 196.026	1.0358	ppb	6.3216	610.3	2.9169	1.03575
Si 288.158	6.9414	ppb	0.9278	13.4	567.963	6.94144
Sn 189.925	-3.2410	ppb	1.3424	41.4	0.1742	-3.24103
Sr 216.596	0.2041	ppb	0.8276	405.5	7.7588	0.20407
Ti 334.941	0.1563	ppb	0.0828	52.9	-11.4894	0.15634
Tl 190.794	-2.6482	ppb	6.7504	254.9	-2.0526	-2.64816
V 292.401	-0.1023	ppb	0.7455	729.0	-13.8941	-0.10226
Zn 206.200	0.0161	ppb	0.7142	4423.6	-0.0965	0.01615

680-167630-a-1-b (Samp)

4/19/2019, 10:47:41 PM

Rack 3, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4702u	0.5694	-0.8963u
Al 308.215	4.9365	6.3684	6.4748
As 188.980	1591.39	1585.30	1611.22
B 249.678	149.420	148.769	149.388
Ba 389.178	45.0735	47.0949	48.3328
Be 313.042	-0.0929u	-0.1180u	-0.1187u
Ca 370.602	47961	47886	47848

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.0156	-0.1438	0.0441
Co 228.615	17.4509	18.8240	19.3008
Cr 267.716	0.1272	-0.2454	-0.5213u
Cu 324.754	0.5378	-0.3109	0.2120
Fe 271.441	63931.7	63666.0	63685.9
K 766.491	8501.05	8497.89	8495.35
Mg 279.078	6832.78	6830.10	6822.36
Mn 257.610	2075.37	2071.07	2069.31
Mo 202.032	1.5469	3.2437	1.2759
Na 330.237	12895.7	13265.4	12755.6
Ni 231.604	6.0501	5.7138	6.3971
Pb 220.353	3.3586u	8.8575	5.7724
Sb 206.834	-5.9592u	-9.0652u	7.2508
Se 196.026	2.2225	-2.6404u	-19.1916u
Si 288.158	9454.86	9430.13	9441.46
Sn 189.925	-8.9394u	-0.1632u	-4.1025u
Sr 216.596	369.133	370.373	367.802
Ti 334.941	-0.2065u	-0.0857	-0.0507
Tl 190.794	2.8064u	-5.6742u	-19.1458u
V 292.401	-0.3517	1.0754	0.8437
Zn 206.200	-0.6325u	0.3115	0.9456

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2657	ppb	0.7540	283.8	-57.7267
Al 308.215	5.9265	ppb	0.8590	14.5	220.710
As 188.980	1595.97	ppb	13.5537	0.8	426.680
B 249.678	149.192	ppb	0.3671	0.2	949.976
Ba 389.178	46.8337	ppb	1.6453	3.5	292.811
Be 313.042	-0.1099	ppb	0.0147	13.4	-410.216
Ca 370.602	47898	ppb	57.58	0.1	80031
Cd 226.502	-0.0385	ppb	0.0960	249.6	101.859
Co 228.615	18.5252	ppb	0.9605	5.2	59.5220
Cr 267.716	-0.2132	ppb	0.3255	152.7	18.4757
Cu 324.754	0.1463	ppb	0.4281	292.6	452.040
Fe 271.441	63761.2	ppb	147.988	0.2	35313.0
K 766.491	8498.10	ppb	2.8580	0.0	175237
Mg 279.078	6828.41	ppb	5.4103	0.1	9132.34
Mn 257.610	2071.92	ppb	3.1198	0.2	171849
Mo 202.032	2.0222	ppb	1.0665	52.7	6.6682
Na 330.237	12972.2	ppb	263.363	2.0	385.754
Ni 231.604	6.0537	ppb	0.3417	5.6	5.0037
Pb 220.353	5.9962	ppb	2.7562	46.0	1.0662
Sb 206.834	-2.5912	ppb	8.6637	334.4	5.9717
Se 196.026	-6.5365	ppb	11.2261	171.7	1.9474
Si 288.158	9442.15	ppb	12.3801	0.1	44603.6
Sn 189.925	-4.4017	ppb	4.3958	99.9	-0.1179
Sr 216.596	369.102	ppb	1.2857	0.3	1091.98
Ti 334.941	-0.1143	ppb	0.0817	71.5	-17.6858
Tl 190.794	-7.3378	ppb	11.0702	150.9	-5.6056
V 292.401	0.5225	ppb	0.7659	146.6	-3.6646
Zn 206.200	0.2082	ppb	0.7941	381.4	0.1495

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167630-a-3-b (Samp) **4/19/2019, 10:51:54 PM** **Rack 3, Tube 32****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4295u	0.3000	-0.1195u
Al 308.215	9.9459	2.0495	4.5845
As 188.980	2.9888	3.1816	10.2254
B 249.678	7.7163	7.2003	5.2703
Ba 389.178	4.3417	1.4957	1.4680
Be 313.042	-0.1176u	-0.1043u	-0.1150u
Ca 370.602	4809	4746	4780
Cd 226.502	0.1068	0.0658	0.0543
Co 228.615	0.0552	0.2048	0.2400
Cr 267.716	0.7514	-0.1922u	0.0803
Cu 324.754	-0.5765u	1.0978	1.1539
Fe 271.441	5.1302	5.4246	-4.5406u
K 766.491	953.504	938.669	942.570
Mg 279.078	506.556	497.331	502.522
Mn 257.610	0.2470	0.2976	0.3933
Mo 202.032	-0.9480u	-2.0750u	-1.2139u
Na 330.237	1377.79	1637.91	1966.72
Ni 231.604	-3.8780u	1.0705	-1.5458u
Pb 220.353	5.2291	-8.9132u	-2.4939u
Sb 206.834	1.3589	-2.3540u	0.3521
Se 196.026	0.7475	12.7348	-12.4304u
Si 288.158	3042.75	2996.84	3008.06
Sn 189.925	-6.5629u	-1.9079u	-10.7486u
Sr 216.596	25.7742	25.9339	25.6750
Ti 334.941	0.2185	-0.0887u	-0.0250u
Tl 190.794	-2.8310u	-0.9774u	-7.4871u
V 292.401	0.2136	0.2454	0.0805
Zn 206.200	0.8353	0.8233	0.9683

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0830	ppb	0.3661	441.1	-43.3283
Al 308.215	5.5266	ppb	4.0316	72.9	217.918
As 188.980	5.4653	ppb	4.1235	75.4	2.1658
B 249.678	6.7290	ppb	1.2893	19.2	40.3026
Ba 389.178	2.4351	ppb	1.6512	67.8	-20.7785
Be 313.042	-0.1123	ppb	0.0070	6.3	-416.719
Ca 370.602	4779	ppb	31.57	0.7	8015
Cd 226.502	0.0756	ppb	0.0276	36.5	4.9272
Co 228.615	0.1667	ppb	0.0981	58.9	-11.6918
Cr 267.716	0.2132	ppb	0.4856	227.8	17.1308
Cu 324.754	0.5584	ppb	0.9832	176.1	452.969
Fe 271.441	2.0047	ppb	5.6703	282.9	18.3419
K 766.491	944.914	ppb	7.6907	0.8	19740.0
Mg 279.078	502.136	ppb	4.6249	0.9	693.202
Mn 257.610	0.3126	ppb	0.0743	23.8	54.3616
Mo 202.032	-1.4123	ppb	0.5891	41.7	1.6204
Na 330.237	1660.81	ppb	295.132	17.8	82.4298
Ni 231.604	-1.4511	ppb	2.4756	170.6	-3.3995
Pb 220.353	-2.0593	ppb	7.0812	343.9	0.0766
Sb 206.834	-0.2144	ppb	1.9201	895.8	5.9293
Se 196.026	0.3506	ppb	12.5873	3590.0	2.7878
Si 288.158	3015.89	ppb	23.9339	0.8	14611.0

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-6.4065	ppb	4.4225	69.0	-0.6256
Sr 216.596	25.7943	ppb	0.1306	0.5	82.4903
Ti 334.941	0.0349	ppb	0.1621	463.8	-20.9688
Tl 190.794	-3.7652	ppb	3.3539	89.1	-2.3201
V 292.401	0.1798	ppb	0.0875	48.6	-10.8226
Zn 206.200	0.8756	ppb	0.0805	9.2	0.3779

680-167630-a-4-b (Samp) 4/19/2019, 10:56:06 PM Rack 3, Tube 33

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1610u	0.0832	-0.6040u
Al 308.215	-0.2441u	7.5413	4.1889
As 188.980	2.3524	3.9521	-1.2508u
B 249.678	1.7360	0.6174	1.5011
Ba 389.178	0.8823	-1.3598u	-3.1937u
Be 313.042	-0.1137u	-0.1004u	-0.0913u
Ca 370.602	15.51	20.82	18.16
Cd 226.502	-0.2188u	-0.1519u	-0.3390u
Co 228.615	-0.0846u	0.2219	-0.0905u
Cr 267.716	0.3622	0.2673	0.9024
Cu 324.754	1.3453	1.8073	0.6525
Fe 271.441	4.1308	-1.7559u	4.0730
K 766.491	8.4128	6.7419	5.8585
Mg 279.078	0.6010	1.2245	-1.4470u
Mn 257.610	-0.0655u	-0.0390u	-0.1266u
Mo 202.032	1.7069	0.7965	1.8556
Na 330.237	283.302	483.864	343.735
Ni 231.604	-2.4435u	-0.4552u	-0.9449u
Pb 220.353	-12.5473u	-3.6086u	-9.7945u
Sb 206.834	2.7928	0.9690	-7.2843u
Se 196.026	-16.1652u	-7.3574u	0.1985
Si 288.158	24.0826	23.3100	22.5414
Sn 189.925	-2.9518u	-6.6587u	-4.3019u
Sr 216.596	0.2796	-0.5424u	-0.6800u
Ti 334.941	-0.0377u	-0.0617u	-0.1224u
Tl 190.794	-12.2672u	12.4883	-8.2617u
V 292.401	0.0124	0.0431	0.4048
Zn 206.200	1.4888	0.1591	1.3271

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2273	ppb	0.3484	153.3	-47.6269
Al 308.215	3.8287	ppb	3.9052	102.0	214.628
As 188.980	1.6846	ppb	2.6650	158.2	1.1559
B 249.678	1.2848	ppb	0.5898	45.9	3.0344
Ba 389.178	-1.2237	ppb	2.0414	166.8	-44.3310
Be 313.042	-0.1018	ppb	0.0113	11.1	-409.054
Ca 370.602	18.16	ppb	2.654	14.6	55.44
Cd 226.502	-0.2366	ppb	0.0948	40.1	0.9235
Co 228.615	0.0156	ppb	0.1787	1145.1	-12.3172
Cr 267.716	0.5106	ppb	0.3426	67.1	22.0986
Cu 324.754	1.2684	ppb	0.5812	45.8	474.524
Fe 271.441	2.1493	ppb	3.3821	157.4	18.4092
K 766.491	7.0044	ppb	1.2972	18.5	411.443

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	0.1262	ppb	1.3976	1107.5	21.8639
Mn 257.610	-0.0771	ppb	0.0449	58.3	20.1683
Mo 202.032	1.4530	ppb	0.5734	39.5	6.4562
Na 330.237	370.300	ppb	102.886	27.8	47.5668
Ni 231.604	-1.2812	ppb	1.0359	80.9	-3.2085
Pb 220.353	-8.6501	ppb	4.5779	52.9	-2.4198
Sb 206.834	-1.1742	ppb	5.3695	457.3	5.6267
Se 196.026	-7.7747	ppb	8.1898	105.3	1.2560
Si 288.158	23.3113	ppb	0.7706	3.3	644.378
Sn 189.925	-4.6375	ppb	1.8761	40.5	-0.1787
Sr 216.596	-0.3143	ppb	0.5189	165.1	6.2441
Ti 334.941	-0.0739	ppb	0.0437	59.1	-31.9303
Tl 190.794	-2.6802	ppb	13.2881	495.8	-2.0614
V 292.401	0.1534	ppb	0.2183	142.3	-11.3002
Zn 206.200	0.9917	ppb	0.7256	73.2	0.4419

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Rack 3, Tube 34

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2815	-1.0486u	-0.3269u
Al 308.215	2.8630	7.9918	2.9255
As 188.980	3205.51	3208.57	3204.12
B 249.678	43.1156	44.6676	45.0752
Ba 389.178	11.1647	12.8007	12.9394
Be 313.042	-0.1098u	-0.1209u	-0.1101u
Ca 370.602	26542	26373	26417
Cd 226.502	0.6246	0.0266	-0.4357
Co 228.615	14.0833	15.3286	15.7692
Cr 267.716	-0.6717u	0.0664	-0.6962u
Cu 324.754	-0.0666	0.3761	0.1992
Fe 271.441	40836.0	40625.8	40693.4
K 766.491	3540.93	3528.42	3528.52
Mg 279.078	3090.94	3077.73	3087.25
Mn 257.610	2380.55	2368.17	2371.99
Mo 202.032	2.1564	2.8291	2.2185
Na 330.237	6740.02	6824.99	6772.21
Ni 231.604	3.8666	3.3302	8.6536
Pb 220.353	-2.8959u	-0.6082u	2.2593u
Sb 206.834	2.0153	7.3924	12.9563
Se 196.026	-5.9779u	-1.5676	-11.6013u
Si 288.158	8154.67	8111.17	8135.43
Sn 189.925	-14.0133u	6.4946	-5.8799u
Sr 216.596	182.110	181.599	181.535
Ti 334.941	0.0314	-0.1382u	-0.1320u
Tl 190.794	4.6839u	-19.7967u	-0.9718u
V 292.401	0.8205	0.0057	-0.7405u
Zn 206.200	0.7455	3.4574	-2.6473u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3647	ppb	0.6659	182.6	-55.3798
Al 308.215	4.5934	ppb	2.9433	64.1	217.382
As 188.980	3206.06	ppb	2.2757	0.1	856.655
B 249.678	44.2861	ppb	1.0340	2.3	255.595

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	12.3016	ppb	0.9870	8.0	61.6333
Be 313.042	-0.1136	ppb	0.0063	5.5	-415.955
Ca 370.602	26444	ppb	87.67	0.3	44204
Cd 226.502	0.0718	ppb	0.5316	740.0	67.6697
Co 228.615	15.0604	ppb	0.8744	5.8	46.3298
Cr 267.716	-0.4338	ppb	0.4334	99.9	13.2867
Cu 324.754	0.1696	ppb	0.2228	131.4	448.596
Fe 271.441	40718.4	ppb	107.314	0.3	22557.5
K 766.491	3532.62	ppb	7.1938	0.2	73008.1
Mg 279.078	3085.30	ppb	6.8194	0.2	4123.59
Mn 257.610	2373.57	ppb	6.3377	0.3	196826
Mo 202.032	2.4013	ppb	0.3717	15.5	7.5790
Na 330.237	6779.07	ppb	42.8979	0.6	219.245
Ni 231.604	5.2834	ppb	2.9309	55.5	4.1425
Pb 220.353	-0.4149	ppb	2.5830	622.5	-0.5651
Sb 206.834	7.4547	ppb	5.4708	73.4	9.2078
Se 196.026	-6.3823	ppb	5.0291	78.8	1.9098
Si 288.158	8133.76	ppb	21.7968	0.3	38497.2
Sn 189.925	-4.4662	ppb	10.3268	231.2	-0.1348
Sr 216.596	181.748	ppb	0.3153	0.2	542.394
Ti 334.941	-0.0796	ppb	0.0962	120.9	-24.4061
Tl 190.794	-5.3615	ppb	12.8171	239.1	-4.0260
V 292.401	0.0286	ppb	0.7808	2733.0	-10.1470
Zn 206.200	0.5185	ppb	3.0587	589.9	0.2700

680-167630-a-8-b (Samp)

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Rack 3, Tube 35

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0010u	0.0835	0.4475
Al 308.215	19.9292	20.0221	16.5042
As 188.980	14.9638	17.5728	22.4366
B 249.678	43.1869	43.1175	43.4399
Ba 389.178	14.4570	12.9713	12.3578
Be 313.042	-0.1114u	-0.0894u	-0.0965u
Ca 370.602	22080	21985	21966
Cd 226.502	-0.2158	0.1977	-0.0796
Co 228.615	0.8837	3.2386	2.3446
Cr 267.716	0.8415	0.5985	0.5069
Cu 324.754	1.3980	0.5578	0.5729
Fe 271.441	5415.32	5414.58	5403.94
K 766.491	1654.58	1648.13	1642.34
Mg 279.078	3613.01	3617.63	3610.91
Mn 257.610	440.918	439.685	439.482
Mo 202.032	-0.5461u	-0.1044u	0.3237
Na 330.237	28692.1	28790.5	28596.4
Ni 231.604	41.3326	41.2541	38.9879
Pb 220.353	-3.6752u	-0.6204u	-10.9924u
Sb 206.834	-7.4383u	1.4150	-2.5886u
Se 196.026	4.6555	-6.7816u	-15.4706u
Si 288.158	5399.99	5379.17	5381.10
Sn 189.925	-1.7872u	-7.2502u	-5.7397u
Sr 216.596	151.826	151.824	149.783
Ti 334.941	-0.0958	-0.1923u	-0.0996

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-19.4420u	-3.4048u	2.6118
V 292.401	-0.5493u	0.0451	1.0710
Zn 206.200	0.6366	3.4272	6.3177

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1767	ppb	0.2383	134.9	-36.0172
Al 308.215	18.8185	ppb	2.0048	10.7	244.100
As 188.980	18.3244	ppb	3.7926	20.7	5.5848
B 249.678	43.2481	ppb	0.1697	0.4	284.730
Ba 389.178	13.2620	ppb	1.0794	8.1	53.0536
Be 313.042	-0.0991	ppb	0.0112	11.3	-404.914
Ca 370.602	22010	ppb	61.33	0.3	36822
Cd 226.502	-0.0326	ppb	0.2107	647.4	11.8304
Co 228.615	2.1556	ppb	1.1888	55.1	-3.9498
Cr 267.716	0.6490	ppb	0.1729	26.6	25.6842
Cu 324.754	0.8429	ppb	0.4808	57.0	462.581
Fe 271.441	5411.28	ppb	6.3665	0.1	3012.73
K 766.491	1648.35	ppb	6.1219	0.4	34202.9
Mg 279.078	3613.85	ppb	3.4361	0.1	4850.05
Mn 257.610	440.028	ppb	0.7771	0.2	36520.5
Mo 202.032	-0.1089	ppb	0.4349	399.2	3.7567
Na 330.237	28693.0	ppb	97.0059	0.3	812.811
Ni 231.604	40.5248	ppb	1.3316	3.3	43.6900
Pb 220.353	-5.0960	ppb	5.3300	104.6	-1.2350
Sb 206.834	-2.8706	ppb	4.4334	154.4	5.0971
Se 196.026	-5.8656	ppb	10.0943	172.1	1.6796
Si 288.158	5386.76	ppb	11.5044	0.2	25676.4
Sn 189.925	-4.9257	ppb	2.8210	57.3	-0.2487
Sr 216.596	151.144	ppb	1.1788	0.8	448.833
Ti 334.941	-0.1292	ppb	0.0546	42.3	-27.8749
Tl 190.794	-6.7450	ppb	11.4000	169.0	-3.1825
V 292.401	0.1889	ppb	0.8197	433.8	-10.5665
Zn 206.200	3.4605	ppb	2.8407	82.1	1.8159

680-167630-a-14-b (Samp)

4/19/2019, 11:08:45 PM

Rack 3, Tube 36

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8854u	0.5603	-0.9573u
Al 308.215	5.4309	6.4029	11.7678
As 188.980	78.0092	90.0932	90.1862
B 249.678	169.530	170.816	170.881
Ba 389.178	70.2725	68.6107	71.1344
Be 313.042	-0.1456u	-0.1443u	-0.1270u
Ca 370.602	82458	82429	82396
Cd 226.502	-0.2092	-0.5177u	-0.3717u
Co 228.615	8.8417	9.6066	10.1552
Cr 267.716	-1.1151u	-0.5427	-0.1767
Cu 324.754	0.2049	-0.1487u	-0.6949u
Fe 271.441	2976.20	2974.81	2990.85
K 766.491	10006.1	9997.78	9991.92
Mg 279.078	9200.19	9213.55	9207.72
Mn 257.610	9527.07	9522.52	9538.75
Mo 202.032	1.4663	0.9887	0.6948

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	26877.6	27552.7	27522.2
Ni 231.604	1.3989	0.1396	1.9599
Pb 220.353	3.0862	-11.7790u	1.2172
Sb 206.834	1.8177	0.8058	-4.7883u
Se 196.026	15.7019	-7.0483u	12.2994
Si 288.158	10577.4	10580.5	10591.7
Sn 189.925	2.4097	-10.0510u	-7.7957u
Sr 216.596	1878.43	1877.64	1880.10
Ti 334.941	-0.0339	0.0754	-0.0528
Tl 190.794	9.0827	-6.8886	-4.7179
V 292.401	-0.6149u	-0.8033u	-1.2578u
Zn 206.200	10.8998	8.1598	12.4470

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4275	ppb	0.8562	200.3	-42.4558
Al 308.215	7.8672	ppb	3.4128	43.4	222.582
As 188.980	86.0962	ppb	7.0037	8.1	23.6870
B 249.678	170.409	ppb	0.7620	0.4	1157.63
Ba 389.178	70.0059	ppb	1.2828	1.8	414.866
Be 313.042	-0.1390	ppb	0.0104	7.4	-429.362
Ca 370.602	82428	ppb	31.11	0.0	137973
Cd 226.502	-0.3662	ppb	0.1543	42.1	3.8260
Co 228.615	9.5345	ppb	0.6597	6.9	25.3362
Cr 267.716	-0.6115	ppb	0.4729	77.3	18.0669
Cu 324.754	-0.2129	ppb	0.4533	212.9	430.193
Fe 271.441	2980.62	ppb	8.8877	0.3	1667.48
K 766.491	9998.60	ppb	7.1261	0.1	206045
Mg 279.078	9207.15	ppb	6.7006	0.1	12237.7
Mn 257.610	9529.45	ppb	8.3726	0.1	790023
Mo 202.032	1.0499	ppb	0.3894	37.1	5.7412
Na 330.237	27317.5	ppb	381.291	1.4	775.625
Ni 231.604	1.1661	ppb	0.9322	79.9	-0.4718
Pb 220.353	-2.4918	ppb	8.0970	324.9	0.2789
Sb 206.834	-0.7216	ppb	3.5580	493.1	5.8391
Se 196.026	6.9843	ppb	12.2711	175.7	4.9482
Si 288.158	10583.2	ppb	7.5077	0.1	49929.2
Sn 189.925	-5.1457	ppb	6.6396	129.0	-0.3045
Sr 216.596	1878.72	ppb	1.2570	0.1	5491.70
Ti 334.941	-0.0038	ppb	0.0692	1841.5	-2.0194
Tl 190.794	-0.8413	ppb	8.6626	1029.7	0.3013
V 292.401	-0.8920	ppb	0.3305	37.1	-21.7838
Zn 206.200	10.5022	ppb	2.1711	20.7	5.6969

680-167630-a-10-b (Samp) 4/19/2019, 11:12:58 PM Rack 3, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2896u	0.1532	-0.2850u
Al 308.215	240.039	248.396	241.229
As 188.980	9.1516	5.7842	2.5813
B 249.678	66.0732	64.5056	64.8834
Ba 389.178	13.6133	15.2157	17.3626
Be 313.042	-0.0846u	-0.0606u	-0.0810u
Ca 370.602	5690	5707	5723

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.1344	-0.0400	-0.2978
Co 228.615	1.9313	3.4318	1.6135
Cr 267.716	0.1347	0.7002	-0.0878u
Cu 324.754	1.5604	1.2978	0.7928
Fe 271.441	7209.94	7170.18	7228.05
K 766.491	1429.64	1432.41	1436.80
Mg 279.078	2141.34	2138.39	2141.23
Mn 257.610	95.3025	95.5697	96.0055
Mo 202.032	0.3674	0.5400	-0.5884u
Na 330.237	6820.02	6677.04	7111.13
Ni 231.604	1.5397	2.7374	2.9130
Pb 220.353	-12.3023u	6.3084	-5.4893u
Sb 206.834	-6.3863u	-3.8463u	1.2038
Se 196.026	-13.5406u	-20.5477u	2.6211
Si 288.158	5307.38	5309.91	5330.46
Sn 189.925	4.8288	1.3305	-9.4638u
Sr 216.596	50.7258	52.6132	52.2719
Ti 334.941	1.1688	1.1407	1.1670
Tl 190.794	5.9403	-1.9416u	-19.5603u
V 292.401	0.5490	1.1798	1.0250
Zn 206.200	5.5973	7.7147	6.6848

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1405	ppb	0.2543	181.1	-46.2906
Al 308.215	243.221	ppb	4.5208	1.9	683.132
As 188.980	5.8390	ppb	3.2854	56.3	2.2463
B 249.678	65.1541	ppb	0.8181	1.3	432.818
Ba 389.178	15.3972	ppb	1.8813	12.2	65.6279
Be 313.042	-0.0754	ppb	0.0130	17.2	-387.219
Ca 370.602	5707	ppb	16.40	0.3	9556
Cd 226.502	-0.1574	ppb	0.1304	82.9	13.0553
Co 228.615	2.3255	ppb	0.9711	41.8	-3.3074
Cr 267.716	0.2490	ppb	0.4063	163.1	18.5016
Cu 324.754	1.2170	ppb	0.3902	32.1	474.230
Fe 271.441	7202.72	ppb	29.6003	0.4	4004.40
K 766.491	1432.95	ppb	3.6118	0.3	29785.8
Mg 279.078	2140.32	ppb	1.6699	0.1	2882.95
Mn 257.610	95.6259	ppb	0.3549	0.4	7966.37
Mo 202.032	0.1063	ppb	0.6078	571.7	4.0987
Na 330.237	6869.39	ppb	221.217	3.2	222.861
Ni 231.604	2.3967	ppb	0.7474	31.2	0.9153
Pb 220.353	-3.8277	ppb	9.4160	246.0	-0.8337
Sb 206.834	-3.0096	ppb	3.8636	128.4	5.0522
Se 196.026	-10.4891	ppb	11.8820	113.3	0.7830
Si 288.158	5315.92	ppb	12.6590	0.2	25345.6
Sn 189.925	-1.1015	ppb	7.4502	676.4	0.7156
Sr 216.596	51.8703	ppb	1.0057	1.9	159.417
Ti 334.941	1.1588	ppb	0.0158	1.4	82.9636
Tl 190.794	-5.1872	ppb	13.0564	251.7	-2.9648
V 292.401	0.9179	ppb	0.3288	35.8	-2.9599
Zn 206.200	6.6656	ppb	1.0588	15.9	3.5887

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167630-a-12-b (Samp) **4/19/2019, 11:17:11 PM** **Rack 3, Tube 38****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3789u	0.1947	-0.1539u
Al 308.215	11.1301	15.6232	10.1575
As 188.980	1.9365	2.1611	7.4976
B 249.678	6.1197	5.0031	5.9024
Ba 389.178	3.7190	3.2433	4.0649
Be 313.042	-0.1084u	-0.1063u	-0.1163u
Ca 370.602	4889	4856	4854
Cd 226.502	0.1135	-0.4297u	0.0590
Co 228.615	1.4259	0.7761	-0.3580u
Cr 267.716	-0.1575u	0.2578	0.3191
Cu 324.754	0.3546	0.9853	0.8389
Fe 271.441	5.1382	16.6927	24.1144
K 766.491	456.061	452.701	452.141
Mg 279.078	634.397	619.332	628.530
Mn 257.610	1.5002	1.5663	1.5416
Mo 202.032	0.9732	1.1326	1.2698
Na 330.237	2671.72	2620.51	2843.92
Ni 231.604	0.9596	-1.3125u	3.3072
Pb 220.353	-9.2037u	-3.0200u	12.0947
Sb 206.834	-8.9897u	-7.6263u	-2.7230u
Se 196.026	7.1656	4.8191	-3.5916u
Si 288.158	6395.80	6357.07	6365.95
Sn 189.925	-4.0438u	-5.0746u	-2.8105u
Sr 216.596	41.4035	44.9213	42.8771
Ti 334.941	0.1916	0.1765	-0.0223u
Tl 190.794	-24.7034u	-0.1231u	-12.0323u
V 292.401	0.4679	0.1054	0.9322
Zn 206.200	1.4666	-0.8800u	6.7192

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1127	ppb	0.2890	256.4	-44.2845
Al 308.215	12.3036	ppb	2.9157	23.7	231.208
As 188.980	3.8651	ppb	3.1479	81.4	1.7382
B 249.678	5.6751	ppb	0.5920	10.4	33.0824
Ba 389.178	3.6758	ppb	0.4125	11.2	-12.8363
Be 313.042	-0.1103	ppb	0.0053	4.8	-415.298
Ca 370.602	4866	ppb	19.57	0.4	8161
Cd 226.502	-0.0857	ppb	0.2991	348.9	2.8632
Co 228.615	0.6147	ppb	0.9028	146.9	-9.9352
Cr 267.716	0.1398	ppb	0.2593	185.4	15.9120
Cu 324.754	0.7263	ppb	0.3301	45.5	458.088
Fe 271.441	15.3151	ppb	9.5628	62.4	25.7272
K 766.491	453.634	ppb	2.1202	0.5	9656.13
Mg 279.078	627.420	ppb	7.5938	1.2	860.731
Mn 257.610	1.5360	ppb	0.0334	2.2	156.242
Mo 202.032	1.1252	ppb	0.1485	13.2	5.9028
Na 330.237	2712.05	ppb	117.042	4.3	110.839
Ni 231.604	0.9847	ppb	2.3099	234.6	-0.6672
Pb 220.353	-0.0430	ppb	10.9568	25478.1	0.8395
Sb 206.834	-6.4464	ppb	3.2958	51.1	3.7017
Se 196.026	2.7977	ppb	5.6563	202.2	3.2492
Si 288.158	6372.94	ppb	20.2897	0.3	30279.2

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-3.9763	ppb	1.1336	28.5	-0.0113
Sr 216.596	43.0673	ppb	1.7666	4.1	132.877
Ti 334.941	0.1153	ppb	0.1194	103.6	-13.5431
Tl 190.794	-12.2863	ppb	12.2922	100.0	-4.3610
V 292.401	0.5018	ppb	0.4144	82.6	-7.6949
Zn 206.200	2.4353	ppb	3.8911	159.8	1.2387

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1708	0.3803	-0.3128u
Al 308.215	15.4134	15.6767	19.2982
As 188.980	1.4868	5.7360	15.5377
B 249.678	9.0910	7.9463	9.7760
Ba 389.178	9.0454	8.5252	6.0999
Be 313.042	-0.1045u	-0.1141u	-0.1010u
Ca 370.602	11986	11910	11893
Cd 226.502	-0.2730u	0.1736	-0.5242u
Co 228.615	0.6084	0.3324	0.8385
Cr 267.716	0.2876	0.3564	0.8089
Cu 324.754	1.7385	2.7602	1.9755
Fe 271.441	889.006	859.200	876.745
K 766.491	1772.26	1766.57	1755.15
Mg 279.078	2073.65	2052.06	2046.96
Mn 257.610	32.8294	32.5405	32.5310
Mo 202.032	1.0096	0.2128	-0.1548u
Na 330.237	50810.5	51121.0	50407.0
Ni 231.604	2.7748	1.6049	1.6581
Pb 220.353	-4.3683u	-5.9321u	5.5427
Sb 206.834	1.7447	1.2819	4.8350
Se 196.026	-5.0402u	-13.3445u	-6.9205u
Si 288.158	1613.78	1606.56	1603.69
Sn 189.925	0.2777	-2.7489u	3.3612
Sr 216.596	86.7886	88.5460	86.9852
Ti 334.941	-0.0164	0.0173	0.1536
Tl 190.794	-2.4987u	-2.2089u	-4.1337u
V 292.401	0.1453	0.2557	0.7744
Zn 206.200	2.8207	0.8794	0.1733

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0794	ppb	0.3555	447.6	-38.6947
Al 308.215	16.7961	ppb	2.1709	12.9	240.019
As 188.980	7.5868	ppb	7.2060	95.0	2.7297
B 249.678	8.9378	ppb	0.9244	10.3	54.5283
Ba 389.178	7.8902	ppb	1.5721	19.9	15.6170
Be 313.042	-0.1066	ppb	0.0068	6.4	-413.367
Ca 370.602	11929	ppb	49.54	0.4	19969
Cd 226.502	-0.2079	ppb	0.3534	170.0	2.5523
Co 228.615	0.5931	ppb	0.2534	42.7	-10.0361
Cr 267.716	0.4843	ppb	0.2832	58.5	22.0638
Cu 324.754	2.1581	ppb	0.5347	24.8	501.605
Fe 271.441	874.984	ppb	14.9805	1.7	501.598
K 766.491	1764.66	ppb	8.7147	0.5	36588.6

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2057.56	ppb	14.1684	0.7	2772.95
Mn 257.610	32.6336	ppb	0.1696	0.5	2739.99
Mo 202.032	0.3559	ppb	0.5952	167.3	4.5943
Na 330.237	50779.5	ppb	357.990	0.7	1409.91
Ni 231.604	2.0126	ppb	0.6606	32.8	0.4860
Pb 220.353	-1.5859	ppb	6.2229	392.4	0.2276
Sb 206.834	2.6206	ppb	1.9317	73.7	6.9708
Se 196.026	-8.4351	ppb	4.3544	51.6	1.1382
Si 288.158	1608.01	ppb	5.1962	0.3	8040.28
Sn 189.925	0.2967	ppb	3.0551	1029.8	1.0733
Sr 216.596	87.4399	ppb	0.9629	1.1	262.510
Ti 334.941	0.0515	ppb	0.0900	174.8	-16.4604
Tl 190.794	-2.9471	ppb	1.0378	35.2	-2.1567
V 292.401	0.3918	ppb	0.3359	85.7	-8.8598
Zn 206.200	1.2912	ppb	1.3709	106.2	0.6089

680-167630-a-13-b (Samp)

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Rack 3, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0944	0.2513	-1.1347u
Al 308.215	22.7289	26.8396	30.5647
As 188.980	5.0225	7.5074	5.8904
B 249.678	104.237	106.728	108.417
Ba 389.178	11.7084	8.3376	12.8154
Be 313.042	-0.1158u	-0.1015u	-0.1042u
Ca 370.602	38072	38125	38231
Cd 226.502	0.7104	0.4751	0.1394
Co 228.615	10.6140	10.9380	9.6668
Cr 267.716	0.3757	-0.4425	-0.2166
Cu 324.754	1.5466	1.9289	1.0100
Fe 271.441	101.153	92.7030	98.4455
K 766.491	6303.08	6311.35	6326.13
Mg 279.078	6523.14	6530.41	6539.09
Mn 257.610	6365.95	6370.99	6389.02
Mo 202.032	2.2032	-0.0172u	2.2823
Na 330.237	20283.3	20724.2	20325.0
Ni 231.604	6.3197	5.9712	8.1955
Pb 220.353	-4.4826u	-4.7277u	-2.6404u
Sb 206.834	-4.3620u	-3.7472u	-2.4390u
Se 196.026	-14.0515u	6.1163	-0.3467
Si 288.158	7765.28	7769.90	7791.10
Sn 189.925	-6.4257u	-10.6993u	-2.0664u
Sr 216.596	367.243	370.418	369.753
Ti 334.941	0.7502	0.6571	0.7013
Tl 190.794	-9.5700u	-12.3152u	-14.3943u
V 292.401	-0.8218u	-1.2328u	0.2159
Zn 206.200	2.5074	-2.9066u	1.7280

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3260	ppb	0.7214	221.3	-40.0310
Al 308.215	26.7111	ppb	3.9195	14.7	259.361
As 188.980	6.1401	ppb	1.2611	20.5	2.3454
B 249.678	106.461	ppb	2.1027	2.0	722.871

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	10.9538	ppb	2.3323	21.3	39.4365
Be 313.042	-0.1072	ppb	0.0076	7.1	-409.598
Ca 370.602	38143	ppb	80.80	0.2	63890
Cd 226.502	0.4416	ppb	0.2870	65.0	9.7478
Co 228.615	10.4063	ppb	0.6606	6.3	28.8590
Cr 267.716	-0.0945	ppb	0.4225	447.3	21.6923
Cu 324.754	1.4952	ppb	0.4616	30.9	481.416
Fe 271.441	97.4337	ppb	4.3147	4.4	71.5168
K 766.491	6313.52	ppb	11.6803	0.2	130239
Mg 279.078	6530.88	ppb	7.9848	0.1	8690.74
Mn 257.610	6375.32	ppb	12.1284	0.2	528544
Mo 202.032	1.4894	ppb	1.3054	87.6	6.5167
Na 330.237	20444.2	ppb	243.408	1.2	590.096
Ni 231.604	6.8288	ppb	1.1964	17.5	5.8802
Pb 220.353	-3.9502	ppb	1.1410	28.9	-0.3313
Sb 206.834	-3.5161	ppb	0.9821	27.9	4.7636
Se 196.026	-2.7607	ppb	10.2983	373.0	2.8022
Si 288.158	7775.43	ppb	13.7702	0.2	36824.7
Sn 189.925	-6.3972	ppb	4.3165	67.5	-0.6214
Sr 216.596	369.138	ppb	1.6741	0.5	1084.69
Ti 334.941	0.7029	ppb	0.0466	6.6	53.7738
Tl 190.794	-12.0931	ppb	2.4198	20.0	-2.9423
V 292.401	-0.6129	ppb	0.7466	121.8	-19.1422
Zn 206.200	0.4429	ppb	2.9268	660.8	0.1391

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	504.681	508.280	501.327
Al 308.215	10138.0	10168.5	10089.4
As 188.980	487.288	499.470	500.971
B 249.678	512.460	518.462	518.121
Ba 389.178	486.374	490.424	484.355
Be 313.042	527.980	529.163	526.345
Ca 370.602	10076	10093	10014
Cd 226.502	500.052	502.053	500.329
Co 228.615	505.923	508.545	504.311
Cr 267.716	501.908	502.728	498.479
Cu 324.754	506.620	505.764	499.392
Fe 271.441	10174.0	10188.4	10163.8
K 766.491	9827.36	9856.27	9794.33
Mg 279.078	10217.1	10251.8	10184.3
Mn 257.610	506.156	506.682	503.678
Mo 202.032	498.016	504.914	496.854
Na 330.237	10417.2	10715.8	10632.9
Ni 231.604	506.441	500.611	498.960
Pb 220.353	516.085	514.785	486.743
Sb 206.834	487.308	487.808	482.525
Se 196.026	510.600	516.153	525.539
Si 288.158	5139.33	5147.26	5109.71
Sn 189.925	507.957	493.967	501.004
Sr 216.596	497.350	494.655	495.111
Ti 334.941	502.174	502.448	499.682

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	506.745	491.555	505.339
V 292.401	503.404	506.628	501.543
Zn 206.200	1028.93	1030.64	1021.05

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	504.763	ppb	3.4771	0.7	15289.3	100.95256
Al 308.215	10132.0	ppb	39.9100	0.4	20045.0	101.31958
As 188.980	495.910	ppb	7.5044	1.5	133.012	99.18193
B 249.678	516.348	ppb	3.3712	0.7	3518.09	103.26951
Ba 389.178	487.051	ppb	3.0908	0.6	3042.12	97.41019
Be 313.042	527.830	ppb	1.4149	0.3	425485	105.56590
Ca 370.602	10061	ppb	41.75	0.4	16849	100.61011
Cd 226.502	500.811	ppb	1.0843	0.2	6448.56	100.16224
Co 228.615	506.260	ppb	2.1371	0.4	1992.85	101.25197
Cr 267.716	501.038	ppb	2.2540	0.4	8396.17	100.20762
Cu 324.754	503.925	ppb	3.9489	0.8	15707.2	100.78505
Fe 271.441	10175.4	ppb	12.3738	0.1	5670.38	101.70338
K 766.491	9825.99	ppb	30.9917	0.3	199918	98.25986
Mg 279.078	10217.7	ppb	33.7681	0.3	13678.9	102.17711
Mn 257.610	505.505	ppb	1.6043	0.3	41984.4	101.10100
Mo 202.032	499.928	ppb	4.3569	0.9	847.517	99.98560
Na 330.237	10588.6	ppb	154.145	1.5	306.924	105.88638
Ni 231.604	502.004	ppb	3.9301	0.8	560.956	100.40083
Pb 220.353	505.871	ppb	16.5783	3.3	191.834	101.17418
Sb 206.834	485.880	ppb	2.9167	0.6	182.314	97.17601
Se 196.026	517.431	ppb	7.5509	1.5	100.353	103.48618
Si 288.158	5132.10	ppb	19.7927	0.4	24621.8	102.64200
Sn 189.925	500.976	ppb	6.9951	1.4	127.608	100.19521
Sr 216.596	495.705	ppb	1.4425	0.3	1448.03	99.14107
Ti 334.941	501.435	ppb	1.5239	0.3	44482.2	100.28695
Tl 190.794	501.213	ppb	8.3934	1.7	118.468	100.24262
V 292.401	503.858	ppb	2.5730	0.5	5075.07	100.77168
Zn 206.200	1026.87	ppb	5.1107	0.5	566.325	102.68712

Cont Calib Blank (CCB)

4/19/2019, 11:34:05 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3973	0.2765	-0.3455u
Al 308.215	6.7777	4.0823	7.0002
As 188.980	-1.6877u	0.1085	3.9814
B 249.678	12.1422	10.5628	9.0313
Ba 389.178	0.2152	0.7624	0.7339
Be 313.042	0.0613	0.0348	0.0132
Ca 370.602	-3.883u	1.047	-11.16u
Cd 226.502	0.7579	-0.1101u	0.5080
Co 228.615	-0.7278u	2.2591	0.4892
Cr 267.716	-0.3508u	-0.0509u	0.1996
Cu 324.754	0.3646	0.0291	0.7289
Fe 271.441	13.6997	-2.6506u	25.1461
K 766.491	0.1785	-1.6115	-2.9418
Mg 279.078	13.1461	10.6481	7.1306
Mn 257.610	0.3059	0.1568	0.2246
Mo 202.032	1.4326	1.0628	2.0404

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	312.128	127.094	410.836
Ni 231.604	3.9992	-1.4689u	0.4648
Pb 220.353	-19.0601u	-1.2955u	1.2597
Sb 206.834	2.4184	-3.5652u	-3.8793u
Se 196.026	14.7562	6.8734	2.1977
Si 288.158	7.3351	2.6079	9.2631
Sn 189.925	-9.1774u	-4.5561u	-2.4008u
Sr 216.596	-0.1322u	-0.8972u	2.0785
Ti 334.941	0.2680	0.1650	0.1328
Tl 190.794	-16.7564u	-10.2667u	-11.2447u
V 292.401	-0.3034u	0.1538	-0.4123u
Zn 206.200	-1.2053u	0.3920	0.9508

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1094	ppb	0.3986	364.2	-37.3996	0.10944
Al 308.215	5.9534	ppb	1.6242	27.3	218.784	5.95340
As 188.980	0.8007	ppb	2.8972	361.8	0.9199	0.80073
B 249.678	10.5788	ppb	1.5555	14.7	66.6469	10.57877
Ba 389.178	0.5705	ppb	0.3080	54.0	-33.0419	0.57048
Be 313.042	0.0364	ppb	0.0241	66.2	-297.564	0.03643
Ca 370.602	-4.667	ppb	6.144	131.6	17.28	-4.66678
Cd 226.502	0.3853	ppb	0.4469	116.0	8.9105	0.38526
Co 228.615	0.6735	ppb	1.5019	223.0	-9.7106	0.67349
Cr 267.716	-0.0674	ppb	0.2755	408.9	12.4308	-0.06738
Cu 324.754	0.3742	ppb	0.3500	93.5	447.443	0.37418
Fe 271.441	12.0650	ppb	13.9703	115.8	23.9291	12.06503
K 766.491	-1.4583	ppb	1.5658	107.4	289.994	-1.45829
Mg 279.078	10.3083	ppb	3.0222	29.3	35.4769	10.30826
Mn 257.610	0.2291	ppb	0.0747	32.6	45.5810	0.22913
Mo 202.032	1.5119	ppb	0.4936	32.6	6.5555	1.51190
Na 330.237	283.353	ppb	144.043	50.8	45.2359	283.35275
Ni 231.604	0.9984	ppb	2.7728	277.7	-0.6520	0.99837
Pb 220.353	-6.3653	ppb	11.0680	173.9	-1.5549	-6.36533Z
Sb 206.834	-1.6753	ppb	3.5488	211.8	5.3783	-1.67535
Se 196.026	7.9424	ppb	6.3472	79.9	4.2189	7.94242
Si 288.158	6.4020	ppb	3.4243	53.5	565.567	6.40204
Sn 189.925	-5.3781	ppb	3.4623	64.4	-0.3658	-5.37808
Sr 216.596	0.3497	ppb	1.5453	441.9	8.1736	0.34970
Ti 334.941	0.1886	ppb	0.0706	37.4	-8.6224	0.18861
Tl 190.794	-12.7559	ppb	3.4989	27.4	-4.4742	-12.75595Z
V 292.401	-0.1873	ppb	0.3004	160.4	-14.7808	-0.18731
Zn 206.200	0.0458	ppb	1.1190	2440.7	-0.0800	0.04585

mb 680-566757/1-a (Samp)

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Rack 3, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6663	-0.0513u	-0.3825u
Al 308.215	6.0849	0.4207	4.4865
As 188.980	5.2108	-2.3858u	4.9128
B 249.678	1.3681	0.8950	1.1441
Ba 389.178	0.3160	-2.2831u	-2.5425u
Be 313.042	-0.1226u	-0.1198u	-0.0895u
Ca 370.602	-3.031u	4.955	-13.56u

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Label	Replicates Concentration		
Cd 226.502	-0.1245u	0.1010	0.1088
Co 228.615	0.4879	-0.3235u	0.7920
Cr 267.716	0.2675	0.0350	0.3431
Cu 324.754	-0.7651u	0.2062	-0.4080u
Fe 271.441	-7.4112u	7.7179	2.7331
K 766.491	-0.0226	-0.9539u	-0.1945
Mg 279.078	1.3355	-3.3822u	2.3849
Mn 257.610	-0.0035u	-0.0755u	-0.0606u
Mo 202.032	2.6638	0.9919	-0.1683u
Na 330.237	-53.2785u	313.359	135.051
Ni 231.604	-1.6912u	0.2171	-1.7166u
Pb 220.353	-1.6191u	-2.8222u	4.6880
Sb 206.834	-1.3368u	-0.9261u	-4.7879u
Se 196.026	-4.6243u	-13.7636u	0.7961
Si 288.158	5.2711	0.7286	4.6429
Sn 189.925	-10.9693u	-5.9215u	-2.0113u
Sr 216.596	-1.0037u	-0.3261u	0.2639
Ti 334.941	0.0023	-0.1169u	0.1700
Tl 190.794	-15.5668u	-5.0241u	0.0133
V 292.401	0.3719	0.1606	0.2290
Zn 206.200	0.9433	-2.0170u	0.6244

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0775	ppb	0.5362	691.8	-38.3642
Al 308.215	3.6640	ppb	2.9203	79.7	214.310
As 188.980	2.5793	ppb	4.3024	166.8	1.3949
B 249.678	1.1357	ppb	0.2367	20.8	2.0191
Ba 389.178	-1.5032	ppb	1.5808	105.2	-46.0900
Be 313.042	-0.1106	ppb	0.0184	16.6	-416.151
Ca 370.602	-3.877	ppb	9.284	239.5	18.61
Cd 226.502	0.0284	ppb	0.1325	466.0	4.3181
Co 228.615	0.3188	ppb	0.5767	180.9	-11.1106
Cr 267.716	0.2152	ppb	0.1606	74.6	17.1549
Cu 324.754	-0.3223	ppb	0.4913	152.4	426.332
Fe 271.441	1.0133	ppb	7.7098	760.9	17.8006
K 766.491	-0.3903	ppb	0.4956	127.0	267.648
Mg 279.078	0.1127	ppb	3.0719	2725.3	21.8456
Mn 257.610	-0.0465	ppb	0.0380	81.7	22.6989
Mo 202.032	1.1625	ppb	1.4237	122.5	5.9658
Na 330.237	131.711	ppb	183.342	139.2	41.1277
Ni 231.604	-1.0636	ppb	1.1092	104.3	-2.9648
Pb 220.353	0.0822	ppb	4.0339	4905.3	0.8871
Sb 206.834	-2.3502	ppb	2.1210	90.2	5.2007
Se 196.026	-5.8639	ppb	7.3586	125.5	1.6162
Si 288.158	3.5475	ppb	2.4614	69.4	551.850
Sn 189.925	-6.3007	ppb	4.4910	71.3	-0.5990
Sr 216.596	-0.3553	ppb	0.6343	178.5	6.1245
Ti 334.941	0.0185	ppb	0.1441	781.0	-23.7290
Tl 190.794	-6.8592	ppb	7.9505	115.9	-3.0615
V 292.401	0.2539	ppb	0.1078	42.5	-10.2423
Zn 206.200	-0.1498	ppb	1.6249	1084.8	-0.1879

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

ics 680-566757/2-a (Samp) 4/19/2019, 11:42:29 PM Rack 3, Tube 42

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.7678	55.3824	54.4379
Al 308.215	5247.37	5235.31	5227.43
As 188.980	108.804	110.188	108.969
B 249.678	213.621	216.023	215.246
Ba 389.178	106.267	102.663	106.149
Be 313.042	56.1873	56.1234	56.0508
Ca 370.602	5199	5181	5186
Cd 226.502	53.5494	53.3999	53.8890
Co 228.615	52.0900	53.7093	52.8894
Cr 267.716	106.502	105.659	106.482
Cu 324.754	107.298	107.286	105.320
Fe 271.441	5251.73	5279.04	5271.23
K 766.491	7992.91	7965.83	7961.47
Mg 279.078	5291.89	5288.68	5273.99
Mn 257.610	429.752	428.846	429.346
Mo 202.032	105.058	105.330	108.107
Na 330.237	5487.74	5320.38	5598.40
Ni 231.604	106.045	104.646	109.253
Pb 220.353	539.311	528.398	532.770
Sb 206.834	52.8996	55.4819	50.4639
Se 196.026	98.8875	105.807	112.019
Si 288.158	2.2045	1.5460	1.2911
Sn 189.925	92.5002	93.8236	97.9512
Sr 216.596	105.226	104.780	102.183
Ti 334.941	418.264	417.082	416.981
Tl 190.794	40.3618	39.8538	43.1096
V 292.401	105.801	106.599	106.140
Zn 206.200	106.954	111.335	112.764

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.8627	ppb	0.4793	0.9	1624.91
Al 308.215	5236.70	ppb	10.0448	0.2	10454.9
As 188.980	109.320	ppb	0.7561	0.7	29.8651
B 249.678	214.963	ppb	1.2256	0.6	1460.24
Ba 389.178	105.026	ppb	2.0476	1.9	631.972
Be 313.042	56.1205	ppb	0.0683	0.1	44944.9
Ca 370.602	5189	ppb	9.084	0.2	8707
Cd 226.502	53.6128	ppb	0.2506	0.5	700.373
Co 228.615	52.8962	ppb	0.8097	1.5	199.346
Cr 267.716	106.215	ppb	0.4810	0.5	1791.56
Cu 324.754	106.634	ppb	1.1383	1.1	3668.13
Fe 271.441	5267.33	ppb	14.0671	0.3	2935.46
K 766.491	7973.41	ppb	17.0330	0.2	164170
Mg 279.078	5284.85	ppb	9.5434	0.2	7083.81
Mn 257.610	429.314	ppb	0.4542	0.1	35645.4
Mo 202.032	106.165	ppb	1.6873	1.6	183.096
Na 330.237	5468.84	ppb	139.970	2.6	180.155
Ni 231.604	106.648	ppb	2.3622	2.2	117.826
Pb 220.353	533.493	ppb	5.4927	1.0	202.626
Sb 206.834	52.9484	ppb	2.5094	4.7	25.3719
Se 196.026	105.571	ppb	6.5691	6.2	22.6851
Si 288.158	1.6805	ppb	0.4713	28.0	585.559

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	94.7584	ppb	2.8432	3.0	24.9426
Sr 216.596	104.063	ppb	1.6432	1.6	309.992
Ti 334.941	417.443	ppb	0.7130	0.2	37018.5
Tl 190.794	41.1084	ppb	1.7516	4.3	8.3048
V 292.401	106.180	ppb	0.4007	0.4	1060.81
Zn 206.200	110.351	ppb	3.0276	2.7	60.7453

680-167560-a-23-d (Samp) 4/19/2019, 11:46:43 PM Rack 3, Tube 43

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1073u	0.4398	-0.2732u
Al 308.215	3.5688	5.7970	0.7538
As 188.980	0.0528	7.0223	-1.6792u
B 249.678	5.1949	3.6189	4.6127
Ba 389.178	-4.0919u	0.0839	-0.3846u
Be 313.042	-0.1143u	-0.1186u	-0.1143u
Ca 370.602	18.97	19.46	22.15
Cd 226.502	0.1692	-0.0519u	0.0814
Co 228.615	1.5649	0.3773	-0.6291u
Cr 267.716	0.3828	0.0669	0.1098
Cu 324.754	0.7247	0.6558	0.0574
Fe 271.441	-5.5392u	-6.4099u	-0.7016u
K 766.491	5.1509	5.9420	5.1243
Mg 279.078	8.3260	-1.0470u	-5.2715u
Mn 257.610	0.4681	0.5846	0.4284
Mo 202.032	1.2101	2.0426	1.3564
Na 330.237	102.130	302.261	249.132
Ni 231.604	1.0534	-2.3578u	1.7645
Pb 220.353	-10.7564u	-1.7287u	-4.2348u
Sb 206.834	-5.5374u	6.5969	4.1119
Se 196.026	20.8269	-16.8101u	-5.6739u
Si 288.158	8.8335	7.1457	7.3434
Sn 189.925	-0.7468u	4.1157	-8.4379u
Sr 216.596	-1.4842u	-2.1455u	0.7758
Ti 334.941	0.2970	0.0834	0.0847
Tl 190.794	-4.4495u	-6.3532u	-4.9053u
V 292.401	-0.2075u	-0.4795u	-0.3149u
Zn 206.200	-0.4585u	-1.2004u	-2.3621u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0198	ppb	0.3731	1886.4	-40.1201
Al 308.215	3.3732	ppb	2.5273	74.9	213.730
As 188.980	1.7986	ppb	4.6059	256.1	1.1864
B 249.678	4.4755	ppb	0.7969	17.8	24.8836
Ba 389.178	-1.4642	ppb	2.2877	156.2	-45.8499
Be 313.042	-0.1157	ppb	0.0025	2.1	-420.291
Ca 370.602	20.19	ppb	1.714	8.5	58.86
Cd 226.502	0.0662	ppb	0.1113	168.1	4.7966
Co 228.615	0.4377	ppb	1.0982	250.9	-10.6426
Cr 267.716	0.1865	ppb	0.1713	91.9	16.6768
Cu 324.754	0.4793	ppb	0.3670	76.6	450.622
Fe 271.441	-4.2169	ppb	3.0753	72.9	14.9053
K 766.491	5.4058	ppb	0.4646	8.6	396.391

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	0.6692	ppb	6.9593	1040.0	22.5842
Mn 257.610	0.4937	ppb	0.0812	16.4	67.4695
Mo 202.032	1.5363	ppb	0.4445	28.9	6.5969
Na 330.237	217.841	ppb	103.670	47.6	43.4708
Ni 231.604	0.1534	ppb	2.2036	1436.6	-1.5996
Pb 220.353	-5.5733	ppb	4.6603	83.6	-1.2544
Sb 206.834	1.7238	ppb	6.4099	371.8	6.6211
Se 196.026	-0.5524	ppb	19.3341	3500.2	2.6175
Si 288.158	7.7742	ppb	0.9227	11.9	572.099
Sn 189.925	-1.6897	ppb	6.3297	374.6	0.5663
Sr 216.596	-0.9513	ppb	1.5318	161.0	4.3806
Ti 334.941	0.1550	ppb	0.1229	79.3	-11.6249
Tl 190.794	-5.2360	ppb	0.9940	19.0	-2.6727
V 292.401	-0.3339	ppb	0.1370	41.0	-16.2594
Zn 206.200	-1.3403	ppb	0.9595	71.6	-0.8452

680-167560-a-23-d (Samp)

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Rack 3, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2885u	0.0528	0.2680
Al 308.215	3.9227	11.3479	7.3094
As 188.980	6.1381	2.0067	3.5644
B 249.678	-1.3044u	-0.2349u	-2.0689u
Ba 389.178	-0.5387u	-1.7970u	-2.1128u
Be 313.042	-0.1087u	-0.0937u	-0.1109u
Ca 370.602	-1.808u	-0.7387u	8.119
Cd 226.502	-0.3089u	-0.1991u	-0.0314u
Co 228.615	0.7756	0.5827	0.5088
Cr 267.716	0.2680	-0.4126u	0.5241
Cu 324.754	0.3205	-0.4373u	0.4428
Fe 271.441	3.7952	9.7828	3.6011
K 766.491	0.5306	1.9084	0.7031
Mg 279.078	-0.0968u	2.0180	-0.3247u
Mn 257.610	0.2969	0.2434	0.2179
Mo 202.032	1.3502	0.2807	0.5345
Na 330.237	282.783	215.754	-223.882u
Ni 231.604	-2.6405u	1.5703	-1.0331u
Pb 220.353	-0.2488u	-10.8825u	-14.4712u
Sb 206.834	-0.8183u	8.8979	-5.6128u
Se 196.026	20.1252	-18.5799u	4.4984
Si 288.158	-0.5737u	0.1594	1.2868
Sn 189.925	-6.1836u	1.7529	9.8148
Sr 216.596	-0.5071u	0.9093	0.4504
Ti 334.941	0.0499	0.0202	0.1660
Tl 190.794	-4.9732u	-4.5792u	3.5041
V 292.401	-0.0193u	1.2533	0.6061
Zn 206.200	0.6137	1.7692	-3.2206u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0107	ppb	0.2806	2615.6	-40.3948
Al 308.215	7.5267	ppb	3.7174	49.4	221.868
As 188.980	3.9031	ppb	2.0864	53.5	1.7484
B 249.678	-1.2027	ppb	0.9212	76.6	-13.9882

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-1.4828	ppb	0.8327	56.2	-45.9618
Be 313.042	-0.1044	ppb	0.0094	9.0	-411.115
Ca 370.602	1.857	ppb	5.449	293.4	28.20
Cd 226.502	-0.1798	ppb	0.1398	77.7	1.6467
Co 228.615	0.6223	ppb	0.1378	22.1	-9.9067
Cr 267.716	0.1265	ppb	0.4841	382.7	15.6714
Cu 324.754	0.1087	ppb	0.4767	438.7	439.382
Fe 271.441	5.7264	ppb	3.5144	61.4	20.4254
K 766.491	1.0474	ppb	0.7507	71.7	299.582
Mg 279.078	0.5322	ppb	1.2918	242.7	22.4030
Mn 257.610	0.2528	ppb	0.0403	16.0	47.5104
Mo 202.032	0.7218	ppb	0.5588	77.4	5.2221
Na 330.237	91.5514	ppb	275.221	300.6	40.0446
Ni 231.604	-0.7011	ppb	2.1249	303.1	-2.5586
Pb 220.353	-8.5342	ppb	7.3963	86.7	-2.3758
Sb 206.834	0.8223	ppb	7.3931	899.1	6.3124
Se 196.026	2.0146	ppb	19.4717	966.5	3.1014
Si 288.158	0.2908 ^{uv}	ppb	0.9372	322.3	536.955
Sn 189.925	1.7947	ppb	7.9993	445.7	1.4469
Sr 216.596	0.2842	ppb	0.7227	254.3	7.9940
Ti 334.941	0.0787	ppb	0.0770	97.9	-18.3849
Tl 190.794	-2.0161	ppb	4.7847	237.3	-1.9014
V 292.401	0.6133	ppb	0.6363	103.7	-6.5669
Zn 206.200	-0.2792	ppb	2.6120	935.5	-0.2593

680-167560-a-23-d (Samp)

4/19/2019, 11:55:09 PM

Rack 3, Tube 45

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.1890	53.0531	55.0350
Al 308.215	5196.48	5157.08	5167.70
As 188.980	102.641	106.727	108.850
B 249.678	211.856	210.692	213.487
Ba 389.178	102.525	103.559	104.499
Be 313.042	55.4058	55.2185	55.1974
Ca 370.602	5166	5127	5135
Cd 226.502	52.6405	52.8552	52.2116
Co 228.615	54.6857	53.5015	55.0011
Cr 267.716	106.814	104.996	105.033
Cu 324.754	104.988	105.142	104.961
Fe 271.441	5254.64	5235.09	5243.08
K 766.491	7996.99	7983.64	7965.62
Mg 279.078	5262.29	5225.22	5213.59
Mn 257.610	525.179	524.035	523.533
Mo 202.032	104.723	104.225	105.493
Na 330.237	5118.90	5312.74	5305.34
Ni 231.604	106.312	102.451	102.356
Pb 220.353	535.693	525.749	514.722
Sb 206.834	48.0074	46.0754	44.2424
Se 196.026	122.824	108.902	115.864
Si 288.158	5.0426	8.7564	2.7540
Sn 189.925	97.7061	110.874	90.0569
Sr 216.596	102.783	102.050	103.247
Ti 334.941	416.239	414.415	414.255

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	30.4330	25.1513	33.3671
V 292.401	104.501	104.165	104.542
Zn 206.200	108.708	107.055	104.671

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.4257	ppb	1.1912	2.2	1611.82
Al 308.215	5173.75	ppb	20.3852	0.4	10331.7
As 188.980	106.073	ppb	3.1558	3.0	28.9982
B 249.678	212.012	ppb	1.4042	0.7	1440.10
Ba 389.178	103.528	ppb	0.9870	1.0	622.463
Be 313.042	55.2739	ppb	0.1147	0.2	44261.9
Ca 370.602	5143	ppb	20.37	0.4	8631
Cd 226.502	52.5691	ppb	0.3277	0.6	686.886
Co 228.615	54.3961	ppb	0.7906	1.5	205.288
Cr 267.716	105.614	ppb	1.0393	1.0	1781.65
Cu 324.754	105.030	ppb	0.0975	0.1	3619.51
Fe 271.441	5244.27	ppb	9.8272	0.2	2922.75
K 766.491	7982.08	ppb	15.7428	0.2	164371
Mg 279.078	5233.70	ppb	25.4339	0.5	7014.46
Mn 257.610	524.249	ppb	0.8439	0.2	43514.9
Mo 202.032	104.814	ppb	0.6392	0.6	180.817
Na 330.237	5245.66	ppb	109.844	2.1	174.187
Ni 231.604	103.706	ppb	2.2573	2.2	114.525
Pb 220.353	525.388	ppb	10.4905	2.0	199.564
Sb 206.834	46.1084	ppb	1.8827	4.1	22.9357
Se 196.026	115.863	ppb	6.9613	6.0	24.6340
Si 288.158	5.5177	ppb	3.0293	54.9	603.277
Sn 189.925	99.5458	ppb	10.5299	10.6	26.1525
Sr 216.596	102.694	ppb	0.6035	0.6	306.019
Ti 334.941	414.970	ppb	1.1020	0.3	36799.0
Tl 190.794	29.6505	ppb	4.1634	14.0	5.5844
V 292.401	104.403	ppb	0.2067	0.2	1042.83
Zn 206.200	106.811	ppb	2.0293	1.9	58.7920

680-167560-a-23-e ms (Samp) 4/19/2019, 11:59:23 PM Rack 3, Tube 46

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.2012	53.6663	53.9188
Al 308.215	5179.09	5201.90	5182.57
As 188.980	100.572	107.687	103.351
B 249.678	215.816	217.582	219.300
Ba 389.178	105.052	104.464	103.718
Be 313.042	55.5222	55.8362	55.5991
Ca 370.602	5141	5164	5144
Cd 226.502	52.7686	53.5693	53.3609
Co 228.615	54.2285	52.7656	50.2229
Cr 267.716	104.261	104.396	105.462
Cu 324.754	105.732	105.564	103.737
Fe 271.441	5189.73	5219.30	5219.62
K 766.491	7873.33	7909.99	7891.81
Mg 279.078	5225.68	5256.54	5239.22
Mn 257.610	424.337	426.895	424.530
Mo 202.032	102.851	105.778	104.739

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	5436.61	5580.16	5678.29
Ni 231.604	102.828	103.959	103.744
Pb 220.353	510.644	516.461	512.135
Sb 206.834	55.0938	50.5636	51.0122
Se 196.026	106.318	98.7818	102.311
Si 288.158	-1.2904	0.7397	0.4641
Sn 189.925	103.808	101.399	101.621
Sr 216.596	103.293	100.841	100.610
Ti 334.941	413.732	415.700	413.962
Tl 190.794	49.5146	36.4626	35.2834
V 292.401	104.614	105.935	104.741
Zn 206.200	104.208	108.460	106.766

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.9288	ppb	0.2676	0.5	1596.55
Al 308.215	5187.85	ppb	12.2857	0.2	10359.3
As 188.980	103.870	ppb	3.5861	3.5	28.4101
B 249.678	217.566	ppb	1.7417	0.8	1478.11
Ba 389.178	104.411	ppb	0.6685	0.6	628.034
Be 313.042	55.6525	ppb	0.1636	0.3	44567.3
Ca 370.602	5150	ppb	12.78	0.2	8641
Cd 226.502	53.2329	ppb	0.4154	0.8	695.414
Co 228.615	52.4057	ppb	2.0269	3.9	197.388
Cr 267.716	104.706	ppb	0.6577	0.6	1766.32
Cu 324.754	105.011	ppb	1.1061	1.1	3618.93
Fe 271.441	5209.55	ppb	17.1668	0.3	2903.46
K 766.491	7891.71	ppb	18.3281	0.2	162484
Mg 279.078	5240.48	ppb	15.4694	0.3	7024.52
Mn 257.610	425.254	ppb	1.4245	0.3	35308.6
Mo 202.032	104.456	ppb	1.4841	1.4	180.214
Na 330.237	5565.02	ppb	121.548	2.2	182.852
Ni 231.604	103.510	ppb	0.6007	0.6	114.307
Pb 220.353	513.080	ppb	3.0213	0.6	194.899
Sb 206.834	52.2232	ppb	2.4961	4.8	25.1181
Se 196.026	102.470	ppb	3.7704	3.7	22.0999
Si 288.158	-0.0289	ppb	1.1012	3814.6	577.866
Sn 189.925	102.276	ppb	1.3316	1.3	26.8426
Sr 216.596	101.582	ppb	1.4865	1.5	302.773
Ti 334.941	414.465	ppb	1.0757	0.3	36754.2
Tl 190.794	40.4202	ppb	7.8980	19.5	8.1414
V 292.401	105.096	ppb	0.7286	0.7	1049.88
Zn 206.200	106.478	ppb	2.1405	2.0	58.6083

680-167560-a-23-f ms (Samp) 4/20/2019, 12:03:36 AM Rack 3, Tube 47

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.1072	53.7507	54.1944
Al 308.215	5143.45	5139.36	5143.23
As 188.980	105.140	98.9831	107.484
B 249.678	217.158	217.275	217.363
Ba 389.178	103.502	101.188	101.467
Be 313.042	55.2444	55.1925	55.2283
Ca 370.602	5119	5119	5127

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Label	Replicates Concentration		
Cd 226.502	52.5793	52.9721	53.0824
Co 228.615	54.5054	50.7814	52.4334
Cr 267.716	104.268	104.627	104.978
Cu 324.754	105.166	104.254	104.730
Fe 271.441	5188.22	5178.20	5186.72
K 766.491	7838.56	7839.98	7819.97
Mg 279.078	5188.16	5198.18	5213.94
Mn 257.610	422.500	422.070	422.196
Mo 202.032	104.096	102.776	106.417
Na 330.237	5413.52	5491.96	5253.09
Ni 231.604	100.711	101.471	105.590
Pb 220.353	520.916	522.117	522.654
Sb 206.834	42.6566	60.4454	49.4306
Se 196.026	107.001	103.122	112.664
Si 288.158	2.5275	2.1322	2.6707
Sn 189.925	107.557	106.827	96.1288
Sr 216.596	102.994	103.805	101.641
Ti 334.941	411.978	410.939	411.546
Tl 190.794	42.5325	33.6915	49.8030
V 292.401	103.977	103.521	103.805
Zn 206.200	98.8359	109.028	104.171

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.3507	ppb	0.6916	1.3	1609.37
Al 308.215	5142.01	ppb	2.2986	0.0	10269.5
As 188.980	103.869	ppb	4.3906	4.2	28.4100
B 249.678	217.265	ppb	0.1030	0.0	1476.08
Ba 389.178	102.052	ppb	1.2629	1.2	613.144
Be 313.042	55.2217	ppb	0.0266	0.0	44219.9
Ca 370.602	5122	ppb	4.818	0.1	8595
Cd 226.502	52.8779	ppb	0.2644	0.5	690.811
Co 228.615	52.5734	ppb	1.8659	3.5	198.040
Cr 267.716	104.624	ppb	0.3549	0.3	1764.94
Cu 324.754	104.716	ppb	0.4561	0.4	3609.99
Fe 271.441	5184.38	ppb	5.4069	0.1	2889.53
K 766.491	7832.84	ppb	11.1628	0.1	161256
Mg 279.078	5200.09	ppb	12.9980	0.2	6970.55
Mn 257.610	422.255	ppb	0.2214	0.1	35059.8
Mo 202.032	104.430	ppb	1.8430	1.8	180.169
Na 330.237	5386.19	ppb	121.756	2.3	178.060
Ni 231.604	102.591	ppb	2.6253	2.6	113.274
Pb 220.353	521.895	ppb	0.8899	0.2	198.238
Sb 206.834	50.8442	ppb	8.9783	17.7	24.6555
Se 196.026	107.596	ppb	4.7985	4.5	23.0658
Si 288.158	2.4434	ppb	0.2789	11.4	588.982
Sn 189.925	103.504	ppb	6.3977	6.2	27.1530
Sr 216.596	102.813	ppb	1.0931	1.1	306.379
Ti 334.941	411.488	ppb	0.5217	0.1	36490.0
Tl 190.794	42.0090	ppb	8.0685	19.2	8.5225
V 292.401	103.768	ppb	0.2303	0.2	1036.40
Zn 206.200	104.012	ppb	5.0977	4.9	57.2473

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167583-b-4-b (Samp) **4/20/2019, 12:07:50 AM** **Rack 3, Tube 48****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.6482u	0.4682	0.8517
Al 308.215	153.638	150.099	155.534
As 188.980	5.6118	-0.7503u	9.9295
B 249.678	274.737	276.583	274.955
Ba 389.178	3.7306	2.6862	6.2940
Be 313.042	-0.1352u	-0.1240u	-0.1019u
Ca 370.602	40899	40925	40823
Cd 226.502	-0.1481u	0.1786	0.1693
Co 228.615	0.0842	0.7079	0.0117
Cr 267.716	0.7586	1.6002	1.2321
Cu 324.754	-0.2904u	0.5253	-0.1828u
Fe 271.441	50.8959	22.5749	58.2438
K 766.491	1777.18	1782.26	1781.02
Mg 279.078	3198.66	3207.69	3202.10
Mn 257.610	32.2895	32.2741	32.4464
Mo 202.032	1.1822	-0.2233u	-1.3835u
Na 330.237	3083.19	2747.10	2865.85
Ni 231.604	-0.8012u	-1.0833u	-4.3925u
Pb 220.353	-0.3549u	-3.7271u	-1.5614u
Sb 206.834	-3.0325u	-2.4054u	-5.2958u
Se 196.026	-7.5136u	-17.7778u	19.5874
Si 288.158	683.133	684.719	682.622
Sn 189.925	-6.8660u	-4.4308u	-1.2950u
Sr 216.596	113.780	112.965	114.614
Ti 334.941	2.8036	2.9608	2.7185
Tl 190.794	-9.2521u	-13.5193u	-11.1751u
V 292.401	4.5841	4.2868	3.7480
Zn 206.200	1.0043	2.5619	-0.5495u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2239	ppb	0.7793	348.1	-34.2597
Al 308.215	153.090	ppb	2.7583	1.8	506.690
As 188.980	4.9303	ppb	5.3724	109.0	2.0227
B 249.678	275.425	ppb	1.0086	0.4	1879.44
Ba 389.178	4.2369	ppb	1.8564	43.8	-6.4452
Be 313.042	-0.1204	ppb	0.0169	14.1	-417.837
Ca 370.602	40882	ppb	53.17	0.1	68377
Cd 226.502	0.0666	ppb	0.1860	279.3	4.8814
Co 228.615	0.2679	ppb	0.3827	142.9	-11.2770
Cr 267.716	1.1970	ppb	0.4219	35.2	33.6411
Cu 324.754	0.0174	ppb	0.4431	2550.3	436.578
Fe 271.441	43.9049	ppb	18.8341	42.9	41.5644
K 766.491	1780.15	ppb	2.6475	0.1	36932.7
Mg 279.078	3202.82	ppb	4.5556	0.1	4304.49
Mn 257.610	32.3367	ppb	0.0954	0.3	2719.36
Mo 202.032	-0.1415	ppb	1.2848	907.7	3.7639
Na 330.237	2898.71	ppb	170.436	5.9	115.865
Ni 231.604	-2.0924	ppb	1.9970	95.4	-4.1190
Pb 220.353	-1.8811	ppb	1.7087	90.8	0.1434
Sb 206.834	-3.5779	ppb	1.5204	42.5	4.7475
Se 196.026	-1.9014	ppb	19.3045	1015.3	2.3664
Si 288.158	683.491	ppb	1.0935	0.2	3725.46

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-4.1973	ppb	2.7928	66.5	-0.0672
Sr 216.596	113.786	ppb	0.8245	0.7	339.346
Ti 334.941	2.8276	ppb	0.1229	4.3	233.916
Tl 190.794	-11.3155	ppb	2.1371	18.9	-4.1220
V 292.401	4.2063	ppb	0.4238	10.1	30.1118
Zn 206.200	1.0056	ppb	1.5557	154.7	0.4492

680-167583-b-3-b (Samp) 4/20/2019, 12:12:03 AM Rack 3, Tube 49

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3818	0.2953	-0.3269u
Al 308.215	93.2827	91.4451	91.1900
As 188.980	5.7657	2.3575	-0.8152u
B 249.678	358.332	358.579	358.801
Ba 389.178	15.8737	16.0049	15.5065
Be 313.042	-0.1120u	-0.1141u	-0.1281u
Ca 370.602	40525	40520	40622
Cd 226.502	0.3900	0.4047	-0.0176
Co 228.615	-1.7011u	-0.7549u	1.9065
Cr 267.716	0.3951	0.9298	0.8032
Cu 324.754	0.6781	0.3598	1.2718
Fe 271.441	554.860	557.419	541.736
K 766.491	1596.47	1595.09	1597.33
Mg 279.078	2926.58	2919.42	2917.79
Mn 257.610	49.1193	48.8397	49.1687
Mo 202.032	-0.4962u	-2.1856u	-0.8787u
Na 330.237	3455.82	3325.01	3373.33
Ni 231.604	-2.5721u	-0.0185u	-0.7392u
Pb 220.353	-16.1619u	-11.0141u	-4.5491u
Sb 206.834	6.4937	0.7200	-0.6196u
Se 196.026	-4.8919u	-0.9097u	-11.0358u
Si 288.158	1921.99	1912.91	1921.52
Sn 189.925	-10.1321u	-4.1541u	-6.5059u
Sr 216.596	169.160	170.252	170.625
Ti 334.941	2.0061	1.8309	2.0466
Tl 190.794	-8.6222u	-4.4838u	-18.5560u
V 292.401	0.6261	0.9575	0.2530
Zn 206.200	1.6749	2.9889	2.0711

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1167	ppb	0.3866	331.3	-37.7462
Al 308.215	91.9726	ppb	1.1417	1.2	387.048
As 188.980	2.4360	ppb	3.2911	135.1	1.3555
B 249.678	358.571	ppb	0.2343	0.1	2448.05
Ba 389.178	15.7950	ppb	0.2583	1.6	66.1183
Be 313.042	-0.1181	ppb	0.0088	7.4	-416.070
Ca 370.602	40556	ppb	57.74	0.1	67830
Cd 226.502	0.2590	ppb	0.2397	92.5	8.1158
Co 228.615	-0.1832	ppb	1.8705	1021.1	-13.0738
Cr 267.716	0.7094	ppb	0.2794	39.4	25.5592
Cu 324.754	0.7699	ppb	0.4629	60.1	459.466
Fe 271.441	551.339	ppb	8.4138	1.5	322.427
K 766.491	1596.30	ppb	1.1315	0.1	33167.3

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2921.26	ppb	4.6751	0.2	3927.81
Mn 257.610	49.0426	ppb	0.1774	0.4	4103.48
Mo 202.032	-1.1868	ppb	0.8858	74.6	1.9945
Na 330.237	3384.72	ppb	66.1464	2.0	128.998
Ni 231.604	-1.1099	ppb	1.3166	118.6	-3.0166
Pb 220.353	-10.5750	ppb	5.8189	55.0	-3.1643
Sb 206.834	2.1980	ppb	3.7800	172.0	6.7583
Se 196.026	-5.6125	ppb	5.1013	90.9	1.6705
Si 288.158	1918.80	ppb	5.1113	0.3	9490.73
Sn 189.925	-6.9307	ppb	3.0116	43.5	-0.7579
Sr 216.596	170.012	ppb	0.7613	0.4	503.536
Ti 334.941	1.9612	ppb	0.1146	5.8	156.292
Tl 190.794	-10.5540	ppb	7.2322	68.5	-3.9594
V 292.401	0.6122	ppb	0.3525	57.6	-6.3819
Zn 206.200	2.2450	ppb	0.6741	30.0	1.1344

680-167583-b-2-b (Samp)

4/20/2019, 12:16:17 AM

Rack 3, Tube 50

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1536	-0.0517u	1.5858
Al 308.215	162.528	169.857	170.126
As 188.980	10.4700	7.6341	3.6974
B 249.678	17.2817	16.2869	14.9371
Ba 389.178	6.0847	1.7298	4.7500
Be 313.042	-0.1012u	-0.1061u	-0.0764u
Ca 370.602	469.8	482.6	470.8
Cd 226.502	0.0897	0.0972	-0.8733u
Co 228.615	0.5764	1.0667	0.0002u
Cr 267.716	0.5572	-0.0501u	0.3950
Cu 324.754	0.6579	1.6205	-0.0071u
Fe 271.441	0.0344	11.9930	23.9324
K 766.491	95.1830	98.7548	93.6864
Mg 279.078	242.316	244.591	236.583
Mn 257.610	9.0102	9.3237	9.0024
Mo 202.032	1.3810	0.7894	-0.5076u
Na 330.237	1092.60	962.342	1247.63
Ni 231.604	-0.6105u	-1.7123u	0.3520
Pb 220.353	-1.5217u	9.0197	0.2096
Sb 206.834	-4.6169u	-4.6061u	-2.1493u
Se 196.026	0.1113	-10.1421u	-5.4353u
Si 288.158	1903.51	1958.91	1924.01
Sn 189.925	-2.0634u	-11.7009u	-0.0680u
Sr 216.596	4.1773	4.3946	4.0126
Ti 334.941	0.3660	0.1434	0.0414
Tl 190.794	-10.1744u	-17.0812u	-11.5135u
V 292.401	0.6569	0.2149	0.5810
Zn 206.200	5.2058	-2.6265u	2.0251

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5626	ppb	0.8921	158.6	-23.6341
Al 308.215	167.504	ppb	4.3111	2.6	534.800
As 188.980	7.2671	ppb	3.4012	46.8	2.6466
B 249.678	16.1686	ppb	1.1768	7.3	104.913

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	4.1882	ppb	2.2311	53.3	-10.0400
Be 313.042	-0.0946	ppb	0.0159	16.8	-403.144
Ca 370.602	474.4	ppb	7.128	1.5	818.4
Cd 226.502	-0.2288	ppb	0.5581	243.9	1.0267
Co 228.615	0.5478	ppb	0.5338	97.5	-10.1997
Cr 267.716	0.3007	ppb	0.3144	104.6	18.6044
Cu 324.754	0.7571	ppb	0.8183	108.1	459.024
Fe 271.441	11.9866	ppb	11.9490	99.7	23.8872
K 766.491	95.8747	ppb	2.6041	2.7	2260.76
Mg 279.078	241.163	ppb	4.1264	1.7	344.081
Mn 257.610	9.1121	ppb	0.1833	2.0	782.825
Mo 202.032	0.5543	ppb	0.9660	174.3	4.9393
Na 330.237	1100.86	ppb	142.824	13.0	67.2990
Ni 231.604	-0.6569	ppb	1.0330	157.2	-2.5089
Pb 220.353	2.5692	ppb	5.6530	220.0	1.8288
Sb 206.834	-3.7908	ppb	1.4216	37.5	4.6799
Se 196.026	-5.1553	ppb	5.1324	99.6	1.7507
Si 288.158	1928.81	ppb	28.0091	1.5	9537.35
Sn 189.925	-4.6108	ppb	6.2208	134.9	-0.1718
Sr 216.596	4.1948	ppb	0.1916	4.6	19.4131
Ti 334.941	0.1836	ppb	0.1660	90.4	-8.4537
Tl 190.794	-12.9230	ppb	3.6628	28.3	-4.5117
V 292.401	0.4843	ppb	0.2363	48.8	-7.8872
Zn 206.200	1.5348	ppb	3.9391	256.6	0.7415

Cont Calib Verif (CCV)

4/20/2019, 12:20:31 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	508.180	507.935	513.257
Al 308.215	10164.6	10146.8	10182.6
As 188.980	496.942	501.451	517.787
B 249.678	517.816	518.181	524.307
Ba 389.178	487.821	486.652	487.630
Be 313.042	531.188	530.888	532.696
Ca 370.602	10103	10082	10142
Cd 226.502	504.741	503.339	506.274
Co 228.615	508.614	506.074	508.757
Cr 267.716	503.426	501.512	503.758
Cu 324.754	502.614	503.733	509.015
Fe 271.441	10156.9	10163.5	10294.3
K 766.491	9840.13	9820.03	9920.61
Mg 279.078	10236.4	10242.9	10286.8
Mn 257.610	504.826	504.318	507.603
Mo 202.032	503.138	498.568	501.471
Na 330.237	10454.8	10384.4	10723.7
Ni 231.604	506.278	505.479	511.580
Pb 220.353	502.314	499.834	504.823
Sb 206.834	478.655	484.403	487.417
Se 196.026	525.694	527.550	540.444
Si 288.158	5136.85	5119.49	5154.59
Sn 189.925	497.188	503.577	516.731
Sr 216.596	496.323	499.616	502.094
Ti 334.941	504.708	503.986	506.298

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	516.413	506.227	496.350
V 292.401	506.367	504.234	507.050
Zn 206.200	1041.72	1031.93	1036.11

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	509.791	ppb	3.0047	0.6	15442.0	101.95815
Al 308.215	10164.7	ppb	17.8956	0.2	20109.0	101.64652
As 188.980	505.393	ppb	10.9677	2.2	135.544	101.07868
B 249.678	520.101	ppb	3.6466	0.7	3543.78	104.02026
Ba 389.178	487.368	ppb	0.6268	0.1	3044.15	97.47355
Be 313.042	531.591	ppb	0.9689	0.2	428520	106.31818
Ca 370.602	10109	ppb	30.71	0.3	16929	101.08744
Cd 226.502	504.785	ppb	1.4680	0.3	6499.58	100.95692
Co 228.615	507.815	ppb	1.5093	0.3	1999.05	101.56303
Cr 267.716	502.899	ppb	1.2127	0.2	8427.29	100.57976
Cu 324.754	505.120	ppb	3.4186	0.7	15743.3	101.02407
Fe 271.441	10204.9	ppb	77.4983	0.8	5686.76	101.99805
K 766.491	9860.25	ppb	53.2258	0.5	200606	98.60254
Mg 279.078	10255.4	ppb	27.4241	0.3	13729.2	102.55351
Mn 257.610	505.582	ppb	1.7682	0.3	41991.0	101.11647
Mo 202.032	501.059	ppb	2.3127	0.5	849.425	100.21178
Na 330.237	10521.0	ppb	179.032	1.7	304.952	105.20972
Ni 231.604	507.779	ppb	3.3160	0.7	567.433	101.55580
Pb 220.353	502.324	ppb	2.4949	0.5	190.490	100.46475
Sb 206.834	483.492	ppb	4.4516	0.9	181.507	96.69838
Se 196.026	531.230	ppb	8.0339	1.5	102.954	106.24591
Si 288.158	5136.98	ppb	17.5514	0.3	24644.7	102.73954
Sn 189.925	505.832	ppb	9.9650	2.0	128.836	101.16643
Sr 216.596	499.344	ppb	2.8950	0.6	1458.66	99.86884
Ti 334.941	504.997	ppb	1.1829	0.2	44798.3	100.99946
Tl 190.794	506.330	ppb	10.0318	2.0	119.695	101.26601
V 292.401	505.884	ppb	1.4685	0.3	5095.83	101.17674
Zn 206.200	1036.59	ppb	4.9119	0.5	571.687	103.65896

Cont Calib Blank (CCB)

4/20/2019, 12:24:44 AM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0971	0.1363	-0.0969u
Al 308.215	11.2760	12.2147	3.0571
As 188.980	-0.2780u	-1.6904u	1.3001
B 249.678	14.5536	12.6441	9.9364
Ba 389.178	-1.0233u	-4.2711u	-2.9595u
Be 313.042	0.0716	0.0785	0.0492
Ca 370.602	15.98	-2.027u	-8.575u
Cd 226.502	0.2841	0.3986	-0.0941u
Co 228.615	0.1397	1.0144	-0.1989u
Cr 267.716	0.2862	0.8952	0.5942
Cu 324.754	0.3395	-0.5189u	0.4826
Fe 271.441	7.7325	8.1995	4.6923
K 766.491	0.1615	-0.1451	0.0333
Mg 279.078	4.4911	7.7112	5.4360
Mn 257.610	0.1714	0.1906	0.2230
Mo 202.032	1.0043	0.2098	-0.1714u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	-95.1612u	55.0468	72.0355
Ni 231.604	-1.1606u	-0.3044u	-1.4319u
Pb 220.353	-0.0557u	6.6737	-3.8914u
Sb 206.834	-4.0043u	6.3205	-8.1094u
Se 196.026	-2.0964u	4.3727	17.3842
Si 288.158	5.8041	4.2238	6.9823
Sn 189.925	-12.3499u	-6.3210u	-9.9324u
Sr 216.596	-1.0790u	0.1859	0.7487
Ti 334.941	0.2814	0.3451	0.1464
Tl 190.794	-3.2508u	-7.9215u	-5.8926u
V 292.401	0.1273	-0.0830u	1.2747
Zn 206.200	2.6567	-1.3536u	-3.1836u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3788	ppb	0.6329	167.1	-29.2141	0.37883
Al 308.215	8.8493	ppb	5.0381	56.9	224.445	8.84926
As 188.980	-0.2228	ppb	1.4960	671.6	0.6468	-0.22277
B 249.678	12.3781	ppb	2.3201	18.7	78.9705	12.37807
Ba 389.178	-2.7513	ppb	1.6338	59.4	-53.9328	-2.75130
Be 313.042	0.0664	ppb	0.0153	23.1	-273.239	0.06644
Ca 370.602	1.792	ppb	12.71	709.4	28.09	1.79224
Cd 226.502	0.1962	ppb	0.2578	131.4	6.4720	0.19616
Co 228.615	0.3184	ppb	0.6261	196.6	-11.1035	0.31839
Cr 267.716	0.5918	ppb	0.3045	51.5	23.4557	0.59185
Cu 324.754	0.1011	ppb	0.5417	535.9	439.144	0.10107
Fe 271.441	6.8748	ppb	1.9045	27.7	21.0440	6.87477
K 766.491	0.0166	ppb	0.1539	928.5	291.595	0.01658
Mg 279.078	5.8794	ppb	1.6552	28.2	29.5541	5.87943
Mn 257.610	0.1950	ppb	0.0261	13.4	42.7430	0.19502
Mo 202.032	0.3476	ppb	0.5998	172.6	4.5905	0.34755
Na 330.237	10.6404	ppb	92.0197	864.8	37.8572	10.64039
Ni 231.604	-0.9656	ppb	0.5885	60.9	-2.8549	-0.96565
Pb 220.353	0.9089	ppb	5.3482	588.4	1.2003	0.90887
Sb 206.834	-1.9310	ppb	7.4350	385.0	5.3280	-1.93105
Se 196.026	6.5535	ppb	9.9217	151.4	3.9571	6.55346
Si 288.158	5.6701	ppb	1.3841	24.4	561.722	5.67008
Sn 189.925	-9.5344	ppb	3.0341	31.8	-1.4163	-9.53444
Sr 216.596	-0.0482	ppb	0.9360	1943.5	7.0304	-0.04816
Ti 334.941	0.2576	ppb	0.1015	39.4	-2.5000	0.25764
Tl 190.794	-5.6883	ppb	2.3420	41.2	-2.7809	-5.68833
V 292.401	0.4397	ppb	0.7308	166.2	-8.3037	0.43968
Zn 206.200	-0.6268	ppb	2.9872	476.5	-0.4514	-0.62685

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4/20/2019, 12:28:56 AM

Rack 3, Tube 51

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1741u	0.1644	-0.1233u
Al 308.215	49.0717	48.6116	42.9685
As 188.980	6.4809	0.3189	10.4384
B 249.678	125.897	127.398	126.757
Ba 389.178	5.8465	5.7909	4.4599
Be 313.042	-0.1293u	-0.1354u	-0.0963u
Ca 370.602	15942	16064	16078

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.2009	0.1966	0.1598
Co 228.615	0.1234	0.8046	0.0654
Cr 267.716	0.5993	1.1065	0.5822
Cu 324.754	0.1915	0.1629	0.0243
Fe 271.441	5239.44	5297.40	5229.40
K 766.491	2341.38	2351.00	2355.17
Mg 279.078	3302.50	3320.23	3322.40
Mn 257.610	66.6581	66.9074	66.7486
Mo 202.032	1.3814	1.6152	-0.2043u
Na 330.237	4243.94	3960.94	4416.73
Ni 231.604	-3.5143u	-1.3385u	0.5144
Pb 220.353	8.4785	3.5981	6.4181
Sb 206.834	-3.0011u	2.9242	-0.7249u
Se 196.026	-18.7005u	7.4793	-4.8915u
Si 288.158	1207.74	1213.69	1214.42
Sn 189.925	-8.3064u	-19.2653u	1.3558
Sr 216.596	45.8804	49.1203	49.0563
Ti 334.941	0.5434	0.3613	0.3644
Tl 190.794	-6.7828u	-13.6497u	-2.4463u
V 292.401	-0.0806u	-0.3118u	0.2885
Zn 206.200	-1.1667u	0.6094	2.0080

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0443	ppb	0.1826	411.8	-43.0702
Al 308.215	46.8839	ppb	3.3987	7.2	299.009
As 188.980	5.7461	ppb	5.0996	88.7	2.2266
B 249.678	126.684	ppb	0.7531	0.6	856.008
Ba 389.178	5.3658	ppb	0.7850	14.6	3.0090
Be 313.042	-0.1204	ppb	0.0210	17.5	-421.914
Ca 370.602	16028	ppb	74.73	0.5	26815
Cd 226.502	0.0518	ppb	0.2196	423.7	12.6977
Co 228.615	0.3311	ppb	0.4110	124.1	-11.1795
Cr 267.716	0.7627	ppb	0.2979	39.1	26.8721
Cu 324.754	0.1262	ppb	0.0894	70.8	440.860
Fe 271.441	5255.42	ppb	36.7049	0.7	2926.38
K 766.491	2349.18	ppb	7.0694	0.3	48631.5
Mg 279.078	3315.04	ppb	10.9142	0.3	4454.25
Mn 257.610	66.7714	ppb	0.1262	0.2	5577.54
Mo 202.032	0.9308	ppb	0.9899	106.4	5.5134
Na 330.237	4207.20	ppb	230.106	5.5	151.077
Ni 231.604	-1.4461	ppb	2.0165	139.4	-3.3939
Pb 220.353	6.1649	ppb	2.4500	39.7	3.0166
Sb 206.834	-0.2673	ppb	2.9890	1118.3	6.0029
Se 196.026	-5.3709	ppb	13.0964	243.8	1.7370
Si 288.158	1211.95	ppb	3.6659	0.3	6191.82
Sn 189.925	-8.7386	ppb	10.3173	118.1	-1.2148
Sr 216.596	48.0190	ppb	1.8524	3.9	147.949
Ti 334.941	0.4230	ppb	0.1043	24.6	20.8685
Tl 190.794	-7.6263	ppb	5.6491	74.1	-3.4673
V 292.401	-0.0347	ppb	0.3028	873.2	-12.8539
Zn 206.200	0.4836	ppb	1.5911	329.0	0.1728

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167583-b-7-b (Samp) **4/20/2019, 12:33:09 AM** **Rack 3, Tube 52****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4922u	0.1545	0.0251
Al 308.215	105.701	98.3981	97.3661
As 188.980	1.8469	-2.1746u	2.5230
B 249.678	34.6539	35.1919	33.0779
Ba 389.178	5.1040	8.7527	5.0873
Be 313.042	-0.1137u	-0.1068u	-0.0999u
Ca 370.602	6156	6113	6112
Cd 226.502	-0.4782u	0.1444	0.0240
Co 228.615	-0.4337u	0.2371	-0.4074u
Cr 267.716	1.0830	1.5823	1.0278
Cu 324.754	-0.1614u	1.1083	0.8933
Fe 271.441	13.4619	29.9824	21.2025
K 766.491	482.284	480.861	482.380
Mg 279.078	927.708	914.802	920.755
Mn 257.610	29.9567	30.0765	29.8916
Mo 202.032	1.4241	-0.1265u	0.7550
Na 330.237	1685.41	1614.75	1563.67
Ni 231.604	-3.6159u	-0.6165u	1.5125
Pb 220.353	2.7738	0.0793	0.4308
Sb 206.834	2.2153	1.5533	-8.8627u
Se 196.026	17.6602	-0.3535u	-4.5836u
Si 288.158	1837.58	1833.17	1831.59
Sn 189.925	-1.7281u	-5.7349u	-0.1791u
Sr 216.596	24.8027	24.4634	24.2413
Ti 334.941	1.6687	1.4475	1.5593
Tl 190.794	-10.1513u	-15.6387u	-21.9667u
V 292.401	0.7478	0.5495	0.7561
Zn 206.200	1.1779	1.9801	-2.1846u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1042	ppb	0.3422	328.4	-43.9187
Al 308.215	100.488	ppb	4.5435	4.5	403.706
As 188.980	0.7318	ppb	2.5396	347.0	0.9015
B 249.678	34.3079	ppb	1.0987	3.2	229.057
Ba 389.178	6.3147	ppb	2.1115	33.4	4.0862
Be 313.042	-0.1068	ppb	0.0069	6.5	-412.163
Ca 370.602	6127	ppb	25.15	0.4	10269
Cd 226.502	-0.1032	ppb	0.3302	319.9	2.6630
Co 228.615	-0.2014	ppb	0.3799	188.7	-13.1539
Cr 267.716	1.2310	ppb	0.3055	24.8	34.2049
Cu 324.754	0.6134	ppb	0.6795	110.8	454.667
Fe 271.441	21.5489	ppb	8.2657	38.4	29.1499
K 766.491	481.841	ppb	0.8507	0.2	10253.1
Mg 279.078	921.088	ppb	6.4596	0.7	1253.15
Mn 257.610	29.9749	ppb	0.0938	0.3	2514.87
Mo 202.032	0.6842	ppb	0.7777	113.7	5.1584
Na 330.237	1621.28	ppb	61.1347	3.8	81.3594
Ni 231.604	-0.9066	ppb	2.5765	284.2	-2.7882
Pb 220.353	1.0946	ppb	1.4648	133.8	1.2711
Sb 206.834	-1.6980	ppb	6.2136	365.9	5.3530
Se 196.026	4.2410	ppb	11.8122	278.5	3.5240
Si 288.158	1834.12	ppb	3.1060	0.2	9095.54

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.5474	ppb	2.8671	112.6	0.3497
Sr 216.596	24.5025	ppb	0.2827	1.2	78.6986
Ti 334.941	1.5585	ppb	0.1106	7.1	115.291
Tl 190.794	-15.9189	ppb	5.9127	37.1	-5.2257
V 292.401	0.6845	ppb	0.1169	17.1	-5.8368
Zn 206.200	0.3244	ppb	2.2096	681.0	0.0730

680-167583-b-6-b (Samp) 4/20/2019, 12:37:23 AM Rack 3, Tube 53

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4234u	-0.0856u	-1.1870u
Al 308.215	249.855	253.412	256.195
As 188.980	-1.0074u	2.7609	9.1577
B 249.678	115.534	114.649	114.776
Ba 389.178	3.2640	4.9812	3.4105
Be 313.042	-0.1165u	-0.1194u	-0.1117u
Ca 370.602	25265	25253	25231
Cd 226.502	0.1094	-0.3485u	-0.4133u
Co 228.615	-0.0321u	0.8272	-0.2833u
Cr 267.716	0.8322	0.8895	0.2305
Cu 324.754	1.2751	-0.3400u	0.2886
Fe 271.441	1919.84	1950.45	1954.70
K 766.491	1460.97	1461.78	1458.54
Mg 279.078	3094.71	3102.70	3098.43
Mn 257.610	70.4158	70.1896	70.3535
Mo 202.032	0.1827	1.6501	-0.0537u
Na 330.237	3440.80	3824.64	3525.60
Ni 231.604	-0.9789u	-2.0012u	0.4971
Pb 220.353	0.8082	-5.7492u	1.1719
Sb 206.834	-3.0145u	-1.4449u	-2.5229u
Se 196.026	-0.2342u	9.7375	3.1907
Si 288.158	1472.19	1479.78	1474.06
Sn 189.925	-6.0824u	-8.8310u	0.3024
Sr 216.596	63.4405	64.4500	64.5314
Ti 334.941	4.5717	4.6100	4.7460
Tl 190.794	-11.3875u	-7.8628u	0.0954u
V 292.401	0.7923	0.7066	-0.7625u
Zn 206.200	1.8661	-0.2404u	-0.7982u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5653	ppb	0.5642	99.8	-58.3565
Al 308.215	253.154	ppb	3.1779	1.3	702.391
As 188.980	3.6371	ppb	5.1389	141.3	1.6723
B 249.678	114.987	ppb	0.4787	0.4	779.326
Ba 389.178	3.8852	ppb	0.9519	24.5	-7.9580
Be 313.042	-0.1159	ppb	0.0039	3.4	-416.737
Ca 370.602	25249	ppb	17.11	0.1	42237
Cd 226.502	-0.2174	ppb	0.2849	131.0	4.1583
Co 228.615	0.1706	ppb	0.5823	341.4	-11.7016
Cr 267.716	0.6507	ppb	0.3651	56.1	24.7296
Cu 324.754	0.4079	ppb	0.8142	199.6	448.786
Fe 271.441	1941.66	ppb	19.0182	1.0	1092.05
K 766.491	1460.43	ppb	1.6894	0.1	30352.0

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	3098.61	ppb	3.9970	0.1	4164.73
Mn 257.610	70.3196	ppb	0.1168	0.2	5868.83
Mo 202.032	0.5930	ppb	0.9230	155.6	4.9821
Na 330.237	3597.01	ppb	201.640	5.6	134.677
Ni 231.604	-0.8276	ppb	1.2560	151.8	-2.7000
Pb 220.353	-1.2563	ppb	3.8952	310.0	0.3171
Sb 206.834	-2.3275	ppb	0.8029	34.5	5.2150
Se 196.026	4.2314	ppb	5.0666	119.7	3.5339
Si 288.158	1475.35	ppb	3.9536	0.3	7421.46
Sn 189.925	-4.8703	ppb	4.6858	96.2	-0.2372
Sr 216.596	64.1406	ppb	0.6077	0.9	194.630
Ti 334.941	4.6425	ppb	0.0916	2.0	394.621
Tl 190.794	-6.3850	ppb	5.8824	92.1	-3.0200
V 292.401	0.2455	ppb	0.8740	356.0	-10.1511
Zn 206.200	0.2758	ppb	1.4052	509.5	0.0507

X (Samp) **4/20/2019, 12:41:36 AM** **Rack 3, Tube 54**
 Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.2967	10.7052	11.5318
Al 308.215	211.341	212.803	214.462
As 188.980	30.1042	24.6522	25.1014
B 249.678	108.215	106.544	108.429
Ba 389.178	8.7604	11.1037	10.1291
Be 313.042	4.3992	4.3636	4.3786
Ca 370.602	512.7	528.4	534.0
Cd 226.502	5.0816	5.5556	5.3341
Co 228.615	11.7178	9.6698	11.7329
Cr 267.716	9.9932	10.2432	10.2372
Cu 324.754	22.3854	21.0939	21.7888
Fe 271.441	54.7885	34.2040	61.2456
K 766.491	948.364	937.683	944.518
Mg 279.078	543.184	530.231	527.387
Mn 257.610	10.8530	10.7994	11.0235
Mo 202.032	10.9243	9.3731	10.2447
Na 330.237	1476.30	1282.25	1267.67
Ni 231.604	43.7105	38.0304	39.6690
Pb 220.353	14.6991	-1.3028u	16.3854
Sb 206.834	25.7110	14.5186	14.7953
Se 196.026	19.3511	13.2424	27.4196
Si 288.158	15.3438	15.3314	13.1099
Sn 189.925	47.5593	45.0338	53.2358
Sr 216.596	10.4386	12.0392	11.9850
Ti 334.941	10.5053	10.6688	10.3709
Tl 190.794	15.9175	24.8373	14.2986
V 292.401	10.1846	10.4738	10.2843
Zn 206.200	23.2888	22.7093	21.6845

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.1779	ppb	0.4259	3.8	298.788
Al 308.215	212.869	ppb	1.5613	0.7	623.894
As 188.980	26.6193	ppb	3.0264	11.4	7.8121
B 249.678	107.729	ppb	1.0320	1.0	731.575

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	9.9977	ppb	1.1772	11.8	26.8463
Be 313.042	4.3805	ppb	0.0179	0.4	3206.71
Ca 370.602	525.0	ppb	11.05	2.1	903.2
Cd 226.502	5.3238	ppb	0.2372	4.5	72.3824
Co 228.615	11.0402	ppb	1.1868	10.7	31.3564
Cr 267.716	10.1579	ppb	0.1426	1.4	183.496
Cu 324.754	21.7560	ppb	0.6464	3.0	1095.19
Fe 271.441	50.0794	ppb	14.1225	28.2	45.3866
K 766.491	943.522	ppb	5.4098	0.6	19585.6
Mg 279.078	533.601	ppb	8.4206	1.6	735.133
Mn 257.610	10.8920	ppb	0.1170	1.1	931.656
Mo 202.032	10.1807	ppb	0.7776	7.6	21.1833
Na 330.237	1342.07	ppb	116.468	8.7	73.4795
Ni 231.604	40.4700	ppb	2.9235	7.2	43.6207
Pb 220.353	9.9273	ppb	9.7620	98.3	4.6086
Sb 206.834	18.3416	ppb	6.3836	34.8	12.6623
Se 196.026	20.0044	ppb	7.1112	35.5	6.4939
Si 288.158	14.5950	ppb	1.2862	8.8	610.213
Sn 189.925	48.6096	ppb	4.2007	8.6	13.2788
Sr 216.596	11.4876	ppb	0.9089	7.9	40.4256
Ti 334.941	10.5150	ppb	0.1492	1.4	908.773
Tl 190.794	18.3511	ppb	5.6752	30.9	2.9802
V 292.401	10.3142	ppb	0.1469	1.4	91.3645
Zn 206.200	22.5609	ppb	0.8124	3.6	12.3394

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	507.041	504.720	512.522
Al 308.215	10177.3	10159.4	10175.6
As 188.980	511.327	497.309	495.940
B 249.678	516.539	521.407	521.533
Ba 389.178	488.982	488.334	489.444
Be 313.042	532.157	532.200	533.932
Ca 370.602	10105	10104	10132
Cd 226.502	505.135	505.924	506.717
Co 228.615	507.789	505.445	509.693
Cr 267.716	504.432	503.783	504.494
Cu 324.754	504.998	502.252	511.843
Fe 271.441	10216.4	10249.9	10297.5
K 766.491	9852.61	9874.37	9914.42
Mg 279.078	10226.7	10260.9	10287.1
Mn 257.610	505.001	505.691	506.542
Mo 202.032	497.895	504.935	504.146
Na 330.237	11002.5	10686.8	10779.1
Ni 231.604	508.119	501.016	506.694
Pb 220.353	501.924	495.690	503.430
Sb 206.834	478.240	489.797	482.385
Se 196.026	513.860	524.433	531.736
Si 288.158	5122.95	5127.96	5137.09
Sn 189.925	508.149	500.962	514.208
Sr 216.596	495.754	498.620	504.032
Ti 334.941	506.402	506.660	507.754

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Label	Replicates Concentration		
Tl 190.794	491.792	504.627	497.490
V 292.401	506.186	504.987	507.640
Zn 206.200	1038.20	1039.29	1036.65

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	508.094	ppb	4.0061	0.8	15390.5	101.61890
Al 308.215	10170.8	ppb	9.8803	0.1	20121.0	101.70773
As 188.980	501.526	ppb	8.5160	1.7	134.512	100.30510
B 249.678	519.826	ppb	2.8479	0.5	3541.87	103.96529
Ba 389.178	488.920	ppb	0.5573	0.1	3053.93	97.78401
Be 313.042	532.763	ppb	1.0127	0.2	429466	106.55264
Ca 370.602	10114	ppb	16.07	0.2	16937	101.13638
Cd 226.502	505.925	ppb	0.7906	0.2	6514.27	101.18507
Co 228.615	507.642	ppb	2.1276	0.4	1998.37	101.52850
Cr 267.716	504.236	ppb	0.3938	0.1	8449.66	100.84718
Cu 324.754	506.364	ppb	4.9393	1.0	15781.0	101.27287
Fe 271.441	10254.6	ppb	40.7753	0.4	5714.26	102.49462
K 766.491	9880.47	ppb	31.3547	0.3	201072	98.80468
Mg 279.078	10258.2	ppb	30.2960	0.3	13733.0	102.58224
Mn 257.610	505.745	ppb	0.7721	0.2	42004.5	101.14893
Mo 202.032	502.325	ppb	3.8567	0.8	851.562	100.46506
Na 330.237	10822.8	ppb	162.332	1.5	313.077	108.22797
Ni 231.604	505.276	ppb	3.7578	0.7	564.626	101.05526
Pb 220.353	500.348	ppb	4.1039	0.8	189.740	100.06957
Sb 206.834	483.474	ppb	5.8549	1.2	181.435	96.69481
Se 196.026	523.343	ppb	8.9879	1.7	101.467	104.66866
Si 288.158	5129.33	ppb	7.1713	0.1	24609.2	102.58668
Sn 189.925	507.773	ppb	6.6308	1.3	129.326	101.55464
Sr 216.596	499.469	ppb	4.2037	0.8	1459.03	99.89372
Ti 334.941	506.939	ppb	0.7176	0.1	44970.5	101.38771
Tl 190.794	497.970	ppb	6.4312	1.3	117.691	99.59392
V 292.401	506.271	ppb	1.3286	0.3	5099.71	101.25414
Zn 206.200	1038.05	ppb	1.3285	0.1	572.492	103.80483

Cont Calib Blank (CCB) 4/20/2019, 12:50:03 AM Rack S, Tube 1

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0661u	-0.2177u	-0.0156u
Al 308.215	2.8597	6.8598	9.7185
As 188.980	3.7876	1.0919	1.3883
B 249.678	13.4880	11.5249	9.3537
Ba 389.178	-0.6562u	0.3641	-0.2189u
Be 313.042	0.0880	0.0820	0.0464
Ca 370.602	-0.6007u	3.072	1.195
Cd 226.502	0.1546	0.0006	-0.0111u
Co 228.615	-0.0421u	0.5541	1.0189
Cr 267.716	0.6452	0.0612	0.2755
Cu 324.754	0.5488	-0.2345u	-0.2091u
Fe 271.441	29.4141	15.7326	14.5576
K 766.491	2.8230	1.8562	0.0184
Mg 279.078	7.8558	7.3637	6.4490
Mn 257.610	0.2547	0.3217	0.1649
Mo 202.032	0.1143	0.4733	-0.2623u

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Label	Replicates Concentration		
Na 330.237	85.3067	211.613	21.8324
Ni 231.604	-0.2257u	-1.7188u	-2.7705u
Pb 220.353	-2.2271u	-7.2405u	-7.7624u
Sb 206.834	4.3057	8.5499	1.1693
Se 196.026	-5.3616u	-1.3732u	2.2393
Si 288.158	7.2766	4.8228	4.8990
Sn 189.925	-10.4111u	-6.8273u	-5.4202u
Sr 216.596	-0.3050u	-0.4025u	0.5156
Ti 334.941	0.2514	0.3696	0.3850
Tl 190.794	5.3726	-10.2804u	-0.9440u
V 292.401	0.4398	0.6716	-0.0621u
Zn 206.200	-3.2033u	2.0767	2.0736

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.4331	ppb	0.5574	128.7	-53.8761	-0.43313
Al 308.215	6.4793	ppb	3.4452	53.2	219.808	6.47933
As 188.980	2.0893	ppb	1.4783	70.8	1.2641	2.08928
B 249.678	11.4555	ppb	2.0680	18.1	72.6506	11.45551
Ba 389.178	-0.1703	ppb	0.5119	300.5	-37.7026	-0.17034
Be 313.042	0.0721	ppb	0.0225	31.1	-268.634	0.07215
Ca 370.602	1.222	ppb	1.836	150.3	27.13	1.22218
Cd 226.502	0.0480	ppb	0.0925	192.5	4.5779	0.04802
Co 228.615	0.5103	ppb	0.5318	104.2	-10.3421	0.51030
Cr 267.716	0.3273	ppb	0.2954	90.3	19.0315	0.32732
Cu 324.754	0.0351	ppb	0.4451	1268.9	437.145	0.03508
Fe 271.441	19.9014	ppb	8.2591	41.5	28.2633	19.90140
K 766.491	1.5659	ppb	1.4246	91.0	296.335	1.56587
Mg 279.078	7.2228	ppb	0.7139	9.9	31.3508	7.22282
Mn 257.610	0.2471	ppb	0.0787	31.8	47.0717	0.24712
Mo 202.032	0.1084	ppb	0.3678	339.3	4.1868	0.10842
Na 330.237	106.251	ppb	96.6083	90.9	40.4407	106.25070
Ni 231.604	-1.5717	ppb	1.2787	81.4	-3.5350	-1.57165
Pb 220.353	-5.7433	ppb	3.0563	53.2	-1.3190	-5.74334Z
Sb 206.834	4.6750	ppb	3.7041	79.2	7.6870	4.67497
Se 196.026	-1.4985	ppb	3.8020	253.7	2.4392	-1.49853
Si 288.158	5.6661	ppb	1.3952	24.6	561.672	5.66615
Sn 189.925	-7.5529	ppb	2.5733	34.1	-0.9155	-7.55286
Sr 216.596	-0.0639	ppb	0.5043	788.7	6.9859	-0.06394
Ti 334.941	0.3353	ppb	0.0731	21.8	4.3955	0.33534
Tl 190.794	-1.9506	ppb	7.8749	403.7	-1.8859	-1.95060
V 292.401	0.3498	ppb	0.3751	107.2	-9.2172	0.34978
Zn 206.200	0.3157	ppb	3.0475	965.3	0.0687	0.31570

mb 680-566542/1-a (Samp)

4/20/2019, 12:54:15 AM

Rack 4, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6633u	-1.0020u	0.3658
Al 308.215	9.9820	13.4662	8.6119
As 188.980	-2.1299u	5.8642	1.5604
B 249.678	1.5374	0.3574	1.9105
Ba 389.178	-2.2719u	1.9664	0.2782
Be 313.042	-0.1127u	-0.1185u	-0.1101u
Ca 370.602	14.58	6.310	15.89

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.1993u	-0.2047u	0.3929
Co 228.615	-0.8892u	0.4411	0.0475
Cr 267.716	0.5334	0.5381	0.2264
Cu 324.754	0.8762	1.1107	1.0302
Fe 271.441	16.5727	29.5266	19.6729
K 766.491	19.5651	20.5258	20.6547
Mg 279.078	8.0681	7.8972	1.2092
Mn 257.610	0.1765	0.2079	0.1985
Mo 202.032	-0.5001u	0.0910	-0.6446u
Na 330.237	42.5442	319.164	248.666
Ni 231.604	-2.5775u	-0.2066u	-3.4229u
Pb 220.353	-0.7533u	0.7784	3.4139
Sb 206.834	0.4712	1.8222	-1.5800u
Se 196.026	-14.6861u	-2.6810u	3.2184
Si 288.158	12.0077	14.1839	15.2222
Sn 189.925	10.1741	1.0187	6.8977
Sr 216.596	-2.0983u	-0.0695u	-0.8343u
Ti 334.941	0.2934	0.4870	0.3484
Tl 190.794	-5.0199u	-12.8218u	-13.3684u
V 292.401	-0.1579u	0.5655	0.1295
Zn 206.200	2.8198	2.5825	-0.6777u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4332	ppb	0.7123	164.4	-53.8816
Al 308.215	10.6867	ppb	2.5027	23.4	228.029
As 188.980	1.7649	ppb	4.0009	226.7	1.1775
B 249.678	1.2685	ppb	0.8107	63.9	2.9026
Ba 389.178	-0.0091	ppb	2.1337	23415.1	-36.6828
Be 313.042	-0.1138	ppb	0.0043	3.8	-418.611
Ca 370.602	12.26	ppb	5.196	42.4	45.56
Cd 226.502	-0.0037	ppb	0.3435	9356.6	3.9436
Co 228.615	-0.1335	ppb	0.6834	511.8	-12.8944
Cr 267.716	0.4326	ppb	0.1786	41.3	20.7950
Cu 324.754	1.0057	ppb	0.1191	11.8	466.546
Fe 271.441	21.9241	ppb	6.7640	30.9	29.3558
K 766.491	20.2485	ppb	0.5954	2.9	718.526
Mg 279.078	5.7249	ppb	3.9116	68.3	29.3472
Mn 257.610	0.1943	ppb	0.0161	8.3	42.7034
Mo 202.032	-0.3512	ppb	0.3897	111.0	3.4109
Na 330.237	203.458	ppb	143.744	70.7	43.0504
Ni 231.604	-2.0690	ppb	1.6674	80.6	-4.0923
Pb 220.353	1.1464	ppb	2.1078	183.9	1.2895
Sb 206.834	0.2378	ppb	1.7131	720.3	6.0764
Se 196.026	-4.7162	ppb	9.1241	193.5	1.8327
Si 288.158	13.8046	ppb	1.6404	11.9	600.842
Sn 189.925	6.0302	ppb	4.6390	76.9	2.5174
Sr 216.596	-1.0007	ppb	1.0246	102.4	4.2604
Ti 334.941	0.3763	ppb	0.0997	26.5	8.0235
Tl 190.794	-10.4034	ppb	4.6702	44.9	-3.9114
V 292.401	0.1790	ppb	0.3642	203.5	-10.9271
Zn 206.200	1.5749	ppb	1.9544	124.1	0.7638

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

ics 680-566542/2-a (Samp) 4/20/2019, 12:58:29 AM Rack 4, Tube 2

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.3518	54.5786	54.7998
Al 308.215	5131.17	5119.11	5121.27
As 188.980	93.7291	97.1705	102.519
B 249.678	205.727	205.228	207.787
Ba 389.178	100.424	99.1344	98.6138
Be 313.042	55.1039	54.9861	54.9396
Ca 370.602	5115	5112	5096
Cd 226.502	52.6929	52.1420	52.5883
Co 228.615	51.4436	50.9470	51.4094
Cr 267.716	104.167	104.118	104.198
Cu 324.754	105.878	105.753	105.259
Fe 271.441	5155.31	5189.56	5160.25
K 766.491	7766.44	7776.00	7751.43
Mg 279.078	5155.25	5157.86	5143.08
Mn 257.610	518.963	517.250	517.008
Mo 202.032	103.835	102.181	105.070
Na 330.237	5378.26	5487.58	5130.83
Ni 231.604	103.055	99.2310	105.928
Pb 220.353	496.932	505.145	519.895
Sb 206.834	46.8143	46.3464	51.8993
Se 196.026	104.492	127.778	94.8380
Si 288.158	7.8150	9.3028	9.2360
Sn 189.925	104.855	112.598	108.633
Sr 216.596	99.7213	102.528	100.471
Ti 334.941	412.683	412.111	411.602
Tl 190.794	39.4994	28.5591	34.9531
V 292.401	103.239	102.712	102.862
Zn 206.200	104.926	104.609	112.295

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.9100	ppb	0.3982	0.7	1626.54
Al 308.215	5123.85	ppb	6.4285	0.1	10234.0
As 188.980	97.8061	ppb	4.4291	4.5	26.7913
B 249.678	206.247	ppb	1.3563	0.7	1400.70
Ba 389.178	99.3907	ppb	0.9319	0.9	596.338
Be 313.042	55.0099	ppb	0.0847	0.2	44048.9
Ca 370.602	5108	ppb	10.07	0.2	8573
Cd 226.502	52.4744	ppb	0.2926	0.6	685.584
Co 228.615	51.2666	ppb	0.2774	0.5	192.866
Cr 267.716	104.161	ppb	0.0401	0.0	1757.33
Cu 324.754	105.630	ppb	0.3278	0.3	3637.66
Fe 271.441	5168.37	ppb	18.5102	0.4	2880.62
K 766.491	7764.62	ppb	12.3835	0.2	159880
Mg 279.078	5152.06	ppb	7.8913	0.2	6905.35
Mn 257.610	517.741	ppb	1.0659	0.2	42975.0
Mo 202.032	103.696	ppb	1.4496	1.4	178.931
Na 330.237	5332.22	ppb	182.779	3.4	176.556
Ni 231.604	102.738	ppb	3.3595	3.3	113.441
Pb 220.353	507.324	ppb	11.6354	2.3	192.727
Sb 206.834	48.3533	ppb	3.0798	6.4	23.7424
Se 196.026	109.036	ppb	16.9337	15.5	23.3462
Si 288.158	8.7846	ppb	0.8404	9.6	619.174

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	108.695	ppb	3.8718	3.6	28.4650
Sr 216.596	100.907	ppb	1.4531	1.4	300.809
Ti 334.941	412.132	ppb	0.5407	0.1	36547.0
Tl 190.794	34.3372	ppb	5.4961	16.0	6.7066
V 292.401	102.938	ppb	0.2715	0.3	1027.98
Zn 206.200	107.277	ppb	4.3486	4.1	59.0492

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3806	0.6878	1.1192
Al 308.215	-57.6258u	-58.0470u	-56.3278u
As 188.980	1.6231	-1.3011u	-2.5118u
B 249.678	0.7415	0.5275	0.5671
Ba 389.178	-0.7231u	-0.9859u	-0.5347u
Be 313.042	0.1498	0.1482	0.1551
Ca 370.602	-6.046u	-7.345u	-7.046u
Cd 226.502	-0.1319u	-0.0795u	-0.0247u
Co 228.615	1.1465	2.0514	1.1746
Cr 267.716	0.1078	0.2241	0.1794
Cu 324.754	-8.1876u	-8.8114u	-8.8927u
Fe 271.441	3.2015	-1.8323u	-0.7541u
K 766.491	-4.7321u	-5.6093u	-5.8235u
Mg 279.078	-12.6680u	-10.6152u	-8.9277u
Mn 257.610	-0.1790u	-0.1746u	-0.2091u
Mo 202.032	0.0477	-0.8199u	-1.0288u
Na 330.237	-422.341u	-288.952u	-416.204u
Ni 231.604	0.9610	0.3642	0.7290
Pb 220.353	-7.0105u	-3.8573u	-2.1068u
Sb 206.834	-10.0042u	-11.1785u	-4.4191u
Se 196.026	-12.1735u	-11.5388u	-8.4690u
Si 288.158	-50.4251u	-55.5082u	-55.0814u
Sn 189.925	-2.1625u	-1.1176u	-1.7443u
Sr 216.596	-0.7785u	-0.3994u	-1.5375u
Ti 334.941	-0.1309u	-0.2038u	-0.2011u
Tl 190.794	-3.8151u	-7.9001u	-1.7512u
V 292.401	0.7587	0.8308	0.3442
Zn 206.200	0.0987	-0.3106u	-1.0217u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7292	ppb	0.3710	50.9	-18.5649
Al 308.215	-57.3336	ppb	0.8961	1.6	94.9712
As 188.980	-0.7299	ppb	2.1258	291.2	0.5116
B 249.678	0.6120	ppb	0.1139	18.6	-1.5328
Ba 389.178	-0.7479	ppb	0.2266	30.3	-41.3702
Be 313.042	0.1510	ppb	0.0036	2.4	-204.923
Ca 370.602	-6.812	ppb	0.6802	10.0	13.75
Cd 226.502	-0.0787	ppb	0.0536	68.2	2.8905
Co 228.615	1.4575	ppb	0.5145	35.3	-6.5863
Cr 267.716	0.1704	ppb	0.0587	34.4	16.4002
Cu 324.754	-8.6306	ppb	0.3858	4.5	174.640
Fe 271.441	0.2051	ppb	2.6504	1292.5	17.3950
K 766.491	-5.3883	ppb	0.5783	10.7	152.646

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	-10.7369	ppb	1.8731	17.4	7.3568
Mn 257.610	-0.1876	ppb	0.0188	10.0	10.9404
Mo 202.032	-0.6003	ppb	0.5708	95.1	2.9911
Na 330.237	-375.833	ppb	75.3030	20.0	27.4178
Ni 231.604	0.6847	ppb	0.3009	43.9	-1.0046
Pb 220.353	-4.3249	ppb	2.4850	57.5	-0.7803
Sb 206.834	-8.5340	ppb	3.6116	42.3	3.0450
Se 196.026	-10.7271	ppb	1.9812	18.5	0.6993
Si 288.158	-53.6716uv	ppb	2.8196	5.3	285.287
Sn 189.925	-1.6748	ppb	0.5259	31.4	0.5700
Sr 216.596	-0.9052	ppb	0.5795	64.0	4.5296
Ti 334.941	-0.1786	ppb	0.0413	23.1	-41.2314
Tl 190.794	-4.4888	ppb	3.1293	69.7	-2.4916
V 292.401	0.6446	ppb	0.2626	40.7	-6.1464
Zn 206.200	-0.4112	ppb	0.5670	137.9	-0.3322

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Rack 4, Tube 4

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6749	-1.1427u	-0.3195u
Al 308.215	6417.97	6423.78	6348.80
As 188.980	0.5807	0.2405	1.5142
B 249.678	0.1911u	0.4309u	-0.9879u
Ba 389.178	37.8775	38.0221	39.4339
Be 313.042	0.0496	0.0760	0.0623
Ca 370.602	811.7	813.2	802.1
Cd 226.502	0.0044	0.3256	0.4478
Co 228.615	2.0548	0.9396	-0.0544
Cr 267.716	11.1260	10.9028	10.7012
Cu 324.754	12.7655	13.0636	12.7774
Fe 271.441	9603.01	9643.18	9461.10
K 766.491	96.9855	98.8302	96.2030
Mg 279.078	147.936	157.425	157.613
Mn 257.610	205.014	205.860	203.383
Mo 202.032	1.3728	1.8104	0.0375u
Na 330.237	55.9177u	-149.321u	413.349
Ni 231.604	5.1497	1.5277	-0.2312u
Pb 220.353	3.6162	16.2256	8.3702
Sb 206.834	-0.4223u	-6.1540u	-6.5941u
Se 196.026	12.8412	0.3229	-9.0336u
Si 288.158	854.342	859.860	850.528
Sn 189.925	-5.4071u	-6.9376u	1.2000
Sr 216.596	4.0487	3.8965	3.4679
Ti 334.941	71.9831	72.5263	71.8093
Tl 190.794	-15.0896u	-5.4714u	-4.2135u
V 292.401	22.2706	21.7296	22.3777
Zn 206.200	78.1111	81.4063	75.9729

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2624	ppb	0.9101	346.8	-50.0969
Al 308.215	6396.85	ppb	41.7123	0.7	12721.0
As 188.980	0.7785	ppb	0.6594	84.7	0.8883
B 249.678	-0.1219	ppb	0.7594	622.8	-16.3652

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	38.4445	ppb	0.8599	2.2	209.344
Be 313.042	0.0626	ppb	0.0132	21.1	-275.552
Ca 370.602	809.0	ppb	5.984	0.7	1366
Cd 226.502	0.2593	ppb	0.2290	88.3	22.2027
Co 228.615	0.9800	ppb	1.0552	107.7	-8.1624
Cr 267.716	10.9100	ppb	0.2124	1.9	197.190
Cu 324.754	12.8688	ppb	0.1687	1.3	827.473
Fe 271.441	9569.10	ppb	95.6584	1.0	5314.38
K 766.491	97.3396	ppb	1.3489	1.4	2301.80
Mg 279.078	154.324	ppb	5.5335	3.6	224.771
Mn 257.610	204.752	ppb	1.2587	0.6	17007.9
Mo 202.032	1.0736	ppb	0.9235	86.0	5.7003
Na 330.237	106.649	ppb	284.745	267.0	38.5333
Ni 231.604	2.1487	ppb	2.7437	127.7	0.6393
Pb 220.353	9.4040	ppb	6.3680	67.7	4.0761
Sb 206.834	-4.3901	ppb	3.4433	78.4	4.6300
Se 196.026	1.3769	ppb	10.9754	797.1	3.0397
Si 288.158	854.910	ppb	4.6916	0.5	4529.30
Sn 189.925	-3.7149	ppb	4.3246	116.4	0.0545
Sr 216.596	3.8044	ppb	0.3011	7.9	19.3666
Ti 334.941	72.1062	ppb	0.3740	0.5	6371.43
Tl 190.794	-8.2582	ppb	5.9496	72.0	-3.7762
V 292.401	22.1260	ppb	0.3474	1.6	213.125
Zn 206.200	78.4968	ppb	2.7371	3.5	43.2286

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Rack 4, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.3781	55.3023	55.0316
Al 308.215	36293.8	36216.4	36040.6
As 188.980	116.798	111.094	113.512
B 249.678	218.120	222.770	222.260
Ba 389.178	303.814	306.052	303.604
Be 313.042	57.4664	57.4476	57.0691
Ca 370.602	9072	9060	8989
Cd 226.502	54.7272	55.3344	53.6764
Co 228.615	58.6279	56.4404	58.2800
Cr 267.716	158.950	158.003	158.129
Cu 324.754	163.337	167.840	162.893
Fe 271.441	51179.3	51358.4	51079.3
K 766.491	8712.58	8731.84	8688.66
Mg 279.078	6048.13	6054.67	5997.04
Mn 257.610	1509.06	1508.60	1500.66
Mo 202.032	109.158	108.852	108.075
Na 330.237	5528.35	5592.69	5510.16
Ni 231.604	114.595	110.999	114.099
Pb 220.353	577.543	575.785	578.821
Sb 206.834	56.0301	43.8254	48.3360
Se 196.026	116.409	119.529	112.559
Si 288.158	4111.35	4119.77	4087.77
Sn 189.925	119.688	122.494	123.847
Sr 216.596	118.153	118.890	119.414
Ti 334.941	776.805	775.505	771.786

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Label	Replicates Concentration		
Tl 190.794	51.7888	34.2439	39.3833
V 292.401	213.649	213.220	212.472
Zn 206.200	487.563	483.771	475.254

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.9040	ppb	0.4751	0.9	1619.58
Al 308.215	36183.6	ppb	129.766	0.4	70994.8
As 188.980	113.801	ppb	2.8629	2.5	30.9372
B 249.678	221.050	ppb	2.5503	1.2	1454.98
Ba 389.178	304.490	ppb	1.3567	0.4	1906.57
Be 313.042	57.3277	ppb	0.2241	0.4	45922.5
Ca 370.602	9040	ppb	44.52	0.5	15094
Cd 226.502	54.5793	ppb	0.8388	1.5	784.406
Co 228.615	57.7828	ppb	1.1755	2.0	220.328
Cr 267.716	158.361	ppb	0.5146	0.3	2669.44
Cu 324.754	164.690	ppb	2.7373	1.7	5434.27
Fe 271.441	51205.6	ppb	141.411	0.3	28365.5
K 766.491	8711.03	ppb	21.6337	0.2	179358
Mg 279.078	6033.28	ppb	31.5578	0.5	8067.83
Mn 257.610	1506.11	ppb	4.7265	0.3	124947
Mo 202.032	108.695	ppb	0.5584	0.5	186.812
Na 330.237	5543.73	ppb	43.3586	0.8	172.962
Ni 231.604	113.231	ppb	1.9484	1.7	125.212
Pb 220.353	577.383	ppb	1.5242	0.3	217.611
Sb 206.834	49.3972	ppb	6.1711	12.5	24.9636
Se 196.026	116.166	ppb	3.4916	3.0	24.9720
Si 288.158	4106.29	ppb	16.5883	0.4	19762.0
Sn 189.925	122.009	ppb	2.1213	1.7	31.8299
Sr 216.596	118.819	ppb	0.6335	0.5	358.320
Ti 334.941	774.699	ppb	2.6050	0.3	68711.8
Tl 190.794	41.8053	ppb	9.0197	21.6	6.6703
V 292.401	213.114	ppb	0.5958	0.3	2152.58
Zn 206.200	482.196	ppb	6.3038	1.3	266.022

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.7245	51.6030	52.4286
Al 308.215	41626.7	41295.4	41257.2
As 188.980	107.589	92.2462	87.6472
B 249.678	196.861	195.426	194.461
Ba 389.178	304.873	301.789	306.691
Be 313.042	54.5219	54.1199	54.1811
Ca 370.602	8366	8281	8278
Cd 226.502	51.3762	50.8295	51.1163
Co 228.615	56.8659	54.9467	53.5267
Cr 267.716	139.311	137.741	138.012
Cu 324.754	158.384	153.236	155.052
Fe 271.441	31085.0	30855.0	30876.9
K 766.491	8230.62	8177.04	8169.81
Mg 279.078	5929.97	5900.65	5882.29
Mn 257.610	1383.43	1372.58	1370.47
Mo 202.032	96.1070	95.2939	97.0128

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Label	Replicates Concentration		
Na 330.237	5389.30	5610.92	5285.31
Ni 231.604	112.567	112.752	112.092
Pb 220.353	550.102	552.016	535.410
Sb 206.834	43.6486	34.0877	36.4483
Se 196.026	99.3091	85.4222	95.2122
Si 288.158	5195.36	5160.46	5156.20
Sn 189.925	116.756	105.539	116.120
Sr 216.596	117.248	112.135	113.695
Ti 334.941	690.992	685.421	685.403
Tl 190.794	26.0046	32.1363	26.7362
V 292.401	166.193	165.006	164.803
Zn 206.200	460.779	464.453	455.803

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.9187	ppb	0.4458	0.9	1532.38
Al 308.215	41393.1	ppb	203.196	0.5	81183.2
As 188.980	95.8273	ppb	10.4418	10.9	26.1936
B 249.678	195.583	ppb	1.2079	0.6	1301.23
Ba 389.178	304.451	ppb	2.4779	0.8	1897.50
Be 313.042	54.2743	ppb	0.2166	0.4	43459.1
Ca 370.602	8308	ppb	50.24	0.6	13900
Cd 226.502	51.1073	ppb	0.2734	0.5	709.146
Co 228.615	55.1131	ppb	1.6758	3.0	209.659
Cr 267.716	138.355	ppb	0.8391	0.6	2332.96
Cu 324.754	155.557	ppb	2.6107	1.7	5154.10
Fe 271.441	30939.0	ppb	126.911	0.4	17146.5
K 766.491	8192.49	ppb	33.2187	0.4	168723
Mg 279.078	5904.30	ppb	24.0486	0.4	7895.69
Mn 257.610	1375.49	ppb	6.9540	0.5	114104
Mo 202.032	96.1379	ppb	0.8599	0.9	165.863
Na 330.237	5428.51	ppb	166.306	3.1	171.642
Ni 231.604	112.470	ppb	0.3401	0.3	124.361
Pb 220.353	545.843	ppb	9.0855	1.7	206.337
Sb 206.834	38.0616	ppb	4.9804	13.1	20.5653
Se 196.026	93.3145	ppb	7.1353	7.6	20.5695
Si 288.158	5170.67	ppb	21.4870	0.4	24722.4
Sn 189.925	112.805	ppb	6.3010	5.6	29.5036
Sr 216.596	114.359	ppb	2.6201	2.3	343.112
Ti 334.941	687.272	ppb	3.2212	0.5	60956.3
Tl 190.794	28.2924	ppb	3.3490	11.8	4.2999
V 292.401	165.334	ppb	0.7509	0.5	1665.78
Zn 206.200	460.345	ppb	4.3414	0.9	253.931

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.8713	52.7796	52.1823
Al 308.215	42587.1	42464.2	42476.6
As 188.980	90.2837	99.0749	107.235
B 249.678	202.828	203.002	202.951
Ba 389.178	310.096	308.525	309.482
Be 313.042	56.3822	56.3167	56.2745
Ca 370.602	8448	8411	8422

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Label	Replicates Concentration		
Cd 226.502	52.8538	52.9829	52.8596
Co 228.615	56.7645	56.6115	55.8101
Cr 267.716	143.373	142.502	143.347
Cu 324.754	148.014	151.863	148.918
Fe 271.441	29643.7	29633.0	29441.6
K 766.491	8447.39	8426.30	8433.04
Mg 279.078	6097.45	6057.49	6069.29
Mn 257.610	1389.72	1386.64	1385.29
Mo 202.032	100.449	99.2215	100.250
Na 330.237	5836.36	5654.70	5731.49
Ni 231.604	115.947	114.634	113.928
Pb 220.353	576.630	571.447	575.169
Sb 206.834	36.9104	40.0959	39.3134
Se 196.026	75.2721	98.8144	90.3685
Si 288.158	5314.98	5301.74	5294.87
Sn 189.925	111.135	106.356	110.928
Sr 216.596	119.109	120.203	118.474
Ti 334.941	711.860	710.249	709.444
Tl 190.794	35.2680	40.0767	29.5685
V 292.401	168.791	167.127	168.121
Zn 206.200	451.807	451.066	451.140

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.6111	ppb	0.3742	0.7	1553.65
Al 308.215	42509.3	ppb	67.6722	0.2	83366.7
As 188.980	98.8646	ppb	8.4777	8.6	27.0076
B 249.678	202.927	ppb	0.0894	0.0	1352.94
Ba 389.178	309.367	ppb	0.7917	0.3	1928.01
Be 313.042	56.3245	ppb	0.0543	0.1	45113.0
Ca 370.602	8427	ppb	19.18	0.2	14101
Cd 226.502	52.8988	ppb	0.0729	0.1	730.010
Co 228.615	56.3953	ppb	0.5126	0.9	214.915
Cr 267.716	143.074	ppb	0.4954	0.3	2411.82
Cu 324.754	149.598	ppb	2.0126	1.3	4973.41
Fe 271.441	29572.8	ppb	113.739	0.4	16390.3
K 766.491	8435.58	ppb	10.7717	0.1	173705
Mg 279.078	6074.74	ppb	20.5328	0.3	8123.28
Mn 257.610	1387.22	ppb	2.2697	0.2	115076
Mo 202.032	99.9734	ppb	0.6586	0.7	172.352
Na 330.237	5740.85	ppb	91.1877	1.6	180.027
Ni 231.604	114.836	ppb	1.0244	0.9	127.015
Pb 220.353	574.415	ppb	2.6726	0.5	217.198
Sb 206.834	38.7732	ppb	1.6600	4.3	20.8420
Se 196.026	88.1517	ppb	11.9266	13.5	19.5915
Si 288.158	5303.86	ppb	10.2191	0.2	25345.8
Sn 189.925	109.473	ppb	2.7014	2.5	28.6615
Sr 216.596	119.262	ppb	0.8742	0.7	357.206
Ti 334.941	710.518	ppb	1.2304	0.2	63018.8
Tl 190.794	34.9711	ppb	5.2604	15.0	5.9658
V 292.401	168.013	ppb	0.8373	0.5	1692.67
Zn 206.200	451.338	ppb	0.4082	0.1	248.954

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680-167563-c-14-a (Samp) **4/20/2019, 1:23:54 AM** **Rack 4, Tube 8****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2003u	0.9636u	-0.0245u
Al 308.215	111906	112347	112817
As 188.980	21.8026	18.0379	31.6084
B 249.678	14.3564u	14.3414u	12.3356u
Ba 389.178	81.6912	82.1432	81.6802
Be 313.042	0.6502	0.6451	0.6559
Ca 370.602	579.7	589.1	589.5
Cd 226.502	-0.1360	-0.0049	0.3502
Co 228.615	2.8537	5.6077	2.9553
Cr 267.716	122.027	122.392	121.976
Cu 324.754	19.5386	19.4397	19.7836
Fe 271.441	212979	214717	216335
K 766.491	662.175	667.931	669.451
Mg 279.078	1420.70	1436.11	1435.63
Mn 257.610	40.4457	40.8336	40.7349
Mo 202.032	9.1355	6.7936	8.6319
Na 330.237	19.1075u	19.7582u	396.756u
Ni 231.604	18.6479	10.6209	15.6480
Pb 220.353	68.7948	85.4485	79.1048
Sb 206.834	-15.3714u	-3.6074	-0.5580
Se 196.026	16.4899	5.6686	1.1530
Si 288.158	6156.53	6195.66	6230.16
Sn 189.925	8.3466	12.0960	11.6975
Sr 216.596	14.5374	15.3759	12.2973
Ti 334.941	691.979	695.249	697.574
Tl 190.794	7.4724u	-8.9905u	0.2748u
V 292.401	495.181	496.104	498.394
Zn 206.200	16.6713	17.9877	16.4490

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2463	ppb	0.6274	254.8	-71.9892
Al 308.215	112357	ppb	455.728	0.4	220009
As 188.980	23.8163	ppb	7.0058	29.4	6.4913
B 249.678	13.6778	ppb	1.1624	8.5	-131.563
Ba 389.178	81.8382	ppb	0.2642	0.3	571.860
Be 313.042	0.6504	ppb	0.0054	0.8	212.004
Ca 370.602	586.1	ppb	5.526	0.9	667.1
Cd 226.502	0.0698	ppb	0.2516	360.6	338.788
Co 228.615	3.8056	ppb	1.5615	41.0	2.9293
Cr 267.716	122.132	ppb	0.2270	0.2	2074.42
Cu 324.754	19.5873	ppb	0.1770	0.9	1065.06
Fe 271.441	214677	ppb	1678.57	0.8	118855
K 766.491	666.519	ppb	3.8379	0.6	14115.2
Mg 279.078	1430.81	ppb	8.7635	0.6	1913.21
Mn 257.610	40.6714	ppb	0.2016	0.5	3555.66
Mo 202.032	8.1870	ppb	1.2327	15.1	15.2286
Na 330.237	145.207	ppb	217.848	150.0	27.0198
Ni 231.604	14.9723	ppb	4.0559	27.1	15.0397
Pb 220.353	77.7827	ppb	8.4052	10.8	22.6449
Sb 206.834	-6.5122	ppb	7.8223	120.1	7.1208
Se 196.026	7.7705	ppb	7.8816	101.4	5.0709
Si 288.158	6194.12	ppb	36.8373	0.6	29478.7

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	10.7134	ppb	2.0594	19.2	3.7009
Sr 216.596	14.0702	ppb	1.5916	11.3	72.8920
Ti 334.941	694.934	ppb	2.8104	0.4	61625.4
Tl 190.794	-0.4144	ppb	8.2530	1991.4	-11.0259
V 292.401	496.560	ppb	1.6541	0.3	5055.87
Zn 206.200	17.0360	ppb	0.8317	4.9	9.6963

680-167563-c-15-a (Samp) 4/20/2019, 1:28:08 AM Rack 4, Tube 9

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0145u	-0.3210u	0.1189u
Al 308.215	116426	115555	115471
As 188.980	12.6804	15.7028	12.6547
B 249.678	13.5964	12.8539u	13.3669
Ba 389.178	196.736	192.090	196.825
Be 313.042	1.0587	1.0717	1.0653
Ca 370.602	1728	1713	1707
Cd 226.502	-0.3718	0.1418	0.4833
Co 228.615	5.7215	6.6605	8.2391
Cr 267.716	99.3420	99.6558	99.2658
Cu 324.754	30.0606	30.5610	28.0855
Fe 271.441	87466.3	87020.5	87051.8
K 766.491	968.386	963.829	958.628
Mg 279.078	2122.18	2104.81	2112.21
Mn 257.610	78.2417	77.7915	77.4216
Mo 202.032	2.7942	6.3965	5.3666
Na 330.237	152.401u	302.168u	309.739u
Ni 231.604	23.5101	23.2360	23.4206
Pb 220.353	57.0609	41.9860	45.2815
Sb 206.834	6.8992	8.5711	5.1889
Se 196.026	-8.4654u	24.2147	0.4603
Si 288.158	5109.61	5085.44	5075.49
Sn 189.925	3.6273	12.0849	19.6203
Sr 216.596	24.1128	22.2533	22.7828
Ti 334.941	596.161	592.429	592.568
Tl 190.794	-6.9690u	-8.7873u	-6.9608u
V 292.401	233.357	232.317	229.709
Zn 206.200	32.0070	29.8287	31.9732

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4055	ppb	0.5714	140.9	-68.9488
Al 308.215	115817	ppb	529.119	0.5	226768
As 188.980	13.6793	ppb	1.7525	12.8	4.1221
B 249.678	13.2724	ppb	0.3802	2.9	-4.2981
Ba 389.178	195.217	ppb	2.7085	1.4	1230.67
Be 313.042	1.0653	ppb	0.0065	0.6	542.016
Ca 370.602	1716	ppb	10.93	0.6	2764
Cd 226.502	0.0845	ppb	0.4304	509.6	143.714
Co 228.615	6.8737	ppb	1.2722	18.5	17.3127
Cr 267.716	99.4212	ppb	0.2067	0.2	1684.44
Cu 324.754	29.5690	ppb	1.3089	4.4	1346.11
Fe 271.441	87179.5	ppb	248.856	0.3	48277.2
K 766.491	963.614	ppb	4.8825	0.5	20169.6

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2113.07	ppb	8.7179	0.4	2824.60
Mn 257.610	77.8183	ppb	0.4107	0.5	6552.43
Mo 202.032	4.8524	ppb	1.8554	38.2	11.1323
Na 330.237	254.769	ppb	88.7345	34.8	35.5275
Ni 231.604	23.3889	ppb	0.1398	0.6	24.4796
Pb 220.353	48.1095	ppb	7.9254	16.5	15.7004
Sb 206.834	6.8864	ppb	1.6911	24.6	9.9770
Se 196.026	5.4032	ppb	16.8915	312.6	4.1063
Si 288.158	5090.18	ppb	17.5478	0.3	24321.6
Sn 189.925	11.7775	ppb	8.0009	67.9	3.9699
Sr 216.596	23.0497	ppb	0.9580	4.2	84.4040
Ti 334.941	593.719	ppb	2.1159	0.4	52648.8
Tl 190.794	-7.5724	ppb	1.0522	13.9	-7.0822
V 292.401	231.795	ppb	1.8795	0.8	2352.52
Zn 206.200	31.2696	ppb	1.2480	4.0	17.2864

680-167563-c-16-a (Samp)

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Rack 4, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.6349u	-0.6901u	-0.3993u
Al 308.215	101213	100830	101143
As 188.980	8.7241	12.2064	7.7774
B 249.678	20.0575	21.0632	20.7254
Ba 389.178	106.672	107.745	102.805
Be 313.042	0.5723	0.5679	0.5858
Ca 370.602	1517	1513	1501
Cd 226.502	0.2346	0.1411	-0.4619
Co 228.615	4.3469	4.5689	5.5915
Cr 267.716	73.7276	73.3556	73.6591
Cu 324.754	32.4261	32.7152	32.7774
Fe 271.441	69214.7	68921.4	69239.8
K 766.491	805.541	804.001	805.414
Mg 279.078	1904.46	1903.58	1909.53
Mn 257.610	65.9003	65.5276	65.8300
Mo 202.032	3.6475	4.1696	2.9485
Na 330.237	305.965	215.112u	120.576u
Ni 231.604	16.7889	19.5425	18.4363
Pb 220.353	51.4365	42.5929	40.9482
Sb 206.834	4.7559	-5.6954u	-1.8589
Se 196.026	-3.2346u	-3.7565u	-14.7410u
Si 288.158	6864.09	6843.59	6870.84
Sn 189.925	6.0776	9.1767	21.4262
Sr 216.596	26.6922	23.0744	24.1346
Ti 334.941	527.647	526.758	528.357
Tl 190.794	8.6655u	-6.7553u	-6.4865u
V 292.401	206.403	205.874	207.430
Zn 206.200	29.3624	30.7116	29.2716

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9081	ppb	0.6460	71.1	-80.9447
Al 308.215	101062	ppb	204.222	0.2	197904
As 188.980	9.5693	ppb	2.3324	24.4	3.0741
B 249.678	20.6154	ppb	0.5118	2.5	64.5013

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	105.741	ppb	2.5985	2.5	660.107
Be 313.042	0.5753	ppb	0.0093	1.6	145.839
Ca 370.602	1510	ppb	8.387	0.6	2448
Cd 226.502	-0.0288	ppb	0.3781	1314.9	113.848
Co 228.615	4.8358	ppb	0.6638	13.7	9.1635
Cr 267.716	73.5808	ppb	0.1980	0.3	1250.61
Cu 324.754	32.6396	ppb	0.1875	0.6	1435.98
Fe 271.441	69125.3	ppb	177.007	0.3	38283.0
K 766.491	804.985	ppb	0.8550	0.1	16884.5
Mg 279.078	1905.85	ppb	3.2125	0.2	2550.43
Mn 257.610	65.7526	ppb	0.1980	0.3	5538.47
Mo 202.032	3.5885	ppb	0.6127	17.1	9.2153
Na 330.237	213.884	ppb	92.7008	43.3	35.7084
Ni 231.604	18.2559	ppb	1.3857	7.6	18.7205
Pb 220.353	44.9925	ppb	5.6409	12.5	15.1841
Sb 206.834	-0.9328	ppb	5.2869	566.8	6.9054
Se 196.026	-7.2440	ppb	6.4978	89.7	1.6466
Si 288.158	6859.51	ppb	14.1922	0.2	32576.5
Sn 189.925	12.2268	ppb	8.1162	66.4	4.0835
Sr 216.596	24.6337	ppb	1.8598	7.5	86.9740
Ti 334.941	527.587	ppb	0.8010	0.2	46781.6
Tl 190.794	-1.5254	ppb	8.8266	578.6	-4.8280
V 292.401	206.569	ppb	0.7913	0.4	2094.98
Zn 206.200	29.7819	ppb	0.8065	2.7	16.4402

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	507.714	505.014	508.105
Al 308.215	10192.8	10207.0	10172.9
As 188.980	502.570	493.385	493.566
B 249.678	512.201	517.971	522.086
Ba 389.178	486.560	487.483	488.581
Be 313.042	532.535	533.272	532.842
Ca 370.602	10111	10131	10141
Cd 226.502	503.264	505.201	506.791
Co 228.615	506.427	505.543	510.277
Cr 267.716	503.785	502.102	504.459
Cu 324.754	500.382	503.134	505.391
Fe 271.441	10227.3	10263.7	10240.7
K 766.491	9876.83	9899.94	9864.74
Mg 279.078	10269.2	10268.0	10272.2
Mn 257.610	504.956	506.124	505.677
Mo 202.032	501.996	503.312	505.760
Na 330.237	10975.9	10684.3	10795.2
Ni 231.604	508.246	509.380	501.615
Pb 220.353	503.416	505.036	496.576
Sb 206.834	483.030	483.188	482.600
Se 196.026	531.589	508.109	514.227
Si 288.158	5142.59	5143.99	5126.83
Sn 189.925	514.392	498.049	502.253
Sr 216.596	501.921	497.701	502.914
Ti 334.941	505.469	506.192	505.994

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Label	Replicates Concentration		
Tl 190.794	510.733	505.544	509.452
V 292.401	505.991	506.520	507.046
Zn 206.200	1034.28	1035.67	1042.36

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	506.944	ppb	1.6832	0.3	15355.5	101.38889
Al 308.215	10190.9	ppb	17.1019	0.2	20160.4	101.90917
As 188.980	496.507	ppb	5.2516	1.1	133.171	99.30146
B 249.678	517.419	ppb	4.9656	1.0	3525.40	103.48379
Ba 389.178	487.541	ppb	1.0115	0.2	3045.26	97.50823
Be 313.042	532.883	ppb	0.3703	0.1	429562	106.57658
Ca 370.602	10128	ppb	15.59	0.2	16961	101.27541
Cd 226.502	505.085	ppb	1.7664	0.3	6503.47	101.01709
Co 228.615	507.416	ppb	2.5172	0.5	1997.46	101.48313
Cr 267.716	503.448	ppb	1.2138	0.2	8436.49	100.68967
Cu 324.754	502.969	ppb	2.5085	0.5	15678.2	100.59383
Fe 271.441	10243.9	ppb	18.3981	0.2	5708.35	102.38789
K 766.491	9880.50	ppb	17.8840	0.2	201026	98.80505
Mg 279.078	10269.8	ppb	2.1295	0.0	13748.5	102.69814
Mn 257.610	505.586	ppb	0.5890	0.1	41991.4	101.11714
Mo 202.032	503.689	ppb	1.9102	0.4	853.863	100.73784
Na 330.237	10818.5	ppb	147.164	1.4	312.966	108.18461
Ni 231.604	506.414	ppb	4.1947	0.8	565.902	101.28277
Pb 220.353	501.676	ppb	4.4908	0.9	190.244	100.33520
Sb 206.834	482.939	ppb	0.3043	0.1	181.310	96.58790
Se 196.026	517.975	ppb	12.1808	2.4	100.455	103.59499
Si 288.158	5137.80	ppb	9.5260	0.2	24648.2	102.75606
Sn 189.925	504.898	ppb	8.4864	1.7	128.600	100.97960
Sr 216.596	500.845	ppb	2.7678	0.6	1463.03	100.16908
Ti 334.941	505.885	ppb	0.3736	0.1	44877.1	101.17700
Tl 190.794	508.576	ppb	2.7033	0.5	120.232	101.71526
V 292.401	506.519	ppb	0.5276	0.1	5102.13	101.30376
Zn 206.200	1037.44	ppb	4.3172	0.4	572.154	103.74371

Cont Calib Blank (CCB) 4/20/2019, 1:40:50 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1912	-0.8845u	-1.7504u
Al 308.215	14.2338	11.2932	11.6097
As 188.980	0.6149	9.9576	9.3869
B 249.678	11.6504	10.0566	9.2469
Ba 389.178	-0.8009u	-1.2406u	0.8200
Be 313.042	0.0602	0.0721	0.0705
Ca 370.602	-0.1874u	-9.529u	6.432
Cd 226.502	0.0415	0.8254	-0.1446u
Co 228.615	0.5299	0.5784	0.7396
Cr 267.716	0.3972	-0.1894u	0.3658
Cu 324.754	-0.0490u	0.7078	0.1506
Fe 271.441	20.7610	23.2860	5.1002
K 766.491	1.6363	0.7679	0.4050
Mg 279.078	11.8607	-1.8450u	12.4572
Mn 257.610	0.2176	0.2726	0.2936
Mo 202.032	-0.2861u	2.5200	2.0197

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Label	Replicates Concentration		
Na 330.237	387.864	79.4516	171.798
Ni 231.604	-1.3897u	-2.8943u	1.7764
Pb 220.353	-21.7142u	0.1115	9.6735
Sb 206.834	3.4418	-8.0025u	-1.2608u
Se 196.026	0.6794	-6.6703u	-5.6286u
Si 288.158	5.0171	6.1381	5.4337
Sn 189.925	-8.0653u	-4.3395u	-4.6955u
Sr 216.596	0.7732	0.2299	-1.0962u
Ti 334.941	0.3940	0.0453	0.3983
Tl 190.794	-8.6843u	-21.4512u	-0.4263u
V 292.401	0.2461	-0.1470u	0.2017
Zn 206.200	1.6758	-2.0025u	-3.7168u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.8145	ppb	0.9727	119.4	-65.4620	-0.81453
Al 308.215	12.3789	ppb	1.6142	13.0	231.360	12.37891
As 188.980	6.6531	ppb	5.2371	78.7	2.4826	6.65315
B 249.678	10.3180	ppb	1.2229	11.9	64.8634	10.31798
Ba 389.178	-0.4071	ppb	1.0853	266.6	-39.1867	-0.40714
Be 313.042	0.0676	ppb	0.0065	9.6	-272.430	0.06758
Ca 370.602	-1.095	ppb	8.019	732.4	23.26	-1.09487
Cd 226.502	0.2408	ppb	0.5148	213.8	7.0542	0.24078
Co 228.615	0.6160	ppb	0.1098	17.8	-9.9403	0.61597
Cr 267.716	0.1912	ppb	0.3300	172.6	16.7548	0.19121
Cu 324.754	0.2698	ppb	0.3922	145.4	444.285	0.26981
Fe 271.441	16.3824	ppb	9.8519	60.1	26.3184	16.38237
K 766.491	0.9364	ppb	0.6327	67.6	326.507	0.93638
Mg 279.078	7.4909	ppb	8.0907	108.0	31.7083	7.49095
Mn 257.610	0.2613	ppb	0.0393	15.0	48.2519	0.26126
Mo 202.032	1.4179	ppb	1.4968	105.6	6.3968	1.41787
Na 330.237	213.038	ppb	158.288	74.3	43.3452	213.03793
Ni 231.604	-0.8359	ppb	2.3841	285.2	-2.7097	-0.83586
Pb 220.353	-3.9764	ppb	16.0882	404.6	-0.6503	-3.97637
Sb 206.834	-1.9405	ppb	5.7523	296.4	5.3017	-1.94053
Se 196.026	-3.8732	ppb	3.9769	102.7	1.9916	-3.87316
Si 288.158	5.5296	ppb	0.5666	10.2	561.556	5.52961
Sn 189.925	-5.7001	ppb	2.0560	36.1	-0.4472	-5.70008
Sr 216.596	-0.0310	ppb	0.9616	3098.1	7.0664	-0.03104
Ti 334.941	0.2792	ppb	0.2026	72.6	-0.5771	0.27919
Tl 190.794	-10.1873	ppb	10.5927	104.0	-3.8590	-10.18726
V 292.401	0.1002	ppb	0.2153	214.7	-11.8642	0.10025
Zn 206.200	-1.3479	ppb	2.7552	204.4	-0.8490	-1.34785

680-167563-d-17-a (Samp)

4/20/2019, 1:45:02 AM

Rack 4, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1163u	-0.8331u	-1.0318u
Al 308.215	59829.6	59835.0	60235.9
As 188.980	7.9066	8.1644	6.1302
B 249.678	25.8859	24.8739	24.5390
Ba 389.178	167.152	166.320	167.187
Be 313.042	0.8268	0.8171	0.8199
Ca 370.602	8506	8480	8569

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.3325	0.0299	0.5908
Co 228.615	6.5215	4.7452	5.6242
Cr 267.716	62.7902	62.2944	62.5250
Cu 324.754	21.0551	21.9813	21.6447
Fe 271.441	71812.1	71486.2	72495.3
K 766.491	1253.77	1252.92	1264.98
Mg 279.078	1558.94	1557.04	1574.84
Mn 257.610	232.604	232.567	234.320
Mo 202.032	3.0310	3.8002	3.7389
Na 330.237	406.604	521.180	717.847
Ni 231.604	10.5700	11.6715	13.1818
Pb 220.353	36.8171	36.2515	43.7775
Sb 206.834	1.1429	0.5128	-12.6309u
Se 196.026	-15.4292u	-10.7269u	-9.2765u
Si 288.158	6441.08	6450.54	6502.13
Sn 189.925	4.3453	-2.6281u	6.5647
Sr 216.596	78.2503	77.3100	80.4605
Ti 334.941	576.423	578.366	581.647
Tl 190.794	-5.4031u	-1.9970u	-20.0567u
V 292.401	182.692	182.973	185.305
Zn 206.200	33.6470	33.5951	33.7323

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6604	ppb	0.4816	72.9	-73.9351
Al 308.215	59966.8	ppb	233.021	0.4	117516
As 188.980	7.4004	ppb	1.1076	15.0	2.4886
B 249.678	25.0996	ppb	0.7012	2.8	92.4944
Ba 389.178	166.886	ppb	0.4909	0.3	1045.28
Be 313.042	0.8213	ppb	0.0050	0.6	342.999
Ca 370.602	8518	ppb	45.45	0.5	14164
Cd 226.502	0.3177	ppb	0.2808	88.4	120.750
Co 228.615	5.6303	ppb	0.8882	15.8	12.6322
Cr 267.716	62.5365	ppb	0.2481	0.4	1066.26
Cu 324.754	21.5604	ppb	0.4689	2.2	1101.00
Fe 271.441	71931.2	ppb	514.958	0.7	39836.1
K 766.491	1257.22	ppb	6.7345	0.5	26217.0
Mg 279.078	1563.61	ppb	9.7759	0.6	2098.88
Mn 257.610	233.164	ppb	1.0012	0.4	19417.7
Mo 202.032	3.5233	ppb	0.4275	12.1	9.0783
Na 330.237	548.544	ppb	157.416	28.7	44.1282
Ni 231.604	11.8078	ppb	1.3112	11.1	11.4792
Pb 220.353	38.9487	ppb	4.1914	10.8	12.9320
Sb 206.834	-3.6584	ppb	7.7768	212.6	5.9152
Se 196.026	-11.8109	ppb	3.2164	27.2	0.8123
Si 288.158	6464.58	ppb	32.8634	0.5	30735.1
Sn 189.925	2.7606	ppb	4.7969	173.8	1.6910
Sr 216.596	78.6736	ppb	1.6174	2.1	245.064
Ti 334.941	578.812	ppb	2.6401	0.5	51324.1
Tl 190.794	-9.1523	ppb	9.5958	104.8	-6.7436
V 292.401	183.657	ppb	1.4346	0.8	1862.38
Zn 206.200	33.6581	ppb	0.0693	0.2	18.5912

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167563-d-18-a (Samp) 4/20/2019, 1:49:17 AM Rack 4, Tube 12**Weight: 1 Volume: 1 Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.8515u	0.1817u	-0.4880u
Al 308.215	67755.3	68170.1	68181.2
As 188.980	8.2052	12.1540	13.5621
B 249.678	29.6375	28.4714	27.8944
Ba 389.178	144.972	147.173	145.600
Be 313.042	0.8762	0.8788	0.8797
Ca 370.602	4761	4785	4799
Cd 226.502	0.1681	0.3767	0.0446
Co 228.615	5.5535	5.0687	5.7802
Cr 267.716	66.4379	66.0623	66.0573
Cu 324.754	22.6037	23.0388	23.4099
Fe 271.441	74425.5	75083.2	74522.4
K 766.491	1172.62	1177.87	1177.08
Mg 279.078	1221.03	1234.94	1226.89
Mn 257.610	177.330	178.600	178.418
Mo 202.032	3.1626	2.1850	0.0510u
Na 330.237	773.713	41.4420u	90.7141u
Ni 231.604	11.3466	11.2170	14.0676
Pb 220.353	63.5636	56.3528	67.7481
Sb 206.834	2.9086	2.1481	11.5867
Se 196.026	-22.2951u	-6.9679u	10.9621
Si 288.158	6048.24	6095.95	6090.55
Sn 189.925	2.7639	3.3389	17.8473
Sr 216.596	46.9452	47.3488	48.5567
Ti 334.941	552.976	555.760	556.910
Tl 190.794	-6.1100u	-30.3759u	-0.6910u
V 292.401	176.242	177.910	176.103
Zn 206.200	28.5131	31.8627	29.3392

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3859	ppb	0.5241	135.8	-66.0086
Al 308.215	68035.6	ppb	242.778	0.4	133300
As 188.980	11.3071	ppb	2.7771	24.6	3.5252
B 249.678	28.6678	ppb	0.8880	3.1	114.421
Ba 389.178	145.915	ppb	1.1342	0.8	914.101
Be 313.042	0.8782	ppb	0.0018	0.2	388.622
Ca 370.602	4781	ppb	18.94	0.4	7911
Cd 226.502	0.1965	ppb	0.1679	85.4	123.268
Co 228.615	5.4675	ppb	0.3635	6.6	11.7693
Cr 267.716	66.1858	ppb	0.2183	0.3	1127.45
Cu 324.754	23.0174	ppb	0.4035	1.8	1145.60
Fe 271.441	74677.0	ppb	355.076	0.5	41356.1
K 766.491	1175.86	ppb	2.8312	0.2	24577.2
Mg 279.078	1227.62	ppb	6.9841	0.6	1648.56
Mn 257.610	178.116	ppb	0.6872	0.4	14854.4
Mo 202.032	1.7995	ppb	1.5912	88.4	6.1417
Na 330.237	301.956	ppb	409.296	135.5	37.6347
Ni 231.604	12.2104	ppb	1.6097	13.2	11.9322
Pb 220.353	62.5548	ppb	5.7642	9.2	21.7646
Sb 206.834	5.5478	ppb	5.2437	94.5	9.1513
Se 196.026	-6.1003	ppb	16.6456	272.9	1.8937
Si 288.158	6078.25	ppb	26.1272	0.4	28930.6

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	7.9834	ppb	8.5473	107.1	3.0110
Sr 216.596	47.6169	ppb	0.8385	1.8	154.691
Ti 334.941	555.215	ppb	2.0226	0.4	49230.1
Tl 190.794	-12.3923	ppb	15.8082	127.6	-7.6431
V 292.401	176.751	ppb	1.0054	0.6	1792.08
Zn 206.200	29.9050	ppb	1.7450	5.8	16.5232

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	0.1403u	-1.3112u	-0.0916u
Al 308.215	39715.2	39997.6	39926.7
As 188.980	3.0505	5.7206	15.5064
B 249.678	13.6147	12.1298	13.6209
Ba 389.178	90.4576	91.6777	89.1113
Be 313.042	0.9561	0.9826	0.9901
Ca 370.602	2913	2938	2929
Cd 226.502	0.1118	0.6665	0.4744
Co 228.615	5.6700	6.1665	6.7068
Cr 267.716	44.2153	45.2271	43.8839
Cu 324.754	1263.06	1256.21	1283.09
Fe 271.441	34484.5	34725.8	34794.5
K 766.491	720.546	724.213	723.169
Mg 279.078	702.806	706.998	704.397
Mn 257.610	90.4786	91.3948	90.7175
Mo 202.032	3.4206	3.6830	3.4172
Na 330.237	523.524	78.3776u	280.643u
Ni 231.604	11.5030	15.7683	12.1313
Pb 220.353	28.1970	20.8627	26.3566
Sb 206.834	0.9261	-0.2000	2.5129
Se 196.026	-2.0338u	8.7643	9.4319
Si 288.158	2768.81	2789.71	2786.19
Sn 189.925	8.6906	3.7973	8.2421
Sr 216.596	31.1841	31.9288	31.4296
Ti 334.941	476.086	479.514	478.202
Tl 190.794	-2.0807u	4.4370u	-8.7741u
V 292.401	90.3565	90.2759	89.3855
Zn 206.200	722.818	722.669	723.941

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4208	ppb	0.7797	185.3	-60.0670
Al 308.215	39879.8	ppb	146.923	0.4	78220.2
As 188.980	8.0925	ppb	6.5579	81.0	2.7727
B 249.678	13.1218	ppb	0.8591	6.5	48.6205
Ba 389.178	90.4155	ppb	1.2837	1.4	547.508
Be 313.042	0.9763	ppb	0.0179	1.8	464.527
Ca 370.602	2927	ppb	12.30	0.4	4873
Cd 226.502	0.4176	ppb	0.2816	67.4	64.0015
Co 228.615	6.1811	ppb	0.5186	8.4	14.9084
Cr 267.716	44.4421	ppb	0.6997	1.6	760.295
Cu 324.754	1267.45	ppb	13.9705	1.1	38833.0
Fe 271.441	34668.3	ppb	162.811	0.5	19208.7
K 766.491	722.642	ppb	1.8892	0.3	15175.1

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	704.734	ppb	2.1164	0.3	955.585
Mn 257.610	90.8636	ppb	0.4753	0.5	7592.12
Mo 202.032	3.5069	ppb	0.1525	4.3	9.5022
Na 330.237	294.181	ppb	222.882	75.8	31.5482
Ni 231.604	13.1342	ppb	2.3027	17.5	12.9637
Pb 220.353	25.1388	ppb	3.8158	15.2	9.0258
Sb 206.834	1.0797	ppb	1.3629	126.2	7.0297
Se 196.026	5.3875	ppb	6.4356	119.5	3.8880
Si 288.158	2781.57	ppb	11.1923	0.4	13541.0
Sn 189.925	6.9100	ppb	2.7050	39.1	2.7398
Sr 216.596	31.5142	ppb	0.3795	1.2	103.074
Ti 334.941	477.934	ppb	1.7298	0.4	42372.9
Tl 190.794	-2.1393	ppb	6.6057	308.8	-3.4441
V 292.401	90.0060	ppb	0.5388	0.6	906.471
Zn 206.200	723.143	ppb	0.6952	0.1	399.017

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Rack 4, Tube 14

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3519u	-0.3599u	-0.0759u
Al 308.215	88646.2	89939.1	88960.6
As 188.980	27.2994	27.1529	29.5164
B 249.678	55.2107	56.0494	55.9489
Ba 389.178	79.5098	73.7779	75.7457
Be 313.042	0.6225	0.6442	0.6335
Ca 370.602	1510	1534	1516
Cd 226.502	-0.1778	0.0616	-0.1633
Co 228.615	4.9324	3.5982	7.1020
Cr 267.716	101.739	103.864	102.681
Cu 324.754	331.440	338.059	334.362
Fe 271.441	164808	166822	165581
K 766.491	838.663	851.435	840.507
Mg 279.078	933.723	947.482	942.215
Mn 257.610	53.6535	54.4530	53.9583
Mo 202.032	5.3779	7.6767	5.6217
Na 330.237	465.671u	703.214	243.809u
Ni 231.604	15.7592	15.7526	13.8182
Pb 220.353	46.9790	53.8390	36.6428
Sb 206.834	-0.5701	-8.3470u	-11.5636u
Se 196.026	-7.4854u	18.0600	3.6606
Si 288.158	4000.41	4053.96	4021.27
Sn 189.925	10.0938	5.0977	14.6957
Sr 216.596	20.3362	21.4169	19.2792
Ti 334.941	606.756	614.985	608.890
Tl 190.794	-2.7563u	-10.1915u	9.4544u
V 292.401	383.729	389.696	384.373
Zn 206.200	114.380	117.983	118.823

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2626	ppb	0.1617	61.6	-78.6470
Al 308.215	89182.0	ppb	674.265	0.8	174673
As 188.980	27.9896	ppb	1.3243	4.7	7.7364
B 249.678	55.7364	ppb	0.4580	0.8	206.485

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	76.3445	ppb	2.9125	3.8	515.658
Be 313.042	0.6334	ppb	0.0108	1.7	195.400
Ca 370.602	1520	ppb	12.08	0.8	2308
Cd 226.502	-0.0932	ppb	0.1342	144.1	260.428
Co 228.615	5.2109	ppb	1.7684	33.9	9.0053
Cr 267.716	102.761	ppb	1.0645	1.0	1746.40
Cu 324.754	334.620	ppb	3.3167	1.0	10599.2
Fe 271.441	165737	ppb	1016.16	0.6	91763.5
K 766.491	843.535	ppb	6.9036	0.8	17726.3
Mg 279.078	941.140	ppb	6.9422	0.7	1262.68
Mn 257.610	54.0216	ppb	0.4035	0.7	4626.94
Mo 202.032	6.2254	ppb	1.2628	20.3	12.5103
Na 330.237	470.898	ppb	229.747	48.8	37.2727
Ni 231.604	15.1100	ppb	1.1187	7.4	15.1891
Pb 220.353	45.8203	ppb	8.6565	18.9	12.2776
Sb 206.834	-6.8269	ppb	5.6522	82.8	6.2733
Se 196.026	4.7450	ppb	12.8072	269.9	4.3005
Si 288.158	4025.21	ppb	26.9918	0.7	19352.5
Sn 189.925	9.9624	ppb	4.8003	48.2	3.5111
Sr 216.596	20.3441	ppb	1.0689	5.3	85.5570
Ti 334.941	610.210	ppb	4.2702	0.7	54108.1
Tl 190.794	-1.1645	ppb	9.9192	851.8	-9.0253
V 292.401	385.933	ppb	3.2748	0.8	3926.67
Zn 206.200	117.062	ppb	2.3601	2.0	64.8001

680-167563-c-21-a (Samp)

4/20/2019, 2:02:00 AM

Rack 4, Tube 15

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.5436u	-1.9895u	-0.1928u
Al 308.215	36903.7	37247.7	36876.7
As 188.980	0.3734	7.2300	0.0575u
B 249.678	5.3295	3.1247u	4.9474
Ba 389.178	155.553	154.028	156.332
Be 313.042	0.6031	0.6278	0.6164
Ca 370.602	722.0	731.7	722.4
Cd 226.502	-0.0950	-0.0930	-0.0332
Co 228.615	3.4710	2.5778	4.2099
Cr 267.716	31.8870	32.5072	32.1747
Cu 324.754	12.3170	12.3243	12.1061
Fe 271.441	21111.3	21173.2	20967.8
K 766.491	489.968	493.359	489.615
Mg 279.078	768.595	775.664	777.382
Mn 257.610	212.078	214.113	212.680
Mo 202.032	0.5022	2.2735	3.0612
Na 330.237	468.978	18.1614u	182.864u
Ni 231.604	7.8659	10.7404	9.0534
Pb 220.353	20.1530	14.3551	20.5492
Sb 206.834	6.7507	0.4922	-4.3048u
Se 196.026	9.3013	-5.4418u	-10.7963u
Si 288.158	3812.32	3843.65	3809.90
Sn 189.925	13.5650	3.4606	16.6418
Sr 216.596	7.1508	7.0036	7.0493
Ti 334.941	462.234	466.760	462.447

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-7.7039u	-13.2684u	-7.6235u
V 292.401	66.7779	67.0179	65.0166
Zn 206.200	19.1896	23.8552	16.4479

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.2420	ppb	0.9355	75.3	-82.2591
Al 308.215	37009.4	ppb	206.848	0.6	72604.3
As 188.980	2.5536	ppb	4.0529	158.7	1.3307
B 249.678	4.4672	ppb	1.1782	26.4	3.3363
Ba 389.178	155.304	ppb	1.1718	0.8	949.661
Be 313.042	0.6158	ppb	0.0124	2.0	172.826
Ca 370.602	725.4	ppb	5.507	0.8	1216
Cd 226.502	-0.0737	ppb	0.0351	47.6	36.6167
Co 228.615	3.4196	ppb	0.8173	23.9	4.1889
Cr 267.716	32.1897	ppb	0.3104	1.0	554.414
Cu 324.754	12.2491	ppb	0.1239	1.0	810.506
Fe 271.441	21084.1	ppb	105.362	0.5	11688.9
K 766.491	490.981	ppb	2.0677	0.4	10418.0
Mg 279.078	773.880	ppb	4.6569	0.6	1047.37
Mn 257.610	212.957	ppb	1.0456	0.5	17704.3
Mo 202.032	1.9456	ppb	1.3106	67.4	7.0307
Na 330.237	223.334	ppb	228.117	102.1	38.4434
Ni 231.604	9.2199	ppb	1.4445	15.7	8.5742
Pb 220.353	18.3524	ppb	3.4675	18.9	6.9330
Sb 206.834	0.9794	ppb	5.5438	566.1	6.7375
Se 196.026	-2.3123	ppb	10.4078	450.1	2.3920
Si 288.158	3821.96	ppb	18.8225	0.5	18396.7
Sn 189.925	11.2225	ppb	6.8958	61.4	3.8297
Sr 216.596	7.0679	ppb	0.0754	1.1	30.1766
Ti 334.941	463.814	ppb	2.5535	0.6	41120.5
Tl 190.794	-9.5319	ppb	3.2361	34.0	-4.5812
V 292.401	66.2708	ppb	1.0928	1.6	664.323
Zn 206.200	19.8309	ppb	3.7451	18.9	10.8665

680-167563-d-22-a (Samp)

4/20/2019, 2:06:14 AM

Rack 4, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6862u	-0.0241u	-0.5462u
Al 308.215	77035.9	76710.9	77029.5
As 188.980	14.4869	21.3946	17.8603
B 249.678	2.9802u	3.3760u	4.0254u
Ba 389.178	85.7997	84.6539	86.1172
Be 313.042	0.4353	0.4166	0.4343
Ca 370.602	759.0	774.9	776.0
Cd 226.502	0.0773	-0.0548	-0.1254
Co 228.615	2.6377	3.6480	3.8588
Cr 267.716	58.4594	57.4253	58.5479
Cu 324.754	21.7542	20.9278	22.1807
Fe 271.441	102307	101921	102596
K 766.491	522.814	522.563	523.191
Mg 279.078	981.837	974.636	975.496
Mn 257.610	27.9428	27.7022	27.6912
Mo 202.032	3.1883	1.4429	2.2342

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Label	Replicates Concentration		
Na 330.237	292.387	345.558	330.779
Ni 231.604	9.7476	8.7011	10.2840
Pb 220.353	40.4340	35.7483	31.0458
Sb 206.834	7.9650	-5.2837u	-4.9565u
Se 196.026	-0.8095	-8.8164u	10.4951
Si 288.158	7599.90	7568.70	7602.31
Sn 189.925	21.1246	11.7097	17.9098
Sr 216.596	12.5581	10.7164	12.1043
Ti 334.941	433.623	432.589	432.522
Tl 190.794	5.8333u	-11.2156u	0.8595u
V 292.401	327.328	326.569	327.757
Zn 206.200	16.7467	14.2172	16.7450

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4188	ppb	0.3490	83.3	-71.8612
Al 308.215	76925.4	ppb	185.833	0.2	150694
As 188.980	17.9139	ppb	3.4542	19.3	5.2162
B 249.678	3.4605	ppb	0.5277	15.3	-86.5590
Ba 389.178	85.5236	ppb	0.7697	0.9	546.173
Be 313.042	0.4287	ppb	0.0105	2.5	29.1265
Ca 370.602	770.0	ppb	9.506	1.2	1154
Cd 226.502	-0.0343	ppb	0.1029	299.8	163.415
Co 228.615	3.3815	ppb	0.6527	19.3	1.9136
Cr 267.716	58.1442	ppb	0.6242	1.1	994.701
Cu 324.754	21.6209	ppb	0.6370	2.9	1107.39
Fe 271.441	102275	ppb	338.366	0.3	56633.5
K 766.491	522.856	ppb	0.3164	0.1	11091.2
Mg 279.078	977.323	ppb	3.9326	0.4	1313.67
Mn 257.610	27.7787	ppb	0.1422	0.5	2407.13
Mo 202.032	2.2885	ppb	0.8739	38.2	6.6163
Na 330.237	322.908	ppb	27.4452	8.5	38.4061
Ni 231.604	9.5775	ppb	0.8050	8.4	8.9819
Pb 220.353	35.7427	ppb	4.6941	13.1	10.6559
Sb 206.834	-0.7584	ppb	7.5565	996.3	7.3776
Se 196.026	0.2897	ppb	9.7026	3348.6	3.1982
Si 288.158	7590.30	ppb	18.7505	0.2	35982.4
Sn 189.925	16.9147	ppb	4.7857	28.3	5.2683
Sr 216.596	11.7929	ppb	0.9595	8.1	53.3388
Ti 334.941	432.911	ppb	0.6172	0.1	38380.4
Tl 190.794	-1.5076	ppb	8.7675	581.5	-6.2783
V 292.401	327.218	ppb	0.6020	0.2	3325.46
Zn 206.200	15.9029	ppb	1.4599	9.2	8.8613

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1492u	-0.1134u	-1.1508u
Al 308.215	62821.1	62841.6	62918.8
As 188.980	4.6631	19.8290	1.5648
B 249.678	14.3838	14.2534	16.1182
Ba 389.178	197.328	199.243	201.218
Be 313.042	0.9635	0.9638	0.9830
Ca 370.602	5287	5277	5308

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Label	Replicates Concentration		
Cd 226.502	0.3659	0.4204	-0.5428
Co 228.615	4.3153	3.8834	5.8235
Cr 267.716	50.7482	50.2973	51.0891
Cu 324.754	95.8688	94.9989	95.5883
Fe 271.441	30538.0	30491.9	30539.7
K 766.491	1014.17	1013.88	1015.51
Mg 279.078	1324.44	1321.26	1325.54
Mn 257.610	114.102	114.149	114.441
Mo 202.032	76.9830	77.8797	79.1064
Na 330.237	329.283	101.046u	285.515
Ni 231.604	15.7248	16.7007	15.9766
Pb 220.353	39.4178	40.0917	40.5581
Sb 206.834	5.7556	-2.0693u	4.8864
Se 196.026	12.8075	3.1130	-4.2961u
Si 288.158	5852.71	5850.15	5851.60
Sn 189.925	19.7227	4.9178	14.0558
Sr 216.596	35.8297	33.6593	33.5624
Ti 334.941	549.567	549.092	550.091
Tl 190.794	-5.6601u	-2.7274u	-0.5828u
V 292.401	101.231	101.455	101.055
Zn 206.200	88.6204	92.0104	94.7945

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8045	ppb	0.5985	74.4	-70.9741
Al 308.215	62860.5	ppb	51.5366	0.1	123174
As 188.980	8.6857	ppb	9.7740	112.5	2.9337
B 249.678	14.9185	ppb	1.0410	7.0	65.0909
Ba 389.178	199.263	ppb	1.9452	1.0	1230.87
Be 313.042	0.9701	ppb	0.0112	1.2	456.205
Ca 370.602	5290	ppb	15.73	0.3	8833
Cd 226.502	0.0812	ppb	0.5411	666.7	54.2861
Co 228.615	4.6741	ppb	1.0186	21.8	8.9043
Cr 267.716	50.7116	ppb	0.3972	0.8	864.981
Cu 324.754	95.4853	ppb	0.4440	0.5	3334.50
Fe 271.441	30523.2	ppb	27.1010	0.1	16914.2
K 766.491	1014.52	ppb	0.8697	0.1	21171.3
Mg 279.078	1323.75	ppb	2.2245	0.2	1778.78
Mn 257.610	114.231	ppb	0.1836	0.2	9529.98
Mo 202.032	77.9897	ppb	1.0660	1.4	135.251
Na 330.237	238.615	ppb	121.131	50.8	36.9207
Ni 231.604	16.1340	ppb	0.5066	3.1	16.3337
Pb 220.353	40.0225	ppb	0.5733	1.4	14.7079
Sb 206.834	2.8576	ppb	4.2888	150.1	7.6246
Se 196.026	3.8748	ppb	8.5772	221.4	3.5883
Si 288.158	5851.49	ppb	1.2841	0.0	27882.6
Sn 189.925	12.8988	ppb	7.4699	57.9	4.2533
Sr 216.596	34.3505	ppb	1.2819	3.7	110.122
Ti 334.941	549.583	ppb	0.5001	0.1	48730.7
Tl 190.794	-2.9901	ppb	2.5488	85.2	-3.4740
V 292.401	101.247	ppb	0.2007	0.2	1015.65
Zn 206.200	91.8084	ppb	3.0920	3.4	50.5983

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0887u	0.1016u	-0.6971u
Al 308.215	58678.1	58489.1	58851.6
As 188.980	17.7300	16.9701	15.5999
B 249.678	31.5478	31.0250	31.6760
Ba 389.178	59.9263	59.0427	58.4055
Be 313.042	0.3048	0.2934	0.2852
Ca 370.602	4236	4209	4240
Cd 226.502	0.0387	0.1279	-0.1259
Co 228.615	0.1901	4.0007	3.7893
Cr 267.716	41.4350	41.0319	40.7211
Cu 324.754	17.9886	16.8142	16.4396
Fe 271.441	75506.6	75108.7	75097.0
K 766.491	825.070	822.220	825.096
Mg 279.078	807.772	803.856	815.332
Mn 257.610	81.0178	80.4403	80.9067
Mo 202.032	3.4977	3.4942	4.5575
Na 330.237	725.374	646.346	505.450
Ni 231.604	7.3000	10.0832	9.6476
Pb 220.353	25.6612	29.6062	27.0402
Sb 206.834	1.6112	-11.3199u	-0.7160
Se 196.026	-8.5079u	9.0272	0.5192
Si 288.158	6034.06	6002.33	6025.57
Sn 189.925	15.3609	9.2531	12.5208
Sr 216.596	23.8518	26.1884	27.4970
Ti 334.941	354.896	352.790	355.354
Tl 190.794	1.1103u	-13.9290u	5.0087u
V 292.401	190.950	188.857	190.039
Zn 206.200	16.8350	12.7706	11.3815

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2281	ppb	0.4172	182.9	-61.2335
Al 308.215	58672.9	ppb	181.342	0.3	114986
As 188.980	16.7667	ppb	1.0795	6.4	4.9820
B 249.678	31.4163	ppb	0.3448	1.1	132.426
Ba 389.178	59.1248	ppb	0.7637	1.3	368.339
Be 313.042	0.2944	ppb	0.0098	3.3	-82.6311
Ca 370.602	4228	ppb	16.52	0.4	6979
Cd 226.502	0.0136	ppb	0.1287	948.6	121.815
Co 228.615	2.6600	ppb	2.1416	80.5	-0.9307
Cr 267.716	41.0626	ppb	0.3579	0.9	706.918
Cu 324.754	17.0808	ppb	0.8082	4.7	965.874
Fe 271.441	75237.4	ppb	233.152	0.3	41666.2
K 766.491	824.129	ppb	1.6535	0.2	17289.3
Mg 279.078	808.987	ppb	5.8337	0.7	1091.51
Mn 257.610	80.7883	ppb	0.3064	0.4	6781.81
Mo 202.032	3.8498	ppb	0.6129	15.9	9.5905
Na 330.237	625.724	ppb	111.403	17.8	48.3296
Ni 231.604	9.0103	ppb	1.4971	16.6	8.3435
Pb 220.353	27.4359	ppb	2.0020	7.3	8.4894
Sb 206.834	-3.4749	ppb	6.8929	198.4	5.9740
Se 196.026	0.3462	ppb	8.7688	2532.9	3.1030
Si 288.158	6020.65	ppb	16.4264	0.3	28653.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	12.3782	ppb	3.0564	24.7	4.1218
Sr 216.596	25.8457	ppb	1.8466	7.1	91.2239
Ti 334.941	354.347	ppb	1.3677	0.4	31410.5
Tl 190.794	-2.6033	ppb	10.0001	384.1	-5.3531
V 292.401	189.949	ppb	1.0496	0.6	1926.07
Zn 206.200	13.6624	ppb	2.8340	20.7	7.5754

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0987u	0.3707	-0.0357u
Al 308.215	56654.7	56574.3	56808.8
As 188.980	6.8778	8.8006	22.7361
B 249.678	6.0969u	6.1485u	6.3104u
Ba 389.178	187.544	187.784	187.581
Be 313.042	0.7615	0.7736	0.7518
Ca 370.602	3347	3332	3373
Cd 226.502	0.1667	-0.0724	0.1739
Co 228.615	6.2642	2.6747	5.8084
Cr 267.716	52.1297	52.8292	53.0828
Cu 324.754	23.1231	23.1447	23.1772
Fe 271.441	55693.1	55655.0	56156.7
K 766.491	744.364	741.776	746.915
Mg 279.078	1125.88	1127.95	1134.80
Mn 257.610	610.236	609.198	613.744
Mo 202.032	2.3501	1.4959	1.3683
Na 330.237	285.310	211.622u	-11.0103u
Ni 231.604	10.4195	13.9613	11.4873
Pb 220.353	48.7269	38.3361	49.9744
Sb 206.834	-4.7270u	-5.6747u	-14.2262u
Se 196.026	-15.2949u	-12.6917u	0.5114
Si 288.158	5261.86	5242.50	5277.54
Sn 189.925	16.6830	12.9237	11.2231
Sr 216.596	21.9166	20.9279	21.5300
Ti 334.941	480.714	479.787	481.363
Tl 190.794	-1.2711u	-16.3127u	1.6200u
V 292.401	134.563	134.222	134.792
Zn 206.200	56.7501	59.5855	60.9947

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2546	ppb	0.7588	298.1	-57.7528
Al 308.215	56679.3	ppb	119.147	0.2	111084
As 188.980	12.8048	ppb	8.6543	67.6	3.9750
B 249.678	6.1852	ppb	0.1114	1.8	-20.4325
Ba 389.178	187.636	ppb	0.1292	0.1	1168.28
Be 313.042	0.7623	ppb	0.0109	1.4	293.490
Ca 370.602	3351	ppb	21.12	0.6	5554
Cd 226.502	0.0894	ppb	0.1402	156.8	92.8618
Co 228.615	4.9158	ppb	1.9541	39.8	9.4433
Cr 267.716	52.6806	ppb	0.4936	0.9	900.625
Cu 324.754	23.1484	ppb	0.0272	0.1	1146.48
Fe 271.441	55834.9	ppb	279.299	0.5	30925.7
K 766.491	744.352	ppb	2.5696	0.3	15616.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1129.54	ppb	4.6687	0.4	1515.19
Mn 257.610	611.059	ppb	2.3821	0.4	50730.1
Mo 202.032	1.7381	ppb	0.5338	30.7	6.2628
Na 330.237	161.974	ppb	154.273	95.2	34.8752
Ni 231.604	11.9561	ppb	1.8168	15.2	11.6458
Pb 220.353	45.6791	ppb	6.3898	14.0	16.0676
Sb 206.834	-8.2093	ppb	5.2323	63.7	4.1085
Se 196.026	-9.1584	ppb	8.4748	92.5	1.2816
Si 288.158	5260.64	ppb	17.5515	0.3	25111.5
Sn 189.925	13.6099	ppb	2.7939	20.5	4.4330
Sr 216.596	21.4582	ppb	0.4983	2.3	76.1828
Ti 334.941	480.621	ppb	0.7918	0.2	42612.7
Tl 190.794	-5.3213	ppb	9.6280	180.9	-5.0310
V 292.401	134.526	ppb	0.2870	0.2	1361.00
Zn 206.200	59.1101	ppb	2.1619	3.7	32.6072

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Rack 4, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5972u	0.3412u	0.9762u
Al 308.215	91344.6	90816.3	91448.4
As 188.980	12.3295	28.5652	20.8470
B 249.678	26.7914u	28.6778	29.0213
Ba 389.178	97.8807	99.6472	94.8013
Be 313.042	0.6348	0.6080	0.6060
Ca 370.602	4275	4248	4272
Cd 226.502	-0.0227	0.1896	0.2316
Co 228.615	5.2281	5.5121	5.7400
Cr 267.716	118.074	117.401	118.621
Cu 324.754	40.8728	40.4964	41.0646
Fe 271.441	190491	189497	190344
K 766.491	1141.55	1137.19	1142.14
Mg 279.078	975.218	978.445	983.975
Mn 257.610	147.690	146.701	147.376
Mo 202.032	5.8509	6.3242	8.3266
Na 330.237	98.5322u	315.671u	246.985u
Ni 231.604	12.8637	10.7110	8.7680
Pb 220.353	40.6079	52.2491	43.0441
Sb 206.834	-1.4404	-6.3812	-10.2149u
Se 196.026	3.6828	23.2632	12.6021
Si 288.158	7187.42	7131.39	7162.87
Sn 189.925	11.3843	10.7225	2.9716
Sr 216.596	49.4767	46.9080	50.7130
Ti 334.941	603.354	600.014	603.103
Tl 190.794	11.3992u	2.0665u	3.5311u
V 292.401	491.131	491.128	492.759
Zn 206.200	25.4598	23.9238	20.5372

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6382	ppb	0.3195	50.1	-55.4347
Al 308.215	91203.1	ppb	338.955	0.4	178630
As 188.980	20.5806	ppb	8.1211	39.5	5.6935
B 249.678	28.1635	ppb	1.2006	4.3	6.9401

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	97.4430	ppb	2.4524	2.5	658.774
Be 313.042	0.6163	ppb	0.0161	2.6	184.377
Ca 370.602	4265	ppb	15.08	0.4	6859
Cd 226.502	0.1328	ppb	0.1363	102.7	300.519
Co 228.615	5.4934	ppb	0.2565	4.7	9.5126
Cr 267.716	118.032	ppb	0.6110	0.5	2003.81
Cu 324.754	40.8113	ppb	0.2891	0.7	1703.46
Fe 271.441	190111	ppb	536.969	0.3	105256
K 766.491	1140.29	ppb	2.7034	0.2	23840.9
Mg 279.078	979.213	ppb	4.4287	0.5	1312.26
Mn 257.610	147.255	ppb	0.5055	0.3	12371.6
Mo 202.032	6.8339	ppb	1.3142	19.2	13.2369
Na 330.237	220.396	ppb	110.984	50.4	30.7521
Ni 231.604	10.7809	ppb	2.0487	19.0	10.3327
Pb 220.353	45.3004	ppb	6.1398	13.6	11.2665
Sb 206.834	-6.0122	ppb	4.3989	73.2	6.9546
Se 196.026	13.1827	ppb	9.8031	74.4	5.9990
Si 288.158	7160.56	ppb	28.0817	0.4	33985.4
Sn 189.925	8.3595	ppb	4.6777	56.0	3.1060
Sr 216.596	49.0325	ppb	1.9410	4.0	172.109
Ti 334.941	602.157	ppb	1.8599	0.3	53393.9
Tl 190.794	5.6656	ppb	5.0192	88.6	-8.4259
V 292.401	491.673	ppb	0.9409	0.2	5004.46
Zn 206.200	23.3069	ppb	2.5186	10.8	13.1048

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	507.322	505.142	510.064
Al 308.215	10137.9	10187.0	10171.7
As 188.980	494.310	501.997	494.963
B 249.678	509.915	517.905	520.913
Ba 389.178	483.186	486.355	489.391
Be 313.042	529.320	531.679	532.570
Ca 370.602	10066	10101	10104
Cd 226.502	500.626	502.419	504.353
Co 228.615	504.056	504.325	505.474
Cr 267.716	499.141	500.944	505.705
Cu 324.754	501.979	505.425	508.730
Fe 271.441	10179.0	10192.1	10230.6
K 766.491	9807.93	9848.63	9873.97
Mg 279.078	10209.6	10242.1	10261.6
Mn 257.610	501.705	503.169	504.846
Mo 202.032	496.962	501.293	500.132
Na 330.237	10709.7	10558.4	10468.4
Ni 231.604	500.944	501.805	504.657
Pb 220.353	487.949	502.434	498.393
Sb 206.834	472.563	471.481	478.808
Se 196.026	539.278	523.598	530.896
Si 288.158	5119.26	5122.48	5126.71
Sn 189.925	511.955	485.250	498.846
Sr 216.596	494.090	494.018	499.216
Ti 334.941	501.589	504.030	505.773

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Label	Replicates Concentration		
Tl 190.794	496.462	492.148	494.487
V 292.401	501.571	501.255	503.507
Zn 206.200	1046.62	1030.17	1042.44

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	507.510	ppb	2.4662	0.5	15372.7	101.50193
Al 308.215	10165.6	ppb	25.1164	0.2	20110.6	101.65563
As 188.980	497.090	ppb	4.2619	0.9	133.328	99.41801
B 249.678	516.245	ppb	5.6839	1.1	3517.41	103.24894
Ba 389.178	486.311	ppb	3.1025	0.6	3037.47	97.26213
Be 313.042	531.190	ppb	1.6795	0.3	428197	106.23795
Ca 370.602	10090	ppb	20.97	0.2	16898	100.90192
Cd 226.502	502.466	ppb	1.8638	0.4	6469.79	100.49327
Co 228.615	504.619	ppb	0.7532	0.1	1986.41	100.92372
Cr 267.716	501.930	ppb	3.3916	0.7	8411.09	100.38602
Cu 324.754	505.378	ppb	3.3757	0.7	15751.1	101.07553
Fe 271.441	10200.6	ppb	26.7984	0.3	5684.23	101.95483
K 766.491	9843.51	ppb	33.3183	0.3	200313	98.43510
Mg 279.078	10237.8	ppb	26.2920	0.3	13705.7	102.37778
Mn 257.610	503.240	ppb	1.5720	0.3	41796.8	100.64804
Mo 202.032	499.462	ppb	2.2416	0.4	846.731	99.89240
Na 330.237	10578.8	ppb	121.958	1.2	306.505	105.78819
Ni 231.604	502.468	ppb	1.9436	0.4	561.479	100.49368
Pb 220.353	496.259	ppb	7.4750	1.5	188.195	99.25171
Sb 206.834	474.284	ppb	3.9550	0.8	178.191	94.85678
Se 196.026	531.257	ppb	7.8464	1.5	102.959	106.25146
Si 288.158	5122.82	ppb	3.7388	0.1	24577.5	102.45638
Sn 189.925	498.684	ppb	13.3531	2.7	127.029	99.73671
Sr 216.596	495.774	ppb	2.9808	0.6	1448.29	99.15488
Ti 334.941	503.797	ppb	2.1016	0.4	44691.8	100.75945
Tl 190.794	494.366	ppb	2.1593	0.4	116.829	98.87318
V 292.401	502.111	ppb	1.2193	0.2	5057.70	100.42224
Zn 206.200	1039.74	ppb	8.5494	0.8	573.428	103.97430

Cont Calib Blank (CCB) 4/20/2019, 2:31:38 AM Rack S, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2315u	-0.5827u	-0.4597u
Al 308.215	11.9184	6.3720	11.5113
As 188.980	0.6826	4.0739	-2.3987u
B 249.678	11.9832	11.1725	8.2321
Ba 389.178	0.2764	2.0348	2.0309
Be 313.042	0.0902	0.0787	0.0845
Ca 370.602	5.023	-4.321u	5.319
Cd 226.502	0.0748	-0.4055u	0.5975
Co 228.615	1.3445	0.5594	3.1672
Cr 267.716	0.1280	0.6763	0.1813
Cu 324.754	0.9202	0.7559	-0.4796u
Fe 271.441	15.8286	25.6147	14.8789
K 766.491	1.0062	0.1895	0.8321
Mg 279.078	6.2541	15.7044	8.5966
Mn 257.610	0.4299	0.3083	0.2795
Mo 202.032	1.4630	0.8553	-0.0804u

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Label	Replicates Concentration		
Na 330.237	120.122	104.143	344.220
Ni 231.604	-0.5133u	-1.7114u	-0.3737u
Pb 220.353	-0.9574u	-2.4229u	-5.4361u
Sb 206.834	-7.3797u	7.2195	3.1510
Se 196.026	9.2447	5.3558	11.9838
Si 288.158	6.9931	6.7469	7.7360
Sn 189.925	-5.7786u	-4.3511u	-9.0534u
Sr 216.596	1.2997	0.3155	-0.0488u
Ti 334.941	0.4377	0.4363	0.2871
Tl 190.794	-0.8994u	-16.1998u	-8.2123u
V 292.401	-0.0073u	0.3680	1.1511
Zn 206.200	-1.9702u	-4.3742u	-4.0348u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.4246	ppb	0.1782	42.0	-53.6207	-0.42463
Al 308.215	9.9339	ppb	3.0914	31.1	226.563	9.93390
As 188.980	0.7859	ppb	3.2375	411.9	0.9161	0.78592
B 249.678	10.4626	ppb	1.9737	18.9	65.8485	10.46260
Ba 389.178	1.4474	ppb	1.0141	70.1	-27.5228	1.44736
Be 313.042	0.0845	ppb	0.0057	6.8	-258.721	0.08446
Ca 370.602	2.007	ppb	5.482	273.1	28.44	2.00705
Cd 226.502	0.0889	ppb	0.5016	564.1	5.1120	0.08893
Co 228.615	1.6904	ppb	1.3379	79.1	-5.6684	1.69038
Cr 267.716	0.3285	ppb	0.3024	92.0	19.0517	0.32850
Cu 324.754	0.3988	ppb	0.7652	191.8	448.169	0.39885
Fe 271.441	18.7740	ppb	5.9432	31.7	27.6835	18.77404
K 766.491	0.6759	ppb	0.4301	63.6	312.148	0.67592
Mg 279.078	10.1850	ppb	4.9213	48.3	35.3105	10.18505
Mn 257.610	0.3392	ppb	0.0798	23.5	54.7328	0.33922
Mo 202.032	0.7460	ppb	0.7775	104.2	5.2628	0.74599
Na 330.237	189.495	ppb	134.234	70.8	42.7154	189.49510
Ni 231.604	-0.8661	ppb	0.7354	84.9	-2.7447	-0.86613
Pb 220.353	-2.9388	ppb	2.2835	77.7	-0.2574	-2.93880
Sb 206.834	0.9969	ppb	7.5342	755.7	6.3479	0.99694
Se 196.026	8.8615	ppb	3.3306	37.6	4.3922	8.86145
Si 288.158	7.1586	ppb	0.5149	7.2	568.618	7.15864
Sn 189.925	-6.3944	ppb	2.4109	37.7	-0.6227	-6.39437
Sr 216.596	0.5221	ppb	0.6976	133.6	8.6930	0.52213
Ti 334.941	0.3871	ppb	0.0866	22.4	9.0005	0.38706
Tl 190.794	-8.4371	ppb	7.6527	90.7	-3.4392	-8.43714
V 292.401	0.5039	ppb	0.5910	117.3	-7.6634	0.50391
Zn 206.200	-3.4597	ppb	1.3011	37.6	-2.0147	-3.45972

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Rack 4, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3389u	-0.1620u	-0.4725u
Al 308.215	95418.5	95181.1	95232.6
As 188.980	13.2993	11.8408	14.4976
B 249.678	62.2700	63.0732	62.9857
Ba 389.178	198.426	194.044	197.391
Be 313.042	0.9657	0.9853	0.9643
Ca 370.602	21423	21322	21422

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Label	Replicates Concentration		
Cd 226.502	0.0099	0.4259	0.3979
Co 228.615	7.8111	5.1267	7.2243
Cr 267.716	131.433	130.928	131.290
Cu 324.754	29.9891	29.2726	29.6667
Fe 271.441	75094.5	74778.0	74882.2
K 766.491	1226.00	1225.90	1234.72
Mg 279.078	2201.94	2189.50	2208.24
Mn 257.610	164.966	164.701	164.446
Mo 202.032	15.1372	14.7768	13.9074
Na 330.237	459.466	530.813	650.150
Ni 231.604	26.4264	24.0810	26.4852
Pb 220.353	36.4897	44.1086	37.7376
Sb 206.834	1.6291	-6.2798u	0.2120
Se 196.026	-12.2649u	15.9761	3.6318
Si 288.158	8982.96	8965.90	8983.47
Sn 189.925	19.0421	11.4601	17.3474
Sr 216.596	176.675	177.223	176.298
Ti 334.941	678.222	676.897	676.111
Tl 190.794	-17.1913u	4.8145u	-5.8114u
V 292.401	204.004	202.778	202.867
Zn 206.200	30.4072	34.6515	38.9865

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0985	ppb	0.4094	415.5	-57.8136
Al 308.215	95277.4	ppb	124.888	0.1	186589
As 188.980	13.2125	ppb	1.3305	10.1	4.0284
B 249.678	62.7763	ppb	0.4406	0.7	347.631
Ba 389.178	196.621	ppb	2.2902	1.2	1234.10
Be 313.042	0.9718	ppb	0.0118	1.2	467.488
Ca 370.602	21389	ppb	58.03	0.3	35678
Cd 226.502	0.2779	ppb	0.2325	83.7	125.724
Co 228.615	6.7207	ppb	1.4113	21.0	17.5761
Cr 267.716	131.217	ppb	0.2599	0.2	2215.43
Cu 324.754	29.6428	ppb	0.3588	1.2	1346.38
Fe 271.441	74918.2	ppb	161.300	0.2	41489.8
K 766.491	1228.88	ppb	5.0645	0.4	25625.7
Mg 279.078	2199.90	ppb	9.5359	0.4	2943.73
Mn 257.610	164.704	ppb	0.2601	0.2	13748.4
Mo 202.032	14.6071	ppb	0.6322	4.3	27.7494
Na 330.237	546.810	ppb	96.3430	17.6	43.1045
Ni 231.604	25.6642	ppb	1.3714	5.3	27.0285
Pb 220.353	39.4453	ppb	4.0865	10.4	12.9055
Sb 206.834	-1.4796	ppb	4.2171	285.0	6.9636
Se 196.026	2.4477	ppb	14.1577	578.4	3.5048
Si 288.158	8977.44	ppb	10.0017	0.1	42469.7
Sn 189.925	15.9498	ppb	3.9795	24.9	5.0244
Sr 216.596	176.732	ppb	0.4649	0.3	531.432
Ti 334.941	677.076	ppb	1.0668	0.2	60043.0
Tl 190.794	-6.0627	ppb	11.0051	181.5	-6.1363
V 292.401	203.216	ppb	0.6836	0.3	2059.81
Zn 206.200	34.6817	ppb	4.2897	12.4	19.1234

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0579u	-0.1990u	-1.2015u
Al 308.215	89114.0	88605.6	89009.6
As 188.980	8.7238	9.5073	3.9511
B 249.678	4.7473	3.7097u	3.1833u
Ba 389.178	145.742	144.184	141.981
Be 313.042	0.7836	0.7751	0.7724
Ca 370.602	2713	2706	2707
Cd 226.502	0.4605	-0.1395	-0.2750
Co 228.615	6.6695	5.6160	5.9968
Cr 267.716	83.8389	84.0420	84.4423
Cu 324.754	21.8046	20.6907	21.7851
Fe 271.441	28359.1	28272.4	28420.5
K 766.491	1001.59	996.439	1000.21
Mg 279.078	1788.28	1772.67	1776.09
Mn 257.610	54.4130	54.0119	54.5880
Mo 202.032	2.1016	1.7797	2.9749
Na 330.237	279.558	444.223	-43.6159u
Ni 231.604	18.8327	19.1937	19.4115
Pb 220.353	30.3440	37.1739	47.1265
Sb 206.834	2.9969	-3.5236u	-1.0159
Se 196.026	-14.4191u	-8.7379u	-5.4627u
Si 288.158	7165.96	7136.21	7171.57
Sn 189.925	7.4789	3.8814	13.5720
Sr 216.596	21.7429	23.8646	23.4985
Ti 334.941	585.002	582.327	583.765
Tl 190.794	-7.0435u	-15.4635u	-3.6781u
V 292.401	132.220	130.235	131.310
Zn 206.200	34.0932	30.7094	33.2789

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4475	ppb	0.6655	148.7	-59.7511
Al 308.215	88909.7	ppb	268.517	0.3	174129
As 188.980	7.3941	ppb	3.0073	40.7	2.6011
B 249.678	3.8801	ppb	0.7958	20.5	-8.1418
Ba 389.178	143.969	ppb	1.8898	1.3	882.676
Be 313.042	0.7770	ppb	0.0059	0.8	306.901
Ca 370.602	2709	ppb	4.078	0.2	4520
Cd 226.502	0.0153	ppb	0.3914	2552.2	50.9531
Co 228.615	6.0941	ppb	0.5334	8.8	15.5610
Cr 267.716	84.1078	ppb	0.3070	0.4	1423.42
Cu 324.754	21.4268	ppb	0.6375	3.0	1089.41
Fe 271.441	28350.7	ppb	74.4359	0.3	15711.8
K 766.491	999.413	ppb	2.6659	0.3	20895.0
Mg 279.078	1779.02	ppb	8.2053	0.5	2383.24
Mn 257.610	54.3376	ppb	0.2954	0.5	4565.81
Mo 202.032	2.2854	ppb	0.6184	27.1	7.5079
Na 330.237	226.722	ppb	248.174	109.5	37.0497
Ni 231.604	19.1460	ppb	0.2924	1.5	19.7157
Pb 220.353	38.2148	ppb	8.4396	22.1	14.0284
Sb 206.834	-0.5142	ppb	3.2891	639.7	6.4763
Se 196.026	-9.5399	ppb	4.5318	47.5	1.0446
Si 288.158	7157.91	ppb	19.0044	0.3	33971.2

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	8.3108	ppb	4.8986	58.9	3.0938
Sr 216.596	23.0354	ppb	1.1341	4.9	77.5832
Ti 334.941	583.698	ppb	1.3385	0.2	51758.5
Tl 190.794	-8.7284	ppb	6.0707	69.6	-4.7316
V 292.401	131.255	ppb	0.9936	0.8	1325.78
Zn 206.200	32.6938	ppb	1.7661	5.4	17.9520

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.2511u	-0.7846u	-0.6184u
Al 308.215	80685.3	81205.8	81319.6
As 188.980	13.8195	9.3414	14.6796
B 249.678	2.5446u	2.0321u	3.0457u
Ba 389.178	177.694	182.462	178.701
Be 313.042	0.7084	0.6995	0.7328
Ca 370.602	1719	1723	1728
Cd 226.502	-0.0285	0.0076	0.3755
Co 228.615	4.7566	4.6828	3.9138
Cr 267.716	78.3094	79.3394	78.6263
Cu 324.754	19.5975	21.0750	21.0643
Fe 271.441	22963.4	23079.3	23051.3
K 766.491	904.000	912.825	913.847
Mg 279.078	1619.18	1639.34	1643.68
Mn 257.610	72.9899	73.1986	73.3015
Mo 202.032	2.1243	1.8253	3.0910
Na 330.237	71.3265u	176.103u	465.524
Ni 231.604	16.4153	21.0170	19.9099
Pb 220.353	31.1760	28.4789	38.8833
Sb 206.834	-9.4677u	-4.1620u	1.5862
Se 196.026	7.3533	-22.8939u	-2.0672u
Si 288.158	6635.43	6662.81	6683.43
Sn 189.925	11.6946	0.6094	21.0080
Sr 216.596	14.4372	15.3383	15.3010
Ti 334.941	528.345	531.222	532.107
Tl 190.794	-1.3385u	5.1475	-16.4841u
V 292.401	126.529	125.863	127.138
Zn 206.200	29.0366	28.9828	28.6674

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8847	ppb	0.3280	37.1	-71.9615
Al 308.215	81070.2	ppb	338.151	0.4	158794
As 188.980	12.6135	ppb	2.8662	22.7	4.0092
B 249.678	2.5408	ppb	0.5068	19.9	-11.8387
Ba 389.178	179.619	ppb	2.5128	1.4	1104.35
Be 313.042	0.7136	ppb	0.0172	2.4	255.132
Ca 370.602	1724	ppb	4.466	0.3	2881
Cd 226.502	0.1182	ppb	0.2236	189.2	43.7653
Co 228.615	4.4511	ppb	0.4667	10.5	8.7746
Cr 267.716	78.7584	ppb	0.5276	0.7	1333.47
Cu 324.754	20.5789	ppb	0.8500	4.1	1062.80
Fe 271.441	23031.3	ppb	60.4405	0.3	12767.2
K 766.491	910.224	ppb	5.4145	0.6	19035.8

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1634.06	ppb	13.0747	0.8	2190.69
Mn 257.610	73.1634	ppb	0.1588	0.2	6121.47
Mo 202.032	2.3469	ppb	0.6615	28.2	7.6750
Na 330.237	237.651	ppb	204.179	85.9	38.0536
Ni 231.604	19.1141	ppb	2.4019	12.6	19.6802
Pb 220.353	32.8461	ppb	5.3995	16.4	12.2074
Sb 206.834	-4.0145	ppb	5.5284	137.7	5.1828
Se 196.026	-5.8693	ppb	15.4779	263.7	1.7163
Si 288.158	6660.56	ppb	24.0802	0.4	31647.8
Sn 189.925	11.1040	ppb	10.2121	92.0	3.7997
Sr 216.596	15.0255	ppb	0.5098	3.4	53.5875
Ti 334.941	530.558	ppb	1.9669	0.4	47044.1
Tl 190.794	-4.2250	ppb	11.1009	262.7	-3.4103
V 292.401	126.510	ppb	0.6376	0.5	1277.03
Zn 206.200	28.8956	ppb	0.1994	0.7	15.8472

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Rack 4, Tube 24

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3846	-0.5895u	-1.7273u
Al 308.215	6379.09	6424.79	6478.48
As 188.980	0.4860	8.8477	-1.7833u
B 249.678	1.1312	-0.5380u	1.4644
Ba 389.178	8.5967	9.7531	11.7710
Be 313.042	-0.0247u	-0.0385u	-0.0250u
Ca 370.602	1856	1862	1881
Cd 226.502	0.4291	0.3316	-0.3301
Co 228.615	0.0954	-0.5813u	0.8527
Cr 267.716	10.4359	9.5658	10.0282
Cu 324.754	1.5717	2.5703	2.4189
Fe 271.441	2837.94	2856.31	2914.72
K 766.491	221.328	223.022	227.327
Mg 279.078	306.264	301.269	310.613
Mn 257.610	15.8069	16.0159	16.2201
Mo 202.032	0.4939	1.4531	-0.0637u
Na 330.237	263.308	388.249	64.3517u
Ni 231.604	2.3472	2.2187	0.5798
Pb 220.353	9.3907	5.7263	7.1836
Sb 206.834	1.7156	-1.8632u	0.9579
Se 196.026	-4.9185u	-3.5033u	-6.2589u
Si 288.158	2025.73	2047.40	2056.10
Sn 189.925	-2.5053u	11.0216	7.9514
Sr 216.596	17.7245	19.9903	18.4179
Ti 334.941	306.023	307.660	308.758
Tl 190.794	-15.8328u	-9.0391u	-12.1452u
V 292.401	9.7114	9.4494	10.2659
Zn 206.200	4.8718	1.4813	4.9891

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6441	ppb	1.0570	164.1	-61.1657
Al 308.215	6427.45	ppb	49.7467	0.8	12780.3
As 188.980	2.5168	ppb	5.5989	222.5	1.3701
B 249.678	0.6858	ppb	1.0729	156.4	-3.9793

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	10.0403	ppb	1.6065	16.0	28.0506
Be 313.042	-0.0294	ppb	0.0079	26.9	-349.871
Ca 370.602	1866	ppb	12.99	0.7	3147
Cd 226.502	0.1435	ppb	0.4131	287.8	10.3538
Co 228.615	0.1223	ppb	0.7174	586.7	-9.6351
Cr 267.716	10.0100	ppb	0.4353	4.3	181.475
Cu 324.754	2.1870	ppb	0.5382	24.6	502.794
Fe 271.441	2869.66	ppb	40.0894	1.4	1605.80
K 766.491	223.892	ppb	3.0928	1.4	4930.35
Mg 279.078	306.049	ppb	4.6755	1.5	429.584
Mn 257.610	16.0143	ppb	0.2066	1.3	1362.21
Mo 202.032	0.6278	ppb	0.7672	122.2	5.0284
Na 330.237	238.636	ppb	163.352	68.5	41.1302
Ni 231.604	1.7152	ppb	0.9854	57.5	0.1536
Pb 220.353	7.4336	ppb	1.8449	24.8	3.5149
Sb 206.834	0.2701	ppb	1.8859	698.2	6.1343
Se 196.026	-4.8936	ppb	1.3779	28.2	1.8124
Si 288.158	2043.08	ppb	15.6405	0.8	10086.2
Sn 189.925	5.4892	ppb	7.0916	129.2	2.3807
Sr 216.596	18.7109	ppb	1.1610	6.2	62.0983
Ti 334.941	307.480	ppb	1.3759	0.4	27251.0
Tl 190.794	-12.3390	ppb	3.4010	27.6	-4.4961
V 292.401	9.8089	ppb	0.4169	4.3	88.2406
Zn 206.200	3.7807	ppb	1.9922	52.7	1.9818

680-167563-c-53-a (Samp)

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Rack 4, Tube 25

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4737u	-0.4793u	-1.0898u
Al 308.215	69420.5	69408.6	69202.4
As 188.980	13.8825	14.8021	17.2464
B 249.678	5.8679u	5.1341u	5.1153u
Ba 389.178	68.1015	70.7807	71.5296
Be 313.042	0.6219	0.6262	0.6281
Ca 370.602	627.0	626.5	624.4
Cd 226.502	-0.2415	0.8878	-0.1331
Co 228.615	2.0054	1.5014	2.1899
Cr 267.716	80.3359	79.8105	79.7172
Cu 324.754	11.2541	9.9904	10.2063
Fe 271.441	84993.3	85015.7	84755.8
K 766.491	626.656	628.734	623.800
Mg 279.078	733.421	738.372	737.346
Mn 257.610	38.8833	38.9329	39.0251
Mo 202.032	4.3206	1.6096	5.8483
Na 330.237	354.459	621.547	540.922
Ni 231.604	8.4914	4.9902	13.7155
Pb 220.353	48.1728	41.4549	45.0089
Sb 206.834	-3.8181	-3.7346	-1.9706
Se 196.026	-9.2052u	-10.0260u	3.0638
Si 288.158	7115.24	7120.82	7090.74
Sn 189.925	17.2770	4.1379	4.4579
Sr 216.596	10.1153	9.6339	10.7160
Ti 334.941	615.216	615.211	612.581

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	3.7866u	-4.2340u	-0.9923u
V 292.401	232.937	232.333	231.657
Zn 206.200	16.0384	16.1683	18.3762

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6809	ppb	0.3541	52.0	-76.9720
Al 308.215	69343.8	ppb	122.633	0.2	135860
As 188.980	15.3103	ppb	1.7386	11.4	4.5659
B 249.678	5.3724	ppb	0.4292	8.0	-55.6088
Ba 389.178	70.1373	ppb	1.8024	2.6	441.625
Be 313.042	0.6254	ppb	0.0032	0.5	185.245
Ca 370.602	626.0	ppb	1.365	0.2	945.6
Cd 226.502	0.1711	ppb	0.6231	364.3	138.864
Co 228.615	1.8989	ppb	0.3564	18.8	-2.1786
Cr 267.716	79.9546	ppb	0.3336	0.4	1358.37
Cu 324.754	10.4836	ppb	0.6759	6.4	767.496
Fe 271.441	84921.6	ppb	144.037	0.2	47027.1
K 766.491	626.397	ppb	2.4770	0.4	13216.6
Mg 279.078	736.380	ppb	2.6133	0.4	992.801
Mn 257.610	38.9471	ppb	0.0720	0.2	3323.61
Mo 202.032	3.9262	ppb	2.1467	54.7	9.6005
Na 330.237	505.643	ppb	136.994	27.1	42.3732
Ni 231.604	9.0657	ppb	4.3909	48.4	8.4075
Pb 220.353	44.8789	ppb	3.3608	7.5	14.7051
Sb 206.834	-3.1744	ppb	1.0434	32.9	6.3550
Se 196.026	-5.3891	ppb	7.3319	136.0	2.0571
Si 288.158	7108.93	ppb	16.0028	0.2	33744.2
Sn 189.925	8.6243	ppb	7.4952	86.9	3.1730
Sr 216.596	10.1551	ppb	0.5421	5.3	46.5307
Ti 334.941	614.336	ppb	1.5196	0.2	54473.2
Tl 190.794	-0.4799	ppb	4.0348	840.8	-5.2714
V 292.401	232.309	ppb	0.6399	0.3	2358.26
Zn 206.200	16.8610	ppb	1.3138	7.8	9.3396

680-167563-d-47-a (Samp)

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Rack 4, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.2880u	-0.6668u	-0.6746u
Al 308.215	70702.6	70774.4	69484.8
As 188.980	11.3869	6.7669	7.6433
B 249.678	22.0724	20.9007	20.5444
Ba 389.178	149.879	151.331	147.483
Be 313.042	0.5818	0.5904	0.5547
Ca 370.602	3565	3568	3493
Cd 226.502	0.2123	-0.2474	-0.8469
Co 228.615	2.8372	5.3184	2.4669
Cr 267.716	62.3229	62.6008	61.7431
Cu 324.754	40.1958	41.4457	39.8052
Fe 271.441	8220.06	8129.93	8020.14
K 766.491	1156.27	1156.29	1134.94
Mg 279.078	1951.12	1943.14	1912.30
Mn 257.610	104.110	103.945	102.646
Mo 202.032	19.6848	18.2451	18.2570

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Label	Replicates Concentration		
Na 330.237	100.505u	596.779	553.552
Ni 231.604	14.8274	14.6813	16.0218
Pb 220.353	38.2013	30.0061	40.1481
Sb 206.834	-7.5554u	-2.3529u	-4.6282u
Se 196.026	-5.5810u	-14.1814u	3.7058
Si 288.158	6834.58	6836.07	6726.98
Sn 189.925	11.1514	8.3147	11.8043
Sr 216.596	34.2413	36.3961	36.5248
Ti 334.941	513.189	512.739	505.588
Tl 190.794	-6.7639u	-12.3523u	-4.6203u
V 292.401	67.5102	68.0654	66.6294
Zn 206.200	25.0793	26.3405	21.1496

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8765	ppb	0.3564	40.7	-69.1076
Al 308.215	70320.6	ppb	724.735	1.0	137765
As 188.980	8.5990	ppb	2.4538	28.5	2.9755
B 249.678	21.1725	ppb	0.7994	3.8	130.882
Ba 389.178	149.564	ppb	1.9434	1.3	909.336
Be 313.042	0.5756	ppb	0.0186	3.2	141.250
Ca 370.602	3542	ppb	42.43	1.2	5946
Cd 226.502	-0.2940	ppb	0.5311	180.6	15.2371
Co 228.615	3.5409	ppb	1.5505	43.8	5.1941
Cr 267.716	62.2223	ppb	0.4376	0.7	1055.72
Cu 324.754	40.4822	ppb	0.8570	2.1	1663.65
Fe 271.441	8123.38	ppb	100.120	1.2	4514.50
K 766.491	1149.17	ppb	12.3177	1.1	23945.6
Mg 279.078	1935.52	ppb	20.4968	1.1	2595.57
Mn 257.610	103.567	ppb	0.8018	0.8	8632.88
Mo 202.032	18.7290	ppb	0.8278	4.4	35.5064
Na 330.237	416.945	ppb	274.896	65.9	43.6964
Ni 231.604	15.1768	ppb	0.7354	4.8	15.2622
Pb 220.353	36.1185	ppb	5.3822	14.9	13.9807
Sb 206.834	-4.8455	ppb	2.6081	53.8	4.6283
Se 196.026	-5.3522	ppb	8.9458	167.1	1.7557
Si 288.158	6799.21	ppb	62.5584	0.9	32296.0
Sn 189.925	10.4235	ppb	1.8552	17.8	3.6278
Sr 216.596	35.7208	ppb	1.2828	3.6	112.116
Ti 334.941	510.505	ppb	4.2647	0.8	45266.0
Tl 190.794	-7.9122	ppb	3.9919	50.5	-3.6396
V 292.401	67.4017	ppb	0.7241	1.1	673.351
Zn 206.200	24.1898	ppb	2.7073	11.2	13.2269

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7541	0.7261	0.3238
Al 308.215	-56.3350u	-57.5429u	-56.9596u
As 188.980	-0.6171u	0.7873	-1.4347u
B 249.678	-2.4418u	-1.7808u	-2.5408u
Ba 389.178	-0.7389u	-0.0351u	0.1679
Be 313.042	0.1495	0.1499	0.1477
Ca 370.602	-6.669u	-4.691u	-8.383u

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Label	Replicates Concentration		
Cd 226.502	-0.2421u	-0.2268u	-0.3018u
Co 228.615	0.7752	1.1661	1.4972
Cr 267.716	0.1999	0.0790	0.1458
Cu 324.754	-8.4171u	-8.6910u	-8.8386u
Fe 271.441	1.0049	6.9968	-10.0221u
K 766.491	-6.1094u	-5.0167u	-5.6321u
Mg 279.078	-10.6472u	-11.6369u	-8.6976u
Mn 257.610	-0.2124u	-0.1953u	-0.1606u
Mo 202.032	-1.6420u	-0.2865u	-1.7474u
Na 330.237	-431.302u	-385.740u	-251.476u
Ni 231.604	-0.4056u	0.2554	1.7614
Pb 220.353	-2.3172u	-1.3343u	-8.1595u
Sb 206.834	-2.8083u	-8.8731u	-4.2706u
Se 196.026	-12.9436u	-5.5033u	-8.8923u
Si 288.158	-40.1882u	-42.7459u	-48.0637u
Sn 189.925	-2.6569u	-1.6752u	-2.5213u
Sr 216.596	-1.5588u	-1.1785u	-1.4885u
Ti 334.941	-0.2112u	-0.2559u	-0.0969u
Tl 190.794	-1.0507u	-7.1309u	-4.3037u
V 292.401	0.8002	0.6665	0.9200
Zn 206.200	1.1543	1.9463	-1.8938u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6013	ppb	0.2408	40.0	-22.4490
Al 308.215	-56.9459	ppb	0.6041	1.1	95.7264
As 188.980	-0.4215	ppb	1.1239	266.6	0.5940
B 249.678	-2.2545	ppb	0.4132	18.3	-21.1558
Ba 389.178	-0.2021	ppb	0.4759	235.5	-37.9370
Be 313.042	0.1490	ppb	0.0012	0.8	-206.487
Ca 370.602	-6.581	ppb	1.848	28.1	14.13
Cd 226.502	-0.2569	ppb	0.0396	15.4	0.6065
Co 228.615	1.1462	ppb	0.3614	31.5	-7.8144
Cr 267.716	0.1416	ppb	0.0605	42.8	15.9172
Cu 324.754	-8.6489	ppb	0.2139	2.5	174.074
Fe 271.441	-0.6735	ppb	8.6327	1281.8	16.8962
K 766.491	-5.5861	ppb	0.5478	9.8	156.334
Mg 279.078	-10.3272	ppb	1.4955	14.5	7.9045
Mn 257.610	-0.1894	ppb	0.0264	13.9	10.7908
Mo 202.032	-1.2253	ppb	0.8147	66.5	1.9363
Na 330.237	-356.173	ppb	93.4880	26.2	27.9395
Ni 231.604	0.5371	ppb	1.1106	206.8	-1.1699
Pb 220.353	-3.9370	ppb	3.6897	93.7	-0.6333
Sb 206.834	-5.3173	ppb	3.1650	59.5	4.1656
Se 196.026	-9.1131	ppb	3.7251	40.9	1.0036
Si 288.158	-43.6659uv	ppb	4.0176	9.2	331.932
Sn 189.925	-2.2845	ppb	0.5320	23.3	0.4160
Sr 216.596	-1.4086	ppb	0.2023	14.4	3.0688
Ti 334.941	-0.1880	ppb	0.0820	43.6	-42.0670
Tl 190.794	-4.1618	ppb	3.0426	73.1	-2.4133
V 292.401	0.7956	ppb	0.1268	15.9	-4.5690
Zn 206.200	0.4023	ppb	2.0275	504.0	0.1166

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

mb 680-566377/1-a (Samp) 4/20/2019, 3:05:32 AM Rack 4, Tube 28

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2592u	-0.2808u	0.5143
Al 308.215	14.4758	15.7910	7.2354
As 188.980	4.1568	5.3453	3.1471
B 249.678	-3.6540u	-2.8490u	-2.1998u
Ba 389.178	1.7297	-1.4086u	-0.5280u
Be 313.042	-0.1213u	-0.1154u	-0.1160u
Ca 370.602	14.28	6.015	17.06
Cd 226.502	0.2022	0.3055	-0.1285u
Co 228.615	0.5165	-1.0646u	-1.3931u
Cr 267.716	0.9746	0.1027	0.5372
Cu 324.754	-0.0515u	1.0301	-0.2565u
Fe 271.441	32.6545	26.0045	9.2092
K 766.491	14.3358	14.1733	13.0374
Mg 279.078	8.5343	-0.7130u	6.0134
Mn 257.610	0.3614	0.2863	0.2459
Mo 202.032	0.5999	2.2597	1.2651
Na 330.237	279.406	444.658	130.846
Ni 231.604	-1.1080u	0.7021	-0.1041u
Pb 220.353	-0.8055u	0.9189	-9.2667u
Sb 206.834	-0.8831u	-0.0617u	-11.0590u
Se 196.026	1.3380	14.2671	-3.8928u
Si 288.158	19.5424	20.1847	12.5967
Sn 189.925	10.4327	9.7468	4.6798
Sr 216.596	-1.4116u	0.1089	-1.9123u
Ti 334.941	0.3737	0.3804	0.5048
Tl 190.794	-11.7150u	-15.3073u	-18.9630u
V 292.401	0.1513	0.4293	0.6797
Zn 206.200	0.0617	-0.5032u	4.8739

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0085	ppb	0.4529	5300.3	-40.9807
Al 308.215	12.5007	ppb	4.6071	36.9	231.592
As 188.980	4.2164	ppb	1.1003	26.1	1.8320
B 249.678	-2.9009	ppb	0.7285	25.1	-25.6238
Ba 389.178	-0.0690	ppb	1.6187	2346.6	-37.0665
Be 313.042	-0.1176	ppb	0.0032	2.8	-421.699
Ca 370.602	12.45	ppb	5.744	46.1	45.90
Cd 226.502	0.1264	ppb	0.2267	179.4	5.5945
Co 228.615	-0.6471	ppb	1.0210	157.8	-14.9318
Cr 267.716	0.5382	ppb	0.4359	81.0	22.5599
Cu 324.754	0.2407	ppb	0.6913	287.2	443.375
Fe 271.441	22.6227	ppb	12.0829	53.4	29.7298
K 766.491	13.8488	ppb	0.7074	5.1	606.067
Mg 279.078	4.6116	ppb	4.7803	103.7	27.8571
Mn 257.610	0.2979	ppb	0.0586	19.7	51.2726
Mo 202.032	1.3749	ppb	0.8353	60.8	6.3242
Na 330.237	284.970	ppb	156.980	55.1	45.2425
Ni 231.604	-0.1700	ppb	0.9069	533.5	-1.9615
Pb 220.353	-3.0511	ppb	5.4515	178.7	-0.2995
Sb 206.834	-4.0012	ppb	6.1259	153.1	4.5622
Se 196.026	3.9041	ppb	9.3480	239.4	3.4577
Si 288.158	17.4412	ppb	4.2078	24.1	617.826

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	8.2864	ppb	3.1422	37.9	3.0876
Sr 216.596	-1.0717	ppb	1.0526	98.2	4.0406
Ti 334.941	0.4196	ppb	0.0738	17.6	11.8610
Tl 190.794	-15.3284	ppb	3.6241	23.6	-5.0905
V 292.401	0.4201	ppb	0.2643	62.9	-8.5150
Zn 206.200	1.4775	ppb	2.9550	200.0	0.7097

ics 680-566377/2-a (Samp) 4/20/2019, 3:09:46 AM Rack 4, Tube 29

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.6205	54.9436	53.9499
Al 308.215	5091.84	5066.91	5056.90
As 188.980	104.719	104.059	103.232
B 249.678	202.473	202.475	203.343
Ba 389.178	97.1139	100.467	97.4517
Be 313.042	54.7075	54.3061	54.3885
Ca 370.602	5063	5023	5022
Cd 226.502	51.8360	51.6936	51.4611
Co 228.615	51.5149	51.7689	51.3982
Cr 267.716	104.159	103.786	103.175
Cu 324.754	105.720	102.855	102.384
Fe 271.441	5124.22	5101.51	5106.98
K 766.491	7738.31	7669.33	7687.08
Mg 279.078	5119.10	5099.19	5090.91
Mn 257.610	510.607	507.761	508.842
Mo 202.032	103.296	101.281	103.865
Na 330.237	5525.05	5192.33	5505.31
Ni 231.604	100.391	101.222	97.3105
Pb 220.353	515.075	504.871	478.419
Sb 206.834	43.1180	51.9783	46.6124
Se 196.026	102.196	105.061	102.480
Si 288.158	12.6017	14.1546	9.1743
Sn 189.925	113.307	107.257	103.987
Sr 216.596	101.280	100.974	98.6603
Ti 334.941	409.195	406.945	405.999
Tl 190.794	24.3340	52.6632	28.2472
V 292.401	101.544	100.687	101.445
Zn 206.200	102.965	108.790	106.244

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.5047	ppb	0.5069	0.9	1614.23
Al 308.215	5071.88	ppb	17.9950	0.4	10132.3
As 188.980	104.003	ppb	0.7451	0.7	28.4463
B 249.678	202.764	ppb	0.5017	0.2	1376.91
Ba 389.178	98.3441	ppb	1.8459	1.9	589.679
Be 313.042	54.4674	ppb	0.2120	0.4	43611.3
Ca 370.602	5036	ppb	23.72	0.5	8452
Cd 226.502	51.6636	ppb	0.1893	0.4	675.086
Co 228.615	51.5606	ppb	0.1896	0.4	194.005
Cr 267.716	103.707	ppb	0.4967	0.5	1749.71
Cu 324.754	103.653	ppb	1.8055	1.7	3577.74
Fe 271.441	5110.90	ppb	11.8511	0.2	2848.81
K 766.491	7698.24	ppb	35.8182	0.5	158518

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5103.07	ppb	14.4917	0.3	6839.93
Mn 257.610	509.070	ppb	1.4367	0.3	42255.9
Mo 202.032	102.814	ppb	1.3577	1.3	177.443
Na 330.237	5407.56	ppb	186.661	3.5	178.671
Ni 231.604	99.6410	ppb	2.0606	2.1	109.966
Pb 220.353	499.455	ppb	18.9190	3.8	189.749
Sb 206.834	47.2363	ppb	4.4630	9.4	23.3383
Se 196.026	103.246	ppb	1.5784	1.5	22.2536
Si 288.158	11.9768	ppb	2.5483	21.3	633.718
Sn 189.925	108.184	ppb	4.7287	4.4	28.3356
Sr 216.596	100.305	ppb	1.4324	1.4	299.077
Ti 334.941	407.379	ppb	1.6418	0.4	36125.3
Tl 190.794	35.0815	ppb	15.3514	43.8	6.8856
V 292.401	101.225	ppb	0.4687	0.5	1010.65
Zn 206.200	106.000	ppb	2.9205	2.8	58.3451

680-167563-d-27-a (Samp)

4/20/2019, 3:14:01 AM

Rack 4, Tube 30

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7712u	-1.1018u	-1.2977u
Al 308.215	38044.2	38377.7	38068.1
As 188.980	5.1849	10.0632	18.3112
B 249.678	5.2600	4.9404	4.4242
Ba 389.178	214.416	220.915	213.822
Be 313.042	0.7154	0.7308	0.7255
Ca 370.602	4065	4107	4066
Cd 226.502	0.3528	0.4290	0.3133
Co 228.615	4.7390	5.3612	4.4006
Cr 267.716	32.9747	33.1827	32.4381
Cu 324.754	13.8124	13.6484	12.9693
Fe 271.441	23589.9	23790.3	23425.1
K 766.491	660.830	667.150	659.000
Mg 279.078	820.052	822.138	816.663
Mn 257.610	661.125	667.280	659.302
Mo 202.032	2.8455	3.1252	1.1937
Na 330.237	141.040u	483.587	282.612
Ni 231.604	9.8989	7.0038	10.8384
Pb 220.353	23.0605	28.8015	39.4312
Sb 206.834	4.1784	-14.7473u	2.1766
Se 196.026	-3.0393u	-13.0708u	-4.2682u
Si 288.158	3784.88	3825.33	3787.89
Sn 189.925	9.1903	6.9194	5.8496
Sr 216.596	16.2858	14.2714	16.6173
Ti 334.941	375.584	376.355	373.852
Tl 190.794	1.0687u	-0.7146u	-7.1832u
V 292.401	70.5902	69.2062	69.9411
Zn 206.200	31.3899	28.4927	22.7271

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.0569	ppb	0.2661	25.2	-76.1757
Al 308.215	38163.3	ppb	186.021	0.5	74861.7
As 188.980	11.1864	ppb	6.6349	59.3	3.6291
B 249.678	4.8748	ppb	0.4217	8.7	3.5689

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	216.384	ppb	3.9348	1.8	1334.80
Be 313.042	0.7239	ppb	0.0078	1.1	260.595
Ca 370.602	4079	ppb	23.99	0.6	6824
Cd 226.502	0.3650	ppb	0.0588	16.1	46.1598
Co 228.615	4.8336	ppb	0.4873	10.1	9.0674
Cr 267.716	32.8651	ppb	0.3842	1.2	566.536
Cu 324.754	13.4767	ppb	0.4470	3.3	848.126
Fe 271.441	23601.8	ppb	182.892	0.8	13082.6
K 766.491	662.327	ppb	4.2762	0.6	13925.9
Mg 279.078	819.618	ppb	2.7634	0.3	1103.74
Mn 257.610	662.569	ppb	4.1804	0.6	54976.0
Mo 202.032	2.3882	ppb	1.0438	43.7	7.7478
Na 330.237	302.413	ppb	172.130	56.9	41.1870
Ni 231.604	9.2470	ppb	1.9986	21.6	8.6036
Pb 220.353	30.4311	ppb	8.3061	27.3	11.4528
Sb 206.834	-2.7974	ppb	10.3972	371.7	5.4747
Se 196.026	-6.7928	ppb	5.4716	80.5	1.6000
Si 288.158	3799.37	ppb	22.5321	0.6	18286.1
Sn 189.925	7.3198	ppb	1.7060	23.3	2.8433
Sr 216.596	15.7248	ppb	1.2696	8.1	55.7286
Ti 334.941	375.263	ppb	1.2817	0.3	33265.7
Tl 190.794	-2.2764	ppb	4.3420	190.7	-2.8580
V 292.401	69.9125	ppb	0.6924	1.0	701.145
Zn 206.200	27.5366	ppb	4.4098	16.0	15.1238

Cont Calib Verif (CCV)

4/20/2019, 3:18:15 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	503.161	509.655	504.735
Al 308.215	10131.8	10194.1	10194.7
As 188.980	490.431	494.740	504.342
B 249.678	512.076	518.556	521.151
Ba 389.178	481.542	485.324	484.339
Be 313.042	531.376	535.551	534.593
Ca 370.602	10059	10134	10114
Cd 226.502	500.255	502.125	501.643
Co 228.615	504.069	505.858	505.983
Cr 267.716	500.551	501.592	501.618
Cu 324.754	501.291	506.091	500.938
Fe 271.441	10145.5	10306.0	10299.1
K 766.491	9811.55	9910.76	9881.68
Mg 279.078	10198.2	10298.2	10297.7
Mn 257.610	500.935	504.935	505.054
Mo 202.032	491.968	498.164	503.057
Na 330.237	10485.7	10913.2	10254.9
Ni 231.604	502.930	501.288	505.391
Pb 220.353	494.711	498.713	511.236
Sb 206.834	475.515	478.042	483.305
Se 196.026	518.636	532.324	521.259
Si 288.158	5106.12	5145.29	5146.26
Sn 189.925	504.746	496.433	499.181
Sr 216.596	490.424	497.451	495.609
Ti 334.941	502.301	504.991	504.951

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	487.082	503.488	511.565
V 292.401	499.217	504.122	501.826
Zn 206.200	1029.21	1037.43	1039.68

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	505.850	ppb	3.3874	0.7	15322.3	101.17004
Al 308.215	10173.5	ppb	36.1614	0.4	20126.2	101.73524
As 188.980	496.504	ppb	7.1214	1.4	133.171	99.30088
B 249.678	517.261	ppb	4.6740	0.9	3524.35	103.45217
Ba 389.178	483.735	ppb	1.9622	0.4	3021.30	96.74701
Be 313.042	533.840	ppb	2.1869	0.4	430335	106.76798
Ca 370.602	10102	ppb	38.57	0.4	16919	101.02491
Cd 226.502	501.341	ppb	0.9710	0.2	6455.35	100.26823
Co 228.615	505.303	ppb	1.0710	0.2	1989.12	101.06063
Cr 267.716	501.254	ppb	0.6089	0.1	8399.77	100.25074
Cu 324.754	502.773	ppb	2.8786	0.6	15672.2	100.55464
Fe 271.441	10250.2	ppb	90.7055	0.9	5711.73	102.45084
K 766.491	9868.00	ppb	50.9972	0.5	200820	98.67999
Mg 279.078	10264.7	ppb	57.5694	0.6	13741.7	102.64719
Mn 257.610	503.641	ppb	2.3446	0.5	41830.1	100.72829
Mo 202.032	497.730	ppb	5.5571	1.1	843.807	99.54594
Na 330.237	10551.3	ppb	334.003	3.2	305.790	105.51272
Ni 231.604	503.203	ppb	2.0653	0.4	562.302	100.64056
Pb 220.353	501.554	ppb	8.6207	1.7	190.200	100.31071
Sb 206.834	478.954	ppb	3.9744	0.8	179.839	95.79081
Se 196.026	524.073	ppb	7.2649	1.4	101.605	104.81459
Si 288.158	5132.56	ppb	22.8984	0.4	24623.4	102.65113
Sn 189.925	500.120	ppb	4.2351	0.8	127.392	100.02399
Sr 216.596	494.495	ppb	3.6438	0.7	1444.54	98.89896
Ti 334.941	504.081	ppb	1.5416	0.3	44717.0	100.81618
Tl 190.794	500.712	ppb	12.4752	2.5	118.349	100.14230
V 292.401	501.722	ppb	2.4543	0.5	5053.65	100.34435
Zn 206.200	1035.44	ppb	5.5096	0.5	571.052	103.54397

Cont Calib Blank (CCB)

4/20/2019, 3:22:28 AM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6068	-0.5358u	-0.0009u
Al 308.215	9.5916	13.5646	9.3407
As 188.980	5.2030	10.2247	0.5808
B 249.678	11.2696	11.1075	8.2097
Ba 389.178	1.6208	0.0529	-4.1092u
Be 313.042	0.1121	0.0946	0.0511
Ca 370.602	-6.082u	4.146	5.037
Cd 226.502	-0.0804u	0.4408	-0.0197u
Co 228.615	-0.1915u	2.2193	0.5079
Cr 267.716	0.1204	-0.1473u	0.0404
Cu 324.754	1.2400	0.5378	1.7984
Fe 271.441	16.0703	19.9939	5.5282
K 766.491	1.8183	2.2603	2.2915
Mg 279.078	12.1571	5.1405	7.8241
Mn 257.610	0.3661	0.2329	0.2398
Mo 202.032	0.1025	2.5997	2.3528

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	183.888	-108.020u	130.088
Ni 231.604	-3.2890u	0.2415	-3.0451u
Pb 220.353	0.4887	-2.6700u	-1.2519u
Sb 206.834	0.6802	5.4049	6.6086
Se 196.026	-8.7603u	15.8626	-9.0268u
Si 288.158	5.8297	4.0142	6.0881
Sn 189.925	-1.8970u	-11.1491u	-13.9900u
Sr 216.596	-0.9272u	1.8145	1.2480
Ti 334.941	0.4488	0.4029	0.1415
Tl 190.794	-5.0298u	-8.3969u	-4.0697u
V 292.401	-0.5811u	0.7372	0.3092
Zn 206.200	-0.2706u	-0.1859u	-0.6177u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0234	ppb	0.5716	2444.8	-40.0137	0.02338
Al 308.215	10.8323	ppb	2.3696	21.9	228.335	10.83228
As 188.980	5.3362	ppb	4.8233	90.4	2.1309	5.33617
B 249.678	10.1956	ppb	1.7218	16.9	64.0184	10.19559
Ba 389.178	-0.8118	ppb	2.9613	364.8	-41.7294	-0.81183
Be 313.042	0.0859	ppb	0.0314	36.6	-257.651	0.08590
Ca 370.602	1.034	ppb	6.178	597.7	26.80	1.03365
Cd 226.502	0.1136	ppb	0.2850	251.0	5.4321	0.11357
Co 228.615	0.8453	ppb	1.2403	146.7	-9.0303	0.84526
Cr 267.716	0.0045	ppb	0.1374	3043.6	13.6323	0.00452
Cu 324.754	1.1920	ppb	0.6317	53.0	472.220	1.19205
Fe 271.441	13.8641	ppb	7.4810	54.0	24.9314	13.86411
K 766.491	2.1234	ppb	0.2647	12.5	311.930	2.12336
Mg 279.078	8.3739	ppb	3.5405	42.3	32.8889	8.37389
Mn 257.610	0.2796	ppb	0.0750	26.8	49.7691	0.27957
Mo 202.032	1.6850	ppb	1.3760	81.7	6.8476	1.68502
Na 330.237	68.6521	ppb	155.349	226.3	39.4115	68.65209
Ni 231.604	-2.0309	ppb	1.9717	97.1	-4.0505	-2.03087
Pb 220.353	-1.1444	ppb	1.5821	138.3	0.4219	-1.14435
Sb 206.834	4.2312	ppb	3.1336	74.1	7.5233	4.23123
Se 196.026	-0.6415	ppb	14.2936	2228.1	2.6008	-0.64152
Si 288.158	5.3107	ppb	1.1302	21.3	560.025	5.31067
Sn 189.925	-9.0120	ppb	6.3235	70.2	-1.2843	-9.01204
Sr 216.596	0.7118	ppb	1.4474	203.3	9.2404	0.71177
Ti 334.941	0.3311	ppb	0.1658	50.1	4.0206	0.33107
Tl 190.794	-5.8321	ppb	2.2724	39.0	-2.8162	-5.83214
V 292.401	0.1551	ppb	0.6725	433.6	-11.3028	0.15508
Zn 206.200	-0.3581	ppb	0.2288	63.9	-0.3028	-0.35808

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4/20/2019, 3:26:41 AM

Rack 4, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0662	-0.1488u	-0.9369u
Al 308.215	7759.45	7796.79	7649.43
As 188.980	2.2899	-0.0051u	5.3338
B 249.678	2.7628	1.4086	1.3508
Ba 389.178	44.2827	43.2768	42.3955
Be 313.042	0.0764	0.0790	0.0999
Ca 370.602	836.0	838.4	826.8

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.0500	0.1057	0.1763
Co 228.615	-0.1300u	1.2985	0.7721
Cr 267.716	7.3750	6.3184	6.6901
Cu 324.754	2.2140	3.1105	2.1882
Fe 271.441	4816.83	4872.31	4749.73
K 766.491	142.977	143.803	139.479
Mg 279.078	174.660	173.425	160.848
Mn 257.610	134.791	134.960	132.601
Mo 202.032	0.3011	-0.6047u	1.1494
Na 330.237	155.084	466.802	23.8287u
Ni 231.604	2.8189	5.8014	0.5466
Pb 220.353	7.5496	4.4781	3.3027
Sb 206.834	-8.2142u	3.3578	-6.2314u
Se 196.026	16.3650	7.9699	2.5469
Si 288.158	781.818	779.898	766.682
Sn 189.925	7.7116	4.9746	-1.3344u
Sr 216.596	2.5178	1.6264	2.7389
Ti 334.941	75.9918	75.8997	74.5608
Tl 190.794	-10.3964u	-13.1737u	-6.5724u
V 292.401	14.1277	13.9187	14.1825
Zn 206.200	3.1328	11.6368	4.4713

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3398	ppb	0.5281	155.4	-51.7259
Al 308.215	7735.23	ppb	76.6089	1.0	15338.7
As 188.980	2.5395	ppb	2.6782	105.5	1.3713
B 249.678	1.8407	ppb	0.7991	43.4	1.9475
Ba 389.178	43.3183	ppb	0.9443	2.2	237.948
Be 313.042	0.0851	ppb	0.0129	15.1	-257.493
Ca 370.602	833.7	ppb	6.088	0.7	1415
Cd 226.502	0.1107	ppb	0.0633	57.2	13.0140
Co 228.615	0.6469	ppb	0.7224	111.7	-9.3458
Cr 267.716	6.7945	ppb	0.5360	7.9	127.866
Cu 324.754	2.5042	ppb	0.5252	21.0	512.715
Fe 271.441	4812.96	ppb	61.3834	1.3	2681.56
K 766.491	142.086	ppb	2.2957	1.6	3240.78
Mg 279.078	169.644	ppb	7.6427	4.5	245.722
Mn 257.610	134.117	ppb	1.3161	1.0	11149.4
Mo 202.032	0.2820	ppb	0.8772	311.1	4.4215
Na 330.237	215.238	ppb	227.531	105.7	42.4530
Ni 231.604	3.0556	ppb	2.6354	86.2	1.6571
Pb 220.353	5.1101	ppb	2.1929	42.9	2.6029
Sb 206.834	-3.6959	ppb	6.1886	167.4	4.7655
Se 196.026	8.9606	ppb	6.9621	77.7	4.4431
Si 288.158	776.133	ppb	8.2405	1.1	4161.57
Sn 189.925	3.7839	ppb	4.6390	122.6	1.9497
Sr 216.596	2.2943	ppb	0.5890	25.7	14.4078
Ti 334.941	75.4841	ppb	0.8009	1.1	6671.12
Tl 190.794	-10.0475	ppb	3.3144	33.0	-4.0075
V 292.401	14.0763	ppb	0.1392	1.0	130.983
Zn 206.200	6.4136	ppb	4.5726	71.3	3.4408

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167563-d-27-a (Samp) **4/20/2019, 3:30:55 AM** **Rack 4, Tube 32****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	54.8437	55.5791	55.4260
Al 308.215	42803.6	42595.4	43140.4
As 188.980	112.206	117.788	113.477
B 249.678	217.960	219.706	222.879
Ba 389.178	317.493	312.287	317.240
Be 313.042	57.8816	57.6802	58.3472
Ca 370.602	9265	9191	9333
Cd 226.502	53.2970	53.6726	54.3146
Co 228.615	58.0394	56.4536	57.9192
Cr 267.716	139.502	139.737	140.259
Cu 324.754	120.504	120.158	123.288
Fe 271.441	28375.8	28331.3	28499.6
K 766.491	9041.47	9000.99	9089.16
Mg 279.078	6146.09	6125.93	6208.22
Mn 257.610	1170.39	1166.30	1178.85
Mo 202.032	110.559	107.165	107.016
Na 330.237	5703.91	5450.02	6186.22
Ni 231.604	119.264	114.586	117.037
Pb 220.353	545.912	542.390	553.448
Sb 206.834	56.5559	53.9460	52.3846
Se 196.026	105.170	93.3414	115.378
Si 288.158	3764.49	3756.77	3801.55
Sn 189.925	120.543	108.903	113.285
Sr 216.596	118.228	118.430	120.867
Ti 334.941	797.157	794.030	801.372
Tl 190.794	54.7301	22.5066	52.2854
V 292.401	174.222	173.906	176.034
Zn 206.200	143.855	144.084	145.329

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.2829	ppb	0.3880	0.7	1634.55
Al 308.215	42846.5	ppb	275.005	0.6	84026.5
As 188.980	114.491	ppb	2.9260	2.6	31.1827
B 249.678	220.182	ppb	2.4939	1.1	1472.42
Ba 389.178	315.673	ppb	2.9354	0.9	1967.18
Be 313.042	57.9696	ppb	0.3421	0.6	46440.0
Ca 370.602	9263	ppb	70.68	0.8	15499
Cd 226.502	53.7614	ppb	0.5146	1.0	739.027
Co 228.615	57.4707	ppb	0.8829	1.5	219.792
Cr 267.716	139.832	ppb	0.3875	0.3	2357.21
Cu 324.754	121.317	ppb	1.7161	1.4	4116.60
Fe 271.441	28402.2	ppb	87.1847	0.3	15742.4
K 766.491	9043.87	ppb	44.1339	0.5	186183
Mg 279.078	6160.08	ppb	42.8919	0.7	8239.53
Mn 257.610	1171.84	ppb	6.3992	0.5	97223.3
Mo 202.032	108.246	ppb	2.0039	1.9	186.329
Na 330.237	5780.05	ppb	373.957	6.5	183.913
Ni 231.604	116.962	ppb	2.3395	2.0	129.399
Pb 220.353	547.250	ppb	5.6494	1.0	206.931
Sb 206.834	54.2955	ppb	2.1075	3.9	26.3243
Se 196.026	104.630	ppb	11.0282	10.5	22.6721
Si 288.158	3774.27	ppb	23.9399	0.6	18212.4

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	114.244	ppb	5.8787	5.1	29.8672
Sr 216.596	119.175	ppb	1.4689	1.2	356.711
Ti 334.941	797.520	ppb	3.6843	0.5	70736.6
Tl 190.794	43.1740	ppb	17.9402	41.6	7.9443
V 292.401	174.721	ppb	1.1487	0.7	1760.75
Zn 206.200	144.423	ppb	0.7933	0.5	79.5792

680-167563-d-27-b ms (Samp) 4/20/2019, 3:35:10 AM Rack 4, Tube 33

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	51.9078	54.4020	52.3353
Al 308.215	64867.4	65606.5	65126.6
As 188.980	91.0626	88.2234	90.1841
B 249.678	178.638	180.994	178.934
Ba 389.178	399.757	398.929	401.636
Be 313.042	54.1767	54.7423	54.4754
Ca 370.602	9155	9257	9185
Cd 226.502	49.5388	50.7997	50.7801
Co 228.615	54.6945	56.8224	57.9347
Cr 267.716	143.627	144.841	143.834
Cu 324.754	121.159	121.020	123.166
Fe 271.441	32986.3	33269.0	33295.8
K 766.491	8547.37	8605.76	8603.52
Mg 279.078	6224.18	6279.55	6250.82
Mn 257.610	1253.21	1265.13	1257.48
Mo 202.032	90.1315	93.4141	92.1320
Na 330.237	5209.24	5395.67	5413.56
Ni 231.604	118.086	113.805	115.816
Pb 220.353	521.182	535.876	535.728
Sb 206.834	33.2100	25.5276	38.0497
Se 196.026	84.8595	85.2509	80.0923
Si 288.158	5936.64	5988.34	5966.28
Sn 189.925	110.945	99.2081	105.240
Sr 216.596	115.930	115.967	116.698
Ti 334.941	731.620	738.970	735.488
Tl 190.794	32.8373	46.1190	26.4539
V 292.401	183.630	185.173	183.856
Zn 206.200	140.335	144.498	143.322

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.8817	ppb	1.3338	2.5	1561.05
Al 308.215	65200.2	ppb	374.983	0.6	127753
As 188.980	89.8234	ppb	1.4535	1.6	24.5852
B 249.678	179.522	ppb	1.2834	0.7	1189.20
Ba 389.178	400.107	ppb	1.3869	0.3	2500.16
Be 313.042	54.4648	ppb	0.2829	0.5	43614.7
Ca 370.602	9199	ppb	52.10	0.6	15385
Cd 226.502	50.3729	ppb	0.7224	1.4	703.789
Co 228.615	56.4839	ppb	1.6464	2.9	215.460
Cr 267.716	144.101	ppb	0.6496	0.5	2429.16
Cu 324.754	121.782	ppb	1.2010	1.0	4131.21
Fe 271.441	33183.7	ppb	171.478	0.5	18389.2
K 766.491	8585.55	ppb	33.0841	0.4	176809

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6251.52	ppb	27.6897	0.4	8356.64
Mn 257.610	1258.61	ppb	6.0387	0.5	104418
Mo 202.032	91.8925	ppb	1.6544	1.8	158.671
Na 330.237	5339.49	ppb	113.152	2.1	172.424
Ni 231.604	115.902	ppb	2.1416	1.8	128.214
Pb 220.353	530.929	ppb	8.4409	1.6	200.536
Sb 206.834	32.2625	ppb	6.3146	19.6	18.5857
Se 196.026	83.4009	ppb	2.8720	3.4	18.6981
Si 288.158	5963.76	ppb	25.9448	0.4	28425.3
Sn 189.925	105.131	ppb	5.8690	5.6	27.5640
Sr 216.596	116.198	ppb	0.4332	0.4	348.752
Ti 334.941	735.359	ppb	3.6767	0.5	65223.2
Tl 190.794	35.1367	ppb	10.0322	28.6	5.8288
V 292.401	184.220	ppb	0.8335	0.5	1858.54
Zn 206.200	142.718	ppb	2.1458	1.5	78.6466

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Rack 4, Tube 34

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	50.2392	51.8876	49.9366
Al 308.215	64405.5	64591.9	63874.7
As 188.980	97.5312	100.642	81.7130
B 249.678	175.926	178.473	175.305
Ba 389.178	321.981	323.201	317.346
Be 313.042	53.1701	53.4016	52.8677
Ca 370.602	9308	9337	9240
Cd 226.502	49.1465	48.9777	49.1062
Co 228.615	53.8590	55.8221	52.7169
Cr 267.716	162.805	162.081	160.183
Cu 324.754	117.973	117.295	116.949
Fe 271.441	38041.5	38139.2	37742.0
K 766.491	8376.02	8386.08	8300.86
Mg 279.078	6112.39	6110.58	6058.02
Mn 257.610	1182.57	1184.03	1173.21
Mo 202.032	93.1660	94.4395	91.6108
Na 330.237	5270.05	5513.20	5122.28
Ni 231.604	112.038	113.493	117.385
Pb 220.353	509.498	517.105	514.230
Sb 206.834	37.4233	46.1438	25.2121
Se 196.026	82.6264	95.2019	83.3418
Si 288.158	5890.24	5907.52	5853.72
Sn 189.925	104.708	114.867	96.9361
Sr 216.596	112.426	114.140	112.246
Ti 334.941	746.804	748.174	740.856
Tl 190.794	31.4481	15.5643	34.4965
V 292.401	203.878	202.988	202.259
Zn 206.200	144.029	138.333	138.090

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.6878	ppb	1.0500	2.1	1493.41
Al 308.215	64290.7	ppb	372.081	0.6	125975
As 188.980	93.2954	ppb	10.1505	10.9	25.4986
B 249.678	176.568	ppb	1.6784	1.0	1164.08

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	320.843	ppb	3.0890	1.0	2003.72
Be 313.042	53.1465	ppb	0.2677	0.5	42551.5
Ca 370.602	9295	ppb	49.58	0.5	15536
Cd 226.502	49.0768	ppb	0.0882	0.2	694.484
Co 228.615	54.1327	ppb	1.5705	2.9	206.116
Cr 267.716	161.690	ppb	1.3543	0.8	2723.64
Cu 324.754	117.406	ppb	0.5211	0.4	3999.41
Fe 271.441	37974.2	ppb	206.956	0.5	21041.1
K 766.491	8354.32	ppb	46.5704	0.6	172078
Mg 279.078	6093.66	ppb	30.8801	0.5	8146.52
Mn 257.610	1179.94	ppb	5.8698	0.5	97899.2
Mo 202.032	93.0721	ppb	1.4167	1.5	160.602
Na 330.237	5301.85	ppb	197.390	3.7	171.142
Ni 231.604	114.305	ppb	2.7648	2.4	126.424
Pb 220.353	513.611	ppb	3.8415	0.7	193.815
Sb 206.834	36.2597	ppb	10.5142	29.0	20.0790
Se 196.026	87.0567	ppb	7.0631	8.1	19.3995
Si 288.158	5883.82	ppb	27.4662	0.5	28052.6
Sn 189.925	105.504	ppb	8.9921	8.5	27.6583
Sr 216.596	112.937	ppb	1.0454	0.9	339.788
Ti 334.941	745.278	ppb	3.8903	0.5	66102.6
Tl 190.794	27.1696	ppb	10.1654	37.4	3.6924
V 292.401	203.042	ppb	0.8108	0.4	2050.17
Zn 206.200	140.151	ppb	3.3611	2.4	77.2305

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4632u	0.3014u	-1.0018u
Al 308.215	61376.2	61747.8	61184.5
As 188.980	11.0938	23.4363	9.6075
B 249.678	12.3603	10.1675u	11.5521u
Ba 389.178	46.9549	46.7085	44.2786
Be 313.042	0.4623	0.4650	0.4760
Ca 370.602	268.1	282.7	252.6
Cd 226.502	0.3965	0.2728	-0.1466
Co 228.615	2.9666	1.3302	3.7470
Cr 267.716	52.7412	52.6913	52.5354
Cu 324.754	22.1575	20.2395	20.8278
Fe 271.441	82533.1	82871.5	82005.9
K 766.491	512.450	516.698	510.095
Mg 279.078	523.469	528.940	524.701
Mn 257.610	31.0840	31.3917	31.0615
Mo 202.032	7.2426	6.6173	5.3504
Na 330.237	610.695	186.765u	410.823
Ni 231.604	9.3783	7.0776	6.3238
Pb 220.353	34.0136	31.1074	24.9437
Sb 206.834	-1.4378	-7.4565u	-4.0599u
Se 196.026	-4.9259u	16.2451	-1.1580
Si 288.158	5787.64	5818.31	5757.38
Sn 189.925	12.3837	20.7038	-1.1242u
Sr 216.596	4.1301	6.2970	3.7879
Ti 334.941	455.895	457.788	453.261

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Label	Replicates Concentration		
Tl 190.794	-14.1907u	-20.1237u	4.3253u
V 292.401	345.637	347.349	344.508
Zn 206.200	15.8292	13.8347	15.1609

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3879	ppb	0.6548	168.8	-67.2864
Al 308.215	61436.2	ppb	286.401	0.5	120395
As 188.980	14.7126	ppb	7.5915	51.6	4.4146
B 249.678	11.3600	ppb	1.1089	9.8	-11.9003
Ba 389.178	45.9807	ppb	1.4792	3.2	288.446
Be 313.042	0.4677	ppb	0.0072	1.5	60.3265
Ca 370.602	267.8	ppb	15.07	5.6	348.5
Cd 226.502	0.1743	ppb	0.2847	163.4	134.543
Co 228.615	2.6813	ppb	1.2334	46.0	-0.2472
Cr 267.716	52.6560	ppb	0.1073	0.2	901.163
Cu 324.754	21.0749	ppb	0.9826	4.7	1087.17
Fe 271.441	82470.2	ppb	436.187	0.5	45670.7
K 766.491	513.081	ppb	3.3461	0.7	10933.3
Mg 279.078	525.703	ppb	2.8701	0.5	712.652
Mn 257.610	31.1791	ppb	0.1845	0.6	2674.51
Mo 202.032	6.4035	ppb	0.9641	15.1	13.7933
Na 330.237	402.761	ppb	212.080	52.7	41.1189
Ni 231.604	7.5932	ppb	1.5912	21.0	6.7541
Pb 220.353	30.0216	ppb	4.6314	15.4	9.2120
Sb 206.834	-4.3181	ppb	3.0177	69.9	5.7545
Se 196.026	3.3871	ppb	11.2936	333.4	3.6998
Si 288.158	5787.78	ppb	30.4653	0.5	27571.3
Sn 189.925	10.6544	ppb	11.0162	103.4	3.6861
Sr 216.596	4.7383	ppb	1.3606	28.7	30.4024
Ti 334.941	455.648	ppb	2.2735	0.5	40395.9
Tl 190.794	-9.9964	ppb	12.7527	127.6	-7.3999
V 292.401	345.831	ppb	1.4306	0.4	3513.79
Zn 206.200	14.9416	ppb	1.0152	6.8	8.2899

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.2095u	-0.6179u	0.0530
Al 308.215	22304.6	22456.5	22286.3
As 188.980	10.3025	6.9745	4.1256
B 249.678	3.3878	4.5439	2.7169
Ba 389.178	233.095	232.877	231.893
Be 313.042	0.4859	0.4778	0.4858
Ca 370.602	7204	7283	7214
Cd 226.502	-0.2978	0.6293	0.2835
Co 228.615	0.5520	2.1851	1.5906
Cr 267.716	24.8725	24.5155	24.3984
Cu 324.754	12.5751	12.6103	13.1482
Fe 271.441	9859.48	9964.32	9883.62
K 766.491	434.669	437.170	430.844
Mg 279.078	595.499	600.896	590.438
Mn 257.610	981.326	988.274	981.019
Mo 202.032	1.7238	3.5053	2.9634

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Label	Replicates Concentration		
Na 330.237	408.438	288.216	0.2619u
Ni 231.604	3.5574	4.8589	5.9707
Pb 220.353	274.353	269.228	269.122
Sb 206.834	1.9422	5.7384	-4.8723u
Se 196.026	-0.1364	0.3482	-5.2921u
Si 288.158	3289.21	3313.95	3291.72
Sn 189.925	23.3401	1.1307	6.5662
Sr 216.596	23.6830	23.0454	23.3786
Ti 334.941	304.988	307.485	302.054
Tl 190.794	-6.7886u	-8.0970u	-14.6851u
V 292.401	34.3027	35.0709	33.4373
Zn 206.200	20.9891	19.5170	19.0075

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5915	ppb	0.6317	106.8	-58.9924
Al 308.215	22349.1	ppb	93.4149	0.4	43925.9
As 188.980	7.1342	ppb	3.0915	43.3	2.5836
B 249.678	3.5496	ppb	0.9242	26.0	8.4522
Ba 389.178	232.622	ppb	0.6405	0.3	1430.75
Be 313.042	0.4832	ppb	0.0046	1.0	65.3701
Ca 370.602	7234	ppb	43.05	0.6	12124
Cd 226.502	0.2050	ppb	0.4685	228.6	22.5398
Co 228.615	1.4426	ppb	0.8265	57.3	-4.5913
Cr 267.716	24.5955	ppb	0.2469	1.0	427.512
Cu 324.754	12.7779	ppb	0.3212	2.5	824.729
Fe 271.441	9902.47	ppb	54.9051	0.6	5499.03
K 766.491	434.227	ppb	3.1861	0.7	9225.48
Mg 279.078	595.611	ppb	5.2299	0.9	803.940
Mn 257.610	983.540	ppb	4.1031	0.4	81572.5
Mo 202.032	2.7308	ppb	0.9132	33.4	8.4916
Na 330.237	232.305	ppb	209.753	90.3	40.5374
Ni 231.604	4.7957	ppb	1.2079	25.2	3.6106
Pb 220.353	270.901	ppb	2.9899	1.1	103.048
Sb 206.834	0.9361	ppb	5.3764	574.3	6.5664
Se 196.026	-1.6934	ppb	3.1259	184.6	2.5356
Si 288.158	3298.29	ppb	13.6202	0.4	15944.7
Sn 189.925	10.3457	ppb	11.5770	111.9	3.6081
Sr 216.596	23.3690	ppb	0.3189	1.4	76.4782
Ti 334.941	304.843	ppb	2.7184	0.9	27018.0
Tl 190.794	-9.8569	ppb	4.2322	42.9	-4.0017
V 292.401	34.2703	ppb	0.8173	2.4	337.298
Zn 206.200	19.8379	ppb	1.0290	5.2	10.8502

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Rack 4, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0040u	-0.4204u	-0.7250u
Al 308.215	107477	107587	107438
As 188.980	38.7738	39.8544	42.8489
B 249.678	11.0933u	12.4703u	11.4557u
Ba 389.178	94.6364	91.0124	90.8416
Be 313.042	0.6815	0.6868	0.6842
Ca 370.602	3354	3350	3358

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Label	Replicates Concentration		
Cd 226.502	0.4059	0.4835	0.9926
Co 228.615	4.5451	5.1370	3.8019
Cr 267.716	151.879	152.045	152.366
Cu 324.754	24.2692	26.4794	24.6441
Fe 271.441	165121	165227	165264
K 766.491	882.971	882.568	885.054
Mg 279.078	1779.80	1774.39	1786.10
Mn 257.610	35.1119	35.2738	35.2402
Mo 202.032	7.3858	9.9425	8.3048
Na 330.237	810.998	239.768u	301.077u
Ni 231.604	14.9015	16.7297	17.1731
Pb 220.353	57.5983	46.3850	50.5554
Sb 206.834	1.5400	-6.1419	-0.7665
Se 196.026	5.5652	-2.7056	-7.7439u
Si 288.158	7393.02	7401.33	7401.76
Sn 189.925	15.8195	9.2645	11.0671
Sr 216.596	22.4512	23.2463	22.4305
Ti 334.941	528.135	528.420	527.841
Tl 190.794	1.1549u	16.8427u	-2.7409u
V 292.401	676.114	677.787	678.266
Zn 206.200	21.1258	20.8943	22.0245

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7165	ppb	0.2919	40.7	-91.7712
Al 308.215	107501	ppb	77.1189	0.1	210514
As 188.980	40.4924	ppb	2.1112	5.2	11.0755
B 249.678	11.6731	ppb	0.7138	6.1	-93.7348
Ba 389.178	92.1635	ppb	2.1433	2.3	615.630
Be 313.042	0.6842	ppb	0.0026	0.4	244.384
Ca 370.602	3354	ppb	4.231	0.1	5376
Cd 226.502	0.6273	ppb	0.3187	50.8	268.334
Co 228.615	4.4947	ppb	0.6689	14.9	5.6227
Cr 267.716	152.096	ppb	0.2475	0.2	2571.07
Cu 324.754	25.1309	ppb	1.1828	4.7	1222.80
Fe 271.441	165204	ppb	74.4144	0.0	91470.2
K 766.491	883.531	ppb	1.3341	0.2	18530.1
Mg 279.078	1780.10	ppb	5.8566	0.3	2381.29
Mn 257.610	35.2086	ppb	0.0855	0.2	3068.31
Mo 202.032	8.5444	ppb	1.2951	15.2	16.3904
Na 330.237	450.615	ppb	313.603	69.6	38.6119
Ni 231.604	16.2681	ppb	1.2041	7.4	16.4917
Pb 220.353	51.5129	ppb	5.6676	11.0	14.4348
Sb 206.834	-1.7895	ppb	3.9418	220.3	8.2179
Se 196.026	-1.6281	ppb	6.7197	412.7	3.0918
Si 288.158	7398.71	ppb	4.9260	0.1	35093.5
Sn 189.925	12.0503	ppb	3.3863	28.1	4.0388
Sr 216.596	22.7093	ppb	0.4652	2.0	92.2855
Ti 334.941	528.132	ppb	0.2893	0.1	46829.8
Tl 190.794	5.0856	ppb	10.3666	203.8	-7.3879
V 292.401	677.389	ppb	1.1295	0.2	6892.82
Zn 206.200	21.3482	ppb	0.5970	2.8	11.9490

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7499	-0.3951u	-1.3733u
Al 308.215	60677.0	60534.0	60764.4
As 188.980	9.8977	13.7009	9.1628
B 249.678	7.1748u	6.1055u	7.0295u
Ba 389.178	165.647	167.785	166.959
Be 313.042	0.8555	0.8260	0.8345
Ca 370.602	10045	10027	10077
Cd 226.502	0.4661	-0.1702	-0.2505
Co 228.615	6.0153	5.6020	5.4487
Cr 267.716	65.6942	65.8718	66.2687
Cu 324.754	24.3527	24.1750	24.4698
Fe 271.441	78631.6	78438.7	78526.7
K 766.491	1132.91	1131.74	1133.15
Mg 279.078	1387.90	1387.02	1389.11
Mn 257.610	399.714	398.743	400.435
Mo 202.032	3.8327	5.1096	6.4343
Na 330.237	268.242u	812.624	199.814u
Ni 231.604	10.4564	14.2970	11.0975
Pb 220.353	51.0259	43.5390	52.5409
Sb 206.834	-4.1768u	0.4161	4.9317
Se 196.026	-12.7931u	0.1929	-11.6724u
Si 288.158	5383.89	5373.48	5389.98
Sn 189.925	-0.5113u	5.4345	7.7021
Sr 216.596	25.0086	23.4737	25.4532
Ti 334.941	604.648	603.046	606.447
Tl 190.794	-10.6322u	-2.4060u	-4.7550u
V 292.401	180.990	181.962	181.111
Zn 206.200	38.0156	45.0132	41.6027

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3395	ppb	1.0627	313.0	-64.8689
Al 308.215	60658.5	ppb	116.283	0.2	118869
As 188.980	10.9205	ppb	2.4358	22.3	3.4118
B 249.678	6.7700	ppb	0.5800	8.6	-39.3199
Ba 389.178	166.797	ppb	1.0783	0.6	1047.19
Be 313.042	0.8387	ppb	0.0151	1.8	357.074
Ca 370.602	10050	ppb	25.63	0.3	16717
Cd 226.502	0.0151	ppb	0.3926	2592.8	126.430
Co 228.615	5.6887	ppb	0.2931	5.2	12.9045
Cr 267.716	65.9449	ppb	0.2941	0.4	1124.06
Cu 324.754	24.3325	ppb	0.1484	0.6	1186.12
Fe 271.441	78532.3	ppb	96.6051	0.1	43490.2
K 766.491	1132.60	ppb	0.7556	0.1	23642.0
Mg 279.078	1388.01	ppb	1.0510	0.1	1862.23
Mn 257.610	399.631	ppb	0.8493	0.2	33221.1
Mo 202.032	5.1255	ppb	1.3009	25.4	11.7100
Na 330.237	426.893	ppb	335.800	78.7	40.2941
Ni 231.604	11.9503	ppb	2.0574	17.2	11.6390
Pb 220.353	49.0352	ppb	4.8198	9.8	16.5445
Sb 206.834	0.3903	ppb	4.5543	1166.8	7.4528
Se 196.026	-8.0909	ppb	7.1958	88.9	1.5548
Si 288.158	5382.45	ppb	8.3458	0.2	25685.8

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	4.2084	ppb	4.2418	100.8	2.0569
Sr 216.596	24.6452	ppb	1.0386	4.2	88.0464
Ti 334.941	604.713	ppb	1.7018	0.3	53621.2
Tl 190.794	-5.9311	ppb	4.2373	71.4	-6.2168
V 292.401	181.354	ppb	0.5297	0.3	1839.25
Zn 206.200	41.5438	ppb	3.4992	8.4	22.9548

680-167563-d-32-a (Samp) 4/20/2019, 4:00:37 AM Rack 4, Tube 39

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	-1.3989u	-0.4552u	-1.0219u
Al 308.215	41753.4	41442.1	41896.5
As 188.980	5.4927	8.7642	8.7144
B 249.678	1.0491u	2.9244u	0.8373u
Ba 389.178	31.1541	30.6845	31.0502
Be 313.042	0.1436	0.1640	0.1681
Ca 370.602	356.9	369.6	368.8
Cd 226.502	-0.1948	0.5332	0.4309
Co 228.615	2.1534	1.7182	2.7589
Cr 267.716	25.8817	26.0230	26.1888
Cu 324.754	13.8005	14.2497	14.1423
Fe 271.441	23457.7	23297.3	23498.7
K 766.491	437.607	429.160	435.400
Mg 279.078	329.440	333.701	332.383
Mn 257.610	27.0617	26.7609	27.0417
Mo 202.032	3.8834	2.0051	3.6072
Na 330.237	459.761	381.956	190.109
Ni 231.604	3.4956	6.6059	11.6473
Pb 220.353	26.0710	36.2961	29.1919
Sb 206.834	-1.1240u	-5.7445u	-7.7323u
Se 196.026	1.6231	-3.7052u	-16.1722u
Si 288.158	4586.64	4554.60	4605.54
Sn 189.925	8.1984	4.8104	10.9819
Sr 216.596	2.6219	2.4662	3.4950
Ti 334.941	324.753	322.604	325.762
Tl 190.794	-3.8813u	1.0459u	-17.8855u
V 292.401	88.1026	88.3331	89.5624
Zn 206.200	16.4466	14.6964	9.3936

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9587	ppb	0.4750	49.6	-74.1892
Al 308.215	41697.3	ppb	232.331	0.6	81775.1
As 188.980	7.6571	ppb	1.8746	24.5	2.6877
B 249.678	1.6036	ppb	1.1487	71.6	-18.5652
Ba 389.178	30.9629	ppb	0.2467	0.8	168.428
Be 313.042	0.1586	ppb	0.0131	8.3	-195.401
Ca 370.602	365.1	ppb	7.112	1.9	604.3
Cd 226.502	0.2564	ppb	0.3941	153.7	44.5289
Co 228.615	2.2102	ppb	0.5226	23.6	-1.7164
Cr 267.716	26.0312	ppb	0.1537	0.6	451.187
Cu 324.754	14.0642	ppb	0.2346	1.7	865.772
Fe 271.441	23417.9	ppb	106.436	0.5	12980.9
K 766.491	434.056	ppb	4.3809	1.0	9258.84

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	331.841	ppb	2.1814	0.7	457.207
Mn 257.610	26.9548	ppb	0.1682	0.6	2282.89
Mo 202.032	3.1652	ppb	1.0142	32.0	9.0589
Na 330.237	343.942	ppb	138.787	40.4	42.9316
Ni 231.604	7.2496	ppb	4.1138	56.7	6.3658
Pb 220.353	30.5197	ppb	5.2402	17.2	11.4596
Sb 206.834	-4.8670	ppb	3.3904	69.7	4.6778
Se 196.026	-6.0848	ppb	9.1332	150.1	1.6726
Si 288.158	4582.26	ppb	25.7492	0.6	21937.6
Sn 189.925	7.9969	ppb	3.0907	38.6	3.0145
Sr 216.596	2.8611	ppb	0.5545	19.4	18.1565
Ti 334.941	324.373	ppb	1.6131	0.5	28750.2
Tl 190.794	-6.9069	ppb	9.8217	142.2	-4.0883
V 292.401	88.6660	ppb	0.7848	0.9	891.946
Zn 206.200	13.5122	ppb	3.6726	27.2	7.3876

680-167563-c-33-a (Samp)

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Rack 4, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1696u	0.3924u	-1.0702u
Al 308.215	76001.1	76153.9	76462.0
As 188.980	17.1892	12.2183	4.6988
B 249.678	9.8553u	10.0117u	11.1312u
Ba 389.178	76.7030	75.5799	78.9403
Be 313.042	0.9149	0.9221	0.9202
Ca 370.602	22008	21998	22149
Cd 226.502	-0.2236	0.1888	0.4309
Co 228.615	6.7977	8.9219	10.6025
Cr 267.716	84.8944	84.6982	84.6069
Cu 324.754	31.5285	32.4828	32.9258
Fe 271.441	108652	109140	109821
K 766.491	1132.62	1135.14	1142.80
Mg 279.078	920.074	919.817	925.994
Mn 257.610	173.937	174.407	175.404
Mo 202.032	6.0669	7.4891	6.5155
Na 330.237	336.497u	397.417	397.822
Ni 231.604	15.8108	16.4027	17.7118
Pb 220.353	49.7000	50.5576	54.0438
Sb 206.834	-6.2572u	-4.2433	13.6939
Se 196.026	-3.6094u	-22.5090u	-9.2957u
Si 288.158	7556.73	7574.50	7630.29
Sn 189.925	9.9209	-2.4521u	15.8327
Sr 216.596	46.8254	46.1214	49.2043
Ti 334.941	656.840	657.200	660.020
Tl 190.794	-2.4643u	2.2560u	-2.6733u
V 292.401	243.163	243.294	243.518
Zn 206.200	39.1345	38.7677	39.7041

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6158	ppb	0.8746	142.0	-79.2287
Al 308.215	76205.7	ppb	234.777	0.3	149284
As 188.980	11.3687	ppb	6.2884	55.3	3.4495
B 249.678	10.3327	ppb	0.6959	6.7	-46.1789

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	77.0744	ppb	1.7107	2.2	495.741
Be 313.042	0.9191	ppb	0.0037	0.4	425.525
Ca 370.602	22052	ppb	84.40	0.4	36730
Cd 226.502	0.1320	ppb	0.3310	250.6	175.472
Co 228.615	8.7740	ppb	1.9067	21.7	24.8145
Cr 267.716	84.7332	ppb	0.1469	0.2	1440.53
Cu 324.754	32.3124	ppb	0.7141	2.2	1432.98
Fe 271.441	109204	ppb	587.113	0.5	60469.1
K 766.491	1136.85	ppb	5.3060	0.5	23761.2
Mg 279.078	921.962	ppb	3.4945	0.4	1238.29
Mn 257.610	174.583	ppb	0.7491	0.4	14584.6
Mo 202.032	6.6905	ppb	0.7271	10.9	13.9836
Na 330.237	377.245	ppb	35.2898	9.4	37.3535
Ni 231.604	16.6418	ppb	0.9728	5.8	16.9018
Pb 220.353	51.4338	ppb	2.3007	4.5	16.3568
Sb 206.834	1.0645	ppb	10.9837	1031.9	8.1571
Se 196.026	-11.8047	ppb	9.6964	82.1	0.9589
Si 288.158	7587.18	ppb	38.3846	0.5	35978.6
Sn 189.925	7.7671	ppb	9.3307	120.1	2.9563
Sr 216.596	47.3837	ppb	1.6155	3.4	157.916
Ti 334.941	658.020	ppb	1.7415	0.3	58348.9
Tl 190.794	-0.9606	ppb	2.7876	290.2	-6.4318
V 292.401	243.325	ppb	0.1797	0.1	2471.76
Zn 206.200	39.2021	ppb	0.4718	1.2	21.7186

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	507.400	503.302	505.305
Al 308.215	10250.3	10215.2	10211.7
As 188.980	506.095	501.830	497.974
B 249.678	516.234	520.363	524.919
Ba 389.178	483.865	483.188	481.631
Be 313.042	536.028	535.330	536.702
Ca 370.602	10140	10135	10131
Cd 226.502	503.080	501.055	501.871
Co 228.615	506.647	507.598	505.582
Cr 267.716	501.690	501.391	503.167
Cu 324.754	500.972	498.010	498.918
Fe 271.441	10326.4	10326.5	10289.8
K 766.491	9885.47	9868.03	9879.27
Mg 279.078	10338.7	10317.2	10322.8
Mn 257.610	504.243	503.797	504.583
Mo 202.032	501.658	501.909	504.066
Na 330.237	10724.6	10864.3	10463.8
Ni 231.604	505.027	502.033	505.919
Pb 220.353	506.549	497.196	490.453
Sb 206.834	483.852	487.599	484.422
Se 196.026	518.054	522.648	530.976
Si 288.158	5176.44	5163.99	5156.08
Sn 189.925	514.781	504.165	504.725
Sr 216.596	496.279	499.870	495.576
Ti 334.941	503.808	502.925	503.957

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Label	Replicates Concentration		
Tl 190.794	505.084	499.750	511.084
V 292.401	502.237	502.515	501.704
Zn 206.200	1051.93	1049.47	1040.48

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	505.336	ppb	2.0496	0.4	15306.7	101.06711
Al 308.215	10225.7	ppb	21.3425	0.2	20228.4	102.25729
As 188.980	501.966	ppb	4.0625	0.8	134.629	100.39325
B 249.678	520.506	ppb	4.3443	0.8	3546.52	104.10111
Ba 389.178	482.895	ppb	1.1455	0.2	3016.12	96.57896
Be 313.042	536.020	ppb	0.6859	0.1	432093	107.20396
Ca 370.602	10135	ppb	4.481	0.0	16973	101.35101
Cd 226.502	502.002	ppb	1.0189	0.2	6463.89	100.40035
Co 228.615	506.609	ppb	1.0084	0.2	1994.25	101.32178
Cr 267.716	502.083	ppb	0.9510	0.2	8413.65	100.41654
Cu 324.754	499.300	ppb	1.5174	0.3	15567.1	99.86006
Fe 271.441	10314.3	ppb	21.1458	0.2	5747.23	103.09100
K 766.491	9877.59	ppb	8.8409	0.1	200989	98.77588
Mg 279.078	10326.2	ppb	11.1602	0.1	13824.0	103.26230
Mn 257.610	504.208	ppb	0.3945	0.1	41877.3	100.84153
Mo 202.032	502.544	ppb	1.3236	0.3	851.932	100.50886
Na 330.237	10684.2	ppb	203.266	1.9	309.251	106.84247
Ni 231.604	504.326	ppb	2.0354	0.4	563.561	100.86528
Pb 220.353	498.066	ppb	8.0831	1.6	188.877	99.61320
Sb 206.834	485.291	ppb	2.0191	0.4	182.105	97.05820
Se 196.026	523.893	ppb	6.5500	1.3	101.571	104.77856
Si 288.158	5165.50	ppb	10.2663	0.2	24778.3	103.31001
Sn 189.925	507.891	ppb	5.9741	1.2	129.356	101.57814
Sr 216.596	497.242	ppb	2.3033	0.5	1452.52	99.44832
Ti 334.941	503.563	ppb	0.5576	0.1	44671.3	100.71268
Tl 190.794	505.306	ppb	5.6700	1.1	119.447	101.06120
V 292.401	502.152	ppb	0.4121	0.1	5057.69	100.43043
Zn 206.200	1047.29	ppb	6.0230	0.6	577.593	104.72927

Cont Calib Blank (CCB) 4/20/2019, 4:13:20 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1658	-0.4188u	-0.0598u
Al 308.215	12.8988	13.6961	11.4948
As 188.980	3.1235	4.1384	7.7596
B 249.678	12.9469	10.5450	8.4371
Ba 389.178	-0.7293u	1.2585	-1.4173u
Be 313.042	0.0867	0.0825	0.0906
Ca 370.602	-3.969u	8.500	3.356
Cd 226.502	-0.4979u	0.3842	0.3030
Co 228.615	0.8255	0.9378	-0.6293u
Cr 267.716	-0.1301u	0.4828	0.2898
Cu 324.754	0.3909	-0.1369u	0.3292
Fe 271.441	25.7036	23.5754	30.6933
K 766.491	4.2771	3.8166	0.6329
Mg 279.078	4.1647	10.9039	4.2725
Mn 257.610	0.3671	0.3492	0.4163
Mo 202.032	0.1457	0.5858	2.3590

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Label	Replicates Concentration		
Na 330.237	512.640	92.0704	199.373
Ni 231.604	-1.6820u	-1.2412u	0.4865
Pb 220.353	-8.3375u	-8.9144u	-0.9368u
Sb 206.834	-2.1728u	-5.7948u	0.3138
Se 196.026	-6.8020u	13.2568	13.9768
Si 288.158	15.5153	10.7195	7.7827
Sn 189.925	-4.9350u	5.5345	-2.6371u
Sr 216.596	-0.2576u	1.8247	-0.9267u
Ti 334.941	0.4857	0.2989	0.4379
Tl 190.794	-11.0029u	8.1231	6.0526
V 292.401	0.8372	0.0750	0.0701
Zn 206.200	1.4042	0.0155	1.3022

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1043	ppb	0.2948	282.7	-43.8888	-0.10428
Al 308.215	12.6966	ppb	1.1145	8.8	231.969	12.69659
As 188.980	5.0072	ppb	2.4371	48.7	2.0432	5.00719
B 249.678	10.6430	ppb	2.2565	21.2	67.0811	10.64301
Ba 389.178	-0.2960	ppb	1.3895	469.4	-38.4886	-0.29603
Be 313.042	0.0866	ppb	0.0040	4.7	-257.015	0.08659
Ca 370.602	2.629	ppb	6.266	238.3	29.47	2.62896
Cd 226.502	0.0631	ppb	0.4875	772.4	4.7841	0.06312
Co 228.615	0.3780	ppb	0.8741	231.2	-10.8720	0.37803
Cr 267.716	0.2141	ppb	0.3134	146.3	17.1396	0.21415
Cu 324.754	0.1944	ppb	0.2886	148.4	441.981	0.19441
Fe 271.441	26.6574	ppb	3.6535	13.7	32.0009	26.65742Z
K 766.491	2.9089	ppb	1.9845	68.2	326.134	2.90889
Mg 279.078	6.4470	ppb	3.8602	59.9	30.3108	6.44703
Mn 257.610	0.3775	ppb	0.0348	9.2	57.8893	0.37752
Mo 202.032	1.0302	ppb	1.1717	113.7	5.7424	1.03018
Na 330.237	268.028	ppb	218.529	81.5	44.8091	268.02771
Ni 231.604	-0.8122	ppb	1.1461	141.1	-2.6830	-0.81222
Pb 220.353	-6.0629	ppb	4.4487	73.4	-1.4404	-6.06293Z
Sb 206.834	-2.5512	ppb	3.0718	120.4	5.1442	-2.55125
Se 196.026	6.8105	ppb	11.7943	173.2	4.0056	6.81052
Si 288.158	11.3392	ppb	3.9034	34.4	588.925	11.33916
Sn 189.925	-0.6792	ppb	5.5025	810.1	0.8217	-0.67921
Sr 216.596	0.2135	ppb	1.4349	672.1	7.7937	0.21350
Ti 334.941	0.4075	ppb	0.0970	23.8	10.7975	0.40750
Tl 190.794	1.0576	ppb	10.4959	992.4	-1.1660	1.05760
V 292.401	0.3274	ppb	0.4415	134.8	-9.4667	0.32743
Zn 206.200	0.9073	ppb	0.7740	85.3	0.3954	0.90733

680-167563-d-34-a (Samp)

4/20/2019, 4:17:33 AM

Rack 4, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.4963u	-0.2200u	-1.5452u
Al 308.215	129743	130620	131767
As 188.980	0.0924u	5.7455	0.7954
B 249.678	9.4002	10.0287	11.0015
Ba 389.178	162.733	159.640	162.985
Be 313.042	0.7239	0.7367	0.7343
Ca 370.602	1381	1386	1408

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Label	Replicates Concentration		
Cd 226.502	-0.1616	0.3656	0.2298
Co 228.615	4.0667	5.2448	5.0437
Cr 267.716	96.7079	98.2733	98.8256
Cu 324.754	24.1196	25.5561	26.0835
Fe 271.441	12462.6	12551.0	12683.3
K 766.491	1481.04	1486.25	1504.47
Mg 279.078	2246.91	2263.92	2292.31
Mn 257.610	49.6107	49.9986	50.6136
Mo 202.032	2.1813	1.8884	3.4141
Na 330.237	218.956u	203.401u	100.265u
Ni 231.604	21.3457	26.2195	25.1500
Pb 220.353	69.3787	64.6694	74.0707
Sb 206.834	5.9259	-1.3912u	5.4998
Se 196.026	10.9370	-18.9435u	-6.9527u
Si 288.158	8130.81	8187.11	8244.85
Sn 189.925	20.2064	11.6575	18.3327
Sr 216.596	17.5762	15.1804	16.7202
Ti 334.941	634.384	637.749	643.685
Tl 190.794	-8.9449u	-1.8730u	-14.9497u
V 292.401	112.221	112.329	112.859
Zn 206.200	38.3319	39.1347	39.0489

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.0872	ppb	0.7514	69.1	-76.3022
Al 308.215	130710	ppb	1014.83	0.8	255894
As 188.980	2.2111	ppb	3.0810	139.3	1.2583
B 249.678	10.1435	ppb	0.8068	8.0	50.9335
Ba 389.178	161.786	ppb	1.8626	1.2	988.410
Be 313.042	0.7316	ppb	0.0068	0.9	271.523
Ca 370.602	1392	ppb	14.17	1.0	2345
Cd 226.502	0.1446	ppb	0.2737	189.3	29.8804
Co 228.615	4.7851	ppb	0.6302	13.2	11.1794
Cr 267.716	97.9356	ppb	1.0985	1.1	1653.63
Cu 324.754	25.2531	ppb	1.0164	4.0	1202.58
Fe 271.441	12565.6	ppb	111.080	0.9	6973.82
K 766.491	1490.59	ppb	12.3019	0.8	30968.6
Mg 279.078	2267.72	ppb	22.9373	1.0	3028.80
Mn 257.610	50.0743	ppb	0.5057	1.0	4204.72
Mo 202.032	2.4946	ppb	0.8097	32.5	8.0493
Na 330.237	174.207	ppb	64.5067	37.0	35.6668
Ni 231.604	24.2384	ppb	2.5616	10.6	25.4366
Pb 220.353	69.3729	ppb	4.7006	6.8	26.2267
Sb 206.834	3.3448	ppb	4.1071	122.8	7.6988
Se 196.026	-4.9864	ppb	15.0370	301.6	1.8375
Si 288.158	8187.59	ppb	57.0228	0.7	38780.0
Sn 189.925	16.7322	ppb	4.4936	26.9	5.2222
Sr 216.596	16.4923	ppb	1.2140	7.4	56.6261
Ti 334.941	638.606	ppb	4.7092	0.7	56631.2
Tl 190.794	-8.5892	ppb	6.5456	76.2	-3.9917
V 292.401	112.469	ppb	0.3414	0.3	1133.37
Zn 206.200	38.8385	ppb	0.4408	1.1	21.3003

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5071u	0.3162	-1.3795u
Al 308.215	11480.9	11590.1	11535.9
As 188.980	6.0200	2.4512	0.2917
B 249.678	-0.0117u	0.8034	0.7527
Ba 389.178	34.3799	33.5424	31.1368
Be 313.042	0.1013	0.0814	0.1113
Ca 370.602	1296	1308	1292
Cd 226.502	0.5860	-0.2796u	-0.0462
Co 228.615	2.0059	0.9715	-0.5312u
Cr 267.716	11.5477	11.7207	10.6744
Cu 324.754	4.1870	3.9792	5.4772
Fe 271.441	1941.69	1954.40	1926.73
K 766.491	282.724	284.726	284.775
Mg 279.078	285.126	292.180	291.193
Mn 257.610	56.8761	57.2607	57.0165
Mo 202.032	1.6841	0.3886	3.0053
Na 330.237	416.063	186.724	466.723
Ni 231.604	3.3767	4.4957	1.8131
Pb 220.353	24.5190	11.6459	18.8057
Sb 206.834	-2.7181u	-10.0328u	8.4801
Se 196.026	-2.3454u	25.5440	-11.6576u
Si 288.158	2471.01	2485.65	2470.40
Sn 189.925	5.7516	7.0895	1.5575
Sr 216.596	8.1440	7.8840	5.6072
Ti 334.941	205.456	206.599	206.155
Tl 190.794	-8.4135u	6.2629	-15.1757u
V 292.401	9.4589	9.1656	9.9383
Zn 206.200	21.7101	17.8605	15.6063

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5235	ppb	0.8480	162.0	-57.0903
Al 308.215	11535.7	ppb	54.5762	0.5	22772.6
As 188.980	2.9210	ppb	2.8929	99.0	1.4804
B 249.678	0.5148	ppb	0.4567	88.7	-4.2048
Ba 389.178	33.0197	ppb	1.6836	5.1	172.107
Be 313.042	0.0980	ppb	0.0152	15.5	-247.034
Ca 370.602	1299	ppb	8.330	0.6	2198
Cd 226.502	0.0868	ppb	0.4478	516.2	8.4287
Co 228.615	0.8154	ppb	1.2757	156.5	-7.6360
Cr 267.716	11.3142	ppb	0.5609	5.0	203.230
Cu 324.754	4.5478	ppb	0.8115	17.8	574.147
Fe 271.441	1940.94	ppb	13.8486	0.7	1091.73
K 766.491	284.075	ppb	1.1701	0.4	6136.43
Mg 279.078	289.500	ppb	3.8192	1.3	406.060
Mn 257.610	57.0511	ppb	0.1946	0.3	4761.67
Mo 202.032	1.6927	ppb	1.3084	77.3	6.8365
Na 330.237	356.503	ppb	149.199	41.9	45.0906
Ni 231.604	3.2285	ppb	1.3474	41.7	1.8515
Pb 220.353	18.3235	ppb	6.4501	35.2	7.6699
Sb 206.834	-1.4236	ppb	9.3241	655.0	5.5753
Se 196.026	3.8470	ppb	19.3584	503.2	3.4601
Si 288.158	2475.69	ppb	8.6330	0.3	12101.1

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	4.7995	ppb	2.8863	60.1	2.2064
Sr 216.596	7.2117	ppb	1.3956	19.4	28.4153
Ti 334.941	206.070	ppb	0.5761	0.3	18255.3
Tl 190.794	-5.7754	ppb	10.9601	189.8	-2.8738
V 292.401	9.5209	ppb	0.3901	4.1	84.7712
Zn 206.200	18.3923	ppb	3.0865	16.8	10.0425

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1073u	-0.6475u	-0.0927u
Al 308.215	103584	106915	106967
As 188.980	16.0072	4.9710	10.4620
B 249.678	8.0985	7.9631	8.5476
Ba 389.178	162.628	171.114	170.653
Be 313.042	0.9568	0.9840	0.9939
Ca 370.602	1834	1885	1908
Cd 226.502	-0.1896	0.1919	-0.6716
Co 228.615	5.5667	6.6254	6.2717
Cr 267.716	83.1813	84.6646	84.4273
Cu 324.754	22.4799	24.6484	23.0571
Fe 271.441	28690.1	29534.0	29413.0
K 766.491	2165.25	2237.73	2233.12
Mg 279.078	2688.08	2765.99	2763.92
Mn 257.610	75.5131	77.9996	77.8728
Mo 202.032	2.3656	-0.4127u	3.9560
Na 330.237	313.929	543.332	168.676u
Ni 231.604	24.3592	24.0065	26.6813
Pb 220.353	54.7000	70.2460	50.4525
Sb 206.834	-2.9004u	4.8173	3.8424
Se 196.026	-8.4105u	-19.8757u	7.4796
Si 288.158	5181.75	5347.07	5347.36
Sn 189.925	8.4049	-0.2792u	11.1844
Sr 216.596	16.5538	18.0576	18.2357
Ti 334.941	672.596	694.544	693.837
Tl 190.794	-15.7776u	-11.2872u	-9.5390u
V 292.401	136.573	142.794	143.556
Zn 206.200	42.1874	43.6821	46.3497

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6158	ppb	0.5080	82.5	-65.0188
Al 308.215	105822	ppb	1938.19	1.8	207212
As 188.980	10.4801	ppb	5.5182	52.7	3.4230
B 249.678	8.2030	ppb	0.3060	3.7	20.6618
Ba 389.178	168.132	ppb	4.7719	2.8	1035.98
Be 313.042	0.9782	ppb	0.0192	2.0	469.963
Ca 370.602	1875	ppb	37.55	2.0	3128
Cd 226.502	-0.2231	ppb	0.4327	193.9	49.7153
Co 228.615	6.1546	ppb	0.5389	8.8	16.5649
Cr 267.716	84.0911	ppb	0.7968	0.9	1423.35
Cu 324.754	23.3951	ppb	1.1231	4.8	1149.12
Fe 271.441	29212.4	ppb	456.328	1.6	16188.8
K 766.491	2212.03	ppb	40.5840	1.8	45873.5

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2739.33	ppb	44.3982	1.6	3663.98
Mn 257.610	77.1285	ppb	1.4004	1.8	6460.88
Mo 202.032	1.9696	ppb	2.2111	112.3	6.9643
Na 330.237	341.979	ppb	188.897	55.2	39.0740
Ni 231.604	25.0157	ppb	1.4532	5.8	26.3034
Pb 220.353	58.4662	ppb	10.4203	17.8	21.6063
Sb 206.834	1.9197	ppb	4.2028	218.9	7.3156
Se 196.026	-6.9355	ppb	13.7372	198.1	1.5408
Si 288.158	5292.06	ppb	95.5311	1.8	25267.7
Sn 189.925	6.4367	ppb	5.9799	92.9	2.6202
Sr 216.596	17.6157	ppb	0.9240	5.2	61.8206
Ti 334.941	686.992	ppb	12.4727	1.8	60924.2
Tl 190.794	-12.2013	ppb	3.2182	26.4	-5.5903
V 292.401	140.974	ppb	3.8307	2.7	1425.13
Zn 206.200	44.0731	ppb	2.1085	4.8	24.2331

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Rack 4, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4915u	-0.2482u	-0.0209u
Al 308.215	54740.5	54383.0	54581.9
As 188.980	23.0845	18.4574	20.5497
B 249.678	5.5388u	3.8257u	6.1509u
Ba 389.178	142.030	141.144	145.732
Be 313.042	0.8021	0.7827	0.8061
Ca 370.602	14752	14654	14668
Cd 226.502	0.8603	0.7334	0.2872
Co 228.615	5.5481	3.0367	5.6552
Cr 267.716	58.6671	58.4804	58.6099
Cu 324.754	21.9491	21.6280	22.6866
Fe 271.441	81833.5	81660.3	80902.6
K 766.491	919.357	915.492	914.044
Mg 279.078	1497.35	1501.10	1492.90
Mn 257.610	420.961	419.391	419.241
Mo 202.032	2.6907	5.5310	3.7369
Na 330.237	556.556	937.477	275.987u
Ni 231.604	7.8072	14.5033	10.4199
Pb 220.353	49.2309	37.7688	43.1169
Sb 206.834	-8.7475u	4.3461	-2.8974
Se 196.026	6.3145	-10.4113u	18.7444
Si 288.158	6353.38	6336.53	6332.90
Sn 189.925	8.6712	14.3159	17.7097
Sr 216.596	44.7151	45.8647	48.0404
Ti 334.941	519.552	517.645	518.852
Tl 190.794	6.0747u	-18.5803u	-4.8129u
V 292.401	157.273	157.280	157.561
Zn 206.200	56.7472	53.4209	56.6735

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2535	ppb	0.2353	92.8	-62.6625
Al 308.215	54568.5	ppb	179.103	0.3	106956
As 188.980	20.6972	ppb	2.3171	11.2	6.0164
B 249.678	5.1718	ppb	1.2052	23.3	52.7098

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	142.969	ppb	2.4335	1.7	898.511
Be 313.042	0.7970	ppb	0.0125	1.6	323.332
Ca 370.602	14691	ppb	53.27	0.4	24472
Cd 226.502	0.6270	ppb	0.3010	48.0	137.758
Co 228.615	4.7467	ppb	1.4819	31.2	8.4783
Cr 267.716	58.5858	ppb	0.0956	0.2	1001.15
Cu 324.754	22.0879	ppb	0.5428	2.5	1118.70
Fe 271.441	81465.5	ppb	495.076	0.6	45113.7
K 766.491	916.298	ppb	2.7466	0.3	19191.7
Mg 279.078	1497.11	ppb	4.1048	0.3	2009.06
Mn 257.610	419.864	ppb	0.9531	0.2	34899.0
Mo 202.032	3.9862	ppb	1.4365	36.0	9.7633
Na 330.237	590.007	ppb	332.011	56.3	45.2016
Ni 231.604	10.9101	ppb	3.3749	30.9	10.4720
Pb 220.353	43.3722	ppb	5.7353	13.2	14.3497
Sb 206.834	-2.4330	ppb	6.5592	269.6	6.4707
Se 196.026	4.8825	ppb	14.6305	299.7	4.0121
Si 288.158	6340.94	ppb	10.9266	0.2	30155.8
Sn 189.925	13.5656	ppb	4.5657	33.7	4.4219
Sr 216.596	46.2067	ppb	1.6888	3.7	151.272
Ti 334.941	518.683	ppb	0.9650	0.2	45990.0
Tl 190.794	-5.7728	ppb	12.3555	214.0	-6.2894
V 292.401	157.371	ppb	0.1643	0.1	1595.05
Zn 206.200	55.6138	ppb	1.8995	3.4	30.7285

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Rack 4, Tube 45

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1613u	-0.9913u	-0.0529u
Al 308.215	30947.2	31325.3	31146.7
As 188.980	6.5502	5.3500	6.1881
B 249.678	1.4036	1.9702	0.2884u
Ba 389.178	108.023	114.569	111.258
Be 313.042	0.1969	0.1967	0.1737
Ca 370.602	1369	1378	1374
Cd 226.502	-0.5382	-0.1808	0.0333
Co 228.615	0.7530	1.2822	1.8707
Cr 267.716	47.1408	47.3363	46.5315
Cu 324.754	10.3956	9.7150	11.0204
Fe 271.441	7819.91	7913.64	7929.35
K 766.491	734.145	743.198	740.319
Mg 279.078	538.607	541.573	544.121
Mn 257.610	37.8561	38.1484	38.1796
Mo 202.032	4.2166	5.1518	3.1702
Na 330.237	399.181	512.597	175.288u
Ni 231.604	5.1382	4.0317	3.6948
Pb 220.353	41.5780	40.5153	52.0671
Sb 206.834	5.2814	-11.2986u	0.5872
Se 196.026	5.9298	5.5339	13.4363
Si 288.158	4051.36	4093.39	4071.28
Sn 189.925	3.6479	7.7602	4.7265
Sr 216.596	8.5778	7.9657	8.6794
Ti 334.941	705.201	713.470	708.545

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Label	Replicates Concentration		
Tl 190.794	7.9449	-13.8247u	-2.4741u
V 292.401	66.0812	65.7854	65.3167
Zn 206.200	5.2847	10.1241	10.4379

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7352	ppb	0.5969	81.2	-65.1012
Al 308.215	31139.7	ppb	189.110	0.6	61122.1
As 188.980	6.0294	ppb	0.6156	10.2	2.2927
B 249.678	1.2207	ppb	0.8557	70.1	-5.3900
Ba 389.178	111.283	ppb	3.2734	2.9	666.987
Be 313.042	0.1891	ppb	0.0133	7.0	-171.518
Ca 370.602	1374	ppb	4.747	0.3	2324
Cd 226.502	-0.2286	ppb	0.2887	126.3	14.0595
Co 228.615	1.3020	ppb	0.5591	42.9	-2.0319
Cr 267.716	47.0029	ppb	0.4197	0.9	801.003
Cu 324.754	10.3770	ppb	0.6529	6.3	751.456
Fe 271.441	7887.64	ppb	59.1731	0.8	4383.90
K 766.491	739.221	ppb	4.6254	0.6	15496.7
Mg 279.078	541.433	ppb	2.7594	0.5	739.397
Mn 257.610	38.0614	ppb	0.1785	0.5	3200.63
Mo 202.032	4.1795	ppb	0.9913	23.7	10.9551
Na 330.237	362.355	ppb	171.643	47.4	40.6239
Ni 231.604	4.2882	ppb	0.7551	17.6	3.0424
Pb 220.353	44.7201	ppb	6.3848	14.3	17.3397
Sb 206.834	-1.8100	ppb	8.5460	472.2	5.6568
Se 196.026	8.3000	ppb	4.4526	53.6	4.3219
Si 288.158	4072.01	ppb	21.0289	0.5	19574.7
Sn 189.925	5.3782	ppb	2.1322	39.6	2.3526
Sr 216.596	8.4076	ppb	0.3861	4.6	32.5644
Ti 334.941	709.072	ppb	4.1594	0.6	62875.8
Tl 190.794	-2.7846	ppb	10.8881	391.0	-2.4101
V 292.401	65.7278	ppb	0.3855	0.6	658.591
Zn 206.200	8.6156	ppb	2.8889	33.5	4.6399

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Rack 4, Tube 46

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1796u	0.4983u	-0.8364u
Al 308.215	65854.4	65532.7	65615.4
As 188.980	1.5340	12.3631	7.7075
B 249.678	7.2604u	6.6866u	7.0774u
Ba 389.178	121.711	121.759	126.475
Be 313.042	0.9079	0.9055	0.9130
Ca 370.602	12403	12368	12380
Cd 226.502	0.2862	0.7688	0.6960
Co 228.615	6.1410	5.9849	5.7032
Cr 267.716	70.8501	69.9881	71.1730
Cu 324.754	33.9370	33.9822	35.5297
Fe 271.441	88309.2	88221.5	88301.5
K 766.491	1316.39	1314.32	1313.77
Mg 279.078	982.507	974.737	976.969
Mn 257.610	344.009	342.307	342.848
Mo 202.032	3.1433	4.9072	4.4310

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Label	Replicates Concentration		
Na 330.237	384.255	543.865	763.318
Ni 231.604	15.6134	16.7635	13.3449
Pb 220.353	62.6671	56.8348	55.3111
Sb 206.834	-7.5688u	22.3106	-5.6217u
Se 196.026	-8.2013u	-1.4449	0.4729
Si 288.158	5908.68	5895.15	5899.44
Sn 189.925	18.6441	9.5019	13.3919
Sr 216.596	24.4898	25.2596	22.6257
Ti 334.941	540.911	540.408	540.168
Tl 190.794	-9.9332u	1.4289u	3.7837u
V 292.401	166.428	168.850	168.662
Zn 206.200	60.2560	61.2229	59.5240

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1726	ppb	0.6673	386.7	-61.5619
Al 308.215	65667.5	ppb	167.058	0.3	128668
As 188.980	7.2016	ppb	5.4323	75.4	2.3933
B 249.678	7.0081	ppb	0.2931	4.2	-47.4864
Ba 389.178	123.315	ppb	2.7365	2.2	777.467
Be 313.042	0.9088	ppb	0.0038	0.4	413.844
Ca 370.602	12383	ppb	17.98	0.1	20601
Cd 226.502	0.5837	ppb	0.2602	44.6	148.662
Co 228.615	5.9430	ppb	0.2219	3.7	13.2167
Cr 267.716	70.6704	ppb	0.6125	0.9	1203.82
Cu 324.754	34.4830	ppb	0.9068	2.6	1495.37
Fe 271.441	88277.4	ppb	48.5878	0.1	48884.5
K 766.491	1314.83	ppb	1.3813	0.1	27392.9
Mg 279.078	978.071	ppb	4.0004	0.4	1313.61
Mn 257.610	343.055	ppb	0.8698	0.3	28534.9
Mo 202.032	4.1605	ppb	0.9125	21.9	9.9716
Na 330.237	563.813	ppb	190.317	33.8	43.9805
Ni 231.604	15.2406	ppb	1.7395	11.4	15.3310
Pb 220.353	58.2710	ppb	3.8826	6.7	19.7095
Sb 206.834	3.0400	ppb	16.7172	549.9	8.5414
Se 196.026	-3.0578	ppb	4.5565	149.0	2.5375
Si 288.158	5901.09	ppb	6.9149	0.1	28103.7
Sn 189.925	13.8460	ppb	4.5880	33.1	4.4927
Sr 216.596	24.1250	ppb	1.3543	5.6	87.6262
Ti 334.941	540.496	ppb	0.3792	0.1	47923.7
Tl 190.794	-1.5735	ppb	7.3348	466.1	-5.6204
V 292.401	167.980	ppb	1.3475	0.8	1703.31
Zn 206.200	60.3343	ppb	0.8521	1.4	33.3425

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.6974u	-0.1799u	-0.4381u
Al 308.215	66371.5	65956.0	66803.0
As 188.980	12.7015	3.2707	-2.0443u
B 249.678	4.2475	2.5679	3.8301
Ba 389.178	82.3335	84.2467	83.5725
Be 313.042	0.2955	0.2949	0.3197
Ca 370.602	11063	11014	11149

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.0514	0.1355	-0.7098
Co 228.615	2.8366	2.9367	2.1475
Cr 267.716	62.4015	62.6556	64.1483
Cu 324.754	16.9957	17.7888	17.7612
Fe 271.441	8818.28	8745.75	8870.51
K 766.491	1379.73	1377.73	1394.65
Mg 279.078	940.665	946.449	944.124
Mn 257.610	47.7449	47.5707	48.1936
Mo 202.032	2.4219	2.7139	2.6606
Na 330.237	425.520	448.003	597.414
Ni 231.604	14.6613	9.6354	14.0714
Pb 220.353	34.3665	32.2945	25.8067
Sb 206.834	-9.6920u	6.3011	-7.4547u
Se 196.026	9.6323	4.1378	-18.9351u
Si 288.158	5335.15	5312.38	5378.09
Sn 189.925	10.7066	13.9687	8.7240
Sr 216.596	24.6098	26.7547	27.4781
Ti 334.941	471.563	468.452	475.534
Tl 190.794	-11.1742u	-7.9082u	-5.3060u
V 292.401	71.2499	71.1383	71.2853
Zn 206.200	20.0102	22.9866	22.1095

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7718	ppb	0.8119	105.2	-66.0805
Al 308.215	66376.8	ppb	423.541	0.6	130050
As 188.980	4.6426	ppb	7.4680	160.9	1.9192
B 249.678	3.5485	ppb	0.8745	24.6	9.5860
Ba 389.178	83.3842	ppb	0.9704	1.2	492.426
Be 313.042	0.3034	ppb	0.0142	4.7	-76.2216
Ca 370.602	11075	ppb	68.70	0.6	18538
Cd 226.502	-0.1743	ppb	0.4656	267.2	17.6210
Co 228.615	2.6402	ppb	0.4297	16.3	1.4699
Cr 267.716	63.0685	ppb	0.9438	1.5	1069.80
Cu 324.754	17.5153	ppb	0.4501	2.6	967.797
Fe 271.441	8811.51	ppb	62.6566	0.7	4895.39
K 766.491	1384.04	ppb	9.2443	0.7	28791.8
Mg 279.078	943.746	ppb	2.9108	0.3	1270.60
Mn 257.610	47.8364	ppb	0.3214	0.7	4009.12
Mo 202.032	2.5988	ppb	0.1555	6.0	8.2755
Na 330.237	490.312	ppb	93.4315	19.1	46.0379
Ni 231.604	12.7894	ppb	2.7473	21.5	12.5842
Pb 220.353	30.8225	ppb	4.4657	14.5	11.9714
Sb 206.834	-3.6152	ppb	8.6603	239.6	5.0573
Se 196.026	-1.7216	ppb	15.1583	880.5	2.4375
Si 288.158	5341.87	ppb	33.3661	0.6	25490.4
Sn 189.925	11.1331	ppb	2.6482	23.8	3.8071
Sr 216.596	26.2809	ppb	1.4917	5.7	84.8188
Ti 334.941	471.850	ppb	3.5496	0.8	41834.2
Tl 190.794	-8.1295	ppb	2.9404	36.2	-3.7282
V 292.401	71.2245	ppb	0.0767	0.1	713.315
Zn 206.200	21.7021	ppb	1.5295	7.0	11.8550

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167563-c-41-a (Samp) **4/20/2019, 4:47:19 AM** **Rack 4, Tube 48****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.8540u	-1.6101u	-0.2016u
Al 308.215	94748.4	95098.3	95224.3
As 188.980	14.2742	-1.3441u	2.6790
B 249.678	31.4716	32.1710	32.3855
Ba 389.178	139.545	142.669	138.433
Be 313.042	0.4995	0.5156	0.5045
Ca 370.602	8961	9009	9020
Cd 226.502	-0.1310	-0.2610	-0.3363
Co 228.615	5.5074	4.4764	4.1820
Cr 267.716	90.9576	90.7578	90.4641
Cu 324.754	19.7431	19.9571	20.7314
Fe 271.441	23065.4	23286.8	23364.0
K 766.491	1550.28	1557.86	1554.40
Mg 279.078	2111.91	2123.92	2135.96
Mn 257.610	54.2416	54.3698	54.5637
Mo 202.032	3.4523	3.6990	3.4852
Na 330.237	599.374	614.936	874.897
Ni 231.604	18.7910	20.0691	16.0861
Pb 220.353	41.7742	36.6865	48.6215
Sb 206.834	-3.5013u	-10.0358u	-3.6658u
Se 196.026	10.9226	-10.6391u	4.0143
Si 288.158	6561.17	6600.47	6593.87
Sn 189.925	22.6161	1.0791	19.8819
Sr 216.596	35.1966	32.9984	33.9609
Ti 334.941	571.449	572.097	572.772
Tl 190.794	3.1649u	-13.2181u	11.1700
V 292.401	166.934	166.706	165.847
Zn 206.200	22.7216	26.1735	21.6387

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8886	ppb	0.7049	79.3	-72.1644
Al 308.215	95023.7	ppb	246.571	0.3	186090
As 188.980	5.2030	ppb	8.1093	155.9	2.0295
B 249.678	32.0094	ppb	0.4779	1.5	189.812
Ba 389.178	140.216	ppb	2.1963	1.6	857.207
Be 313.042	0.5066	ppb	0.0082	1.6	90.6620
Ca 370.602	8996	ppb	31.46	0.3	15041
Cd 226.502	-0.2428	ppb	0.1038	42.8	39.7537
Co 228.615	4.7219	ppb	0.6960	14.7	10.1572
Cr 267.716	90.7265	ppb	0.2482	0.3	1533.66
Cu 324.754	20.1439	ppb	0.5200	2.6	1049.42
Fe 271.441	23238.8	ppb	154.984	0.7	12882.2
K 766.491	1554.18	ppb	3.7951	0.2	32280.7
Mg 279.078	2123.93	ppb	12.0239	0.6	2843.29
Mn 257.610	54.3917	ppb	0.1622	0.3	4567.94
Mo 202.032	3.5455	ppb	0.1340	3.8	9.6904
Na 330.237	696.402	ppb	154.777	22.2	50.1353
Ni 231.604	18.3154	ppb	2.0337	11.1	18.7865
Pb 220.353	42.3607	ppb	5.9891	14.1	15.7593
Sb 206.834	-5.7343	ppb	3.7261	65.0	4.6330
Se 196.026	1.4326	ppb	11.0103	768.6	3.0913
Si 288.158	6585.17	ppb	21.0459	0.3	31298.0

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	14.5257	ppb	11.7251	80.7	4.6646
Sr 216.596	34.0520	ppb	1.1019	3.2	109.117
Ti 334.941	572.106	ppb	0.6613	0.1	50731.2
Tl 190.794	0.3723	ppb	12.4316	3339.3	-2.3047
V 292.401	166.496	ppb	0.5729	0.3	1683.95
Zn 206.200	23.5113	ppb	2.3683	10.1	12.8689

680-167563-c-42-a (Samp) 4/20/2019, 4:51:34 AM Rack 4, Tube 49

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	-0.2411u	-0.5121u	-0.1586u
Al 308.215	50132.7	50121.1	50380.4
As 188.980	24.0963	17.2000	13.4364
B 249.678	17.1401	19.3291	18.6305
Ba 389.178	49.5555	47.7080	49.4674
Be 313.042	0.5070	0.4992	0.4940
Ca 370.602	24798	24776	24914
Cd 226.502	-0.3551	0.4472	0.1556
Co 228.615	3.4545	2.6904	2.2404
Cr 267.716	84.1406	83.8607	84.0989
Cu 324.754	23.6669	24.1903	26.2010
Fe 271.441	73677.3	73403.3	73975.6
K 766.491	1019.03	1014.81	1021.75
Mg 279.078	1083.88	1086.70	1092.37
Mn 257.610	101.717	101.267	101.865
Mo 202.032	6.4525	4.9122	6.1804
Na 330.237	536.471	184.147u	346.240
Ni 231.604	6.6123	4.5817	8.1852
Pb 220.353	23.8659	33.6116	25.5225
Sb 206.834	7.8314	-0.6473	-9.6903u
Se 196.026	0.4340	5.1075	11.0182
Si 288.158	6710.56	6700.73	6744.45
Sn 189.925	7.6406	14.7354	3.4399
Sr 216.596	60.8171	64.4727	65.8108
Ti 334.941	504.531	505.112	507.133
Tl 190.794	0.3769u	-4.3157u	-9.5391u
V 292.401	176.482	177.385	175.842
Zn 206.200	39.4492	36.2378	39.4615

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3039	ppb	0.1849	60.8	-63.4719
Al 308.215	50211.4	ppb	146.463	0.3	98433.5
As 188.980	18.2442	ppb	5.4061	29.6	5.3795
B 249.678	18.3666	ppb	1.1181	6.1	45.1749
Ba 389.178	48.9103	ppb	1.0422	2.1	303.554
Be 313.042	0.5001	ppb	0.0065	1.3	85.6583
Ca 370.602	24829	ppb	74.16	0.3	41428
Cd 226.502	0.0826	ppb	0.4061	491.8	119.226
Co 228.615	2.7951	ppb	0.6138	22.0	0.8205
Cr 267.716	84.0334	ppb	0.1510	0.2	1425.69
Cu 324.754	24.6861	ppb	1.3378	5.4	1195.97
Fe 271.441	73685.4	ppb	286.218	0.4	40807.1
K 766.491	1018.53	ppb	3.5001	0.3	21302.7

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1087.65	ppb	4.3231	0.4	1465.57
Mn 257.610	101.616	ppb	0.3115	0.3	8510.69
Mo 202.032	5.8484	ppb	0.8221	14.1	12.9892
Na 330.237	355.619	ppb	176.349	49.6	39.4834
Ni 231.604	6.4597	ppb	1.8066	28.0	5.4804
Pb 220.353	27.6667	ppb	5.2147	18.8	8.6531
Sb 206.834	-0.8354	ppb	8.7624	1048.9	7.0007
Se 196.026	5.5199	ppb	5.3041	96.1	4.0719
Si 288.158	6718.58	ppb	22.9352	0.3	31917.4
Sn 189.925	8.6053	ppb	5.7092	66.3	3.1682
Sr 216.596	63.7002	ppb	2.5849	4.1	201.497
Ti 334.941	505.592	ppb	1.3656	0.3	44827.6
Tl 190.794	-4.4926	ppb	4.9604	110.4	-5.7138
V 292.401	176.569	ppb	0.7751	0.4	1789.45
Zn 206.200	38.3828	ppb	1.8577	4.8	21.1890

680-167563-d-43-a (Samp)

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Rack 4, Tube 50

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9031u	-0.2714u	-1.1767u
Al 308.215	71873.3	71728.9	71568.7
As 188.980	19.8398	8.1691	14.2095
B 249.678	26.2653	27.1928	27.1826
Ba 389.178	39.0783	46.0350	42.3962
Be 313.042	0.7712	0.7667	0.7803
Ca 370.602	4738	4702	4704
Cd 226.502	0.0874	0.2069	0.5825
Co 228.615	4.6398	2.5907	3.2730
Cr 267.716	39.8257	39.9597	38.5100
Cu 324.754	380.568	382.699	380.896
Fe 271.441	70780.6	70349.1	70293.1
K 766.491	943.105	937.377	935.019
Mg 279.078	627.456	623.064	622.021
Mn 257.610	76.7210	76.1223	76.1699
Mo 202.032	5.5810	5.5658	4.0699
Na 330.237	511.268	537.554	105.670u
Ni 231.604	19.9671	17.5373	17.5582
Pb 220.353	157.625	152.270	155.119
Sb 206.834	-2.6370	-10.3457u	1.5736
Se 196.026	-17.7489u	-10.3582u	-7.4116u
Si 288.158	6203.69	6175.49	6171.21
Sn 189.925	1.9532	12.7761	9.2185
Sr 216.596	13.5680	12.0152	14.3394
Ti 334.941	512.122	511.664	510.458
Tl 190.794	-5.2429u	-0.0514u	14.9780
V 292.401	192.385	193.184	191.856
Zn 206.200	117.513	109.330	113.085

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7837	ppb	0.4643	59.2	-77.2882
Al 308.215	71723.6	ppb	152.350	0.2	140514
As 188.980	14.0728	ppb	5.8366	41.5	4.2765
B 249.678	26.8802	ppb	0.5326	2.0	106.710

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	42.5031	ppb	3.4796	8.2	261.400
Be 313.042	0.7727	ppb	0.0069	0.9	303.925
Ca 370.602	4714	ppb	20.28	0.4	7804
Cd 226.502	0.2923	ppb	0.2583	88.4	117.846
Co 228.615	3.5012	ppb	1.0434	29.8	3.7044
Cr 267.716	39.4318	ppb	0.8011	2.0	679.344
Cu 324.754	381.388	ppb	1.1472	0.3	11999.8
Fe 271.441	70474.3	ppb	266.771	0.4	39029.6
K 766.491	938.500	ppb	4.1586	0.4	19614.6
Mg 279.078	624.180	ppb	2.8840	0.5	841.916
Mn 257.610	76.3377	ppb	0.3328	0.4	6411.38
Mo 202.032	5.0722	ppb	0.8681	17.1	11.7140
Na 330.237	384.831	ppb	242.117	62.9	39.4570
Ni 231.604	18.3542	ppb	1.3968	7.6	18.8273
Pb 220.353	155.004	ppb	2.6794	1.7	56.9115
Sb 206.834	-3.8031	ppb	6.0446	158.9	5.8158
Se 196.026	-11.8396	ppb	5.3255	45.0	0.7840
Si 288.158	6183.46	ppb	17.6470	0.3	29420.1
Sn 189.925	7.9826	ppb	5.5163	69.1	3.0108
Sr 216.596	13.3075	ppb	1.1838	8.9	53.9774
Ti 334.941	511.415	ppb	0.8592	0.2	45343.2
Tl 190.794	3.2279	ppb	10.5017	325.3	-3.7220
V 292.401	192.475	ppb	0.6690	0.3	1952.06
Zn 206.200	113.310	ppb	4.0962	3.6	62.5560

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	511.422	508.120	502.386
Al 308.215	10282.7	10246.9	10183.9
As 188.980	497.545	502.854	497.379
B 249.678	520.865	521.034	523.507
Ba 389.178	485.205	488.337	481.651
Be 313.042	540.746	537.987	535.533
Ca 370.602	10202	10132	10102
Cd 226.502	504.361	504.719	503.317
Co 228.615	510.875	508.403	507.251
Cr 267.716	504.068	501.394	500.475
Cu 324.754	506.435	505.269	500.090
Fe 271.441	10412.8	10358.0	10259.0
K 766.491	9971.01	9916.35	9871.24
Mg 279.078	10410.5	10339.1	10306.5
Mn 257.610	505.919	504.419	502.441
Mo 202.032	502.727	501.911	501.447
Na 330.237	10744.9	10990.3	10943.5
Ni 231.604	508.394	507.256	501.195
Pb 220.353	514.114	499.016	511.008
Sb 206.834	473.241	474.761	479.981
Se 196.026	525.275	530.843	503.698
Si 288.158	5225.21	5179.96	5148.56
Sn 189.925	504.522	492.603	497.569
Sr 216.596	497.584	499.027	492.894
Ti 334.941	507.166	505.016	502.775

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Label	Replicates Concentration		
Tl 190.794	515.169	502.042	511.208
V 292.401	503.525	503.397	501.399
Zn 206.200	1048.03	1040.61	1050.10

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	507.309	ppb	4.5719	0.9	15366.6	101.46184
Al 308.215	10237.8	ppb	50.0105	0.5	20252.0	102.37811
As 188.980	499.259	ppb	3.1139	0.6	133.906	99.85188
B 249.678	521.802	ppb	1.4789	0.3	3555.38	104.36040
Ba 389.178	485.065	ppb	3.3451	0.7	3029.78	97.01292
Be 313.042	538.089	ppb	2.6076	0.5	433762	107.61776
Ca 370.602	10145	ppb	51.20	0.5	16991	101.45493
Cd 226.502	504.132	ppb	0.7285	0.1	6491.27	100.82648
Co 228.615	508.843	ppb	1.8517	0.4	2003.13	101.76863
Cr 267.716	501.979	ppb	1.8664	0.4	8411.91	100.39576
Cu 324.754	503.932	ppb	3.3776	0.7	15707.4	100.78633
Fe 271.441	10343.3	ppb	77.9691	0.8	5763.38	103.38082
K 766.491	9919.54	ppb	49.9607	0.5	201847	99.19535
Mg 279.078	10352.0	ppb	53.2044	0.5	13858.5	103.52027
Mn 257.610	504.260	ppb	1.7445	0.3	41881.7	100.85195
Mo 202.032	502.028	ppb	0.6480	0.1	851.061	100.40565
Na 330.237	10892.9	ppb	130.283	1.2	314.873	108.92879
Ni 231.604	505.615	ppb	3.8699	0.8	565.004	101.12295
Pb 220.353	508.046	ppb	7.9728	1.6	192.655	101.60918
Sb 206.834	475.994	ppb	3.5351	0.7	178.852	95.19888
Se 196.026	519.939	ppb	14.3375	2.8	100.826	103.98775
Si 288.158	5184.57	ppb	38.5317	0.7	24866.7	103.69150
Sn 189.925	498.231	ppb	5.9870	1.2	126.915	99.64625
Sr 216.596	496.502	ppb	3.2069	0.6	1450.36	99.30037
Ti 334.941	504.986	ppb	2.1953	0.4	44797.5	100.99718
Tl 190.794	509.473	ppb	6.7328	1.3	120.445	101.89458
V 292.401	502.773	ppb	1.1922	0.2	5064.08	100.55470
Zn 206.200	1046.25	ppb	4.9919	0.5	577.015	104.62456

Cont Calib Blank (CCB) 4/20/2019, 5:04:17 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1634u	0.3222	1.2653
Al 308.215	11.1025	10.5336	12.1791
As 188.980	-1.4345u	0.1367	1.7845
B 249.678	12.3541	10.2593	9.5062
Ba 389.178	-3.1497u	-2.0672u	-0.4409u
Be 313.042	0.1198	0.0953	0.0555
Ca 370.602	1.284	-1.020u	6.399
Cd 226.502	0.5389	0.1379	0.1070
Co 228.615	-1.2339u	-0.0056u	-0.2105u
Cr 267.716	-0.9939u	0.2261	-0.0175u
Cu 324.754	0.2568	-0.2974u	0.4843
Fe 271.441	21.0497	13.4573	19.7043
K 766.491	1.5944	0.1117	1.7910
Mg 279.078	15.7238	5.6411	8.7937
Mn 257.610	0.3321	0.4475	0.1756
Mo 202.032	0.4410	0.1792	-0.7253u

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Label	Replicates Concentration		
Na 330.237	158.771	290.908	116.967
Ni 231.604	-1.7368u	-0.4852u	2.1224
Pb 220.353	-1.8107u	1.4879	6.0961
Sb 206.834	1.5290	3.5796	10.2170
Se 196.026	-13.3518u	-0.1624u	9.0946
Si 288.158	10.0820	11.8498	10.9977
Sn 189.925	-3.2964u	-3.8758u	-3.5917u
Sr 216.596	0.4494	-0.0135u	0.0479
Ti 334.941	0.4384	0.3683	0.3184
Tl 190.794	-6.8376u	-28.1248u	-3.1502u
V 292.401	0.4800	0.7708	0.5079
Zn 206.200	0.5861	-2.4795u	2.7448

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.4747	ppb	0.7265	153.0	-26.3067	0.47466
Al 308.215	11.2718	ppb	0.8357	7.4	229.182	11.27176
As 188.980	0.1623	ppb	1.6096	992.0	0.7496	0.16226
B 249.678	10.7065	ppb	1.4757	13.8	67.5161	10.70654
Ba 389.178	-1.8859	ppb	1.3635	72.3	-48.4810	-1.88593
Be 313.042	0.0902	ppb	0.0325	36.0	-254.028	0.09020
Ca 370.602	2.221	ppb	3.798	171.0	28.79	2.22112
Cd 226.502	0.2613	ppb	0.2409	92.2	7.3274	0.26127
Co 228.615	-0.4833	ppb	0.6580	136.1	-14.2759	-0.48332
Cr 267.716	-0.2618	ppb	0.6456	246.6	9.1773	-0.26177
Cu 324.754	0.1479	ppb	0.4021	271.8	440.554	0.14790
Fe 271.441	18.0704	ppb	4.0513	22.4	27.2132	18.07043
K 766.491	1.1657	ppb	0.9181	78.8	340.311	1.16571
Mg 279.078	10.0529	ppb	5.1579	51.3	35.1340	10.05288
Mn 257.610	0.3184	ppb	0.1365	42.9	53.0056	0.31843
Mo 202.032	-0.0350	ppb	0.6119	1748.2	3.9447	-0.03500
Na 330.237	188.882	ppb	90.7959	48.1	42.6750	188.88184
Ni 231.604	-0.0332	ppb	1.9689	5928.5	-1.8081	-0.03321
Pb 220.353	1.9244	ppb	3.9714	206.4	1.5847	1.92443
Sb 206.834	5.1085	ppb	4.5414	88.9	7.7668	5.10855
Se 196.026	-1.4732	ppb	11.2805	765.7	2.4440	-1.47321
Si 288.158	10.9765	ppb	0.8841	8.1	586.735	10.97648
Sn 189.925	-3.5880	ppb	0.2897	8.1	0.0866	-3.58798
Sr 216.596	0.1613	ppb	0.2514	155.9	7.6463	0.16128
Ti 334.941	0.3750	ppb	0.0603	16.1	7.9287	0.37502
Tl 190.794	-12.7042	ppb	13.4813	106.1	-4.4618	-12.70418Z
V 292.401	0.5862	ppb	0.1604	27.4	-6.7636	0.58622
Zn 206.200	0.2838	ppb	2.6252	925.1	0.0514	0.28379

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Rack 4, Tube 51

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6017u	-0.9893u	-0.2077u
Al 308.215	58219.8	58099.2	58203.3
As 188.980	14.9150	14.8781	7.8570
B 249.678	10.5580u	11.5078u	11.3415u
Ba 389.178	202.142	198.895	205.062
Be 313.042	1.1374	1.1368	1.1624
Ca 370.602	79131	79042	79084

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Label	Replicates Concentration		
Cd 226.502	0.6382	1.2473	0.7275
Co 228.615	7.0657	7.7806	5.6154
Cr 267.716	93.7997	93.7808	94.3195
Cu 324.754	31.8975	32.2523	31.8113
Fe 271.441	82737.4	82805.0	82782.4
K 766.491	1561.54	1558.14	1559.22
Mg 279.078	2651.40	2642.70	2645.46
Mn 257.610	720.659	719.898	720.823
Mo 202.032	6.2264	3.1290	5.2215
Na 330.237	1757.82	2233.18	2054.69
Ni 231.604	20.7837	16.0646	17.7898
Pb 220.353	83.7341	87.6633	88.8702
Sb 206.834	9.5137	-7.1351u	-5.2319u
Se 196.026	-10.4549u	-10.0680u	6.0685
Si 288.158	5280.81	5278.81	5290.85
Sn 189.925	21.2257	1.6084	19.9248
Sr 216.596	80.5617	79.5369	79.6231
Ti 334.941	506.273	507.152	506.993
Tl 190.794	-13.8400u	-6.8988u	-5.9070u
V 292.401	188.407	188.101	187.671
Zn 206.200	92.7746	95.4977	98.7322

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5995	ppb	0.3908	65.2	-72.9992
Al 308.215	58174.1	ppb	65.3716	0.1	114010
As 188.980	12.5500	ppb	4.0643	32.4	3.8347
B 249.678	11.1357	ppb	0.5072	4.6	-13.5271
Ba 389.178	202.033	ppb	3.0848	1.5	1271.82
Be 313.042	1.1456	ppb	0.0146	1.3	614.954
Ca 370.602	79086	ppb	44.09	0.1	132134
Cd 226.502	0.8710	ppb	0.3289	37.8	143.495
Co 228.615	6.8205	ppb	1.1032	16.2	16.5759
Cr 267.716	93.9667	ppb	0.3057	0.3	1593.55
Cu 324.754	31.9870	ppb	0.2337	0.7	1418.66
Fe 271.441	82774.9	ppb	34.4333	0.0	45838.8
K 766.491	1559.63	ppb	1.7396	0.1	32431.2
Mg 279.078	2646.52	ppb	4.4444	0.2	3542.46
Mn 257.610	720.460	ppb	0.4936	0.1	59822.8
Mo 202.032	4.8590	ppb	1.5802	32.5	11.2123
Na 330.237	2015.23	ppb	240.123	11.9	83.3161
Ni 231.604	18.2127	ppb	2.3878	13.1	18.6634
Pb 220.353	86.7559	ppb	2.6856	3.1	30.7313
Sb 206.834	-0.9511	ppb	9.1126	958.1	7.1357
Se 196.026	-4.8181	ppb	9.4301	195.7	2.2183
Si 288.158	5283.49	ppb	6.4505	0.1	25219.8
Sn 189.925	14.2530	ppb	10.9698	77.0	4.5957
Sr 216.596	79.9072	ppb	0.5684	0.7	249.793
Ti 334.941	506.806	ppb	0.4685	0.1	44939.5
Tl 190.794	-8.8819	ppb	4.3223	48.7	-7.0323
V 292.401	188.060	ppb	0.3696	0.2	1906.79
Zn 206.200	95.6682	ppb	2.9824	3.1	52.8166

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3865u	-0.2334u	0.0078u
Al 308.215	114313	114113	114049
As 188.980	11.0022	14.9907	14.5108
B 249.678	56.8661	56.2585	57.2437
Ba 389.178	252.329	249.677	251.005
Be 313.042	1.0776	1.0580	1.0639
Ca 370.602	2134	2147	2128
Cd 226.502	0.0997	-0.1668	-0.0381
Co 228.615	6.0804	4.8893	7.0365
Cr 267.716	106.739	107.232	106.851
Cu 324.754	63.8024	64.0665	62.6274
Fe 271.441	64403.1	63932.7	64026.4
K 766.491	1399.75	1391.32	1396.14
Mg 279.078	1829.10	1816.17	1822.75
Mn 257.610	192.562	192.091	192.080
Mo 202.032	3.1276	4.1971	3.0755
Na 330.237	446.028	48.3849u	742.816
Ni 231.604	29.5674	28.3692	30.1997
Pb 220.353	52.6839	38.2886	43.0949
Sb 206.834	-17.3361u	-9.9162u	3.8743
Se 196.026	-18.8035u	-4.0395u	0.1273
Si 288.158	6315.08	6281.23	6295.77
Sn 189.925	11.4754	11.4418	11.9194
Sr 216.596	18.8440	17.3703	21.9009
Ti 334.941	572.232	571.115	571.996
Tl 190.794	-11.0303u	-33.2423u	-0.3842u
V 292.401	181.926	180.304	180.333
Zn 206.200	80.3594	84.7955	79.0633

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2041	ppb	0.1988	97.4	-58.3609
Al 308.215	114158	ppb	137.546	0.1	223521
As 188.980	13.5012	ppb	2.1775	16.1	4.1369
B 249.678	56.7894	ppb	0.4970	0.9	317.815
Ba 389.178	251.004	ppb	1.3257	0.5	1570.87
Be 313.042	1.0665	ppb	0.0101	0.9	542.110
Ca 370.602	2136	ppb	9.745	0.5	3507
Cd 226.502	-0.0351	ppb	0.1333	379.7	105.686
Co 228.615	6.0020	ppb	1.0757	17.9	14.2759
Cr 267.716	106.941	ppb	0.2586	0.2	1808.51
Cu 324.754	63.4988	ppb	0.7661	1.2	2369.86
Fe 271.441	64120.7	ppb	248.977	0.4	35512.6
K 766.491	1395.74	ppb	4.2305	0.3	29098.8
Mg 279.078	1822.68	ppb	6.4655	0.4	2435.40
Mn 257.610	192.244	ppb	0.2750	0.1	16021.0
Mo 202.032	3.4668	ppb	0.6331	18.3	9.0794
Na 330.237	412.410	ppb	348.434	84.5	40.2719
Ni 231.604	29.3788	ppb	0.9297	3.2	31.2000
Pb 220.353	44.6891	ppb	7.3288	16.4	15.2189
Sb 206.834	-7.7926	ppb	10.7635	138.1	4.4501
Se 196.026	-7.5719	ppb	9.9475	131.4	1.5738
Si 288.158	6297.36	ppb	16.9811	0.3	29954.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	11.6122	ppb	0.2666	2.3	3.9282
Sr 216.596	19.3717	ppb	2.3109	11.9	70.9248
Ti 334.941	571.781	ppb	0.5891	0.1	50701.9
Tl 190.794	-14.8856	ppb	16.7649	112.6	-7.7562
V 292.401	180.855	ppb	0.9281	0.5	1832.27
Zn 206.200	81.4060	ppb	3.0060	3.7	44.8985

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6297u	-0.5438u	-1.0859u
Al 308.215	87415.7	87911.3	87217.3
As 188.980	31.9090	30.5019	32.3926
B 249.678	13.5794u	13.8949u	13.3012u
Ba 389.178	106.639	105.553	102.665
Be 313.042	1.6441	1.6578	1.6665
Ca 370.602	42505	42854	42553
Cd 226.502	0.9965	1.2749	1.7041
Co 228.615	10.2522	8.6585	10.1090
Cr 267.716	88.6511	90.0624	89.4781
Cu 324.754	125.108	122.945	121.545
Fe 271.441	175091	176277	174228
K 766.491	1494.64	1496.34	1483.10
Mg 279.078	1640.67	1655.70	1644.26
Mn 257.610	552.095	555.567	551.665
Mo 202.032	6.7229	5.3619	6.5936
Na 330.237	933.053	670.009	761.458
Ni 231.604	19.4127	18.9005	21.3580
Pb 220.353	95.0616	98.8175	81.7891
Sb 206.834	-6.1189	-0.4641	-8.6930u
Se 196.026	-0.1388	1.0227	-0.0549
Si 288.158	7047.64	7086.51	7017.33
Sn 189.925	21.3095	20.9923	12.5299
Sr 216.596	65.8889	68.3675	66.8222
Ti 334.941	781.833	785.432	778.537
Tl 190.794	9.1328u	9.7785u	-1.3722u
V 292.401	266.620	267.930	265.186
Zn 206.200	133.313	124.873	126.245

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7531	ppb	0.2913	38.7	-94.5114
Al 308.215	87514.8	ppb	357.438	0.4	171409
As 188.980	31.6012	ppb	0.9822	3.1	8.6815
B 249.678	13.5918	ppb	0.2970	2.2	-89.7361
Ba 389.178	104.953	ppb	2.0540	2.0	699.470
Be 313.042	1.6562	ppb	0.0113	0.7	1023.68
Ca 370.602	42637	ppb	189.2	0.4	71049
Cd 226.502	1.3252	ppb	0.3564	26.9	290.181
Co 228.615	9.6732	ppb	0.8817	9.1	27.8096
Cr 267.716	89.3972	ppb	0.7091	0.8	1524.53
Cu 324.754	123.199	ppb	1.7951	1.5	4197.37
Fe 271.441	175199	ppb	1028.87	0.6	97000.9
K 766.491	1491.36	ppb	7.2054	0.5	31063.2

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1646.88	ppb	7.8465	0.5	2201.69
Mn 257.610	553.109	ppb	2.1396	0.4	46010.3
Mo 202.032	6.2261	ppb	0.7512	12.1	12.4429
Na 330.237	788.174	ppb	133.542	16.9	43.9002
Ni 231.604	19.8904	ppb	1.2965	6.5	20.5473
Pb 220.353	91.8894	ppb	8.9464	9.7	29.4720
Sb 206.834	-5.0920	ppb	4.2095	82.7	6.9437
Se 196.026	0.2764	ppb	0.6478	234.4	3.5363
Si 288.158	7050.49	ppb	34.6762	0.5	33479.6
Sn 189.925	18.2773	ppb	4.9799	27.2	5.6126
Sr 216.596	67.0262	ppb	1.2518	1.9	222.695
Ti 334.941	781.934	ppb	3.4486	0.4	69342.9
Tl 190.794	5.8464	ppb	6.2598	107.1	-7.6120
V 292.401	266.578	ppb	1.3722	0.5	2712.86
Zn 206.200	128.144	ppb	4.5288	3.5	70.9395

X (Samp) **4/20/2019, 5:21:15 AM** **Rack 4, Tube 54**
 Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	11.2698	10.6895	9.6688
Al 308.215	222.747	220.875	224.322
As 188.980	28.3798	16.4344	13.5890
B 249.678	103.175	105.621	105.367
Ba 389.178	8.7324	9.4147	10.4429
Be 313.042	4.4245	4.4266	4.4338
Ca 370.602	527.5	536.5	511.8
Cd 226.502	5.5685	4.8227	4.8725
Co 228.615	9.6137	10.7788	11.4345
Cr 267.716	10.3437	10.5616	10.6040
Cu 324.754	20.9934	21.4021	20.8486
Fe 271.441	57.7206	79.7289	61.7929
K 766.491	947.334	950.075	950.245
Mg 279.078	534.998	544.568	538.962
Mn 257.610	10.8546	10.7287	10.7080
Mo 202.032	10.8825	9.7395	11.1369
Na 330.237	1095.91	995.185	1187.33
Ni 231.604	39.3270	39.8380	41.2435
Pb 220.353	9.1986	13.5806	6.1532
Sb 206.834	9.0375	15.9575	22.5341
Se 196.026	17.2533	18.7247	16.4561
Si 288.158	26.2783	25.3716	22.5749
Sn 189.925	59.3436	34.0378	48.4590
Sr 216.596	10.7347	11.4438	11.5018
Ti 334.941	10.6928	10.7218	10.7657
Tl 190.794	8.1331	32.0813	28.6521
V 292.401	10.2364	9.9689	10.1452
Zn 206.200	18.9597	20.6976	21.2696

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.5427	ppb	0.8105	7.7	279.490
Al 308.215	222.648	ppb	1.7260	0.8	643.023
As 188.980	19.4678	ppb	7.8481	40.3	5.9025
B 249.678	104.721	ppb	1.3450	1.3	710.971

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	9.5300	ppb	0.8610	9.0	23.9192
Be 313.042	4.4283	ppb	0.0049	0.1	3245.31
Ca 370.602	525.3	ppb	12.53	2.4	903.6
Cd 226.502	5.0879	ppb	0.4170	8.2	69.3755
Co 228.615	10.6090	ppb	0.9222	8.7	29.6482
Cr 267.716	10.5031	ppb	0.1397	1.3	189.271
Cu 324.754	21.0814	ppb	0.2871	1.4	1074.77
Fe 271.441	66.4141	ppb	11.7093	17.6	54.4170
K 766.491	949.218	ppb	1.6338	0.2	19694.6
Mg 279.078	539.509	ppb	4.8083	0.9	743.034
Mn 257.610	10.7638	ppb	0.0793	0.7	921.067
Mo 202.032	10.5863	ppb	0.7443	7.0	21.8678
Na 330.237	1092.81	ppb	96.1085	8.8	66.7725
Ni 231.604	40.1362	ppb	0.9924	2.5	43.2465
Pb 220.353	9.6442	ppb	3.7337	38.7	4.5009
Sb 206.834	15.8430	ppb	6.7490	42.6	11.7953
Se 196.026	17.4780	ppb	1.1509	6.6	6.0177
Si 288.158	24.7416	ppb	1.9304	7.8	657.104
Sn 189.925	47.2802	ppb	12.6940	26.8	12.9428
Sr 216.596	11.2268	ppb	0.4271	3.8	39.6620
Ti 334.941	10.7268	ppb	0.0367	0.3	927.577
Tl 190.794	22.9555	ppb	12.9506	56.4	4.0820
V 292.401	10.1168	ppb	0.1360	1.3	89.3366
Zn 206.200	20.3090	ppb	1.2029	5.9	11.0967

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	510.901	512.884	512.447
Al 308.215	10266.4	10282.3	10304.8
As 188.980	504.667	503.111	516.767
B 249.678	525.047	527.374	532.254
Ba 389.178	489.154	482.533	490.708
Be 313.042	541.461	541.329	543.849
Ca 370.602	10181	10180	10233
Cd 226.502	507.872	506.795	509.496
Co 228.615	512.411	508.187	513.149
Cr 267.716	504.023	506.275	506.659
Cu 324.754	504.775	503.598	503.338
Fe 271.441	10368.5	10336.3	10364.6
K 766.491	9961.31	9968.41	10004.2
Mg 279.078	10397.8	10386.7	10434.0
Mn 257.610	506.709	506.524	508.522
Mo 202.032	500.586	503.012	505.424
Na 330.237	10887.8	10368.0	10693.6
Ni 231.604	507.613	507.077	512.140
Pb 220.353	499.395	508.024	503.492
Sb 206.834	492.323	497.566	493.776
Se 196.026	515.433	522.122	532.483
Si 288.158	5208.28	5204.09	5221.57
Sn 189.925	517.229	507.911	505.785
Sr 216.596	499.290	502.697	500.485
Ti 334.941	507.201	506.596	510.648

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Label	Replicates Concentration		
Tl 190.794	509.085	498.202	508.324
V 292.401	506.354	506.305	506.643
Zn 206.200	1054.11	1053.33	1061.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	512.077	ppb	1.0416	0.2	15511.4	102.41547
Al 308.215	10284.5	ppb	19.2927	0.2	20343.5	102.84508
As 188.980	508.182	ppb	7.4758	1.5	136.288	101.63634
B 249.678	528.225	ppb	3.6780	0.7	3599.29	105.64497
Ba 389.178	487.465	ppb	4.3409	0.9	3044.95	97.49296
Be 313.042	542.213	ppb	1.4184	0.3	437090	108.44263
Ca 370.602	10198	ppb	30.43	0.3	17078	101.97824
Cd 226.502	508.054	ppb	1.3598	0.3	6541.69	101.61084
Co 228.615	511.249	ppb	2.6777	0.5	2012.68	102.24980
Cr 267.716	505.652	ppb	1.4242	0.3	8473.36	101.13046
Cu 324.754	503.904	ppb	0.7661	0.2	15706.5	100.78074
Fe 271.441	10356.5	ppb	17.5481	0.2	5770.79	103.51295
K 766.491	9977.97	ppb	22.9758	0.2	203061	99.77966
Mg 279.078	10406.2	ppb	24.7274	0.2	13930.8	104.06174
Mn 257.610	507.251	ppb	1.1042	0.2	42130.0	101.45029
Mo 202.032	503.008	ppb	2.4191	0.5	852.712	100.60152
Na 330.237	10649.8	ppb	262.645	2.5	308.181	106.49838
Ni 231.604	508.943	ppb	2.7817	0.5	568.736	101.78865
Pb 220.353	503.637	ppb	4.3162	0.9	190.983	100.72743
Sb 206.834	494.555	ppb	2.7071	0.5	185.370	98.91099
Se 196.026	523.346	ppb	8.5908	1.6	101.468	104.66921
Si 288.158	5211.31	ppb	9.1286	0.2	24992.0	104.22621
Sn 189.925	510.309	ppb	6.0872	1.2	129.967	102.06172
Sr 216.596	500.824	ppb	1.7289	0.3	1462.98	100.16478
Ti 334.941	508.148	ppb	2.1861	0.4	45078.2	101.62965
Tl 190.794	505.204	ppb	6.0757	1.2	119.423	101.04077
V 292.401	506.434	ppb	0.1829	0.0	5101.34	101.28681
Zn 206.200	1056.35	ppb	4.5712	0.4	582.589	105.63481

Cont Calib Blank (CCB) 4/20/2019, 5:29:43 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4642u	-0.7812u	0.5499
Al 308.215	11.0537	15.3740	3.1404
As 188.980	-1.6658u	0.9055	2.3655
B 249.678	12.4639	11.9013	9.6130
Ba 389.178	2.7144	0.8403	-3.3684u
Be 313.042	0.1099	0.0801	0.0669
Ca 370.602	14.32	2.581	3.091
Cd 226.502	0.0295	-0.1617u	0.1259
Co 228.615	0.2948	1.4069	0.2214
Cr 267.716	-0.0587u	0.3027	0.7999
Cu 324.754	-0.3759u	0.2838	1.6546
Fe 271.441	18.7501	26.6115	0.6735
K 766.491	2.2534	0.5603	0.6262
Mg 279.078	13.2147	9.1209	14.9331
Mn 257.610	0.3542	0.2603	0.3184
Mo 202.032	0.1728	2.6028	-0.0721u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	101.319	163.548	182.854
Ni 231.604	-2.8479u	2.6286	-1.9590u
Pb 220.353	11.2105	0.2105	-0.6402u
Sb 206.834	-2.4045u	-4.6359u	15.4125
Se 196.026	13.1426	3.6800	-2.9396u
Si 288.158	12.5143	12.5176	8.8438
Sn 189.925	-5.1333u	-13.1159u	2.9699
Sr 216.596	-1.0293u	-1.0602u	-0.1482u
Ti 334.941	0.3351	0.2800	0.4323
Tl 190.794	-2.7763u	-24.1049u	-9.1072u
V 292.401	0.9417	0.1936	0.9027
Zn 206.200	3.3077	-0.8856u	-1.7116u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2318	ppb	0.6953	299.9	-47.7648	-0.23185
Al 308.215	9.8560	ppb	6.2042	62.9	226.432	9.85604
As 188.980	0.5351	ppb	2.0410	381.5	0.8490	0.53506
B 249.678	11.3261	ppb	1.5100	13.3	71.7569	11.32608
Ba 389.178	0.0621	ppb	3.1152	5016.2	-36.2329	0.06210
Be 313.042	0.0856	ppb	0.0220	25.7	-257.802	0.08563
Ca 370.602	6.665	ppb	6.637	99.6	36.22	6.66495
Cd 226.502	-0.0021	ppb	0.1464	6993.5	3.9467	-0.00209
Co 228.615	0.6410	ppb	0.6643	103.6	-9.8325	0.64103
Cr 267.716	0.3480	ppb	0.4311	123.9	19.3772	0.34799
Cu 324.754	0.5208	ppb	1.0358	198.9	451.870	0.52080
Fe 271.441	15.3450	ppb	13.3000	86.7	25.7410	15.34500
K 766.491	1.1466	ppb	0.9590	83.6	350.667	1.14661
Mg 279.078	12.4229	ppb	2.9859	24.0	38.3031	12.42287
Mn 257.610	0.3110	ppb	0.0474	15.2	52.3831	0.31096
Mo 202.032	0.9012	ppb	1.4787	164.1	5.5246	0.90118
Na 330.237	149.240	ppb	42.6088	28.6	41.5833	149.24033
Ni 231.604	-0.7261	ppb	2.9391	404.8	-2.5864	-0.72610
Pb 220.353	3.5936	ppb	6.6102	183.9	2.2163	3.59360
Sb 206.834	2.7907	ppb	10.9876	393.7	6.9389	2.79070
Se 196.026	4.6277	ppb	8.0829	174.7	3.5941	4.62768
Si 288.158	11.2919	ppb	2.1201	18.8	588.542	11.29191
Sn 189.925	-5.0931	ppb	8.0430	157.9	-0.2938	-5.09308
Sr 216.596	-0.7459	ppb	0.5179	69.4	4.9878	-0.74587
Ti 334.941	0.3491	ppb	0.0771	22.1	5.6294	0.34913
Tl 190.794	-11.9961	ppb	10.9538	91.3	-4.2921	-11.99612
V 292.401	0.6793	ppb	0.4211	62.0	-5.9130	0.67933
Zn 206.200	0.2368	ppb	2.6913	1136.3	0.0253	0.23684

mb 680-566987/1-a (Samp) 4/20/2019, 5:33:53 AM Rack 1, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4440u	0.1015	-0.0343u
Al 308.215	5.3034	10.6324	4.6988
As 188.980	-0.0332u	7.2547	-0.8867u
B 249.678	2.1403	0.9813	1.2301
Ba 389.178	1.5675	-0.1565u	-1.4750u
Be 313.042	-0.0872u	-0.0823u	-0.0863u
Ca 370.602	-5.685u	2.445	-0.6500u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.0256	-0.4175u	-0.1356u
Co 228.615	0.0324	-0.9215u	-0.4263u
Cr 267.716	0.0388	0.1392	-0.2935u
Cu 324.754	0.0549	-0.4227u	0.4232
Fe 271.441	-1.1656u	2.0388	-7.0772u
K 766.491	1.5205	2.2929	1.6438
Mg 279.078	3.1034	3.5412	5.6599
Mn 257.610	0.0985	0.0705	0.0737
Mo 202.032	-0.0480u	0.5360	0.9416
Na 330.237	158.919	-100.787u	335.522
Ni 231.604	-2.0473u	-3.1133u	0.8606
Pb 220.353	-3.4332u	-12.7671u	-0.2725u
Sb 206.834	1.0411	0.2811	-2.1031u
Se 196.026	1.0507	1.3780	6.6071
Si 288.158	1.4191	1.4649	3.2713
Sn 189.925	-4.6187u	-8.6874u	1.0311
Sr 216.596	-0.1747u	-0.5952u	0.1349
Ti 334.941	-0.2319u	-0.1619u	-0.0482u
Tl 190.794	-6.0581u	-12.9765u	-14.5275u
V 292.401	0.5037	0.0183	0.0989
Zn 206.200	-1.6750u	-0.5886u	-3.1349u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1256	ppb	0.2840	226.1	-44.5405
Al 308.215	6.8782	ppb	3.2652	47.5	220.591
As 188.980	2.1116	ppb	4.4745	211.9	1.2701
B 249.678	1.4506	ppb	0.6102	42.1	4.1771
Ba 389.178	-0.0213	ppb	1.5257	7153.6	-36.7723
Be 313.042	-0.0853	ppb	0.0026	3.1	-395.641
Ca 370.602	-1.297	ppb	4.103	316.5	22.92
Cd 226.502	-0.1758	ppb	0.2243	127.6	1.6915
Co 228.615	-0.4385	ppb	0.4771	108.8	-14.1074
Cr 267.716	-0.0385	ppb	0.2264	588.4	12.9111
Cu 324.754	0.0185	ppb	0.4242	2295.1	436.646
Fe 271.441	-2.0680	ppb	4.6245	223.6	16.0694
K 766.491	1.8191	ppb	0.4150	22.8	337.972
Mg 279.078	4.1015	ppb	1.3673	33.3	27.1784
Mn 257.610	0.0809	ppb	0.0153	18.9	33.2666
Mo 202.032	0.4765	ppb	0.4975	104.4	4.8082
Na 330.237	131.218	ppb	219.470	167.3	41.1397
Ni 231.604	-1.4333	ppb	2.0569	143.5	-3.3790
Pb 220.353	-5.4910	ppb	6.4965	118.3	-1.2230
Sb 206.834	-0.2603	ppb	1.6406	630.2	5.9011
Se 196.026	3.0120	ppb	3.1178	103.5	3.2894
Si 288.158	2.0518	ppb	1.0564	51.5	544.531
Sn 189.925	-4.0917	ppb	4.8807	119.3	-0.0407
Sr 216.596	-0.2117	ppb	0.3665	173.1	6.5535
Ti 334.941	-0.1473	ppb	0.0927	62.9	-38.4272
Tl 190.794	-11.1874	ppb	4.5093	40.3	-4.0981
V 292.401	0.2069	ppb	0.2601	125.7	-10.6870
Zn 206.200	-1.7995	ppb	1.2777	71.0	-1.0983

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

ics 680-566987/2-a (Samp) 4/20/2019, 5:38:03 AM Rack 1, Tube 2
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	21.6753	23.1228	22.2539
Al 308.215	2136.39	2189.48	2162.48
As 188.980	39.0444	40.5260	38.2640
B 249.678	84.7107	87.2741	87.0944
Ba 389.178	40.2909	40.1631	41.5150
Be 313.042	22.5303	22.9529	22.8114
Ca 370.602	2126	2171	2144
Cd 226.502	22.0573	22.6038	21.9594
Co 228.615	21.3450	22.0118	23.1264
Cr 267.716	43.2114	44.0435	42.3877
Cu 324.754	41.3064	43.6603	43.9703
Fe 271.441	2149.49	2199.28	2217.45
K 766.491	3588.58	3671.25	3636.01
Mg 279.078	2154.41	2207.05	2174.06
Mn 257.610	171.740	175.075	173.152
Mo 202.032	39.9667	42.4274	41.4219
Na 330.237	2571.47	2187.22	2597.73
Ni 231.604	42.7689	45.0446	41.1868
Pb 220.353	214.709	226.421	214.618
Sb 206.834	17.4745	25.7455	14.6755
Se 196.026	20.1870	27.7765	56.3378
Si 288.158	-2.3975	-0.6661	-1.8988
Sn 189.925	37.1214	38.8953	33.0839
Sr 216.596	42.0768	43.3549	43.0359
Ti 334.941	168.289	171.896	170.265
Tl 190.794	2.6886	17.4330	9.1285
V 292.401	41.7244	43.1827	43.4777
Zn 206.200	45.6828	41.2766	45.3266

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	22.3506	ppb	0.7286	3.3	637.837
Al 308.215	2162.78	ppb	26.5428	1.2	4439.42
As 188.980	39.2781	ppb	1.1490	2.9	11.1815
B 249.678	86.3597	ppb	1.4310	1.7	583.145
Ba 389.178	40.6563	ppb	0.7464	1.8	222.380
Be 313.042	22.7649	ppb	0.2151	0.9	18037.4
Ca 370.602	2147	ppb	22.72	1.1	3618
Cd 226.502	22.2068	ppb	0.3472	1.6	292.392
Co 228.615	22.1611	ppb	0.9000	4.1	76.3238
Cr 267.716	43.2142	ppb	0.8279	1.9	736.951
Cu 324.754	42.9790	ppb	1.4568	3.4	1738.74
Fe 271.441	2188.74	ppb	35.1873	1.6	1229.84
K 766.491	3631.95	ppb	41.4854	1.1	74955.8
Mg 279.078	2178.50	ppb	26.5974	1.2	2932.85
Mn 257.610	173.322	ppb	1.6742	1.0	14406.7
Mo 202.032	41.2720	ppb	1.2372	3.0	73.6253
Na 330.237	2452.14	ppb	229.803	9.4	101.724
Ni 231.604	43.0001	ppb	1.9393	4.5	46.4492
Pb 220.353	218.583	ppb	6.7883	3.1	83.5255
Sb 206.834	19.2985	ppb	5.7560	29.8	13.0903
Se 196.026	34.7671	ppb	19.0623	54.8	9.3009
Si 288.158	-1.6541	ppb	0.8913	53.9	544.383

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	36.3669	ppb	2.9783	8.2	10.1848
Sr 216.596	42.8225	ppb	0.6652	1.6	131.812
Ti 334.941	170.150	ppb	1.8064	1.1	15073.8
Tl 190.794	9.7500	ppb	7.3918	75.8	0.8661
V 292.401	42.7949	ppb	0.9388	2.2	420.046
Zn 206.200	44.0953	ppb	2.4476	5.6	24.2096

lles 680-566987/4-a (Samp) 4/20/2019, 5:42:13 AM Rack 1, Tube 3
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	11.3692	12.7268	10.8399
Al 308.215	222.440	230.357	231.215
As 188.980	23.2870	20.2680	15.2641
B 249.678	109.684	110.036	110.334
Ba 389.178	9.2837	9.8540	10.1791
Be 313.042	4.3810	4.4562	4.4135
Ca 370.602	537.6	545.6	533.6
Cd 226.502	5.7167	5.4671	5.4040
Co 228.615	9.3134	9.0636	10.3061
Cr 267.716	11.1299	10.6136	10.5274
Cu 324.754	22.0225	22.5380	20.8406
Fe 271.441	69.6462	75.5306	69.0770
K 766.491	1150.77	1168.03	1161.53
Mg 279.078	560.619	556.292	555.912
Mn 257.610	10.9755	11.1217	10.9043
Mo 202.032	13.7342	12.6815	11.4388
Na 330.237	1192.62	1085.18	1338.10
Ni 231.604	42.9022	44.4416	45.5834
Pb 220.353	3.8283	1.6331	10.5897
Sb 206.834	21.0533	18.1591	15.7761
Se 196.026	26.8616	2.5540	11.1747
Si 288.158	10.2513	13.1779	12.3319
Sn 189.925	42.3366	53.3499	46.2106
Sr 216.596	10.4040	10.9618	10.3601
Ti 334.941	10.8135	11.0444	10.8773
Tl 190.794	22.7148	21.8122	21.2656
V 292.401	21.4325	20.3371	21.7216
Zn 206.200	21.6990	22.0749	22.7177

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	11.6453	ppb	0.9733	8.4	312.996
Al 308.215	228.004	ppb	4.8375	2.1	653.807
As 188.980	19.6064	ppb	4.0521	20.7	5.9393
B 249.678	110.018	ppb	0.3255	0.3	747.234
Ba 389.178	9.7723	ppb	0.4532	4.6	25.4686
Be 313.042	4.4169	ppb	0.0377	0.9	3236.19
Ca 370.602	538.9	ppb	6.114	1.1	926.5
Cd 226.502	5.5293	ppb	0.1654	3.0	75.0339
Co 228.615	9.5610	ppb	0.6572	6.9	25.4782
Cr 267.716	10.7570	ppb	0.3259	3.0	193.500
Cu 324.754	21.8004	ppb	0.8703	4.0	1096.51
Fe 271.441	71.4179	ppb	3.5730	5.0	57.2115
K 766.491	1160.11	ppb	8.7143	0.8	24033.9

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	557.608	ppb	2.6149	0.5	767.234
Mn 257.610	11.0005	ppb	0.1108	1.0	940.757
Mo 202.032	12.6182	ppb	1.1490	9.1	25.2951
Na 330.237	1205.30	ppb	126.935	10.5	69.7978
Ni 231.604	44.3091	ppb	1.3455	3.0	47.9287
Pb 220.353	5.3504	ppb	4.6682	87.3	2.8748
Sb 206.834	18.3295	ppb	2.6428	14.4	12.6723
Se 196.026	13.5301	ppb	12.3238	91.1	5.2735
Si 288.158	11.9204	ppb	1.5061	12.6	597.853
Sn 189.925	47.2991	ppb	5.5867	11.8	12.9476
Sr 216.596	10.5753	ppb	0.3355	3.2	37.7245
Ti 334.941	10.9117	ppb	0.1192	1.1	944.029
Tl 190.794	21.9308	ppb	0.7319	3.3	3.8392
V 292.401	21.1637	ppb	0.7303	3.5	201.666
Zn 206.200	22.1639	ppb	0.5152	2.3	12.1201

680-167721-ac-2-d (Samp)

4/20/2019, 5:46:24 AM

Rack 1, Tube 4

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3207	-0.2778u	-0.2705u
Al 308.215	261.371	253.289	252.162
As 188.980	14.9731	0.4192	3.7221
B 249.678	16.9042	17.3042	15.6812
Ba 389.178	3.8808	0.9094	-1.9433u
Be 313.042	-0.1115u	-0.1167u	-0.0832u
Ca 370.602	8795	8839	8756
Cd 226.502	0.4280	0.9229	0.8842
Co 228.615	0.2932	-0.1461u	-0.4851u
Cr 267.716	0.4005	0.6792	0.3182
Cu 324.754	1.1754	1.5381	1.0715
Fe 271.441	50.9041	64.0738	44.4642
K 766.491	638.147	640.115	637.525
Mg 279.078	438.347	435.827	433.855
Mn 257.610	2.9186	2.8769	2.9643
Mo 202.032	0.9977	-0.0993u	0.0946
Na 330.237	6674.29	6183.82	6230.32
Ni 231.604	-0.3664u	-2.8632u	-0.1038u
Pb 220.353	-0.7576u	4.4254	-0.9669u
Sb 206.834	-0.8644u	-6.3998u	-7.3254u
Se 196.026	-6.7681u	6.1477	-8.1789u
Si 288.158	2459.67	2471.85	2461.58
Sn 189.925	-3.3278u	-7.8491u	-3.0903u
Sr 216.596	23.2436	24.6342	22.9009
Ti 334.941	0.2645	0.2141	0.2045
Tl 190.794	-12.1693u	-3.4615u	-8.7744u
V 292.401	2.7672	3.7763	2.8257
Zn 206.200	10.8604	12.4475	11.8078

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0759	ppb	0.3435	452.5	-43.1069
Al 308.215	255.607	ppb	5.0229	2.0	707.195
As 188.980	6.3715	ppb	7.6301	119.8	2.4075
B 249.678	16.6299	ppb	0.8456	5.1	108.023

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.9490	ppb	2.9123	306.9	-30.1733
Be 313.042	-0.1038	ppb	0.0180	17.4	-409.443
Ca 370.602	8796	ppb	41.70	0.5	14732
Cd 226.502	0.7450	ppb	0.2752	36.9	13.5953
Co 228.615	-0.1127	ppb	0.3902	346.3	-12.8097
Cr 267.716	0.4660	ppb	0.1892	40.6	21.3900
Cu 324.754	1.2617	ppb	0.2450	19.4	474.282
Fe 271.441	53.1474	ppb	9.9954	18.8	46.6614
K 766.491	638.596	ppb	1.3521	0.2	13424.2
Mg 279.078	436.010	ppb	2.2517	0.5	604.697
Mn 257.610	2.9199	ppb	0.0437	1.5	270.288
Mo 202.032	0.3310	ppb	0.5854	176.9	4.5615
Na 330.237	6362.81	ppb	270.750	4.3	209.391
Ni 231.604	-1.1111	ppb	1.5230	137.1	-3.0178
Pb 220.353	0.9003	ppb	3.0546	339.3	1.1949
Sb 206.834	-4.8632	ppb	3.4939	71.8	4.3127
Se 196.026	-2.9331	ppb	7.8958	269.2	2.1692
Si 288.158	2464.37	ppb	6.5496	0.3	12037.4
Sn 189.925	-4.7558	ppb	2.6815	56.4	-0.2080
Sr 216.596	23.5929	ppb	0.9179	3.9	76.0557
Ti 334.941	0.2277	ppb	0.0322	14.2	-4.1524
Tl 190.794	-8.1351	ppb	4.3890	54.0	-3.3678
V 292.401	3.1231	ppb	0.5665	18.1	19.0495
Zn 206.200	11.7052	ppb	0.7985	6.8	6.3544

680-167721-ac-2-e ms (Samp) 4/20/2019, 5:50:35 AM Rack 1, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	21.8720	21.5498	21.6933
Al 308.215	2373.53	2376.72	2383.68
As 188.980	36.2590	43.1060	31.2099
B 249.678	99.5960	99.9680	100.589
Ba 389.178	43.7311	45.4526	44.6447
Be 313.042	22.4928	22.3971	22.4534
Ca 370.602	11135	11067	11121
Cd 226.502	23.1110	22.5544	22.9544
Co 228.615	22.2224	20.3783	20.7482
Cr 267.716	42.3904	42.2617	42.9053
Cu 324.754	43.4769	43.3666	43.9366
Fe 271.441	2184.41	2198.88	2198.85
K 766.491	4181.08	4318.87	4212.44
Mg 279.078	2581.99	2568.67	2577.70
Mn 257.610	173.184	173.018	173.663
Mo 202.032	40.9906	42.0181	43.1230
Na 330.237	8930.09	9167.50	9200.38
Ni 231.604	43.6958	43.9212	39.6601
Pb 220.353	212.765	198.400	199.458
Sb 206.834	19.2203	24.2338	23.0607
Se 196.026	56.1784	19.3543	52.1831
Si 288.158	2530.05	2524.26	2540.47
Sn 189.925	35.1829	46.1521	45.0991
Sr 216.596	65.3757	65.1112	64.9993
Ti 334.941	166.914	166.502	167.324

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Label	Replicates Concentration		
Tl 190.794	16.3212	20.1891	11.6484
V 292.401	45.9254	46.8522	45.2618
Zn 206.200	61.4300	57.6830	57.4409

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	21.7051	ppb	0.1614	0.7	618.152
Al 308.215	2377.98	ppb	5.1896	0.2	4860.46
As 188.980	36.8583	ppb	5.9707	16.2	10.5354
B 249.678	100.051	ppb	0.5019	0.5	676.870
Ba 389.178	44.6095	ppb	0.8613	1.9	247.675
Be 313.042	22.4478	ppb	0.0481	0.2	17782.7
Ca 370.602	11108	ppb	35.89	0.3	18599
Cd 226.502	22.8733	ppb	0.2870	1.3	300.933
Co 228.615	21.1163	ppb	0.9756	4.6	72.1567
Cr 267.716	42.5191	ppb	0.3406	0.8	725.352
Cu 324.754	43.5934	ppb	0.3023	0.7	1757.33
Fe 271.441	2194.04	ppb	8.3445	0.4	1232.77
K 766.491	4237.46	ppb	72.2228	1.7	87404.8
Mg 279.078	2576.12	ppb	6.7978	0.3	3464.55
Mn 257.610	173.288	ppb	0.3347	0.2	14405.4
Mo 202.032	42.0439	ppb	1.0664	2.5	74.9275
Na 330.237	9099.33	ppb	147.481	1.6	281.221
Ni 231.604	42.4257	ppb	2.3977	5.7	45.8056
Pb 220.353	203.541	ppb	8.0056	3.9	77.8296
Sb 206.834	22.1716	ppb	2.6224	11.8	14.1155
Se 196.026	42.5719	ppb	20.2061	47.5	10.7721
Si 288.158	2531.59	ppb	8.2126	0.3	12367.8
Sn 189.925	42.1447	ppb	6.0520	14.4	11.6457
Sr 216.596	65.1621	ppb	0.1933	0.3	197.027
Ti 334.941	166.913	ppb	0.4111	0.2	14787.6
Tl 190.794	16.0529	ppb	4.2767	26.6	2.3765
V 292.401	46.0131	ppb	0.7989	1.7	452.781
Zn 206.200	58.8513	ppb	2.2365	3.8	32.3532

680-167721-ac-2-f ms (Samp) 4/20/2019, 5:54:46 AM Rack 1, Tube 6

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	22.2692	22.4444	22.7992
Al 308.215	2384.43	2398.44	2395.71
As 188.980	40.7333	45.3393	36.8216
B 249.678	102.117	103.248	104.371
Ba 389.178	45.0798	44.5513	47.6042
Be 313.042	22.6734	22.7693	22.7589
Ca 370.602	10942	10991	10966
Cd 226.502	22.7819	22.7233	22.0039
Co 228.615	23.4871	22.4449	22.8907
Cr 267.716	42.1641	42.6850	42.7777
Cu 324.754	42.9725	43.1388	42.3797
Fe 271.441	2246.35	2230.42	2225.42
K 766.491	4254.50	4279.83	4275.46
Mg 279.078	2645.47	2656.61	2656.95
Mn 257.610	174.758	175.832	175.392
Mo 202.032	41.1791	41.8794	43.2861

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Label	Replicates Concentration		
Na 330.237	10785.7	11332.8	11317.0
Ni 231.604	42.8441	43.2147	45.9748
Pb 220.353	204.532	220.353	210.761
Sb 206.834	12.4536	21.0610	18.0272
Se 196.026	56.4593	40.5448	47.0331
Si 288.158	2483.92	2498.72	2496.15
Sn 189.925	40.1944	47.5955	46.2708
Sr 216.596	67.0203	68.6174	68.3398
Ti 334.941	168.422	169.478	169.260
Tl 190.794	-4.9456u	2.1508	2.3727
V 292.401	45.4040	45.7030	45.7208
Zn 206.200	55.0991	57.6497	59.9640

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	22.5043	ppb	0.2700	1.2	642.425
Al 308.215	2392.86	ppb	7.4309	0.3	4889.57
As 188.980	40.9647	ppb	4.2636	10.4	11.6317
B 249.678	103.245	ppb	1.1269	1.1	698.696
Ba 389.178	45.7451	ppb	1.6316	3.6	254.912
Be 313.042	22.7339	ppb	0.0526	0.2	18013.3
Ca 370.602	10966	ppb	24.64	0.2	18362
Cd 226.502	22.5030	ppb	0.4333	1.9	296.232
Co 228.615	22.9409	ppb	0.5229	2.3	79.3965
Cr 267.716	42.5423	ppb	0.3308	0.8	725.759
Cu 324.754	42.8303	ppb	0.3990	0.9	1734.23
Fe 271.441	2234.07	ppb	10.9312	0.5	1254.97
K 766.491	4269.93	ppb	13.5400	0.3	88116.9
Mg 279.078	2653.01	ppb	6.5332	0.2	3567.35
Mn 257.610	175.327	ppb	0.5400	0.3	14574.8
Mo 202.032	42.1149	ppb	1.0730	2.5	75.0468
Na 330.237	11145.2	ppb	311.406	2.8	336.521
Ni 231.604	44.0112	ppb	1.7106	3.9	47.5830
Pb 220.353	211.882	ppb	7.9702	3.8	80.9864
Sb 206.834	17.1806	ppb	4.3657	25.4	12.3036
Se 196.026	48.0124	ppb	8.0023	16.7	11.7981
Si 288.158	2492.93	ppb	7.9123	0.3	12187.8
Sn 189.925	44.6869	ppb	3.9466	8.8	12.2884
Sr 216.596	67.9925	ppb	0.8533	1.3	205.281
Ti 334.941	169.053	ppb	0.5573	0.3	14977.6
Tl 190.794	-0.1407	ppb	4.1627	2958.8	-1.5025
V 292.401	45.6093	ppb	0.1780	0.4	448.632
Zn 206.200	57.5710	ppb	2.4334	4.2	31.6466

680-167738-c-1-d (Samp) 4/20/2019, 5:58:57 AM Rack 1, Tube 7
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2308	-0.0466u	-0.8445u
Al 308.215	16.1693	14.7128	19.3324
As 188.980	-0.2418u	0.1653	6.2040
B 249.678	16.5771	15.7432	16.6917
Ba 389.178	14.7968	13.7610	16.9581
Be 313.042	-0.0625u	-0.0770u	-0.0705u
Ca 370.602	23358	23263	23448

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Label	Replicates Concentration		
Cd 226.502	-0.0804u	0.4566	0.0496
Co 228.615	-2.3044u	1.2071	0.1004
Cr 267.716	0.9787	-0.1177u	0.0543
Cu 324.754	0.5876	1.3069	0.5701
Fe 271.441	19.7567	22.6168	40.0530
K 766.491	560.392	559.283	558.223
Mg 279.078	2234.42	2215.22	2229.25
Mn 257.610	5.1184	5.0252	4.9955
Mo 202.032	1.7077	-0.6561u	-0.6941u
Na 330.237	23387.3	23022.0	23798.3
Ni 231.604	2.0843	2.4975	0.7792
Pb 220.353	2.6639	-6.8600u	-7.7834u
Sb 206.834	-6.3155u	-8.7514u	-3.5486u
Se 196.026	-11.9750u	-2.7512u	-1.7309u
Si 288.158	942.612	935.895	940.631
Sn 189.925	-1.5812u	-6.9675u	-2.7996u
Sr 216.596	30.5366	29.0058	30.9327
Ti 334.941	0.5242	0.5586	0.3914
Tl 190.794	-7.6633u	-14.1133u	-3.2972u
V 292.401	-0.0171u	1.1352	0.4233
Zn 206.200	1.1572	1.3084	-2.9116u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2201	ppb	0.5582	253.6	-47.5218
Al 308.215	16.7381	ppb	2.3618	14.1	239.869
As 188.980	2.0425	ppb	3.6097	176.7	1.2516
B 249.678	16.3374	ppb	0.5177	3.2	106.044
Ba 389.178	15.1720	ppb	1.6312	10.8	61.2131
Be 313.042	-0.0700	ppb	0.0072	10.3	-380.832
Ca 370.602	23356	ppb	92.59	0.4	39075
Cd 226.502	0.1419	ppb	0.2802	197.4	5.7860
Co 228.615	-0.3323	ppb	1.7953	540.2	-13.6763
Cr 267.716	0.3051	ppb	0.5896	193.3	18.8006
Cu 324.754	0.8215	ppb	0.4204	51.2	460.961
Fe 271.441	27.4755	ppb	10.9859	40.0	32.4239
K 766.491	559.299	ppb	1.0848	0.2	11803.3
Mg 279.078	2226.30	ppb	9.9312	0.4	2998.89
Mn 257.610	5.0464	ppb	0.0642	1.3	453.263
Mo 202.032	0.1192	ppb	1.3758	1154.7	4.2047
Na 330.237	23402.5	ppb	388.382	1.7	670.041
Ni 231.604	1.7870	ppb	0.8969	50.2	0.2338
Pb 220.353	-3.9931	ppb	5.7836	144.8	-0.6565
Sb 206.834	-6.2052	ppb	2.6031	42.0	3.8253
Se 196.026	-5.4857	ppb	5.6430	102.9	1.6881
Si 288.158	939.713	ppb	3.4512	0.4	4921.55
Sn 189.925	-3.7828	ppb	2.8246	74.7	0.0396
Sr 216.596	30.1584	ppb	1.0176	3.4	95.2049
Ti 334.941	0.4914	ppb	0.0883	18.0	23.6115
Tl 190.794	-8.3579	ppb	5.4414	65.1	-3.4205
V 292.401	0.5138	ppb	0.5814	113.2	-7.5503
Zn 206.200	-0.1487	ppb	2.3940	1610.3	-0.1874

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167738-c-1-e ms (Samp) **4/20/2019, 6:03:09 AM** **Rack 1, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	22.5002	21.7009	22.3909
Al 308.215	2146.03	2144.70	2142.15
As 188.980	45.5727	43.1663	43.0918
B 249.678	102.231	102.489	102.526
Ba 389.178	62.1595	57.7844	59.5740
Be 313.042	22.6394	22.6332	22.5432
Ca 370.602	25720	25732	25619
Cd 226.502	21.5533	22.3122	21.5153
Co 228.615	20.4355	20.7171	22.4863
Cr 267.716	42.4561	42.2470	42.1670
Cu 324.754	42.4716	43.7666	43.1601
Fe 271.441	2164.78	2163.78	2182.34
K 766.491	4219.23	4265.29	4227.24
Mg 279.078	4398.90	4401.56	4386.80
Mn 257.610	176.295	176.523	176.490
Mo 202.032	42.1988	41.1601	44.2579
Na 330.237	25615.7	26279.4	25847.3
Ni 231.604	44.9301	43.3255	45.5254
Pb 220.353	217.357	221.062	214.634
Sb 206.834	14.3200	27.0774	12.7808
Se 196.026	30.3915	43.5715	29.2219
Si 288.158	916.562	924.121	920.095
Sn 189.925	35.1534	38.9769	32.3128
Sr 216.596	72.6455	68.8022	69.7058
Ti 334.941	168.892	168.755	168.396
Tl 190.794	10.2826	13.4557	3.0287
V 292.401	42.1655	41.7764	42.0745
Zn 206.200	43.2198	43.6297	46.4467

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	22.1973	ppb	0.4333	2.0	633.073
Al 308.215	2144.29	ppb	1.9747	0.1	4403.25
As 188.980	43.9436	ppb	1.4113	3.2	12.4273
B 249.678	102.416	ppb	0.1609	0.2	693.081
Ba 389.178	59.8393	ppb	2.1996	3.7	345.415
Be 313.042	22.6053	ppb	0.0538	0.2	17911.0
Ca 370.602	25690	ppb	62.10	0.2	42979
Cd 226.502	21.7936	ppb	0.4495	2.1	287.002
Co 228.615	21.2130	ppb	1.1117	5.2	72.5488
Cr 267.716	42.2900	ppb	0.1493	0.4	721.626
Cu 324.754	43.1328	ppb	0.6479	1.5	1743.41
Fe 271.441	2170.30	ppb	10.4405	0.5	1219.61
K 766.491	4237.25	ppb	24.6103	0.6	87415.9
Mg 279.078	4395.76	ppb	7.8669	0.2	5897.97
Mn 257.610	176.436	ppb	0.1228	0.1	14673.1
Mo 202.032	42.5389	ppb	1.5767	3.7	75.7638
Na 330.237	25914.1	ppb	336.839	1.3	735.835
Ni 231.604	44.5937	ppb	1.1379	2.6	48.2377
Pb 220.353	217.685	ppb	3.2266	1.5	83.1868
Sb 206.834	18.0594	ppb	7.8476	43.5	12.6492
Se 196.026	34.3949	ppb	7.9686	23.2	9.2309
Si 288.158	920.259	ppb	3.7825	0.4	4847.03

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	35.4810	ppb	3.3441	9.4	9.9632
Sr 216.596	70.3845	ppb	2.0095	2.9	212.249
Ti 334.941	168.681	ppb	0.2562	0.2	14948.8
Tl 190.794	8.9224	ppb	5.3449	59.9	0.6694
V 292.401	42.0054	ppb	0.2035	0.5	411.881
Zn 206.200	44.4321	ppb	1.7567	4.0	24.3957

680-167738-c-1-f msd (Samp) 4/20/2019, 6:07:21 AM Rack 1, Tube 9

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	21.3011	21.4787	22.0636
Al 308.215	2109.22	2108.61	2094.57
As 188.980	46.3076	38.9309	41.1161
B 249.678	101.823	100.779	99.6108
Ba 389.178	56.5907	55.2430	58.3330
Be 313.042	22.1703	22.0651	22.1053
Ca 370.602	23409	23286	23310
Cd 226.502	21.5054	21.3968	21.4883
Co 228.615	19.8590	20.5965	20.7697
Cr 267.716	41.7526	42.1267	41.7269
Cu 324.754	41.9543	41.0160	41.3677
Fe 271.441	2135.86	2113.90	2133.89
K 766.491	4217.84	4186.70	4204.10
Mg 279.078	4142.01	4120.23	4132.02
Mn 257.610	173.284	172.484	172.891
Mo 202.032	41.0379	40.5191	41.4386
Na 330.237	23698.3	23430.7	23794.4
Ni 231.604	42.7225	41.6124	43.3005
Pb 220.353	189.975	221.980	199.797
Sb 206.834	15.9759	19.0550	29.7057
Se 196.026	52.6528	24.9010	36.8654
Si 288.158	827.849	820.543	827.361
Sn 189.925	36.4412	36.1638	42.6532
Sr 216.596	67.7196	68.5877	67.3528
Ti 334.941	165.438	164.702	165.024
Tl 190.794	4.7789	20.6108	16.6458
V 292.401	41.4560	40.2616	42.3907
Zn 206.200	43.5515	36.8661	45.2667

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	21.6144	ppb	0.3990	1.8	615.383
Al 308.215	2104.13	ppb	8.2899	0.4	4324.65
As 188.980	42.1182	ppb	3.7891	9.0	11.9402
B 249.678	100.738	ppb	1.1069	1.1	681.640
Ba 389.178	56.7222	ppb	1.5492	2.7	325.509
Be 313.042	22.1136	ppb	0.0531	0.2	17514.2
Ca 370.602	23335	ppb	65.21	0.3	39041
Cd 226.502	21.4635	ppb	0.0584	0.3	282.702
Co 228.615	20.4084	ppb	0.4836	2.4	69.3498
Cr 267.716	41.8687	ppb	0.2238	0.5	714.554
Cu 324.754	41.4460	ppb	0.4740	1.1	1692.28
Fe 271.441	2127.88	ppb	12.1523	0.6	1196.09
K 766.491	4202.88	ppb	15.6065	0.4	86680.6

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	4131.42	ppb	10.9061	0.3	5544.52
Mn 257.610	172.886	ppb	0.3998	0.2	14377.8
Mo 202.032	40.9985	ppb	0.4610	1.1	73.1648
Na 330.237	23641.1	ppb	188.428	0.8	674.479
Ni 231.604	42.5451	ppb	0.8579	2.0	45.9403
Pb 220.353	203.917	ppb	16.3953	8.0	77.9759
Sb 206.834	21.5789	ppb	7.2044	33.4	13.9210
Se 196.026	38.1397	ppb	13.9197	36.5	9.9363
Si 288.158	825.251	ppb	4.0846	0.5	4403.27
Sn 189.925	38.4194	ppb	3.6692	9.6	10.7056
Sr 216.596	67.8867	ppb	0.6342	0.9	204.979
Ti 334.941	165.055	ppb	0.3687	0.2	14626.5
Tl 190.794	14.0118	ppb	8.2380	58.8	1.8894
V 292.401	41.3694	ppb	1.0672	2.6	405.552
Zn 206.200	41.8948	ppb	4.4386	10.6	22.9958

680-167708-a-2-b (Samp)

4/20/2019, 6:11:33 AM

Rack 1, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0766	-0.5818u	-0.3514u
Al 308.215	151.937	149.107	151.668
As 188.980	9.5878	3.3184	7.7170
B 249.678	14.9870	15.2841	14.6199
Ba 389.178	35.0291	33.1458	33.8699
Be 313.042	-0.1185u	-0.1121u	-0.1196u
Ca 370.602	36067	36111	36206
Cd 226.502	-0.5443u	0.1333	-0.4544u
Co 228.615	0.3012	1.2792	-0.0613u
Cr 267.716	-0.7013u	0.4371	0.2962
Cu 324.754	4.1534	4.2865	3.9988
Fe 271.441	5.0283	37.7669	24.6747
K 766.491	2488.35	2499.40	2495.35
Mg 279.078	8669.71	8692.82	8715.16
Mn 257.610	57.0196	56.8264	56.9454
Mo 202.032	1.5734	1.1612	1.6558
Na 330.237	16680.7	17132.9	16913.0
Ni 231.604	2.9126	-1.9276u	-2.5677u
Pb 220.353	-4.3569u	-1.5067u	-2.8159u
Sb 206.834	3.0882	-0.7125u	7.5506
Se 196.026	4.2441	6.3197	8.7513
Si 288.158	1879.86	1880.62	1887.29
Sn 189.925	2.5464	-11.4648u	-3.0389u
Sr 216.596	153.431	151.550	150.440
Ti 334.941	0.0799	-0.0920	-0.0534
Tl 190.794	6.3243	-6.0057u	9.5939
V 292.401	0.7396	0.2983	-0.2377u
Zn 206.200	-3.1558u	2.0445	0.3591

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2855	ppb	0.3341	117.0	-49.8332
Al 308.215	150.904	ppb	1.5622	1.0	502.332
As 188.980	6.8744	ppb	3.2185	46.8	2.5417
B 249.678	14.9637	ppb	0.3327	2.2	96.6594

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	34.0149	ppb	0.9500	2.8	186.808
Be 313.042	-0.1167	ppb	0.0040	3.5	-416.548
Ca 370.602	36128	ppb	71.40	0.2	60428
Cd 226.502	-0.2885	ppb	0.3680	127.6	0.2829
Co 228.615	0.5064	ppb	0.6934	136.9	-10.3682
Cr 267.716	0.0107	ppb	0.6206	5816.5	13.9162
Cu 324.754	4.1462	ppb	0.1440	3.5	561.691
Fe 271.441	22.4900	ppb	16.4783	73.3	29.6957
K 766.491	2494.37	ppb	5.5865	0.2	51593.6
Mg 279.078	8692.56	ppb	22.7267	0.3	11645.7
Mn 257.610	56.9305	ppb	0.0975	0.2	4778.39
Mo 202.032	1.4635	ppb	0.2650	18.1	6.4737
Na 330.237	16908.9	ppb	226.128	1.3	494.566
Ni 231.604	-0.5276	ppb	2.9964	568.0	-2.3637
Pb 220.353	-2.8931	ppb	1.4267	49.3	-0.2377
Sb 206.834	3.3087	ppb	4.1360	125.0	7.2157
Se 196.026	6.4383	ppb	2.2559	35.0	3.9408
Si 288.158	1882.59	ppb	4.0843	0.2	9321.69
Sn 189.925	-3.9858	ppb	7.0534	177.0	-0.0123
Sr 216.596	151.807	ppb	1.5120	1.0	450.300
Ti 334.941	-0.0218	ppb	0.0902	413.1	-4.6123
Tl 190.794	3.3042	ppb	8.2266	249.0	-0.6157
V 292.401	0.2667	ppb	0.4894	183.5	-10.1302
Zn 206.200	-0.2508	ppb	2.6532	1058.1	-0.2435

Cont Calib Verif (CCV)

4/20/2019, 6:15:47 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	512.298	507.874	512.149
Al 308.215	10206.4	10171.5	10245.7
As 188.980	503.181	511.066	512.869
B 249.678	518.773	520.373	527.622
Ba 389.178	482.130	481.828	488.725
Be 313.042	539.344	537.767	540.936
Ca 370.602	10129	10108	10173
Cd 226.502	502.120	501.256	505.034
Co 228.615	506.984	504.611	507.812
Cr 267.716	500.136	499.669	503.129
Cu 324.754	502.031	499.671	503.764
Fe 271.441	10407.1	10319.4	10398.2
K 766.491	9950.17	9917.37	9970.28
Mg 279.078	10358.7	10306.8	10403.6
Mn 257.610	503.171	501.178	504.724
Mo 202.032	500.180	497.387	500.367
Na 330.237	11274.7	10801.2	10975.9
Ni 231.604	503.743	503.576	507.486
Pb 220.353	504.985	527.037	501.243
Sb 206.834	487.956	485.269	485.143
Se 196.026	512.607	532.964	544.165
Si 288.158	5171.41	5145.90	5172.72
Sn 189.925	494.215	505.228	517.101
Sr 216.596	493.450	495.794	499.694
Ti 334.941	505.513	504.686	507.272

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Label	Replicates Concentration		
Tl 190.794	499.174	503.234	516.001
V 292.401	500.992	499.858	502.583
Zn 206.200	1047.65	1051.53	1053.01

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	510.774	ppb	2.5123	0.5	15471.9	102.15474
Al 308.215	10207.9	ppb	37.0900	0.4	20193.4	102.07870
As 188.980	509.039	ppb	5.1522	1.0	136.518	101.80775
B 249.678	522.256	ppb	4.7153	0.9	3558.51	104.45122
Ba 389.178	484.228	ppb	3.8977	0.8	3024.50	96.84555
Be 313.042	539.349	ppb	1.5848	0.3	434779	107.86983
Ca 370.602	10137	ppb	32.92	0.3	16976	101.36826
Cd 226.502	502.803	ppb	1.9797	0.4	6474.18	100.56065
Co 228.615	506.469	ppb	1.6618	0.3	1993.74	101.29379
Cr 267.716	500.978	ppb	1.8773	0.4	8395.16	100.19551
Cu 324.754	501.822	ppb	2.0547	0.4	15643.4	100.36440
Fe 271.441	10374.9	ppb	48.3008	0.5	5780.81	103.69697
K 766.491	9945.94	ppb	26.7066	0.3	202414	99.45941
Mg 279.078	10356.4	ppb	48.4290	0.5	13864.3	103.56380
Mn 257.610	503.024	ppb	1.7774	0.4	41779.3	100.60486
Mo 202.032	499.311	ppb	1.6691	0.3	846.476	99.86228
Na 330.237	11017.3	ppb	239.444	2.2	318.176	110.17274Q
Ni 231.604	504.935	ppb	2.2109	0.4	564.244	100.98703
Pb 220.353	511.088	ppb	13.9382	2.7	193.808	102.21770
Sb 206.834	486.123	ppb	1.5887	0.3	182.381	97.22452
Se 196.026	529.912	ppb	15.9988	3.0	102.705	105.98238
Si 288.158	5163.34	ppb	15.1209	0.3	24768.0	103.26684
Sn 189.925	505.515	ppb	11.4459	2.3	128.756	101.10294
Sr 216.596	496.313	ppb	3.1543	0.6	1449.84	99.26250
Ti 334.941	505.823	ppb	1.3205	0.3	44871.8	101.16469
Tl 190.794	506.136	ppb	8.7811	1.7	119.646	101.22724
V 292.401	501.144	ppb	1.3688	0.3	5047.63	100.22890
Zn 206.200	1050.73	ppb	2.7696	0.3	579.488	105.07285

Cont Calib Blank (CCB) 4/20/2019, 6:20:00 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3606u	0.4215	-0.3291u
Al 308.215	17.5490	12.0846	11.8641
As 188.980	2.9346	2.5643	7.9898
B 249.678	12.5615	11.5380	10.3291
Ba 389.178	-3.3650u	-0.0855u	-1.3665u
Be 313.042	0.0684	0.0854	0.0725
Ca 370.602	6.966	7.706	5.563
Cd 226.502	0.4305	-0.0501u	0.1553
Co 228.615	1.4375	0.5025	0.7101
Cr 267.716	-0.2375u	0.5280	0.1223
Cu 324.754	1.7975	0.1798	-0.4315u
Fe 271.441	9.8088	33.1508	14.0780
K 766.491	1.9240	2.2432	2.6067
Mg 279.078	15.2422	5.9888	11.4964
Mn 257.610	0.3783	0.3633	0.3376
Mo 202.032	3.6156	1.9803	2.0193

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Label	Replicates Concentration		
Na 330.237	113.112	-268.475u	51.7120
Ni 231.604	-0.4812u	-2.3516u	1.6717
Pb 220.353	1.6235	-6.1283u	-10.4564u
Sb 206.834	6.5673	6.6292	-1.6486u
Se 196.026	-13.9391u	7.5682	2.5730
Si 288.158	12.7245	5.4878	4.8642
Sn 189.925	-2.8461u	-8.5773u	-9.3192u
Sr 216.596	0.0063u	-1.1468u	-1.2538u
Ti 334.941	0.5426	0.3477	0.3280
Tl 190.794	-15.6782u	-7.0527u	-8.1355u
V 292.401	0.8474	0.9884	0.9820
Zn 206.200	0.9996	-0.7560u	0.1022

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0894	ppb	0.4427	495.0	-43.4414	-0.08944
Al 308.215	13.8326	ppb	3.2204	23.3	234.233	13.83257
As 188.980	4.4962	ppb	3.0312	67.4	1.9065	4.49623
B 249.678	11.4762	ppb	1.1175	9.7	72.7813	11.47623
Ba 389.178	-1.6057	ppb	1.6528	102.9	-46.7131	-1.60565
Be 313.042	0.0754	ppb	0.0089	11.8	-266.146	0.07540
Ca 370.602	6.745	ppb	1.088	16.1	36.36	6.74517
Cd 226.502	0.1786	ppb	0.2411	135.0	6.2706	0.17857
Co 228.615	0.8834	ppb	0.4910	55.6	-8.8834	0.88339
Cr 267.716	0.1376	ppb	0.3830	278.3	15.8587	0.13761
Cu 324.754	0.5153	ppb	1.1518	223.5	451.726	0.51526
Fe 271.441	19.0125	ppb	12.4288	65.4	27.7810	19.01253
K 766.491	2.2580	ppb	0.3416	15.1	341.132	2.25797
Mg 279.078	10.9091	ppb	4.6546	42.7	36.2779	10.90914
Mn 257.610	0.3598	ppb	0.0206	5.7	56.4355	0.35976
Mo 202.032	2.5384	ppb	0.9331	36.8	8.2876	2.53839
Na 330.237	-34.5504	ppb	204.898	593.0	36.6277	-34.55037
Ni 231.604	-0.3870	ppb	2.0133	520.2	-2.2062	-0.38702
Pb 220.353	-4.9871	ppb	6.1203	122.7	-1.0335	-4.98710
Sb 206.834	3.8493	ppb	4.7614	123.7	7.3550	3.84929
Se 196.026	-1.2660	ppb	11.2559	889.1	2.4831	-1.26597
Si 288.158	7.6922	ppb	4.3693	56.8	571.306	7.69219
Sn 189.925	-6.9142	ppb	3.5426	51.2	-0.7541	-6.91421
Sr 216.596	-0.7981	ppb	0.6987	87.5	4.8166	-0.79812
Ti 334.941	0.4061	ppb	0.1186	29.2	10.6860	0.40613
Tl 190.794	-10.2888	ppb	4.6987	45.7	-3.8836	-10.28883
V 292.401	0.9393	ppb	0.0796	8.5	-3.3713	0.93928
Zn 206.200	0.1153	ppb	0.8779	761.4	-0.0418	0.11529

680-167708-a-3-b (Samp)

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Rack 1, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8067	0.4618	-0.9837u
Al 308.215	65.1103	74.4716	65.6103
As 188.980	-0.3953u	3.0398	5.0500
B 249.678	14.5369	15.2913	13.0353
Ba 389.178	33.2500	34.6107	33.5135
Be 313.042	-0.0840u	-0.0830u	-0.0996u
Ca 370.602	35338	35517	35407

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Label	Replicates Concentration		
Cd 226.502	-0.1364u	0.2687	0.1891
Co 228.615	0.9205	-0.1320u	1.4708
Cr 267.716	0.2382	0.2540	-0.2727u
Cu 324.754	1.9282	1.1644	1.3855
Fe 271.441	5.4383	4.2088	7.1367
K 766.491	2417.34	2421.10	2412.06
Mg 279.078	8506.92	8551.09	8500.85
Mn 257.610	7.9070	7.8214	7.9254
Mo 202.032	1.0423	3.4505	0.5141
Na 330.237	16883.4	16605.8	16992.1
Ni 231.604	-1.0831u	0.3184	-2.0878u
Pb 220.353	-2.2433u	-3.7777u	-3.4821u
Sb 206.834	-4.0350u	-6.6253u	-6.5233u
Se 196.026	-1.0211u	15.9469	-39.3218u
Si 288.158	1830.48	1842.32	1837.29
Sn 189.925	-12.7979u	-6.6544u	-3.7795u
Sr 216.596	146.718	148.125	147.784
Ti 334.941	-0.1680	-0.2452	-0.1498
Tl 190.794	-11.0947u	0.3147	-10.4335u
V 292.401	0.1892	2.1545	1.1095
Zn 206.200	1.1570	-0.1363u	1.4429

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0949	ppb	0.9499	1000.7	-38.3486
Al 308.215	68.3974	ppb	5.2664	7.7	340.950
As 188.980	2.5648	ppb	2.7535	107.4	1.3911
B 249.678	14.2878	ppb	1.1484	8.0	92.0459
Ba 389.178	33.7914	ppb	0.7217	2.1	185.211
Be 313.042	-0.0889	ppb	0.0093	10.4	-394.099
Ca 370.602	35421	ppb	89.94	0.3	59245
Cd 226.502	0.1072	ppb	0.2146	200.3	5.3384
Co 228.615	0.7531	ppb	0.8144	108.1	-9.3854
Cr 267.716	0.0732	ppb	0.2996	409.4	14.8841
Cu 324.754	1.4927	ppb	0.3930	26.3	481.296
Fe 271.441	5.5946	ppb	1.4702	26.3	20.3581
K 766.491	2416.83	ppb	4.5449	0.2	50007.7
Mg 279.078	8519.62	ppb	27.4249	0.3	11415.0
Mn 257.610	7.8846	ppb	0.0555	0.7	712.012
Mo 202.032	1.6690	ppb	1.5653	93.8	6.8205
Na 330.237	16827.1	ppb	199.227	1.2	492.339
Ni 231.604	-0.9508	ppb	1.2085	127.1	-2.8388
Pb 220.353	-3.1677	ppb	0.8141	25.7	-0.3433
Sb 206.834	-5.7279	ppb	1.4670	25.6	4.0274
Se 196.026	-8.1320	ppb	28.3122	348.2	1.1894
Si 288.158	1836.70	ppb	5.9461	0.3	9107.67
Sn 189.925	-7.7439	ppb	4.6069	59.5	-0.9622
Sr 216.596	147.542	ppb	0.7338	0.5	437.856
Ti 334.941	-0.1877	ppb	0.0506	27.0	-19.7670
Tl 190.794	-7.0712	ppb	6.4048	90.6	-3.1100
V 292.401	1.1511	ppb	0.9833	85.4	-1.0797
Zn 206.200	0.8212	ppb	0.8414	102.5	0.3479

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680-167708-a-1-b (Samp) 4/20/2019, 6:28:24 AM Rack 1, Tube 12

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4086u	-1.9110u	-1.0125u
Al 308.215	132.881	144.850	139.721
As 188.980	1.1400	4.3763	0.0539
B 249.678	13.1026	12.8100	12.8927
Ba 389.178	35.3151	31.7713	34.7611
Be 313.042	-0.0942u	-0.1071u	-0.1214u
Ca 370.602	35212	35237	35286
Cd 226.502	-0.0435u	-0.3542u	0.7228
Co 228.615	-1.1372u	0.6604	1.0431
Cr 267.716	-0.1012u	0.8064	0.4821
Cu 324.754	4.5434	3.7794	4.1724
Fe 271.441	32.0635	17.4107	-14.2367u
K 766.491	2406.51	2404.73	2400.96
Mg 279.078	8490.39	8495.92	8463.48
Mn 257.610	50.8449	50.9006	50.5266
Mo 202.032	2.0125	-1.3509u	1.3541
Na 330.237	16413.1	16698.8	16391.5
Ni 231.604	-3.5211u	-0.1418u	2.1730
Pb 220.353	-7.0274u	-2.6044u	3.7818
Sb 206.834	-9.0233u	4.8664	2.2971
Se 196.026	12.1036	2.6511	-0.1245u
Si 288.158	1836.94	1835.65	1831.48
Sn 189.925	-2.2251u	-0.2905u	-6.2754u
Sr 216.596	148.615	148.129	147.873
Ti 334.941	-0.2360	-0.3339u	-0.2424
Tl 190.794	-5.8953u	-13.4354u	-0.4249u
V 292.401	0.6245	0.0109	-0.1620u
Zn 206.200	1.8362	2.2862	0.0267

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.1107	ppb	0.7560	68.1	-74.8913
Al 308.215	139.151	ppb	6.0045	4.3	479.331
As 188.980	1.8568	ppb	2.2486	121.1	1.2020
B 249.678	12.9351	ppb	0.1509	1.2	82.7710
Ba 389.178	33.9492	ppb	1.9063	5.6	186.163
Be 313.042	-0.1076	ppb	0.0136	12.6	-409.222
Ca 370.602	35245	ppb	37.64	0.1	58952
Cd 226.502	0.1084	ppb	0.5543	511.5	5.3802
Co 228.615	0.1888	ppb	1.1642	616.7	-11.6222
Cr 267.716	0.3958	ppb	0.4599	116.2	20.3472
Cu 324.754	4.1651	ppb	0.3821	9.2	562.251
Fe 271.441	11.7458	ppb	23.6642	201.5	23.7357
K 766.491	2404.07	ppb	2.8323	0.1	49751.1
Mg 279.078	8483.26	ppb	17.3541	0.2	11365.9
Mn 257.610	50.7574	ppb	0.2018	0.4	4265.88
Mo 202.032	0.6719	ppb	1.7825	265.3	5.1378
Na 330.237	16501.1	ppb	171.549	1.0	483.526
Ni 231.604	-0.4966	ppb	2.8636	576.6	-2.3287
Pb 220.353	-1.9500	ppb	5.4342	278.7	0.1193
Sb 206.834	-0.6199	ppb	7.3900	1192.0	5.8150
Se 196.026	4.8767	ppb	6.4106	131.5	3.6458
Si 288.158	1834.69	ppb	2.8543	0.2	9098.10

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.9303	ppb	3.0541	104.2	0.2544
Sr 216.596	148.206	ppb	0.3772	0.3	439.796
Ti 334.941	-0.2708	ppb	0.0548	20.2	-27.2480
Tl 190.794	-6.5852	ppb	6.5326	99.2	-2.9856
V 292.401	0.1578	ppb	0.4133	262.0	-11.2024
Zn 206.200	1.3830	ppb	1.1960	86.5	0.6579

mb 680-566947/1-a (Samp) 4/20/2019, 6:32:35 AM Rack 1, Tube 13

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.4040u	-0.0698u	-0.0444u
Al 308.215	6.4277	13.5750	5.7049
As 188.980	4.0908	5.6712	0.8349
B 249.678	-1.4112u	-3.8256u	-1.7711u
Ba 389.178	0.4649	-2.8335u	-2.9219u
Be 313.042	-0.1089u	-0.1191u	-0.1116u
Ca 370.602	11.15	-1.545u	16.29
Cd 226.502	-0.2455u	0.0669	-0.2434u
Co 228.615	1.5521	-1.9676u	1.0373
Cr 267.716	-1.1035u	-0.0724u	0.2113
Cu 324.754	-0.4419u	0.0513	0.7669
Fe 271.441	7.1102	14.6930	18.5044
K 766.491	5.4127	6.3892	5.1238
Mg 279.078	8.8765	7.0220	7.1672
Mn 257.610	0.1413	0.1184	0.0687
Mo 202.032	1.3287	1.3040	-0.8576u
Na 330.237	31.6659	438.841	-118.739u
Ni 231.604	-2.1193u	-1.0896u	1.2590
Pb 220.353	-4.8849u	-8.7404u	7.0249
Sb 206.834	1.5007	8.0468	1.9414
Se 196.026	-13.9101u	-0.6445u	-11.6675u
Si 288.158	-0.8547u	7.3550	4.4718
Sn 189.925	-3.9828u	-1.7676u	0.6993
Sr 216.596	0.5230	0.3927	-2.0846u
Ti 334.941	0.1130	-0.1079u	-0.1011u
Tl 190.794	3.7971	-2.5913u	-10.9754u
V 292.401	-0.3119u	0.6645	0.5609
Zn 206.200	-0.7068u	0.9994	-3.3098u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5061	ppb	0.7778	153.7	-56.0925
Al 308.215	8.5692	ppb	4.3502	50.8	223.891
As 188.980	3.5323	ppb	2.4660	69.8	1.6495
B 249.678	-2.3360	ppb	1.3026	55.8	-21.7437
Ba 389.178	-1.7635	ppb	1.9303	109.5	-47.7208
Be 313.042	-0.1132	ppb	0.0053	4.7	-418.160
Ca 370.602	8.630	ppb	9.178	106.4	39.52
Cd 226.502	-0.1406	ppb	0.1797	127.8	2.1473
Co 228.615	0.2073	ppb	1.9010	917.2	-11.5474
Cr 267.716	-0.3216	ppb	0.6919	215.2	8.1761
Cu 324.754	0.1254	ppb	0.6078	484.6	439.882
Fe 271.441	13.4358	ppb	5.8002	43.2	24.6556
K 766.491	5.6419	ppb	0.6631	11.8	389.322

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	7.6885	ppb	1.0313	13.4	31.9747
Mn 257.610	0.1095	ppb	0.0371	33.9	35.6553
Mo 202.032	0.5917	ppb	1.2552	212.1	5.0025
Na 330.237	117.256	ppb	288.476	246.0	40.7415
Ni 231.604	-0.6500	ppb	1.7315	266.4	-2.5003
Pb 220.353	-2.2001	ppb	8.2184	373.5	0.0231
Sb 206.834	3.8296	ppb	3.6588	95.5	7.3753
Se 196.026	-8.7407	ppb	7.1006	81.2	1.0739
Si 288.158	3.6574 ^{uv}	ppb	4.1650	113.9	552.868
Sn 189.925	-1.6837	ppb	2.3422	139.1	0.5678
Sr 216.596	-0.3896	ppb	1.4693	377.1	6.0338
Ti 334.941	-0.0320	ppb	0.1256	393.0	-28.1836
Tl 190.794	-3.2565	ppb	7.4087	227.5	-2.1988
V 292.401	0.3045	ppb	0.5363	176.1	-9.6621
Zn 206.200	-1.0057	ppb	2.1701	215.8	-0.6601

lcs 680-566947/2-a (Samp)

4/20/2019, 6:36:46 AM

Rack 1, Tube 14

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	21.6618	21.2110	21.7651
Al 308.215	2595.74	2602.06	2558.28
As 188.980	54.4314	54.7521	53.4258
B 249.678	104.975	103.446	103.365
Ba 389.178	51.7582	49.0780	53.1995
Be 313.042	27.4901	27.4368	27.1204
Ca 370.602	2738	2739	2690
Cd 226.502	26.3583	26.0669	26.1488
Co 228.615	26.2020	25.4636	25.3769
Cr 267.716	51.2852	51.2582	50.7059
Cu 324.754	50.6268	51.0076	50.3405
Fe 271.441	2643.04	2619.14	2603.54
K 766.491	4315.32	4322.70	4259.06
Mg 279.078	2728.91	2723.87	2691.65
Mn 257.610	208.382	207.851	205.391
Mo 202.032	48.8377	51.3031	48.6924
Na 330.237	4140.70	4036.79	4276.21
Ni 231.604	50.6135	50.6733	50.4106
Pb 220.353	245.645	257.708	252.751
Sb 206.834	19.9242	13.2226	23.8231
Se 196.026	58.2359	43.6889	43.7524
Si 288.158	25.3542	26.3940	23.3052
Sn 189.925	44.3009	45.9422	49.4200
Sr 216.596	51.7962	50.6921	49.5674
Ti 334.941	204.634	204.667	202.249
Tl 190.794	16.3358	22.6596	12.3461
V 292.401	50.7514	51.2853	50.3679
Zn 206.200	52.5432	54.6298	51.1776

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	21.5460	ppb	0.2946	1.4	613.326
Al 308.215	2585.36	ppb	23.6664	0.9	5266.35
As 188.980	54.2031	ppb	0.6920	1.3	15.1642
B 249.678	103.929	ppb	0.9069	0.9	702.979

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	51.3452	ppb	2.0915	4.1	290.370
Be 313.042	27.3491	ppb	0.1998	0.7	21735.4
Ca 370.602	2723	ppb	27.76	1.0	4580
Cd 226.502	26.1913	ppb	0.1503	0.6	344.186
Co 228.615	25.6808	ppb	0.4534	1.8	90.4422
Cr 267.716	51.0831	ppb	0.3269	0.6	868.688
Cu 324.754	50.6583	ppb	0.3347	0.7	1971.51
Fe 271.441	2621.91	ppb	19.8928	0.8	1469.80
K 766.491	4299.02	ppb	34.8074	0.8	88654.2
Mg 279.078	2714.81	ppb	20.2155	0.7	3649.63
Mn 257.610	207.208	ppb	1.5955	0.8	17218.6
Mo 202.032	49.6111	ppb	1.4671	3.0	87.6926
Na 330.237	4151.23	ppb	120.056	2.9	147.226
Ni 231.604	50.5658	ppb	0.1377	0.3	54.9337
Pb 220.353	252.035	ppb	6.0631	2.4	96.1731
Sb 206.834	18.9900	ppb	5.3616	28.2	13.0594
Se 196.026	48.5591	ppb	8.3804	17.3	11.9057
Si 288.158	25.0178	ppb	1.5717	6.3	672.514
Sn 189.925	46.5543	ppb	2.6139	5.6	12.7597
Sr 216.596	50.6852	ppb	1.1144	2.2	154.699
Ti 334.941	203.850	ppb	1.3866	0.7	18064.6
Tl 190.794	17.1139	ppb	5.2006	30.4	2.6199
V 292.401	50.8016	ppb	0.4608	0.9	500.985
Zn 206.200	52.7835	ppb	1.7386	3.3	29.0006

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Rack 1, Tube 15

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	9.9390	10.6295	9.6064
Al 308.215	222.331	226.644	217.844
As 188.980	20.5716	23.4145	32.7100
B 249.678	108.046	107.167	107.375
Ba 389.178	7.9270	11.2883	7.1982
Be 313.042	4.3222	4.3330	4.3219
Ca 370.602	537.3	519.2	523.4
Cd 226.502	5.3237	5.8434	5.7483
Co 228.615	10.8015	10.3024	10.6697
Cr 267.716	10.6295	10.1431	10.6629
Cu 324.754	20.2316	21.8442	21.6211
Fe 271.441	76.3952	55.8038	36.7888
K 766.491	1123.11	1124.13	1120.56
Mg 279.078	540.051	536.700	537.435
Mn 257.610	10.9059	10.7134	10.7070
Mo 202.032	11.6612	9.8783	10.2249
Na 330.237	1180.18	1316.54	1092.07
Ni 231.604	42.6046	42.9471	42.7333
Pb 220.353	10.3721	16.8626	8.5191
Sb 206.834	21.8813	18.7200	23.9766
Se 196.026	12.1993	8.3339	34.7203
Si 288.158	13.1811	12.1303	12.0039
Sn 189.925	45.0272	52.9376	44.5179
Sr 216.596	9.5207	11.5686	9.4524
Ti 334.941	10.8771	10.7850	10.5719

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Label	Replicates Concentration		
Tl 190.794	22.7194	5.3989	17.9535
V 292.401	21.0341	22.1095	21.2812
Zn 206.200	21.0280	21.4409	22.7135

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.0583	ppb	0.5219	5.2	264.791
Al 308.215	222.273	ppb	4.4000	2.0	642.583
As 188.980	25.5653	ppb	6.3486	24.8	7.5307
B 249.678	107.530	ppb	0.4595	0.4	730.203
Ba 389.178	8.8045	ppb	2.1817	24.8	19.3605
Be 313.042	4.3257	ppb	0.0063	0.1	3162.79
Ca 370.602	526.6	ppb	9.516	1.8	905.9
Cd 226.502	5.6385	ppb	0.2767	4.9	76.4333
Co 228.615	10.5912	ppb	0.2587	2.4	29.5766
Cr 267.716	10.4785	ppb	0.2909	2.8	188.840
Cu 324.754	21.2323	ppb	0.8738	4.1	1079.27
Fe 271.441	56.3293	ppb	19.8084	35.2	48.8867
K 766.491	1122.60	ppb	1.8393	0.2	23264.9
Mg 279.078	538.062	ppb	1.7614	0.3	741.098
Mn 257.610	10.7754	ppb	0.1130	1.0	922.025
Mo 202.032	10.5881	ppb	0.9453	8.9	21.8690
Na 330.237	1196.26	ppb	113.096	9.5	69.5513
Ni 231.604	42.7617	ppb	0.1730	0.4	46.1921
Pb 220.353	11.9179	ppb	4.3813	36.8	5.3621
Sb 206.834	21.5259	ppb	2.6463	12.3	13.7898
Se 196.026	18.4178	ppb	14.2500	77.4	6.1949
Si 288.158	12.4384	ppb	0.6463	5.2	599.912
Sn 189.925	47.4942	ppb	4.7210	9.9	12.9969
Sr 216.596	10.1806	ppb	1.2026	11.8	36.6008
Ti 334.941	10.7447	ppb	0.1565	1.5	929.162
Tl 190.794	15.3573	ppb	8.9474	58.3	2.2658
V 292.401	21.4749	ppb	0.5633	2.6	204.977
Zn 206.200	21.7275	ppb	0.8785	4.0	11.8795

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Rack 1, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2442u	-0.3486u	-0.6856u
Al 308.215	82.7169	79.1167	86.5310
As 188.980	4.4466	4.0649	6.3314
B 249.678	26.4257	26.3845	27.3557
Ba 389.178	4.9265	7.7591	0.7728
Be 313.042	-0.1232u	-0.1091u	-0.1050u
Ca 370.602	16305	16239	16264
Cd 226.502	0.1435	-0.1618u	-0.3466u
Co 228.615	0.5629	0.3950	-0.1999u
Cr 267.716	10.1092	10.2524	10.0932
Cu 324.754	0.1797	1.7208	1.7739
Fe 271.441	652.255	625.892	628.608
K 766.491	1852.93	1849.63	1840.23
Mg 279.078	7588.62	7554.23	7549.14
Mn 257.610	6.9316	6.5963	6.8531
Mo 202.032	0.5223	2.2401	0.5450

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Label	Replicates Concentration		
Na 330.237	25063.9	24991.1	24823.0
Ni 231.604	-1.7342u	-0.6518u	2.0123
Pb 220.353	-1.4248u	-0.4661u	0.0363u
Sb 206.834	-6.2630u	0.0841	0.5602
Se 196.026	1.5175	-8.4516u	-3.8809u
Si 288.158	21775.0	21671.3	21596.3
Sn 189.925	-1.8982u	-0.7123u	-3.7577u
Sr 216.596	394.190	393.639	392.050
Ti 334.941	1.6017	1.2151	1.3334
Tl 190.794	0.8123	-4.8629u	-8.5190u
V 292.401	1.3038	1.9389	0.8202
Zn 206.200	18.4729	15.2566	14.1339

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4261	ppb	0.2307	54.1	-55.0324
Al 308.215	82.7882	ppb	3.7077	4.5	369.134
As 188.980	4.9476	ppb	1.2135	24.5	2.0250
B 249.678	26.7220	ppb	0.5492	2.1	176.511
Ba 389.178	4.4861	ppb	3.5139	78.3	0.1776
Be 313.042	-0.1124	ppb	0.0095	8.5	-416.406
Ca 370.602	16269	ppb	33.14	0.2	27225
Cd 226.502	-0.1216	ppb	0.2475	203.5	3.3512
Co 228.615	0.2526	ppb	0.4008	158.7	-11.3725
Cr 267.716	10.1516	ppb	0.0877	0.9	183.575
Cu 324.754	1.2248	ppb	0.9055	73.9	473.311
Fe 271.441	635.585	ppb	14.5003	2.3	369.074
K 766.491	1847.60	ppb	6.5922	0.4	38301.3
Mg 279.078	7564.00	ppb	21.4762	0.3	10137.0
Mn 257.610	6.7937	ppb	0.1754	2.6	618.325
Mo 202.032	1.1025	ppb	0.9853	89.4	5.8570
Na 330.237	24959.3	ppb	123.523	0.5	711.909
Ni 231.604	-0.1246	ppb	1.9281	1547.8	-1.9112
Pb 220.353	-0.6182	ppb	0.7423	120.1	0.6010
Sb 206.834	-1.8729	ppb	3.8094	203.4	5.4128
Se 196.026	-3.6050	ppb	4.9902	138.4	2.0453
Si 288.158	21680.8	ppb	89.7156	0.4	101724
Sn 189.925	-2.1228	ppb	1.5351	72.3	0.4593
Sr 216.596	393.293	ppb	1.1115	0.3	1155.30
Ti 334.941	1.3834	ppb	0.1980	14.3	116.857
Tl 190.794	-4.1899	ppb	4.7019	112.2	-2.4490
V 292.401	1.3543	ppb	0.5610	41.4	0.7416
Zn 206.200	15.9545	ppb	2.2521	14.1	8.6951

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Rack 1, Tube 17

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4168u	0.2824	-1.2622u
Al 308.215	19.0214	20.5360	24.9185
As 188.980	4.9948	5.0473	1.7196
B 249.678	4.9846	4.5459	3.9712
Ba 389.178	4.3044	1.2646	-0.7593u
Be 313.042	-0.0979u	-0.1156u	-0.1150u
Ca 370.602	3329	3414	3422

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Label	Replicates Concentration		
Cd 226.502	-0.1163u	-0.0807u	0.2286
Co 228.615	-0.4699u	-0.2351u	1.2296
Cr 267.716	1.7081	1.7689	1.6066
Cu 324.754	1.2291	-0.3349u	1.1417
Fe 271.441	143.753	153.940	139.290
K 766.491	363.677	373.146	374.486
Mg 279.078	1594.30	1625.52	1629.94
Mn 257.610	1.3734	1.5004	1.4555
Mo 202.032	1.8682	1.6311	1.3671
Na 330.237	6230.85	6122.36	6198.42
Ni 231.604	0.0009	-2.5467u	-1.0243u
Pb 220.353	-6.5013u	-5.9233u	-0.3751u
Sb 206.834	0.9304	3.7511	-0.4733u
Se 196.026	-4.7496u	10.6547	-8.2916u
Si 288.158	4303.28	4401.33	4408.26
Sn 189.925	-3.9938u	-0.8534u	-7.1851u
Sr 216.596	78.9563	79.8133	80.7709
Ti 334.941	0.1769	0.0781	0.3687
Tl 190.794	-11.1193u	-1.0537u	-11.2654u
V 292.401	-0.4021u	0.3308	0.8925
Zn 206.200	-0.5468u	3.0074	-1.1409u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4655	ppb	0.7735	166.1	-55.1378
Al 308.215	21.4920	ppb	3.0625	14.2	249.193
As 188.980	3.9206	ppb	1.9063	48.6	1.7525
B 249.678	4.5006	ppb	0.5082	11.3	24.9053
Ba 389.178	1.6032	ppb	2.5488	159.0	-24.7106
Be 313.042	-0.1095	ppb	0.0100	9.2	-415.047
Ca 370.602	3388	ppb	51.49	1.5	5690
Cd 226.502	0.0106	ppb	0.1897	1798.2	4.3051
Co 228.615	0.1749	ppb	0.9209	526.6	-11.6844
Cr 267.716	1.6945	ppb	0.0820	4.8	41.9491
Cu 324.754	0.6786	ppb	0.8789	129.5	456.681
Fe 271.441	145.661	ppb	7.5088	5.2	97.8613
K 766.491	370.436	ppb	5.8920	1.6	7917.16
Mg 279.078	1616.59	ppb	19.4281	1.2	2183.55
Mn 257.610	1.4431	ppb	0.0644	4.5	152.314
Mo 202.032	1.6221	ppb	0.2507	15.5	6.7399
Na 330.237	6183.88	ppb	55.6840	0.9	204.687
Ni 231.604	-1.1900	ppb	1.2819	107.7	-3.1064
Pb 220.353	-4.2666	ppb	3.3825	79.3	-0.7644
Sb 206.834	1.4027	ppb	2.1515	153.4	6.5044
Se 196.026	-0.7955	ppb	10.0730	1266.3	2.5724
Si 288.158	4370.96	ppb	58.7119	1.3	20935.7
Sn 189.925	-4.0108	ppb	3.1658	78.9	-0.0197
Sr 216.596	79.8468	ppb	0.9078	1.1	240.260
Ti 334.941	0.2079	ppb	0.1477	71.1	-2.7601
Tl 190.794	-7.8128	ppb	5.8540	74.9	-3.2962
V 292.401	0.2738	ppb	0.6492	237.1	-10.0963
Zn 206.200	0.4399	ppb	2.2433	510.0	0.1368

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167431-c-1-d (Samp) **4/20/2019, 6:53:28 AM** **Rack 1, Tube 18****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	53.6720	55.6094	54.8163
Al 308.215	5343.00	5364.46	5365.72
As 188.980	100.485	106.273	115.460
B 249.678	240.845	244.778	242.270
Ba 389.178	110.950	112.977	113.562
Be 313.042	56.4941	56.7812	56.9395
Ca 370.602	21899	21966	22055
Cd 226.502	52.9797	53.5569	54.0226
Co 228.615	52.0590	53.5911	51.7313
Cr 267.716	116.477	118.267	117.936
Cu 324.754	105.939	107.808	107.179
Fe 271.441	6033.04	6055.82	6077.70
K 766.491	11270.8	11346.3	11356.5
Mg 279.078	13124.4	13146.2	13230.2
Mn 257.610	527.847	530.081	530.982
Mo 202.032	109.152	107.180	103.789
Na 330.237	36155.9	35905.0	36404.6
Ni 231.604	106.658	108.385	107.560
Pb 220.353	532.255	525.684	533.565
Sb 206.834	42.9225	50.9470	49.8146
Se 196.026	112.040	105.001	86.1605
Si 288.158	22596.4	22716.7	22766.9
Sn 189.925	116.065	104.962	105.832
Sr 216.596	511.050	509.509	514.211
Ti 334.941	419.610	422.747	422.650
Tl 190.794	20.3129	41.1645	37.9189
V 292.401	106.747	107.456	106.397
Zn 206.200	126.238	125.001	124.435

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.6993	ppb	0.9740	1.8	1618.70
Al 308.215	5357.72	ppb	12.7691	0.2	10691.6
As 188.980	107.406	ppb	7.5516	7.0	29.3514
B 249.678	242.631	ppb	1.9914	0.8	1648.91
Ba 389.178	112.496	ppb	1.3708	1.2	687.919
Be 313.042	56.7383	ppb	0.2258	0.4	45444.2
Ca 370.602	21973	ppb	78.02	0.4	36769
Cd 226.502	53.5197	ppb	0.5225	1.0	700.231
Co 228.615	52.4604	ppb	0.9928	1.9	197.631
Cr 267.716	117.560	ppb	0.9523	0.8	1981.74
Cu 324.754	106.975	ppb	0.9509	0.9	3678.59
Fe 271.441	6055.52	ppb	22.3314	0.4	3371.77
K 766.491	11324.5	ppb	46.8403	0.4	233160
Mg 279.078	13166.9	ppb	55.8851	0.4	17623.6
Mn 257.610	529.637	ppb	1.6143	0.3	43991.6
Mo 202.032	106.707	ppb	2.7127	2.5	184.004
Na 330.237	36155.2	ppb	249.798	0.7	1009.30
Ni 231.604	107.534	ppb	0.8641	0.8	118.821
Pb 220.353	530.501	ppb	4.2231	0.8	201.475
Sb 206.834	47.8947	ppb	4.3431	9.1	23.6222
Se 196.026	101.067	ppb	13.3806	13.2	21.8484
Si 288.158	22693.3	ppb	87.6106	0.4	106492

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	108.953	ppb	6.1742	5.7	28.5331
Sr 216.596	511.590	ppb	2.3970	0.5	1499.69
Ti 334.941	421.669	ppb	1.7839	0.4	37413.6
Tl 190.794	33.1321	ppb	11.2197	33.9	6.3851
V 292.401	106.867	ppb	0.5395	0.5	1067.54
Zn 206.200	125.224	ppb	0.9221	0.7	68.9479

680-167431-c-1-e ms (Samp) 4/20/2019, 6:57:40 AM Rack 1, Tube 19

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	23.4920	23.4545	23.3816
Al 308.215	2752.56	2759.64	2759.52
As 188.980	50.9032	47.1148	49.3819
B 249.678	151.139	151.213	151.841
Ba 389.178	70.0979	69.6566	66.3221
Be 313.042	28.5632	28.4796	28.6468
Ca 370.602	19026	18961	19063
Cd 226.502	27.2650	27.1104	27.3951
Co 228.615	27.9216	26.0667	26.2591
Cr 267.716	63.2456	63.2559	63.2473
Cu 324.754	54.5384	54.5000	53.9906
Fe 271.441	3465.37	3417.46	3462.06
K 766.491	6494.21	6461.12	6514.63
Mg 279.078	10310.7	10274.3	10337.6
Mn 257.610	221.265	220.682	221.425
Mo 202.032	54.6391	55.0590	53.2544
Na 330.237	28990.2	28590.8	28993.6
Ni 231.604	52.5613	54.7660	53.0517
Pb 220.353	264.060	256.205	249.354
Sb 206.834	30.4751	33.2775	22.3012
Se 196.026	45.3422	66.7860	54.1971
Si 288.158	21950.1	21897.9	21964.8
Sn 189.925	48.0761	47.6770	48.2148
Sr 216.596	450.690	449.973	451.344
Ti 334.941	212.569	211.720	212.503
Tl 190.794	13.1314	5.2993	-4.0795u
V 292.401	53.6457	53.3545	54.8990
Zn 206.200	75.8706	72.4909	71.7611

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	23.4427	ppb	0.0561	0.2	669.535
Al 308.215	2757.24	ppb	4.0540	0.1	5602.74
As 188.980	49.1333	ppb	1.9064	3.9	13.8073
B 249.678	151.398	ppb	0.3859	0.3	1027.06
Ba 389.178	68.6922	ppb	2.0644	3.0	408.159
Be 313.042	28.5632	ppb	0.0836	0.3	22715.9
Ca 370.602	19017	ppb	51.58	0.3	31821
Cd 226.502	27.2568	ppb	0.1425	0.5	359.115
Co 228.615	26.7492	ppb	1.0199	3.8	94.6897
Cr 267.716	63.2496	ppb	0.0055	0.0	1072.44
Cu 324.754	54.3430	ppb	0.3058	0.6	2083.32
Fe 271.441	3448.30	ppb	26.7581	0.8	1927.32
K 766.491	6489.99	ppb	27.0022	0.4	133787

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	10307.5	ppb	31.7343	0.3	13803.3
Mn 257.610	221.124	ppb	0.3913	0.2	18401.1
Mo 202.032	54.3175	ppb	0.9443	1.7	95.6254
Na 330.237	28858.2	ppb	231.563	0.8	814.645
Ni 231.604	53.4597	ppb	1.1576	2.2	58.1790
Pb 220.353	256.539	ppb	7.3588	2.9	97.8499
Sb 206.834	28.6846	ppb	5.7030	19.9	16.4641
Se 196.026	55.4417	ppb	10.7760	19.4	13.2079
Si 288.158	21937.6	ppb	35.1612	0.2	102943
Sn 189.925	47.9893	ppb	0.2792	0.6	13.1247
Sr 216.596	450.669	ppb	0.6860	0.2	1322.34
Ti 334.941	212.264	ppb	0.4723	0.2	18830.5
Tl 190.794	4.7837	ppb	8.6170	180.1	-0.3665
V 292.401	53.9664	ppb	0.8207	1.5	532.718
Zn 206.200	73.3742	ppb	2.1925	3.0	40.3589

680-167431-c-1-f msd (Samp) 4/20/2019, 7:01:51 AM Rack 1, Tube 20
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	21.3697	22.4338	21.5127
Al 308.215	2661.44	2664.50	2664.77
As 188.980	55.9545	48.3874	53.4856
B 249.678	131.666	132.867	133.202
Ba 389.178	56.3829	55.5446	55.4919
Be 313.042	27.6648	27.5897	27.6674
Ca 370.602	18641	18699	18720
Cd 226.502	26.3356	25.8807	27.3511
Co 228.615	26.6657	27.8823	26.4562
Cr 267.716	61.2453	61.7754	61.2951
Cu 324.754	53.3889	53.2180	53.5625
Fe 271.441	3247.95	3273.96	3274.55
K 766.491	6208.50	6210.26	6213.00
Mg 279.078	9957.15	9987.50	9994.24
Mn 257.610	213.164	213.515	213.935
Mo 202.032	53.3131	51.3455	49.2940
Na 330.237	25045.0	25513.4	25080.0
Ni 231.604	51.8505	50.4707	50.0629
Pb 220.353	253.012	251.490	253.072
Sb 206.834	21.4896	19.4739	16.5645
Se 196.026	42.3244	52.7284	48.8917
Si 288.158	21865.7	21881.2	21904.4
Sn 189.925	39.6485	35.2019	46.1679
Sr 216.596	446.767	445.325	447.044
Ti 334.941	205.321	205.574	205.905
Tl 190.794	8.2241	16.9635	18.5053
V 292.401	51.4107	52.5144	52.6980
Zn 206.200	69.1109	72.0232	71.3383

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	21.7721	ppb	0.5775	2.7	618.827
Al 308.215	2663.57	ppb	1.8514	0.1	5419.42
As 188.980	52.6092	ppb	3.8589	7.3	14.7362
B 249.678	132.578	ppb	0.8076	0.6	898.429

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	55.8065	ppb	0.4999	0.9	326.699
Be 313.042	27.6406	ppb	0.0442	0.2	21971.8
Ca 370.602	18687	ppb	41.19	0.2	31269
Cd 226.502	26.5224	ppb	0.7528	2.8	349.410
Co 228.615	27.0014	ppb	0.7700	2.9	95.6692
Cr 267.716	61.4386	ppb	0.2927	0.5	1042.10
Cu 324.754	53.3898	ppb	0.1722	0.3	2054.38
Fe 271.441	3265.49	ppb	15.1906	0.5	1826.11
K 766.491	6210.58	ppb	2.2708	0.0	127997
Mg 279.078	9979.63	ppb	19.7556	0.2	13364.9
Mn 257.610	213.538	ppb	0.3862	0.2	17770.8
Mo 202.032	51.3175	ppb	2.0097	3.9	90.5649
Na 330.237	25212.8	ppb	260.923	1.0	716.214
Ni 231.604	50.7947	ppb	0.9368	1.8	55.1893
Pb 220.353	252.525	ppb	0.8963	0.4	96.3369
Sb 206.834	19.1760	ppb	2.4760	12.9	13.1689
Se 196.026	47.9815	ppb	5.2614	11.0	11.8001
Si 288.158	21883.8	ppb	19.4843	0.1	102691
Sn 189.925	40.3394	ppb	5.5155	13.7	11.1910
Sr 216.596	446.379	ppb	0.9229	0.2	1309.83
Ti 334.941	205.600	ppb	0.2931	0.1	18238.6
Tl 190.794	14.5643	ppb	5.5446	38.1	1.9826
V 292.401	52.2077	ppb	0.6963	1.3	514.997
Zn 206.200	70.8241	ppb	1.5227	2.1	38.9520

Cont Calib Verif (CCV)

4/20/2019, 7:06:05 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	513.623	512.465	505.736
Al 308.215	10297.3	10263.2	10208.6
As 188.980	497.633	499.300	496.069
B 249.678	528.584	530.008	529.314
Ba 389.178	487.353	483.103	479.624
Be 313.042	545.254	545.739	541.931
Ca 370.602	10212	10194	10106
Cd 226.502	511.102	507.765	504.424
Co 228.615	509.948	507.635	503.047
Cr 267.716	506.055	504.468	502.304
Cu 324.754	508.595	507.027	496.487
Fe 271.441	10379.4	10404.2	10344.6
K 766.491	10023.2	10024.7	9961.90
Mg 279.078	10455.3	10453.9	10355.9
Mn 257.610	505.003	504.675	502.294
Mo 202.032	501.637	502.455	497.424
Na 330.237	10872.7	10847.0	11429.2
Ni 231.604	507.059	511.179	503.989
Pb 220.353	497.341	520.859	506.122
Sb 206.834	489.306	487.420	492.864
Se 196.026	532.986	535.109	543.168
Si 288.158	5217.84	5218.18	5179.76
Sn 189.925	503.254	513.509	492.409
Sr 216.596	500.493	499.871	495.681
Ti 334.941	510.573	510.567	507.128

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	494.400	532.562	525.058
V 292.401	504.275	502.272	500.087
Zn 206.200	1072.35	1063.91	1055.38

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	510.608	ppb	4.2586	0.8	15466.8	102.12160
Al 308.215	10256.3	ppb	44.7335	0.4	20288.2	102.56330
As 188.980	497.667	ppb	1.6155	0.3	133.481	99.53348
B 249.678	529.302	ppb	0.7124	0.1	3606.70	105.86040
Ba 389.178	483.360	ppb	3.8711	0.8	3019.13	96.67204
Be 313.042	544.308	ppb	2.0728	0.4	438780	108.86155
Ca 370.602	10171	ppb	56.82	0.6	17033	101.70781
Cd 226.502	507.764	ppb	3.3391	0.7	6537.90	101.55273
Co 228.615	506.877	ppb	3.5127	0.7	1995.38	101.37532
Cr 267.716	504.276	ppb	1.8830	0.4	8450.33	100.85510
Cu 324.754	504.036	ppb	6.5849	1.3	15710.5	100.80724
Fe 271.441	10376.1	ppb	29.8908	0.3	5781.47	103.70877
K 766.491	10003.3	ppb	35.8312	0.4	203549	100.03264
Mg 279.078	10421.7	ppb	56.9661	0.5	13951.6	104.21673
Mn 257.610	503.991	ppb	1.4786	0.3	41859.7	100.79813
Mo 202.032	500.505	ppb	2.6993	0.5	848.490	100.10106
Na 330.237	11049.6	ppb	328.979	3.0	318.930	110.49648Q
Ni 231.604	507.409	ppb	3.6079	0.7	567.019	101.48180
Pb 220.353	508.107	ppb	11.8839	2.3	192.678	101.62148
Sb 206.834	489.864	ppb	2.7645	0.6	183.766	97.97272
Se 196.026	537.088	ppb	5.3717	1.0	104.058	107.41758
Si 288.158	5205.26	ppb	22.0808	0.4	24963.3	104.10515
Sn 189.925	503.057	ppb	10.5511	2.1	128.134	100.61146
Sr 216.596	498.682	ppb	2.6170	0.5	1456.75	99.73631
Ti 334.941	509.423	ppb	1.9872	0.4	45191.3	101.88454
Tl 190.794	517.340	ppb	20.2182	3.9	122.329	103.46799
V 292.401	502.211	ppb	2.0950	0.4	5058.53	100.44228
Zn 206.200	1063.88	ppb	8.4856	0.8	586.744	106.38792

Cont Calib Blank (CCB) 4/20/2019, 7:10:18 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0372	1.0092	0.8435
Al 308.215	11.6934	11.8467	14.9337
As 188.980	4.5583	1.0653	0.1513
B 249.678	13.3314	12.3643	10.6357
Ba 389.178	0.0193	-0.2296u	-0.5021u
Be 313.042	0.0830	0.1047	0.0836
Ca 370.602	4.190	0.4017	-4.202u
Cd 226.502	0.5418	0.1989	0.1802
Co 228.615	1.4840	0.6244	0.6249
Cr 267.716	-0.1617u	-0.2778u	0.1182
Cu 324.754	1.5385	-0.4716u	0.8691
Fe 271.441	-7.0480u	32.3247	20.0007
K 766.491	2.2501	3.6214	2.2207
Mg 279.078	7.0479	4.1227	9.8569
Mn 257.610	0.4250	0.2526	0.2667
Mo 202.032	0.2872	-0.3580u	-0.6471u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	491.897	190.367	110.785
Ni 231.604	-0.6019u	0.6111	-0.9742u
Pb 220.353	-4.7773u	6.8775	-1.0663u
Sb 206.834	3.9673	10.8018	-1.4329u
Se 196.026	-15.7155u	-13.7127u	1.8453
Si 288.158	10.1227	5.9370	5.6409
Sn 189.925	-12.2222u	-9.3071u	-9.1342u
Sr 216.596	2.1126	0.9849	-2.1382u
Ti 334.941	0.2694	0.5728	0.3673
Tl 190.794	-12.3703u	-2.7572u	-7.8406u
V 292.401	-0.1868u	-0.4855u	0.7470
Zn 206.200	-0.5514u	3.9201	-2.2376u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.6299	ppb	0.5200	82.5	-21.5917	0.62995
Al 308.215	12.8246	ppb	1.8281	14.3	232.203	12.82457
As 188.980	1.9250	ppb	2.3259	120.8	1.2203	1.92496
B 249.678	12.1105	ppb	1.3657	11.3	77.1375	12.11047
Ba 389.178	-0.2375	ppb	0.2608	109.8	-38.1250	-0.23746
Be 313.042	0.0904	ppb	0.0124	13.7	-253.855	0.09045
Ca 370.602	0.1297	ppb	4.203	3241.3	25.31	0.12966
Cd 226.502	0.3070	ppb	0.2036	66.3	7.8963	0.30697
Co 228.615	0.9111	ppb	0.4961	54.5	-8.7511	0.91110
Cr 267.716	-0.1071	ppb	0.2036	190.0	11.7647	-0.10714
Cu 324.754	0.6453	ppb	1.0236	158.6	455.625	0.64534
Fe 271.441	15.0925	ppb	20.1400	133.4	25.6124	15.09246
K 766.491	2.6974	ppb	0.8003	29.7	350.739	2.69739
Mg 279.078	7.0092	ppb	2.8673	40.9	31.0630	7.00918
Mn 257.610	0.3148	ppb	0.0957	30.4	52.6858	0.31478
Mo 202.032	-0.2393	ppb	0.4784	199.9	3.6001	-0.23932
Na 330.237	264.350	ppb	201.039	76.1	44.7050	264.34964
Ni 231.604	-0.3217	ppb	0.8290	257.7	-2.1331	-0.32169
Pb 220.353	0.3446	ppb	5.9541	1727.6	0.9865	0.34465
Sb 206.834	4.4454	ppb	6.1313	137.9	7.5629	4.44536
Se 196.026	-9.1943	ppb	9.6129	104.6	0.9884	-9.19431
Si 288.158	7.2335	ppb	2.5065	34.7	569.285	7.23351
Sn 189.925	-10.2211	ppb	1.7351	17.0	-1.5899	-10.22114
Sr 216.596	0.3198	ppb	2.2021	688.7	8.1085	0.31976
Ti 334.941	0.4032	ppb	0.1549	38.4	10.4168	0.40318
Tl 190.794	-7.6560	ppb	4.8092	62.8	-3.2520	-7.65605
V 292.401	0.0249	ppb	0.6429	2579.6	-12.4905	0.02492
Zn 206.200	0.3770	ppb	3.1821	844.0	0.1028	0.37704

680-167708-a-6-b (Samp)

4/20/2019, 7:14:29 AM

Rack 1, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6816u	-0.1324u	-1.1600u
Al 308.215	82.0591	84.7534	74.4649
As 188.980	-1.7792u	0.9094	4.5113
B 249.678	13.8079	14.6643	13.6098
Ba 389.178	29.4812	29.8019	30.2862
Be 313.042	-0.1109u	-0.1298u	-0.1121u
Ca 370.602	34684	34677	34562

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.3960	0.0135	-0.0906u
Co 228.615	-0.4567u	0.2981	1.3943
Cr 267.716	0.6756	0.2134	-0.0264u
Cu 324.754	0.7697	0.4815	0.9631
Fe 271.441	3.1605	-19.4609u	6.9060
K 766.491	2388.23	2388.13	2381.77
Mg 279.078	8357.11	8352.80	8330.49
Mn 257.610	27.0688	26.9282	27.3002
Mo 202.032	0.3594	1.3905	1.1293
Na 330.237	16479.3	16381.3	16459.5
Ni 231.604	2.4438	2.5342	-1.3712u
Pb 220.353	-1.7059u	-3.6502u	6.2653
Sb 206.834	6.8153	-5.0099u	-1.5831u
Se 196.026	1.5106	-16.6443u	-1.1985u
Si 288.158	1807.44	1806.09	1797.42
Sn 189.925	0.8749	-2.3618u	-8.9497u
Sr 216.596	146.721	144.489	146.691
Ti 334.941	-0.2263	-0.2529u	0.0193
Tl 190.794	-26.3914u	-3.7435u	-13.5249u
V 292.401	-0.2733u	0.8917	-0.8198u
Zn 206.200	1.3005	-0.2488u	-0.9601u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6580	ppb	0.5142	78.1	-61.1761
Al 308.215	80.4258	ppb	5.3352	6.6	364.460
As 188.980	1.2138	ppb	3.1563	260.0	1.0303
B 249.678	14.0273	ppb	0.5605	4.0	90.2547
Ba 389.178	29.8564	ppb	0.4052	1.4	160.272
Be 313.042	-0.1176	ppb	0.0106	9.0	-417.431
Ca 370.602	34641	ppb	68.61	0.2	57942
Cd 226.502	0.1063	ppb	0.2563	241.1	5.3395
Co 228.615	0.4119	ppb	0.9307	226.0	-10.7424
Cr 267.716	0.2875	ppb	0.3569	124.1	18.5003
Cu 324.754	0.7381	ppb	0.2423	32.8	458.454
Fe 271.441	-3.1315	ppb	14.2652	455.5	15.5094
K 766.491	2386.05	ppb	3.7001	0.2	49433.1
Mg 279.078	8346.80	ppb	14.2900	0.2	11183.7
Mn 257.610	27.0991	ppb	0.1878	0.7	2304.15
Mo 202.032	0.9598	ppb	0.5361	55.9	5.6237
Na 330.237	16440.0	ppb	51.8370	0.3	481.896
Ni 231.604	1.2023	ppb	2.2292	185.4	-0.4229
Pb 220.353	0.3031	ppb	5.2542	1733.5	0.9716
Sb 206.834	0.0741	ppb	6.0843	8213.4	5.9861
Se 196.026	-5.4441	ppb	9.7938	179.9	1.6980
Si 288.158	1803.65	ppb	5.4346	0.3	8953.68
Sn 189.925	-3.4789	ppb	5.0067	143.9	0.1158
Sr 216.596	145.967	ppb	1.2805	0.9	433.255
Ti 334.941	-0.1533	ppb	0.1501	97.9	-17.2014
Tl 190.794	-14.5533	ppb	11.3589	78.1	-4.8986
V 292.401	-0.0671	ppb	0.8742	1302.0	-13.5192
Zn 206.200	0.0305	ppb	1.1559	3783.9	-0.0884

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167708-a-4-b (Samp) **4/20/2019, 7:18:41 AM** **Rack 1, Tube 22****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.9161u	-0.0567u	0.6887
Al 308.215	69.6380	66.9695	71.5692
As 188.980	6.0066	13.2107	-2.3781u
B 249.678	19.6048	20.0684	20.0750
Ba 389.178	39.8955	42.1182	42.5439
Be 313.042	-0.1066u	-0.1159u	-0.1308u
Ca 370.602	35085	35108	35074
Cd 226.502	-0.5458u	0.2820	0.1258
Co 228.615	-1.3294u	0.8606	0.6847
Cr 267.716	0.5421	0.2477	-0.0172u
Cu 324.754	1.9562	1.9818	1.8425
Fe 271.441	129.317	133.408	160.007
K 766.491	2833.78	2840.93	2844.08
Mg 279.078	8842.28	8811.47	8858.67
Mn 257.610	11.3051	11.1931	11.1352
Mo 202.032	-0.1941u	0.6823	-0.4264u
Na 330.237	28657.1	28413.8	28527.5
Ni 231.604	-0.8928u	-0.9649u	0.1202
Pb 220.353	-6.2806u	1.7722	-3.1910u
Sb 206.834	5.5216	2.1540	1.6159
Se 196.026	5.4446	-13.6065u	6.2335
Si 288.158	1923.67	1933.62	1931.57
Sn 189.925	-6.5763u	-17.1036u	-9.7789u
Sr 216.596	148.225	152.377	149.365
Ti 334.941	-0.0082	0.0001	-0.0485
Tl 190.794	-9.2794u	-11.5485u	-14.3965u
V 292.401	1.3489	0.6845	0.0967
Zn 206.200	-0.4421u	5.8494	-0.7238u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0947	ppb	0.8031	848.1	-44.1351
Al 308.215	69.3922	ppb	2.3097	3.3	342.892
As 188.980	5.6131	ppb	7.8019	139.0	2.2046
B 249.678	19.9160	ppb	0.2696	1.4	130.429
Ba 389.178	41.5192	ppb	1.4222	3.4	234.190
Be 313.042	-0.1178	ppb	0.0122	10.4	-418.003
Ca 370.602	35089	ppb	17.07	0.0	58690
Cd 226.502	-0.0460	ppb	0.4399	956.2	3.5660
Co 228.615	0.0720	ppb	1.2168	1690.4	-12.0848
Cr 267.716	0.2575	ppb	0.2797	108.6	18.0520
Cu 324.754	1.9268	ppb	0.0741	3.8	494.469
Fe 271.441	140.910	ppb	16.6639	11.8	95.2303
K 766.491	2839.59	ppb	5.2745	0.2	58745.6
Mg 279.078	8837.48	ppb	23.9638	0.3	11840.0
Mn 257.610	11.2111	ppb	0.0864	0.8	988.969
Mo 202.032	0.0206	ppb	0.5847	2836.5	4.0370
Na 330.237	28532.8	ppb	121.717	0.4	808.677
Ni 231.604	-0.5792	ppb	0.6068	104.8	-2.4210
Pb 220.353	-2.5665	ppb	4.0626	158.3	-0.1200
Sb 206.834	3.0971	ppb	2.1168	68.3	7.0809
Se 196.026	-0.6428	ppb	11.2338	1747.7	2.6021
Si 288.158	1929.62	ppb	5.2533	0.3	9541.25

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-11.1529	ppb	5.3965	48.4	-1.8226
Sr 216.596	149.989	ppb	2.1453	1.4	445.020
Ti 334.941	-0.0189	ppb	0.0260	137.6	-4.2550
Tl 190.794	-11.7415	ppb	2.5640	21.8	-4.2343
V 292.401	0.7100	ppb	0.6265	88.2	-5.5840
Zn 206.200	1.5612	ppb	3.7164	238.0	0.7565

680-167708-a-7-b (Samp) 4/20/2019, 7:22:53 AM Rack 1, Tube 23

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5591u	-0.1424u	-1.2044u
Al 308.215	92.9573	88.6579	88.5478
As 188.980	2.4401	10.5041	-1.7951u
B 249.678	16.7610	17.1616	17.6419
Ba 389.178	34.0073	35.8755	34.6628
Be 313.042	-0.1197u	-0.1041u	-0.1261u
Ca 370.602	36075	35723	36135
Cd 226.502	-0.0978u	0.3425	0.2593
Co 228.615	-0.4624u	-0.4212u	0.9226
Cr 267.716	0.7313	0.5209	0.7342
Cu 324.754	2.6063	3.0500	2.4407
Fe 271.441	20.5988	16.8942	69.5243
K 766.491	2670.02	2649.63	2674.51
Mg 279.078	8715.79	8636.53	8741.46
Mn 257.610	33.3564	33.1602	33.2676
Mo 202.032	0.8805	-0.9196u	0.3082
Na 330.237	21309.3	20678.1	20976.3
Ni 231.604	0.9281	2.6973	-2.1488u
Pb 220.353	3.0685	-2.9360u	0.5389
Sb 206.834	0.2190	-5.5533u	-0.5499u
Se 196.026	-18.4229u	-15.6778u	4.9191
Si 288.158	1916.19	1889.81	1910.59
Sn 189.925	-5.4135u	-6.9754u	-3.3820u
Sr 216.596	151.237	150.800	152.885
Ti 334.941	-0.1487	-0.1093	-0.1319
Tl 190.794	5.8947	7.0419	-1.4148u
V 292.401	0.9063	0.8118	0.2490
Zn 206.200	0.7068	-0.1390u	0.7586

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6353	ppb	0.5351	84.2	-60.4959
Al 308.215	90.0544	ppb	2.5146	2.8	383.296
As 188.980	3.7164	ppb	6.2481	168.1	1.6985
B 249.678	17.1882	ppb	0.4411	2.6	111.876
Ba 389.178	34.8485	ppb	0.9479	2.7	192.051
Be 313.042	-0.1166	ppb	0.0113	9.7	-416.592
Ca 370.602	35978	ppb	222.6	0.6	60177
Cd 226.502	0.1680	ppb	0.2339	139.2	6.1470
Co 228.615	0.0130	ppb	0.7880	6057.8	-12.3124
Cr 267.716	0.6621	ppb	0.1223	18.5	24.8023
Cu 324.754	2.6990	ppb	0.3151	11.7	517.831
Fe 271.441	35.6724	ppb	29.3750	82.3	36.9832
K 766.491	2664.72	ppb	13.2623	0.5	55088.7

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	8697.93	ppb	54.6984	0.6	11653.2
Mn 257.610	33.2614	ppb	0.0983	0.3	2816.30
Mo 202.032	0.0897	ppb	0.9197	1025.1	4.1550
Na 330.237	20987.9	ppb	315.783	1.5	604.797
Ni 231.604	0.4922	ppb	2.4523	498.3	-1.2194
Pb 220.353	0.2238	ppb	3.0146	1347.1	0.9416
Sb 206.834	-1.9614	ppb	3.1343	159.8	5.3822
Se 196.026	-9.7272	ppb	12.7581	131.2	0.8912
Si 288.158	1905.53	ppb	13.8996	0.7	9428.98
Sn 189.925	-5.2570	ppb	1.8018	34.3	-0.3332
Sr 216.596	151.641	ppb	1.0995	0.7	449.828
Ti 334.941	-0.1300	ppb	0.0198	15.2	-14.3026
Tl 190.794	3.8406	ppb	4.5873	119.4	-0.4925
V 292.401	0.6557	ppb	0.3553	54.2	-6.1040
Zn 206.200	0.4421	ppb	0.5040	114.0	0.1384

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Rack 1, Tube 24

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9324	0.3188	-1.1111u
Al 308.215	51.5154	54.0226	51.2706
As 188.980	3.9782	7.2458	5.5214
B 249.678	15.2496	14.6352	13.4314
Ba 389.178	29.0045	27.8281	31.9799
Be 313.042	-0.1362u	-0.1330u	-0.1267u
Ca 370.602	36247	35918	36001
Cd 226.502	0.1037	-0.2166u	-0.1308u
Co 228.615	0.2569	-0.4348u	0.7009
Cr 267.716	0.3822	0.0391	-0.0441u
Cu 324.754	3.1558	3.0223	2.4291
Fe 271.441	159.773	168.871	172.146
K 766.491	2477.24	2451.65	2458.35
Mg 279.078	8808.76	8765.09	8772.42
Mn 257.610	38.0027	37.6450	37.5337
Mo 202.032	2.0567	0.3940	1.0080
Na 330.237	19656.0	18950.4	19214.7
Ni 231.604	2.0181	-3.0024u	0.9643
Pb 220.353	-8.2444u	1.5060	9.6004
Sb 206.834	-1.6122u	-7.4960u	-7.0159u
Se 196.026	-1.1999u	-8.0040u	16.0840
Si 288.158	1903.12	1886.14	1891.06
Sn 189.925	-0.7447u	-5.6375u	-14.1562u
Sr 216.596	154.644	153.999	151.233
Ti 334.941	-0.0386	0.0916	-0.1097
Tl 190.794	-8.6130u	-9.1363u	1.3204
V 292.401	1.0469	-0.0127u	-0.6610u
Zn 206.200	1.2385	-1.4694u	-1.4387u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0467	ppb	1.0486	2246.2	-39.8070
Al 308.215	52.2696	ppb	1.5231	2.9	309.386
As 188.980	5.5818	ppb	1.6346	29.3	2.1962
B 249.678	14.4387	ppb	0.9249	6.4	92.9094

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	29.6042	ppb	2.1398	7.2	159.233
Be 313.042	-0.1320	ppb	0.0049	3.7	-428.925
Ca 370.602	36055	ppb	171.3	0.5	60306
Cd 226.502	-0.0812	ppb	0.1658	204.2	3.1711
Co 228.615	0.1744	ppb	0.5723	328.2	-11.6831
Cr 267.716	0.1257	ppb	0.2260	179.7	15.8385
Cu 324.754	2.8691	ppb	0.3868	13.5	523.026
Fe 271.441	166.930	ppb	6.4109	3.8	109.647
K 766.491	2462.41	ppb	13.2728	0.5	50977.0
Mg 279.078	8782.09	ppb	23.3859	0.3	11765.7
Mn 257.610	37.7271	ppb	0.2451	0.6	3186.90
Mo 202.032	1.1529	ppb	0.8407	72.9	5.9478
Na 330.237	19273.7	ppb	356.494	1.8	558.481
Ni 231.604	-0.0067	ppb	2.6473	39733.4	-1.7792
Pb 220.353	0.9540	ppb	8.9352	936.6	1.2134
Sb 206.834	-5.3747	ppb	3.2673	60.8	4.1124
Se 196.026	2.2934	ppb	12.4181	541.5	3.1582
Si 288.158	1893.44	ppb	8.7371	0.5	9372.45
Sn 189.925	-6.8461	ppb	6.7870	99.1	-0.7350
Sr 216.596	153.292	ppb	1.8122	1.2	454.659
Ti 334.941	-0.0189	ppb	0.1021	539.4	-4.1955
Tl 190.794	-5.4763	ppb	5.8919	107.6	-2.7296
V 292.401	0.1244	ppb	0.8622	693.1	-11.5566
Zn 206.200	-0.5566	ppb	1.5546	279.3	-0.4122

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Rack 1, Tube 25

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7231	-1.1196u	-0.4807u
Al 308.215	74.9421	74.9079	76.5095
As 188.980	4.7128	1.0685	-0.5436u
B 249.678	11.9698	12.0014	11.8524
Ba 389.178	31.1855	31.5621	33.9209
Be 313.042	-0.1086u	-0.1121u	-0.1182u
Ca 370.602	37018	36990	37297
Cd 226.502	0.0961	0.1063	-0.0405u
Co 228.615	-0.8707u	-1.9779u	0.1535
Cr 267.716	0.3923	0.0608	0.0647
Cu 324.754	2.9090	2.3133	3.2095
Fe 271.441	217.303	231.914	245.169
K 766.491	2498.42	2505.46	2521.01
Mg 279.078	8871.29	8882.99	8946.43
Mn 257.610	4.2525	4.2490	4.1921
Mo 202.032	-1.0103u	0.8034	-0.0435u
Na 330.237	19300.4	19396.7	19426.2
Ni 231.604	3.0205	3.3564	2.3038
Pb 220.353	2.2456	2.4200	0.2386
Sb 206.834	-4.4396u	-0.6860u	-2.6009u
Se 196.026	9.1990	-9.2728u	-0.6895u
Si 288.158	1917.02	1915.96	1936.45
Sn 189.925	3.7524	-3.6657u	-8.9539u
Sr 216.596	152.862	156.296	155.768
Ti 334.941	-0.2834u	-0.1790	-0.1046

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Label	Replicates Concentration		
Tl 190.794	-12.0900u	-2.3839u	-10.9169u
V 292.401	0.0408	-0.4095u	0.2124
Zn 206.200	-2.3183u	-2.6729u	0.0159

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2924	ppb	0.9357	320.0	-50.1882
Al 308.215	75.4532	ppb	0.9150	1.2	354.726
As 188.980	1.7459	ppb	2.6929	154.2	1.1719
B 249.678	11.9412	ppb	0.0785	0.7	75.7619
Ba 389.178	32.2229	ppb	1.4826	4.6	175.841
Be 313.042	-0.1130	ppb	0.0048	4.3	-413.363
Ca 370.602	37102	ppb	170.0	0.5	62055
Cd 226.502	0.0540	ppb	0.0820	151.9	4.9861
Co 228.615	-0.8983	ppb	1.0660	118.7	-15.9274
Cr 267.716	0.1726	ppb	0.1903	110.2	16.5774
Cu 324.754	2.8106	ppb	0.4561	16.2	521.248
Fe 271.441	231.462	ppb	13.9385	6.0	145.323
K 766.491	2508.30	ppb	11.5597	0.5	51923.4
Mg 279.078	8900.24	ppb	40.4317	0.5	11924.0
Mn 257.610	4.2312	ppb	0.0339	0.8	410.650
Mo 202.032	-0.0835	ppb	0.9075	1087.5	3.8606
Na 330.237	19374.5	ppb	65.7715	0.3	561.198
Ni 231.604	2.8936	ppb	0.5376	18.6	1.4756
Pb 220.353	1.6347	ppb	1.2122	74.2	1.4682
Sb 206.834	-2.5755	ppb	1.8769	72.9	5.0936
Se 196.026	-0.2544	ppb	9.2436	3633.2	2.6750
Si 288.158	1923.14	ppb	11.5372	0.6	9511.10
Sn 189.925	-2.9557	ppb	6.3828	215.9	0.2483
Sr 216.596	154.975	ppb	1.8492	1.2	459.583
Ti 334.941	-0.1890	ppb	0.0898	47.5	-18.9858
Tl 190.794	-8.4636	ppb	5.2978	62.6	-3.4548
V 292.401	-0.0521	ppb	0.3212	616.4	-13.2755
Zn 206.200	-1.6585	ppb	1.4608	88.1	-1.0201

400-168271-d-2-c (Samp)

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Rack 1, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5657u	-0.8941u	-0.4276u
Al 308.215	1362.30	1378.32	1374.63
As 188.980	23.1973	28.9326	24.7827
B 249.678	190.260	193.392	193.537
Ba 389.178	17.8615	20.6714	17.6318
Be 313.042	-0.0452u	-0.0465u	-0.0402u
Ca 370.602	37136	37487	37371
Cd 226.502	0.9763	1.4221	1.3603
Co 228.615	1.2426	2.1797	3.0907
Cr 267.716	15.1364	15.0891	14.7768
Cu 324.754	8.8276	9.0901	9.1808
Fe 271.441	2152.40	2180.26	2151.70
K 766.491	18618.1	18795.2	18790.7
Mg 279.078	27247.3	27467.7	27351.7
Mn 257.610	50.1925	50.4715	50.3218
Mo 202.032	10.1597	13.3295	10.7165

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Label	Replicates Concentration		
Na 330.237	360027x	363600x	364983x
Ni 231.604	3.2906	1.5161	1.1066
Pb 220.353	18.1647	15.5478	21.3172
Sb 206.834	8.5686	4.9749	-2.0212u
Se 196.026	-5.4853u	28.1351	7.6361
Si 288.158	5954.62	6017.77	5990.93
Sn 189.925	0.0104	12.8503	7.3368
Sr 216.596	136.698	137.552	135.676
Ti 334.941	21.7434	22.1063	21.8892
Tl 190.794	-5.0100u	-1.6144u	-1.6392u
V 292.401	6.2208	7.1387	6.1586
Zn 206.200	177.425	181.030	178.645

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6291b	ppb	0.2397	38.1	-60.7485
Al 308.215	1371.75b	ppb	8.3897	0.6	2890.80
As 188.980	25.6375b	ppb	2.9617	11.6	7.5442
B 249.678	192.396b	ppb	1.8516	1.0	1309.02
Ba 389.178	18.7216b	ppb	1.6925	9.0	112.150
Be 313.042	-0.0440b	ppb	0.0033	7.6	-374.409
Ca 370.602	37331b	ppb	178.7	0.5	62437
Cd 226.502	1.2529b	ppb	0.2416	19.3	22.8297
Co 228.615	2.1710b	ppb	0.9241	42.6	-3.7293
Cr 267.716	15.0008b	ppb	0.1954	1.3	266.801
Cu 324.754	9.0328b	ppb	0.1834	2.0	710.216
Fe 271.441	2161.45b	ppb	16.2911	0.8	1213.82
K 766.491	18734.6b	ppb	100.970	0.5	385854
Mg 279.078	27355.6b	ppb	110.241	0.4	36603.8
Mn 257.610	50.3286b	ppb	0.1396	0.3	4301.60
Mo 202.032	11.4019b	ppb	1.6924	14.8	23.2207
Na 330.237	362870xb	ppb	2557.18	0.7	9842.32
Ni 231.604	1.9711b	ppb	1.1609	58.9	0.4386
Pb 220.353	18.3432b	ppb	2.8889	15.7	7.7245
Sb 206.834	3.8407b	ppb	5.3852	140.2	7.4692
Se 196.026	10.0953b	ppb	16.9446	167.8	4.6383
Si 288.158	5987.77b	ppb	31.6943	0.5	28484.1
Sn 189.925	6.7325b	ppb	6.4412	95.7	2.7306
Sr 216.596	136.642b	ppb	0.9394	0.7	406.165
Ti 334.941	21.9129b	ppb	0.1826	0.8	1982.85
Tl 190.794	-2.7546b	ppb	1.9533	70.9	-2.1632
V 292.401	6.5060b	ppb	0.5488	8.4	51.7594
Zn 206.200	179.033b	ppb	1.8334	1.0	98.6915

400-168271-d-3-c (Samp)

4/20/2019, 7:39:38 AM

Rack 1, Tube 27

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3943	1.2604	1.0883
Al 308.215	339.984	331.530	336.463
As 188.980	19.4212	12.0771	7.9554
B 249.678	446.214	446.348	448.488
Ba 389.178	85.1567	89.6136	88.2054
Be 313.042	1.1099	1.0949	1.1218
Ca 370.602	101279	101177	101249

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	2.6923	2.2328	1.8459
Co 228.615	13.5522	12.1284	12.3587
Cr 267.716	1.0661	1.5119	1.8381
Cu 324.754	3.0543	3.2329	3.0769
Fe 271.441	4856.45	4832.12	4824.43
K 766.491	15220.4	15159.1	15200.2
Mg 279.078	50436.6	50321.7	50321.5
Mn 257.610	3800.79	3801.47	3800.45
Mo 202.032	4.5707	3.1505	1.5622
Na 330.237	999823x	998747x	992514x
Ni 231.604	35.6163	30.2139	31.1113
Pb 220.353	4.0074	-9.3570u	4.6610
Sb 206.834	4.8020	0.0084	-4.4191u
Se 196.026	19.0786	8.0273	13.3187
Si 288.158	14741.9	14712.9	14748.7
Sn 189.925	-0.0387	-13.6498u	-2.3552u
Sr 216.596	715.981	714.838	717.775
Ti 334.941	3.6873	3.9298	4.1704
Tl 190.794	-6.0601u	-13.6840u	-5.1986u
V 292.401	3.2064	3.0360	2.9686
Zn 206.200	31.5066	26.3910	25.9055

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9144b	ppb	0.4585	50.1	-9.3253
Al 308.215	335.992b	ppb	4.2465	1.3	864.604
As 188.980	13.1513b	ppb	5.8079	44.2	4.2049
B 249.678	447.017b	ppb	1.2762	0.3	3049.15
Ba 389.178	87.6585b	ppb	2.2782	2.6	572.008
Be 313.042	1.1089b	ppb	0.0135	1.2	536.377
Ca 370.602	101235b	ppb	52.51	0.1	169328
Cd 226.502	2.2570b	ppb	0.4237	18.8	38.7171
Co 228.615	12.6798b	ppb	0.7642	6.0	37.7818
Cr 267.716	1.4720b	ppb	0.3875	26.3	49.9304
Cu 324.754	3.1214b	ppb	0.0973	3.1	531.513
Fe 271.441	4837.67b	ppb	16.7144	0.3	2695.58
K 766.491	15193.2b	ppb	31.2138	0.2	312987
Mg 279.078	50359.9b	ppb	66.4078	0.1	67329.8
Mn 257.610	3800.90b	ppb	0.5170	0.0	315298
Mo 202.032	3.0945b	ppb	1.5051	48.6	9.1703
Na 330.237	997028xb	ppb	3945.64	0.4	26983.2
Ni 231.604	32.3138b	ppb	2.8950	9.0	34.4690
Pb 220.353	-0.2295b	ppb	7.9113	3446.5	0.7914
Sb 206.834	0.1304b	ppb	4.6117	3536.0	6.1307
Se 196.026	13.4749b	ppb	5.5273	41.0	5.6396
Si 288.158	14734.5b	ppb	19.0076	0.1	69304.2
Sn 189.925	-5.3479b	ppb	7.2824	136.2	-0.2601
Sr 216.596	716.198b	ppb	1.4802	0.2	2098.21
Ti 334.941	3.9292b	ppb	0.2415	6.1	434.223
Tl 190.794	-8.3142b	ppb	4.6702	56.2	-2.8002
V 292.401	3.0704b	ppb	0.1226	4.0	16.1241
Zn 206.200	27.9344b	ppb	3.1032	11.1	15.3199

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

400-168271-d-1-e (Samp) **4/20/2019, 7:43:48 AM** **Rack 1, Tube 28****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2600	0.0117u	-0.0148u
Al 308.215	646.385	649.952	648.190
As 188.980	4.6919	19.1276	3.7664
B 249.678	940.176	947.183	948.900
Ba 389.178	132.937	134.608	135.457
Be 313.042	-0.0014u	-0.0298u	-0.0205u
Ca 370.602	96374	96410	96353
Cd 226.502	0.2378	0.0961	0.1144
Co 228.615	2.2393	2.2065	1.2838
Cr 267.716	8.9736	9.2518	8.2990
Cu 324.754	6.0856	7.0920	6.7400
Fe 271.441	3015.77	3040.95	3026.03
K 766.491	77727.8x	77979.4x	77894.8x
Mg 279.078	99968.4	100118	99878.4
Mn 257.610	152.395	152.610	152.398
Mo 202.032	14.4863	15.4356	14.3989
Na 330.237	1560036x	1568252x	1572550x
Ni 231.604	2.2415	3.4220	1.6185
Pb 220.353	20.4042	9.8212	12.9824
Sb 206.834	0.1804	4.7712	4.5140
Se 196.026	-2.7190u	-11.7639u	23.3201
Si 288.158	18915.1	18973.6	18928.2
Sn 189.925	-17.8279u	1.3806	-5.3515u
Sr 216.596	969.899	970.433	976.535
Ti 334.941	18.7456	18.5416	18.9859
Tl 190.794	-4.8432u	-9.8231u	-11.0178u
V 292.401	2.7282	3.7234	3.2799
Zn 206.200	301.729	294.771	287.712

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0856b	ppb	0.1516	177.0	-42.0325
Al 308.215	648.176b	ppb	1.7834	0.3	1475.38
As 188.980	9.1953b	ppb	8.6140	93.7	3.1517
B 249.678	945.420b	ppb	4.6220	0.5	6462.55
Ba 389.178	134.334b	ppb	1.2824	1.0	919.389
Be 313.042	-0.0172b	ppb	0.0145	83.9	-401.056
Ca 370.602	96379b	ppb	28.67	0.0	161159
Cd 226.502	0.1494b	ppb	0.0771	51.6	8.1097
Co 228.615	1.9099b	ppb	0.5424	28.4	-4.8141
Cr 267.716	8.8414b	ppb	0.4899	5.5	170.808
Cu 324.754	6.6392b	ppb	0.5107	7.7	637.939
Fe 271.441	3027.58b	ppb	12.6649	0.4	1693.25
K 766.491	77867.3xb	ppb	128.063	0.2	1602923
Mg 279.078	99988.4b	ppb	121.169	0.1	133735
Mn 257.610	152.468b	ppb	0.1233	0.1	13037.1
Mo 202.032	14.7736b	ppb	0.5750	3.9	28.9020
Na 330.237	1566946xb	ppb	6358.35	0.4	42382.9
Ni 231.604	2.4273b	ppb	0.9160	37.7	0.9502
Pb 220.353	14.4026b	ppb	5.4326	37.7	6.2109
Sb 206.834	3.1552b	ppb	2.5794	81.8	7.1716
Se 196.026	2.9457b	ppb	18.2151	618.4	3.3038
Si 288.158	18939.0b	ppb	30.6776	0.2	88929.8

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-7.2663b	ppb	9.7463	134.1	-0.6889
Sr 216.596	972.289b	ppb	3.6869	0.4	2845.57
Ti 334.941	18.7577b	ppb	0.2224	1.2	1868.32
Tl 190.794	-8.5614b	ppb	3.2750	38.3	-3.5703
V 292.401	3.2439b	ppb	0.4986	15.4	15.5754
Zn 206.200	294.738b	ppb	7.0086	2.4	162.549

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0893u	-0.8209u	-0.0593u
Al 308.215	223.506	209.292	217.224
As 188.980	22.0648	26.8717	28.8922
B 249.678	1048.01	1047.77	1048.98
Ba 389.178	329.033	324.763	322.780
Be 313.042	0.0463u	0.0234u	0.0510u
Ca 370.602	145333	145059	145157
Cd 226.502	0.0296	0.5869	0.2125
Co 228.615	14.0794	15.0730	14.5895
Cr 267.716	2.6098	2.8736	2.8247
Cu 324.754	0.2891	1.2201	0.9526
Fe 271.441	20686.0	20694.4	20804.7
K 766.491	117514x	117338x	117490x
Mg 279.078	131982	131618	131913
Mn 257.610	147.968	147.536	147.740
Mo 202.032	3.2729	5.9082	5.1569
Na 330.237	2729714x	2719806x	2726443x
Ni 231.604	31.7294	32.0135	30.0319
Pb 220.353	5.2825	3.9289	-0.3274u
Sb 206.834	1.0339	1.9318	4.8562
Se 196.026	13.5134	-7.9278u	0.7153
Si 288.158	14688.0	14659.8	14677.5
Sn 189.925	-8.9108u	-4.4274u	1.1861
Sr 216.596	1482.14	1483.99	1483.59
Ti 334.941	1.3081	1.3708	1.3890
Tl 190.794	-12.3234u	-8.8618u	-11.3411u
V 292.401	4.4591	5.1118	3.1950
Zn 206.200	10.6613	6.1147	10.8650

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3232b	ppb	0.4313	133.5	-59.3439
Al 308.215	216.674b	ppb	7.1227	3.3	631.719
As 188.980	25.9429b	ppb	3.5072	13.5	7.5793
B 249.678	1048.25b	ppb	0.6386	0.1	7148.85
Ba 389.178	325.525b	ppb	3.1958	1.0	2163.89
Be 313.042	0.0402b	ppb	0.0147	36.6	-400.523
Ca 370.602	145183b	ppb	139.1	0.1	242725
Cd 226.502	0.2763b	ppb	0.2840	102.8	34.3360
Co 228.615	14.5806b	ppb	0.4969	3.4	44.9524
Cr 267.716	2.7694b	ppb	0.1403	5.1	77.1907
Cu 324.754	0.8206b	ppb	0.4793	58.4	464.625
Fe 271.441	20728.4b	ppb	66.2474	0.3	11492.0
K 766.491	117448xb	ppb	95.4546	0.1	2417557

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	131838b	ppb	193.544	0.1	176328
Mn 257.610	147.748b	ppb	0.2158	0.1	12773.3
Mo 202.032	4.7793b	ppb	1.3576	28.4	11.8332
Na 330.237	2725321xb	ppb	5048.07	0.2	73692.6
Ni 231.604	31.2582b	ppb	1.0715	3.4	33.2827
Pb 220.353	2.9613b	ppb	2.9274	98.9	1.2993
Sb 206.834	2.6073b	ppb	1.9987	76.7	7.1918
Se 196.026	2.1003b	ppb	10.7875	513.6	3.2149
Si 288.158	14675.1b	ppb	14.2244	0.1	69028.2
Sn 189.925	-4.0507b	ppb	5.0590	124.9	0.2378
Sr 216.596	1483.24b	ppb	0.9734	0.1	4339.06
Ti 334.941	1.3560b	ppb	0.0424	3.1	383.023
Tl 190.794	-10.8421b	ppb	1.7839	16.5	-4.8863
V 292.401	4.2553b	ppb	0.9745	22.9	24.6962
Zn 206.200	9.2137b	ppb	2.6857	29.1	5.0217

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Rack 1, Tube 30

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1123	-0.1495u	-0.8934u
Al 308.215	94.8473	88.4997	92.1496
As 188.980	9.8433	5.6737	-0.1876u
B 249.678	517.745	520.114	516.017
Ba 389.178	332.948	333.136	337.248
Be 313.042	0.0227u	0.0041u	0.0235u
Ca 370.602	24784	24678	24829
Cd 226.502	-0.1064	-0.0638	-0.0985
Co 228.615	3.3374	2.8895	3.1232
Cr 267.716	1.2223	1.2960	0.5681
Cu 324.754	-0.4469u	0.5935	-0.1261u
Fe 271.441	6516.44	6477.39	6550.53
K 766.491	85590.1x	85091.9x	85623.0x
Mg 279.078	36324.6	36178.1	36269.4
Mn 257.610	27.0458	26.9011	26.7276
Mo 202.032	79.0492	78.7168	76.9897
Na 330.237	1982818x	1960123x	1977887x
Ni 231.604	12.1840	14.2230	13.7053
Pb 220.353	-1.2169u	12.1245	5.8844
Sb 206.834	8.4515	15.3414	2.2899
Se 196.026	0.1024	16.4232	6.2751
Si 288.158	6508.85	6485.12	6516.39
Sn 189.925	0.1066	-5.3564u	-6.8667u
Sr 216.596	228.472	222.928	225.804
Ti 334.941	0.1510	0.0033	0.0593
Tl 190.794	-8.7542u	1.5761	-9.1570u
V 292.401	0.6698u	0.9777u	1.5324
Zn 206.200	8.1779	5.1667	7.6157

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3102b	ppb	0.5217	168.2	-52.1711
Al 308.215	91.8322b	ppb	3.1856	3.5	387.962
As 188.980	5.1098b	ppb	5.0392	98.6	2.0454
B 249.678	517.959b	ppb	2.0570	0.4	3533.16

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	334.444b	ppb	2.4300	0.7	2108.83
Be 313.042	0.0168b	ppb	0.0110	65.3	-406.421
Ca 370.602	24764b	ppb	77.49	0.3	41417
Cd 226.502	-0.0896b	ppb	0.0227	25.3	9.3093
Co 228.615	3.1167b	ppb	0.2240	7.2	-0.8534
Cr 267.716	1.0288b	ppb	0.4007	38.9	42.4989
Cu 324.754	0.0068b	ppb	0.5328	7788.3	438.738
Fe 271.441	6514.79b	ppb	36.5977	0.6	3623.64
K 766.491	85435.0xb	ppb	297.587	0.3	1758678
Mg 279.078	36257.4b	ppb	73.9725	0.2	48508.7
Mn 257.610	26.8915b	ppb	0.1593	0.6	2391.36
Mo 202.032	78.2519b	ppb	1.1057	1.4	135.993
Na 330.237	1973609xb	ppb	11936.7	0.6	53377.0
Ni 231.604	13.3708b	ppb	1.0599	7.9	13.2261
Pb 220.353	5.5974b	ppb	6.6753	119.3	2.7464
Sb 206.834	8.6943b	ppb	6.5291	75.1	9.1360
Se 196.026	7.6002b	ppb	8.2407	108.4	4.1832
Si 288.158	6503.45b	ppb	16.3189	0.3	30898.9
Sn 189.925	-4.0389b	ppb	3.6686	90.8	0.1669
Sr 216.596	225.735b	ppb	2.7729	1.2	665.998
Ti 334.941	0.0712b	ppb	0.0745	104.7	32.7009
Tl 190.794	-5.4451b	ppb	6.0838	111.7	-3.0216
V 292.401	1.0600b	ppb	0.4372	41.2	-12.2267
Zn 206.200	6.9868b	ppb	1.6011	22.9	3.7636

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	503.503	507.234	506.777
Al 308.215	10173.5	10241.1	10191.3
As 188.980	499.657	499.465	493.787
B 249.678	543.310	547.045	543.203
Ba 389.178	475.458	478.447	481.296
Be 313.042	542.157	546.389	543.204
Ca 370.602	10115	10153	10119
Cd 226.502	503.366	509.457	506.355
Co 228.615	504.791	508.398	505.475
Cr 267.716	500.937	504.712	501.918
Cu 324.754	498.577	499.612	500.447
Fe 271.441	10358.7	10354.0	10334.2
K 766.491	9982.91	10036.2	9971.45
Mg 279.078	10386.0	10436.1	10385.7
Mn 257.610	499.796	502.887	499.932
Mo 202.032	495.692	497.957	491.261
Na 330.237	11389.4	10841.0	10883.7
Ni 231.604	501.773	508.682	506.382
Pb 220.353	494.162	499.148	499.623
Sb 206.834	484.835	485.891	481.146
Se 196.026	530.326	533.417	526.646
Si 288.158	5331.91	5348.62	5305.79
Sn 189.925	497.763	492.143	509.445
Sr 216.596	494.023	498.434	493.454
Ti 334.941	506.018	509.335	507.332

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Label	Replicates Concentration		
Tl 190.794	507.933	504.586	497.959
V 292.401	497.437	502.330	499.661
Zn 206.200	1050.45	1053.54	1056.41

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	505.838	ppb	2.0349	0.4	15322.0	101.16761
Al 308.215	10202.0	ppb	35.0275	0.3	20181.8	102.01956
As 188.980	497.637	ppb	3.3349	0.7	133.474	99.52731
B 249.678	544.519	ppb	2.1879	0.4	3710.91	108.90383
Ba 389.178	478.400	ppb	2.9193	0.6	2987.89	95.68008
Be 313.042	543.917	ppb	2.2040	0.4	438464	108.78333
Ca 370.602	10129	ppb	20.84	0.2	16963	101.29195
Cd 226.502	506.393	ppb	3.0461	0.6	6520.23	101.27855
Co 228.615	506.221	ppb	1.9157	0.4	1992.81	101.24429
Cr 267.716	502.522	ppb	1.9587	0.4	8421.00	100.50447
Cu 324.754	499.545	ppb	0.9371	0.2	15574.4	99.90903
Fe 271.441	10349.0	ppb	13.0420	0.1	5766.44	103.43783
K 766.491	9996.84	ppb	34.5422	0.3	203491	99.96843
Mg 279.078	10402.6	ppb	29.0523	0.3	13926.1	104.02580
Mn 257.610	500.872	ppb	1.7468	0.3	41601.0	100.17433
Mo 202.032	494.970	ppb	3.4057	0.7	839.149	98.99399
Na 330.237	11038.0	ppb	305.059	2.8	318.796	110.38034Q
Ni 231.604	505.612	ppb	3.5184	0.7	565.004	101.12244
Pb 220.353	497.644	ppb	3.0254	0.6	188.719	99.52885
Sb 206.834	483.957	ppb	2.4911	0.5	181.585	96.79146
Se 196.026	530.130	ppb	3.3894	0.6	102.746	106.02596
Si 288.158	5328.77	ppb	21.5874	0.4	25539.0	106.57543
Sn 189.925	499.784	ppb	8.8264	1.8	127.307	99.95673
Sr 216.596	495.304	ppb	2.7263	0.6	1446.95	99.06071
Ti 334.941	507.562	ppb	1.6700	0.3	45026.1	101.51234
Tl 190.794	503.493	ppb	5.0764	1.0	119.014	100.69852
V 292.401	499.809	ppb	2.4501	0.5	5034.39	99.96188
Zn 206.200	1053.47	ppb	2.9763	0.3	581.000	105.34685

Cont Calib Blank (CCB) 4/20/2019, 8:00:36 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6418u	-0.2097u	-0.3170u
Al 308.215	11.6881	11.9456	16.3825
As 188.980	-2.7024u	7.0970	-1.4591u
B 249.678	19.2530	16.6749	16.0360
Ba 389.178	0.4958	1.9739	0.0892
Be 313.042	0.1346	0.1131	0.0885
Ca 370.602	9.050	9.088	7.293
Cd 226.502	0.2128	0.1680	0.4489
Co 228.615	0.8452	1.8870	1.4131
Cr 267.716	0.1628	0.5380	0.0594
Cu 324.754	1.4392	1.0491	0.4744
Fe 271.441	12.5519	12.4948	24.3575
K 766.491	5.5173	6.4844	4.2474
Mg 279.078	10.7086	19.6947	14.6501
Mn 257.610	0.4673	0.4338	0.3903
Mo 202.032	1.3604	1.7494	1.0573

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Label	Replicates Concentration		
Na 330.237	48.5713	591.937	127.485
Ni 231.604	1.2223	-0.9657u	0.3369
Pb 220.353	4.2514	-3.8678u	6.4289
Sb 206.834	-1.9489u	-2.8299u	0.5067
Se 196.026	-1.7321u	-6.0090u	-15.3489u
Si 288.158	34.1348	32.1883	32.0364
Sn 189.925	-5.3065u	-0.3273u	-9.2170u
Sr 216.596	0.8263	-0.1559u	-1.0003u
Ti 334.941	0.3236	0.2737	0.2864
Tl 190.794	-14.2327u	-1.5213u	-15.9388u
V 292.401	-0.2361u	0.7511	1.3553
Zn 206.200	-0.4032u	2.3723	-3.0618u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.3895	ppb	0.2250	57.8	-52.5531	-0.38951
Al 308.215	13.3387	ppb	2.6391	19.8	233.249	13.33873
As 188.980	0.9785	ppb	5.3351	545.2	0.9674	0.97851
B 249.678	17.3213	ppb	1.7032	9.8	112.794	17.32130
Ba 389.178	0.8530	ppb	0.9918	116.3	-31.2549	0.85299
Be 313.042	0.1121	ppb	0.0231	20.6	-236.499	0.11208
Ca 370.602	8.477	ppb	1.025	12.1	39.26	8.47712
Cd 226.502	0.2766	ppb	0.1509	54.6	7.5219	0.27658
Co 228.615	1.3818	ppb	0.5216	37.8	-6.9025	1.38175
Cr 267.716	0.2534	ppb	0.2519	99.4	17.7953	0.25340
Cu 324.754	0.9875	ppb	0.4853	49.1	466.016	0.98753
Fe 271.441	16.4681	ppb	6.8325	41.5	26.3851	16.46807
K 766.491	5.4164	ppb	1.1219	20.7	423.483	5.41639
Mg 279.078	15.0178	ppb	4.5043	30.0	41.7714	15.01780
Mn 257.610	0.4305	ppb	0.0386	9.0	62.3083	0.43049
Mo 202.032	1.3890	ppb	0.3469	25.0	6.3480	1.38903
Na 330.237	255.998	ppb	293.595	114.7	44.4961	255.99791
Ni 231.604	0.1978	ppb	1.1006	556.3	-1.5504	0.19783
Pb 220.353	2.2708	ppb	5.4266	239.0	1.7152	2.27084
Sb 206.834	-1.4240	ppb	1.7291	121.4	5.4772	-1.42402
Se 196.026	-7.6967	ppb	6.9635	90.5	1.2708	-7.69666
Si 288.158	32.7865	ppb	1.1701	3.6	688.667	32.78653
Sn 189.925	-4.9503	ppb	4.4556	90.0	-0.2577	-4.95026
Sr 216.596	-0.1100	ppb	0.9142	831.4	6.8304	-0.10996
Ti 334.941	0.2946	ppb	0.0259	8.8	0.8016	0.29457
Tl 190.794	-10.5642	ppb	7.8777	74.6	-3.9490	-10.56424
V 292.401	0.6234	ppb	0.8033	128.9	-6.5177	0.62342
Zn 206.200	-0.3642	ppb	2.7172	746.1	-0.3063	-0.36421

400-168271-d-4-c (Samp)

4/20/2019, 8:08:19 AM

Rack 1, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5866	-0.3626u	-0.8485u
Al 308.215	288.050	280.472	284.479
As 188.980	24.9831	30.9961	28.8189
B 249.678	3898.31	3906.28	3937.81
Ba 389.178	3267.24	3269.17	3277.60
Be 313.042	-0.0197u	-0.0287u	-0.0226u
Ca 370.602	78193	77974	78263

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.0318	0.2541	0.0919
Co 228.615	66.8712	66.4587	68.3413
Cr 267.716	9.6402	9.2170	10.0217
Cu 324.754	15.2384	15.2410	14.8499
Fe 271.441	31384.2	31113.0	31305.1
K 766.491	70919.6x	70589.9x	71020.4x
Mg 279.078	72166.7	71905.6	72169.1
Mn 257.610	230.168	228.838	229.779
Mo 202.032	20.3054	16.1627	18.4384
Na 330.237	1343117x	1332587x	1339981x
Ni 231.604	43.8291	46.6870	44.6093
Pb 220.353	11.0391	17.4238	18.6451
Sb 206.834	45.9565	48.8694	37.6159
Se 196.026	-1.4406u	1.2340	-1.5781u
Si 288.158	17757.1	17656.6	17748.3
Sn 189.925	-0.8228u	-12.5513u	3.9971
Sr 216.596	1092.25	1086.00	1082.24
Ti 334.941	2.0823	2.3319	2.1776
Tl 190.794	-6.4393u	-2.2948u	-8.8093u
V 292.401	3.0991	2.5656	3.8049
Zn 206.200	90.4251	88.0143	87.9426

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2082b	ppb	0.7299	350.6	-55.9335
Al 308.215	284.333b	ppb	3.7909	1.3	764.441
As 188.980	28.2660b	ppb	3.0444	10.8	8.1702
B 249.678	3914.13b	ppb	20.8921	0.5	26754.5
Ba 389.178	3271.34b	ppb	5.5069	0.2	20622.9
Be 313.042	-0.0236b	ppb	0.0046	19.5	-399.184
Ca 370.602	78143b	ppb	150.8	0.2	130625
Cd 226.502	0.1047b	ppb	0.1434	136.9	50.4234
Co 228.615	67.2238b	ppb	0.9896	1.5	253.166
Cr 267.716	9.6263b	ppb	0.4025	4.2	185.043
Cu 324.754	15.1098b	ppb	0.2251	1.5	899.553
Fe 271.441	31267.4b	ppb	139.467	0.4	17327.7
K 766.491	70843.3xb	ppb	225.166	0.3	1458369
Mg 279.078	72080.5b	ppb	151.462	0.2	96413.1
Mn 257.610	229.595b	ppb	0.6837	0.3	19345.2
Mo 202.032	18.3022b	ppb	2.0747	11.3	34.5329
Na 330.237	1338562xb	ppb	5406.79	0.4	36212.0
Ni 231.604	45.0418b	ppb	1.4773	3.3	48.6990
Pb 220.353	15.7027b	ppb	4.0846	26.0	5.7623
Sb 206.834	44.1473b	ppb	5.8408	13.2	21.9695
Se 196.026	-0.5949b	ppb	1.5854	266.5	2.7572
Si 288.158	17720.7b	ppb	55.6344	0.3	83244.0
Sn 189.925	-3.1257b	ppb	8.5111	272.3	0.3351
Sr 216.596	1086.83b	ppb	5.0577	0.5	3182.92
Ti 334.941	2.1972b	ppb	0.1260	5.7	330.489
Tl 190.794	-5.8478b	ppb	3.2973	56.4	-4.1297
V 292.401	3.1565b	ppb	0.6217	19.7	16.5383
Zn 206.200	88.7940b	ppb	1.4130	1.6	48.9580

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

400-168271-d-12-c (Samp) **4/20/2019, 8:12:30 AM** **Rack 1, Tube 32****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.7640u	-0.9397u	-0.1207u
Al 308.215	30.6511	34.6098	41.7851
As 188.980	0.9883	8.6003	8.7279
B 249.678	2545.52	2533.08	2534.10
Ba 389.178	87.0826	84.9996	84.5431
Be 313.042	0.2207u	0.2394u	0.2210u
Ca 370.602	168978	168598	168702
Cd 226.502	1.1901	0.9036	0.6961
Co 228.615	2.9440	1.1544	1.5980
Cr 267.716	1.2078	0.7510	0.8639
Cu 324.754	0.2083	0.2262	0.2002
Fe 271.441	266.100	254.876	239.089
K 766.491	246330x	245871x	245836x
Mg 279.078	387341	386078	386464
Mn 257.610	223.768	223.037	222.646
Mo 202.032	0.9613	1.2869	-0.2353u
Na 330.237	5731805x	5777376x	5794593x
Ni 231.604	4.8334	1.9150	1.3300
Pb 220.353	-7.7022u	7.7835	-1.0383u
Sb 206.834	7.5049	-3.4304u	6.8234
Se 196.026	30.7753	-10.0766u	-0.6703u
Si 288.158	27231.2	27152.0	27123.7
Sn 189.925	-2.0961	-1.5292	-18.2146u
Sr 216.596	2472.02	2462.10	2460.63
Ti 334.941	-6.9570	-6.9166	-7.2705
Tl 190.794	-18.6496u	-14.7207u	-22.1846u
V 292.401	4.9210	4.7495	6.0607
Zn 206.200	84.1385	86.2765	87.3985

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6081b	ppb	0.4312	70.9	-68.7366
Al 308.215	35.6820b	ppb	5.6439	15.8	277.032
As 188.980	6.1055b	ppb	4.4321	72.6	2.3357
B 249.678	2537.56b	ppb	6.9086	0.3	17363.5
Ba 389.178	85.5418b	ppb	1.3538	1.6	927.265
Be 313.042	0.2270b	ppb	0.0107	4.7	-390.022
Ca 370.602	168759b	ppb	196.1	0.1	282177
Cd 226.502	0.9300b	ppb	0.2481	26.7	7.8331
Co 228.615	1.8988b	ppb	0.9319	49.1	-4.7687
Cr 267.716	0.9409b	ppb	0.2380	25.3	62.2901
Cu 324.754	0.2116b	ppb	0.0133	6.3	442.518
Fe 271.441	253.355b	ppb	13.5694	5.4	157.556
K 766.491	246012xb	ppb	275.868	0.1	5063612
Mg 279.078	386628b	ppb	646.984	0.2	517060
Mn 257.610	223.150b	ppb	0.5693	0.3	19951.9
Mo 202.032	0.6710b	ppb	0.8016	119.5	5.1326
Na 330.237	5767924xb	ppb	32443.5	0.6	155923
Ni 231.604	2.6928b	ppb	1.8768	69.7	1.2480
Pb 220.353	-0.3190b	ppb	7.7679	2435.2	0.7377
Sb 206.834	3.6326b	ppb	6.1262	168.6	7.2405
Se 196.026	6.6761b	ppb	21.3938	320.5	4.0039
Si 288.158	27169.0b	ppb	55.6888	0.2	127338

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-7.2800b	ppb	9.4739	130.1	-0.2788
Sr 216.596	2464.92b	ppb	6.1947	0.3	7202.55
Ti 334.941	-7.0480b	ppb	0.1937	2.7	244.194
Tl 190.794	-18.5183b	ppb	3.7337	20.2	-5.8120
V 292.401	5.2437b	ppb	0.7127	13.6	26.8543
Zn 206.200	85.9378b	ppb	1.6562	1.9	47.3195

400-168271-d-6-c (Samp) 4/20/2019, 8:16:43 AM Rack 1, Tube 33

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0823u	-0.4388u	-0.5604u
Al 308.215	38.7241	45.0417	44.3097
As 188.980	7.2735	7.0780	8.3164
B 249.678	936.298	932.286	927.832
Ba 389.178	313.032	309.368	311.826
Be 313.042	-0.0748u	-0.0788u	-0.0731u
Ca 370.602	85340	85105	85286
Cd 226.502	-0.1456	-0.0961	0.5198
Co 228.615	15.8382	12.9509	13.5574
Cr 267.716	5.3366	4.6192	5.3258
Cu 324.754	1.0293	0.5414	-0.1249u
Fe 271.441	16587.9	16577.6	16565.4
K 766.491	67061.0x	67060.7x	67152.3x
Mg 279.078	73081.7	72872.9	72969.7
Mn 257.610	187.124	186.668	186.947
Mo 202.032	20.8086	19.3186	21.0826
Na 330.237	1259035x	1252469x	1270297x
Ni 231.604	21.7028	22.9652	19.6464
Pb 220.353	5.1979	-0.0961u	7.4109
Sb 206.834	9.4262	6.3108	0.9548
Se 196.026	-4.4905u	12.0024	-0.7221u
Si 288.158	18228.6	18171.9	18174.7
Sn 189.925	-7.2167u	-9.5608u	-23.7965u
Sr 216.596	725.871	724.479	725.191
Ti 334.941	-0.0580	-0.3770	-0.0975
Tl 190.794	-0.6952u	-6.5415u	-2.2194u
V 292.401	2.0726	1.5117	1.6678
Zn 206.200	7.9597	8.3045	5.9565

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6938b	ppb	0.3419	49.3	-67.0837
Al 308.215	42.6918b	ppb	3.4556	8.1	291.417
As 188.980	7.5560b	ppb	0.6658	8.8	2.6782
B 249.678	932.139b	ppb	4.2347	0.5	6357.93
Ba 389.178	311.408b	ppb	1.8676	0.6	2008.65
Be 313.042	-0.0756b	ppb	0.0029	3.9	-435.964
Ca 370.602	85244b	ppb	123.5	0.1	142520
Cd 226.502	0.0927b	ppb	0.3707	399.9	28.3756
Co 228.615	14.1155b	ppb	1.5224	10.8	43.0276
Cr 267.716	5.0939b	ppb	0.4111	8.1	107.532
Cu 324.754	0.4820b	ppb	0.5794	120.2	453.948
Fe 271.441	16577.0b	ppb	11.3078	0.1	9193.94
K 766.491	67091.4xb	ppb	52.8233	0.1	1381106

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	72974.8b	ppb	104.509	0.1	97609.6
Mn 257.610	186.913b	ppb	0.2299	0.1	15801.1
Mo 202.032	20.4033b	ppb	0.9493	4.7	38.2467
Na 330.237	1260601xb	ppb	9016.42	0.7	34106.5
Ni 231.604	21.4381b	ppb	1.6751	7.8	22.2667
Pb 220.353	4.1709b	ppb	3.8574	92.5	1.8871
Sb 206.834	5.5639b	ppb	4.2848	77.0	8.2450
Se 196.026	2.2633b	ppb	8.6422	381.8	3.2333
Si 288.158	18191.7b	ppb	31.9332	0.2	85441.9
Sn 189.925	-13.5247b	ppb	8.9726	66.3	-2.3007
Sr 216.596	725.180b	ppb	0.6963	0.1	2125.64
Ti 334.941	-0.1775b	ppb	0.1739	98.0	123.946
Tl 190.794	-3.1520b	ppb	3.0327	96.2	-2.8683
V 292.401	1.7507b	ppb	0.2895	16.5	1.4736
Zn 206.200	7.4069b	ppb	1.2678	17.1	4.0150

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Rack 1, Tube 34

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7770u	-1.1236u	-0.6830u
Al 308.215	119.549	124.152	127.572
As 188.980	8.0595	6.9154	4.1057
B 249.678	894.385	893.175	893.661
Ba 389.178	767.474	765.151	764.098
Be 313.042	0.0185u	0.0013u	0.0266u
Ca 370.602	37955	38065	37956
Cd 226.502	0.2571	0.1678	0.4323
Co 228.615	11.6163	12.1781	11.3775
Cr 267.716	1.9385	1.7852	2.0481
Cu 324.754	0.2664	0.7168	0.0421
Fe 271.441	13392.6	13333.9	13354.2
K 766.491	75854.3x	76009.9x	75859.8x
Mg 279.078	41261.3	41321.2	41243.6
Mn 257.610	67.8907	67.9184	67.5793
Mo 202.032	67.6660	69.1133	67.0003
Na 330.237	2086247x	2110656x	2097205x
Ni 231.604	18.6292	20.4127	20.7013
Pb 220.353	2.1052	18.9660	5.9027
Sb 206.834	6.7900	10.0169	12.7357
Se 196.026	7.9019	8.3701	-7.3895u
Si 288.158	11536.7	11547.5	11547.9
Sn 189.925	-3.1233u	-1.4498u	-11.7054u
Sr 216.596	496.800	496.000	495.379
Ti 334.941	1.4805	1.3826	1.4130
Tl 190.794	-13.9417u	-13.1127u	-16.2078u
V 292.401	1.2721	2.3167	2.9493
Zn 206.200	168.481	164.194	166.726

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8612b	ppb	0.2321	26.9	-70.8952
Al 308.215	123.757b	ppb	4.0262	3.3	450.492
As 188.980	6.3602b	ppb	2.0346	32.0	2.3625
B 249.678	893.740b	ppb	0.6092	0.1	6098.37

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	765.574b	ppb	1.7273	0.2	4827.76
Be 313.042	0.0154b	ppb	0.0129	83.7	-410.403
Ca 370.602	37992b	ppb	63.35	0.2	63524
Cd 226.502	0.2857b	ppb	0.1345	47.1	24.3466
Co 228.615	11.7240b	ppb	0.4110	3.5	33.2017
Cr 267.716	1.9239b	ppb	0.1321	6.9	58.8005
Cu 324.754	0.3418b	ppb	0.3436	100.5	449.912
Fe 271.441	13360.3b	ppb	29.7749	0.2	7413.26
K 766.491	75908.0xb	ppb	88.2948	0.1	1562606
Mg 279.078	41275.4b	ppb	40.6533	0.1	55218.9
Mn 257.610	67.7962b	ppb	0.1883	0.3	5805.16
Mo 202.032	67.9265b	ppb	1.0804	1.6	118.488
Na 330.237	2098036xb	ppb	12225.7	0.6	56737.7
Ni 231.604	19.9144b	ppb	1.1223	5.6	20.5593
Pb 220.353	8.9913b	ppb	8.8446	98.4	3.8053
Sb 206.834	9.8476b	ppb	2.9765	30.2	9.6331
Se 196.026	2.9608b	ppb	8.9667	302.8	3.3403
Si 288.158	11544.0b	ppb	6.3337	0.1	54422.7
Sn 189.925	-5.4262b	ppb	5.5020	101.4	-0.1714
Sr 216.596	496.060b	ppb	0.7128	0.1	1455.97
Ti 334.941	1.4253b	ppb	0.0501	3.5	163.302
Tl 190.794	-14.4207b	ppb	1.6022	11.1	-5.4614
V 292.401	2.1794b	ppb	0.8470	38.9	0.0255
Zn 206.200	166.467b	ppb	2.1550	1.3	91.7884

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Rack 1, Tube 35

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7645u	-0.2963u	-0.4057u
Al 308.215	51.6462	48.2509	51.7271
As 188.980	8.0457	9.5985	14.1534
B 249.678	1776.28	1774.45	1792.47
Ba 389.178	684.324	679.895	679.352
Be 313.042	-0.0062u	-0.0138u	-0.0091u
Ca 370.602	40206	40033	40311
Cd 226.502	0.3703	0.3458	-0.1526
Co 228.615	22.5193	22.2835	20.8868
Cr 267.716	30.4823	30.6008	30.8059
Cu 324.754	3.8647	3.4208	3.9202
Fe 271.441	6329.00	6312.19	6359.80
K 766.491	110033x	109649x	110321x
Mg 279.078	20801.5	20737.5	20871.0
Mn 257.610	25.8148	25.8782	25.9364
Mo 202.032	236.423	238.809	239.739
Na 330.237	1700030x	1704076x	1710558x
Ni 231.604	93.4877	96.2880	96.6154
Pb 220.353	6.6595	4.4248	12.8718
Sb 206.834	2.4337	19.1018	11.0014
Se 196.026	4.9613	-9.3088u	-1.7795u
Si 288.158	13572.4	13526.1	13603.3
Sn 189.925	13.3218	7.1759	3.6640
Sr 216.596	547.918	545.589	550.606
Ti 334.941	5.2172	5.0917	5.1722

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Label	Replicates Concentration		
Tl 190.794	-6.3881u	0.0807u	-8.6266u
V 292.401	4.8539	3.8745	4.9641
Zn 206.200	8.2223	11.7254	4.7795

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4888b	ppb	0.2449	50.1	-58.4515
Al 308.215	50.5414b	ppb	1.9840	3.9	309.288
As 188.980	10.5992b	ppb	3.1744	29.9	3.4928
B 249.678	1781.06b	ppb	9.9168	0.6	12179.1
Ba 389.178	681.190b	ppb	2.7276	0.4	4271.93
Be 313.042	-0.0097b	ppb	0.0039	39.7	-424.148
Ca 370.602	40183b	ppb	140.3	0.3	67197
Cd 226.502	0.1878b	ppb	0.2951	157.1	13.0339
Co 228.615	21.8965b	ppb	0.8824	4.0	72.1648
Cr 267.716	30.6296b	ppb	0.1637	0.5	536.126
Cu 324.754	3.7352b	ppb	0.2737	7.3	554.297
Fe 271.441	6333.67b	ppb	24.1453	0.4	3524.12
K 766.491	110001xb	ppb	337.308	0.3	2264279
Mg 279.078	20803.3b	ppb	66.7908	0.3	27841.9
Mn 257.610	25.8765b	ppb	0.0608	0.2	2250.27
Mo 202.032	238.323b	ppb	1.7106	0.7	406.144
Na 330.237	1704888xb	ppb	5310.61	0.3	46114.4
Ni 231.604	95.4637b	ppb	1.7191	1.8	105.306
Pb 220.353	7.9854b	ppb	4.3768	54.8	3.6229
Sb 206.834	10.8456b	ppb	8.3352	76.9	9.9808
Se 196.026	-2.0423b	ppb	7.1387	349.5	2.3647
Si 288.158	13567.3b	ppb	38.8427	0.3	63889.6
Sn 189.925	8.0539b	ppb	4.8884	60.7	3.1966
Sr 216.596	548.037b	ppb	2.5108	0.5	1604.82
Ti 334.941	5.1604b	ppb	0.0636	1.2	449.196
Tl 190.794	-4.9780b	ppb	4.5217	90.8	-2.9341
V 292.401	4.5642b	ppb	0.5998	13.1	12.2813
Zn 206.200	8.2424b	ppb	3.4730	42.1	4.4398

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Rack 1, Tube 36

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0271u	0.0228u	0.1699u
Al 308.215	343.009	340.812	339.326
As 188.980	139.990	137.439	144.554
B 249.678	845.537	845.330	844.821
Ba 389.178	533.384	529.662	528.477
Be 313.042	0.0853	0.0949	0.1066
Ca 370.602	149108	149052	149090
Cd 226.502	0.1397	0.3728	0.6918
Co 228.615	10.8842	9.0516	8.8740
Cr 267.716	1.2757	1.5148	1.2209
Cu 324.754	0.1766	-0.7113u	-0.0453
Fe 271.441	61816.6	62020.8	62271.8
K 766.491	44372.2x	44355.5x	44310.7x
Mg 279.078	66189.0	66200.5	66240.5
Mn 257.610	1064.23	1067.05	1064.81
Mo 202.032	3.1309	2.2416	2.0941

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	1242128x	1238531x	1241042x
Ni 231.604	21.6553	24.5748	26.7870
Pb 220.353	-0.5287u	18.2234	4.3990u
Sb 206.834	6.4458	-5.3039u	0.3966
Se 196.026	7.6929	13.7740	-14.8100u
Si 288.158	17190.3	17189.7	17207.1
Sn 189.925	-9.9551u	-13.9214u	-15.2425u
Sr 216.596	1582.32	1583.98	1580.12
Ti 334.941	4.0764	3.7627	3.7350
Tl 190.794	-8.1055u	-23.7560u	-5.2562u
V 292.401	4.3476	4.1917	5.5515
Zn 206.200	3.3530	0.7787	5.1676

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0733b	ppb	0.0837	114.2	-52.8163
Al 308.215	341.049b	ppb	1.8530	0.5	876.279
As 188.980	140.661b	ppb	3.6048	2.6	38.1032
B 249.678	845.229b	ppb	0.3683	0.0	5717.45
Ba 389.178	530.507b	ppb	2.5606	0.5	3397.76
Be 313.042	0.0956b	ppb	0.0107	11.2	-285.954
Ca 370.602	149083b	ppb	28.62	0.0	249193
Cd 226.502	0.4014b	ppb	0.2772	69.0	100.841
Co 228.615	9.6033b	ppb	1.1129	11.6	24.2888
Cr 267.716	1.3372b	ppb	0.1563	11.7	49.5826
Cu 324.754	-0.1934b	ppb	0.4621	239.0	441.177
Fe 271.441	62036.4b	ppb	228.031	0.4	34358.0
K 766.491	44346.1xb	ppb	31.7740	0.1	913074
Mg 279.078	66210.0b	ppb	27.0134	0.0	88554.0
Mn 257.610	1065.36b	ppb	1.4865	0.1	88626.1
Mo 202.032	2.4889b	ppb	0.5609	22.5	7.4915
Na 330.237	1240567xb	ppb	1844.55	0.1	33563.4
Ni 231.604	24.3390b	ppb	2.5740	10.6	25.5252
Pb 220.353	7.3646b	ppb	9.7215	132.0	1.6397
Sb 206.834	0.5128b	ppb	5.8757	1145.7	6.9768
Se 196.026	2.2190b	ppb	15.0577	678.6	3.4906
Si 288.158	17195.7b	ppb	9.8623	0.1	80790.9
Sn 189.925	-13.0397b	ppb	2.7518	21.1	-2.1801
Sr 216.596	1582.14b	ppb	1.9367	0.1	4632.51
Ti 334.941	3.8580b	ppb	0.1896	4.9	464.427
Tl 190.794	-12.3726b	ppb	9.9607	80.5	-6.8897
V 292.401	4.6969b	ppb	0.7442	15.8	35.5785
Zn 206.200	3.0998b	ppb	2.2054	71.1	1.7376

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7721	0.3728	-0.0837u
Al 308.215	155.623	160.867	158.941
As 188.980	6.5552	-1.4148u	1.7140
B 249.678	84.2216	81.8841	79.0606
Ba 389.178	254.861	252.824	252.451
Be 313.042	-0.0600u	-0.0925u	-0.0620u
Ca 370.602	110261	110547	110546

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Label	Replicates Concentration		
Cd 226.502	-0.3122	0.1131	0.3831
Co 228.615	-0.8114u	1.3262	-0.4172u
Cr 267.716	8.2605	7.7083	8.4522
Cu 324.754	5.5221	5.9080	6.1963
Fe 271.441	8268.74	8326.92	8353.86
K 766.491	5883.33	5901.20	5899.87
Mg 279.078	13373.0	13400.9	13420.0
Mn 257.610	585.235	586.674	587.490
Mo 202.032	23.0812	23.2530	22.9070
Na 330.237	58425.0	58378.5	58359.9
Ni 231.604	5.6101	4.3128	4.2442
Pb 220.353	5.1809	12.4889	4.1061
Sb 206.834	-0.8099u	9.6973	-3.9568u
Se 196.026	-9.8769u	0.5340	-7.4452u
Si 288.158	7499.25	7520.11	7544.45
Sn 189.925	1.2970	-6.8973u	-6.8494u
Sr 216.596	353.116	354.668	356.244
Ti 334.941	5.0987	5.0711	5.8699
Tl 190.794	-5.4295u	-6.8497u	-8.4468u
V 292.401	0.6963	1.5725	1.3651
Zn 206.200	3.7185	10.6103	9.3891

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3537	ppb	0.4282	121.1	-31.6097
Al 308.215	158.477	ppb	2.6526	1.7	517.707
As 188.980	2.2848	ppb	4.0155	175.8	1.2917
B 249.678	81.7221	ppb	2.5843	3.2	545.209
Ba 389.178	253.379	ppb	1.2971	0.5	1574.68
Be 313.042	-0.0715	ppb	0.0182	25.4	-372.349
Ca 370.602	110451	ppb	164.5	0.1	184684
Cd 226.502	0.0613	ppb	0.3505	571.6	17.3496
Co 228.615	0.0325	ppb	1.1376	3497.6	-12.5913
Cr 267.716	8.1403	ppb	0.3862	4.7	151.623
Cu 324.754	5.8755	ppb	0.3383	5.8	615.908
Fe 271.441	8316.50	ppb	43.5057	0.5	4620.87
K 766.491	5894.80	ppb	9.9530	0.2	121632
Mg 279.078	13398.0	ppb	23.6093	0.2	17932.9
Mn 257.610	586.467	ppb	1.1421	0.2	48698.4
Mo 202.032	23.0804	ppb	0.1730	0.7	42.8598
Na 330.237	58387.8	ppb	33.5594	0.1	1615.13
Ni 231.604	4.7224	ppb	0.7695	16.3	3.5264
Pb 220.353	7.2587	ppb	4.5613	62.8	3.3510
Sb 206.834	1.6435	ppb	7.1500	435.0	6.7043
Se 196.026	-5.5960	ppb	5.4462	97.3	1.7558
Si 288.158	7521.27	ppb	22.6192	0.3	35641.6
Sn 189.925	-4.1499	ppb	4.7172	113.7	-0.0497
Sr 216.596	354.676	ppb	1.5641	0.4	1043.21
Ti 334.941	5.3466	ppb	0.4534	8.5	483.112
Tl 190.794	-6.9087	ppb	1.5095	21.8	-3.3226
V 292.401	1.2113	ppb	0.4579	37.8	-1.7810
Zn 206.200	7.9060	ppb	3.6775	46.5	4.2714

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

mb 680-567122/1-a (Samp) 4/20/2019, 8:37:42 AM Rack 1, Tube 38

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.3472u	-0.1063u	-0.9551u
Al 308.215	10.6288	6.9327	12.9125
As 188.980	6.9116	8.1444	3.9704
B 249.678	13.2092	13.0761	11.7316
Ba 389.178	-0.4412u	1.9459	-0.8759u
Be 313.042	-0.1130u	-0.1062u	-0.1412u
Ca 370.602	47.90	155.5	244.5
Cd 226.502	-0.0915u	-0.3683u	0.0251
Co 228.615	-0.1618u	-1.2536u	-0.1237u
Cr 267.716	0.2930	-0.1399u	-0.5125u
Cu 324.754	0.6742	0.5813	0.9376
Fe 271.441	13.7273	9.2655	11.8884
K 766.491	3.2771	8.8274	12.8738
Mg 279.078	23.3994	47.7693	72.6778
Mn 257.610	0.0321	0.1946	0.1254
Mo 202.032	3.1738	0.2169	-0.3653u
Na 330.237	198.228	89.7262	494.988
Ni 231.604	-2.2335u	1.9910	-2.8157u
Pb 220.353	-10.1936u	6.4123	-6.1318u
Sb 206.834	-4.7794u	0.1828u	-0.0467u
Se 196.026	-9.0193u	-5.2502u	0.2089
Si 288.158	50.5245	64.0512	79.0864
Sn 189.925	-11.8087u	-0.4868u	2.6540
Sr 216.596	-1.1524u	0.0831	0.1959
Ti 334.941	-0.1822u	-0.0228u	-0.0876u
Tl 190.794	5.9540	0.5669	-25.6836u
V 292.401	0.5376	-0.6755u	-0.4034u
Zn 206.200	-1.7487u	2.7869	-0.7004u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8029	ppb	0.6343	79.0	-65.1148
Al 308.215	10.1580	ppb	3.0176	29.7	227.003
As 188.980	6.3421	ppb	2.1445	33.8	2.3996
B 249.678	12.6723	ppb	0.8174	6.5	80.9731
Ba 389.178	0.2096	ppb	1.5193	724.9	-35.2670
Be 313.042	-0.1201	ppb	0.0186	15.5	-423.803
Ca 370.602	149.3	ppb	98.43	65.9	274.6
Cd 226.502	-0.1449	ppb	0.2021	139.5	2.1112
Co 228.615	-0.5130	ppb	0.6416	125.1	-14.4101
Cr 267.716	-0.1198	ppb	0.4031	336.5	11.5540
Cu 324.754	0.7311	ppb	0.1848	25.3	458.244
Fe 271.441	11.6271	ppb	2.2424	19.3	23.6444
K 766.491	8.3261	ppb	4.8180	57.9	475.573
Mg 279.078	47.9488	ppb	24.6397	51.4	85.8141
Mn 257.610	0.1174	ppb	0.0816	69.5	36.4590
Mo 202.032	1.0085	ppb	1.8977	188.2	5.7059
Na 330.237	260.981	ppb	209.792	80.4	44.6194
Ni 231.604	-1.0194	ppb	2.6233	257.3	-2.9145
Pb 220.353	-3.3044	ppb	8.6565	262.0	-0.3955
Sb 206.834	-1.5478	ppb	2.8010	181.0	5.4451
Se 196.026	-4.6869	ppb	4.6398	99.0	1.8382
Si 288.158	64.5540	ppb	14.2876	22.1	837.361

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-3.2138	ppb	7.6072	236.7	0.1811
Sr 216.596	-0.2911	ppb	0.7480	256.9	6.3127
Ti 334.941	-0.0975	ppb	0.0802	82.2	-33.9027
Tl 190.794	-6.3876	ppb	16.9265	265.0	-2.9495
V 292.401	-0.1805	ppb	0.6365	352.7	-14.6686
Zn 206.200	0.1126	ppb	2.3746	2108.9	-0.0432

ics 680-567122/2-a (Samp) 4/20/2019, 8:41:53 AM Rack 1, Tube 39

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	517.802	516.772	519.395
Al 308.215	10396.8	10394.3	10394.1
As 188.980	522.899	519.822	512.732
B 249.678	542.835	545.071	547.270
Ba 389.178	487.048	486.303	486.349
Be 313.042	557.836	556.517	555.449
Ca 370.602	10506	10473	10471
Cd 226.502	517.425	516.695	514.711
Co 228.615	516.367	512.996	513.030
Cr 267.716	512.769	511.171	509.199
Cu 324.754	517.055	521.291	513.834
Fe 271.441	10476.8	10524.9	10492.0
K 766.491	10247.1	10227.9	10208.6
Mg 279.078	10666.5	10654.5	10662.8
Mn 257.610	510.775	509.209	508.858
Mo 202.032	504.907	502.716	502.219
Na 330.237	11012.2	11017.9	11228.1
Ni 231.604	512.496	508.682	514.569
Pb 220.353	510.449	528.051	509.556
Sb 206.834	487.123	489.016	488.986
Se 196.026	557.405	537.531	540.461
Si 288.158	5460.40	5443.54	5419.90
Sn 189.925	508.941	505.070	511.878
Sr 216.596	503.327	502.640	504.421
Ti 334.941	518.791	516.416	515.285
Tl 190.794	524.703	510.617	510.536
V 292.401	509.166	507.332	505.227
Zn 206.200	1077.11	1068.75	1076.22

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	517.990	ppb	1.3213	0.3	15691.0
Al 308.215	10395.1	ppb	1.5159	0.0	20559.8
As 188.980	518.484	ppb	5.2138	1.0	139.039
B 249.678	545.059	ppb	2.2178	0.4	3714.43
Ba 389.178	486.567	ppb	0.4172	0.1	3039.60
Be 313.042	556.601	ppb	1.1960	0.2	448697
Ca 370.602	10483	ppb	19.62	0.2	17555
Cd 226.502	516.277	ppb	1.4046	0.3	6647.37
Co 228.615	514.131	ppb	1.9365	0.4	2024.15
Cr 267.716	511.046	ppb	1.7885	0.3	8563.61
Cu 324.754	517.393	ppb	3.7400	0.7	16115.1
Fe 271.441	10497.9	ppb	24.6000	0.2	5849.23
K 766.491	10227.9	ppb	19.2407	0.2	208203

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	10661.3	ppb	6.1665	0.1	14271.9
Mn 257.610	509.614	ppb	1.0206	0.2	42326.9
Mo 202.032	503.281	ppb	1.4303	0.3	853.171
Na 330.237	11086.1	ppb	123.037	1.1	319.765
Ni 231.604	511.916	ppb	2.9862	0.6	572.068
Pb 220.353	516.019	ppb	10.4297	2.0	195.668
Sb 206.834	488.375	ppb	1.0845	0.2	183.234
Se 196.026	545.133	ppb	10.7290	2.0	105.576
Si 288.158	5441.28	ppb	20.3462	0.4	26066.7
Sn 189.925	508.630	ppb	3.4146	0.7	129.543
Sr 216.596	503.463	ppb	0.8985	0.2	1470.67
Ti 334.941	516.831	ppb	1.7894	0.3	45849.0
Tl 190.794	515.285	ppb	8.1557	1.6	121.836
V 292.401	507.242	ppb	1.9709	0.4	5109.43
Zn 206.200	1074.03	ppb	4.5903	0.4	592.342

llcs 680-567122/3-a (Samp)

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Rack 1, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6027	-0.2218u	0.3764
Al 308.215	8.5040	8.0281	15.3951
As 188.980	6.0220	-0.2064u	-0.3047u
B 249.678	18.1411	15.5142	13.5584
Ba 389.178	-3.1941u	2.4798	3.4667
Be 313.042	-0.0565u	-0.0150u	-0.0447u
Ca 370.602	80.20	71.44	68.51
Cd 226.502	0.4994	0.3084	-0.1118u
Co 228.615	1.0459	-0.2766u	-2.0553u
Cr 267.716	0.0199	-0.1881u	0.3414
Cu 324.754	0.8774	2.0517	0.2451
Fe 271.441	5.2408	0.1461	9.4165
K 766.491	7.5152	8.6625	7.8969
Mg 279.078	27.2554	24.5443	32.0290
Mn 257.610	1.6140	1.6578	1.8136
Mo 202.032	3.4026	-0.2504u	-1.4151u
Na 330.237	374.469	392.259	563.698
Ni 231.604	1.8027	-0.5585u	-2.6472u
Pb 220.353	3.0977	-11.9975u	-5.3017u
Sb 206.834	-3.2452u	7.8037	2.1712
Se 196.026	8.8166	8.0663	3.0818
Si 288.158	45.3845	42.4916	49.0993
Sn 189.925	-9.6285u	-14.4153u	0.6056
Sr 216.596	-0.6131u	-0.1081u	-0.4451u
Ti 334.941	0.2537	0.0700	0.1553
Tl 190.794	-25.9185u	-3.0178u	-4.5531u
V 292.401	-0.3051u	0.8330	0.8119
Zn 206.200	-1.0066u	-0.1907u	5.1059

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2524	ppb	0.4260	168.8	-33.0483
Al 308.215	10.6424	ppb	4.1228	38.7	227.965
As 188.980	1.8370	ppb	3.6247	197.3	1.1967
B 249.678	15.7379	ppb	2.2995	14.6	101.970

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.9175	ppb	3.5948	391.8	-30.8408
Be 313.042	-0.0387	ppb	0.0214	55.2	-358.125
Ca 370.602	73.38	ppb	6.079	8.3	147.8
Cd 226.502	0.2320	ppb	0.3127	134.8	6.9283
Co 228.615	-0.4287	ppb	1.5562	363.0	-14.0708
Cr 267.716	0.0577	ppb	0.2667	462.1	14.5240
Cu 324.754	1.0581	ppb	0.9167	86.6	468.141
Fe 271.441	4.9344	ppb	4.6428	94.1	19.9503
K 766.491	8.0249	ppb	0.5842	7.3	455.689
Mg 279.078	27.9429	ppb	3.7894	13.6	59.0441
Mn 257.610	1.6951	ppb	0.1049	6.2	167.184
Mo 202.032	0.5790	ppb	2.5137	434.1	4.9811
Na 330.237	443.475	ppb	104.495	23.6	49.5439
Ni 231.604	-0.4677	ppb	2.2264	476.1	-2.2957
Pb 220.353	-4.7338	ppb	7.5636	159.8	-0.9364
Sb 206.834	2.2433	ppb	5.5248	246.3	6.7949
Se 196.026	6.6549	ppb	3.1171	46.8	3.9763
Si 288.158	45.6584	ppb	3.3124	7.3	748.366
Sn 189.925	-7.8127	ppb	7.6733	98.2	-0.9812
Sr 216.596	-0.3888	ppb	0.2572	66.2	6.0276
Ti 334.941	0.1596	ppb	0.0919	57.6	-11.1349
Tl 190.794	-11.1632	ppb	12.8015	114.7	-4.0920
V 292.401	0.4466	ppb	0.6511	145.8	-8.2761
Zn 206.200	1.3029	ppb	3.3187	254.7	0.6137

Cont Calib Verif (CCV)

4/20/2019, 9:06:03 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	490.156	489.515	502.492
Al 308.215	9894.55	9879.58	10065.4
As 188.980	478.069	479.793	498.320
B 249.678	515.977	514.112	530.841
Ba 389.178	459.536	459.232	466.326
Be 313.042	530.777	529.208	539.222
Ca 370.602	9781	9745	9936
Cd 226.502	489.235	487.316	495.633
Co 228.615	493.186	489.279	501.009
Cr 267.716	486.520	484.540	490.539
Cu 324.754	488.141	485.614	499.332
Fe 271.441	10092.4	10055.7	10289.8
K 766.491	9719.62	9694.59	9889.42
Mg 279.078	10115.7	10078.2	10287.4
Mn 257.610	484.656	483.359	493.769
Mo 202.032	476.366	475.394	481.430
Na 330.237	10697.2	10684.0	10919.6
Ni 231.604	485.802	485.108	498.347
Pb 220.353	473.898	488.609	495.889
Sb 206.834	468.849	474.896	457.513
Se 196.026	532.771	518.592	535.490
Si 288.158	5048.62	5024.00	5124.14
Sn 189.925	479.315	473.450	492.248
Sr 216.596	478.877	476.717	484.187
Ti 334.941	489.486	489.125	497.477

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Label	Replicates Concentration		
Tl 190.794	492.805	482.006	508.844
V 292.401	482.516	483.294	491.492
Zn 206.200	1022.62	1022.82	1055.17

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	494.054	ppb	7.3145	1.5	14964.1	98.81088
Al 308.215	9946.52	ppb	103.247	1.0	19681.6	99.46519
As 188.980	485.394	ppb	11.2272	2.3	130.208	97.07879
B 249.678	520.310	ppb	9.1674	1.8	3545.47	104.06195
Ba 389.178	461.698	ppb	4.0108	0.9	2882.47	92.33954
Be 313.042	533.069	ppb	5.3861	1.0	429714	106.61381
Ca 370.602	9820	ppb	101.5	1.0	16447	98.20499
Cd 226.502	490.728	ppb	4.3546	0.9	6318.74	98.14563
Co 228.615	494.491	ppb	5.9728	1.2	1946.35	98.89822
Cr 267.716	487.200	ppb	3.0568	0.6	8164.65	97.44002
Cu 324.754	491.029	ppb	7.3007	1.5	15316.2	98.20574
Fe 271.441	10146.0	ppb	125.936	1.2	5653.60	101.40913
K 766.491	9767.88	ppb	106.002	1.1	198838	97.67880
Mg 279.078	10160.4	ppb	111.525	1.1	13602.5	101.60435
Mn 257.610	487.261	ppb	5.6729	1.2	40471.4	97.45226
Mo 202.032	477.730	ppb	3.2408	0.7	810.059	95.54602
Na 330.237	10766.9	ppb	132.384	1.2	311.806	107.66934
Ni 231.604	489.752	ppb	7.4514	1.5	547.222	97.95049
Pb 220.353	486.132	ppb	11.2030	2.3	184.375	97.22637
Sb 206.834	467.086	ppb	8.8248	1.9	175.525	93.41722
Se 196.026	528.951	ppb	9.0739	1.7	102.522	105.79022
Si 288.158	5065.59	ppb	52.1836	1.0	24306.7	101.31176
Sn 189.925	481.671	ppb	9.6179	2.0	122.729	96.33415
Sr 216.596	479.927	ppb	3.8440	0.8	1402.24	95.98540
Ti 334.941	492.029	ppb	4.7211	1.0	43647.6	98.40588
Tl 190.794	494.552	ppb	13.5039	2.7	116.877	98.91033
V 292.401	485.767	ppb	4.9733	1.0	4892.62	97.15348
Zn 206.200	1033.53	ppb	18.7341	1.8	570.005	103.35338

Cont Calib Blank (CCB) 4/20/2019, 9:10:15 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0275u	-0.6008u	0.1887
Al 308.215	10.3543	8.8968	13.4578
As 188.980	4.5044	0.5024	-2.3540u
B 249.678	15.2429	12.6917	10.8892
Ba 389.178	1.2845	0.4707	0.9116
Be 313.042	0.0390	0.0582	0.0315
Ca 370.602	-2.079u	-4.716u	-7.044u
Cd 226.502	-0.4998u	-0.3090u	-0.0514u
Co 228.615	-1.2548u	0.4598	0.5854
Cr 267.716	0.2551	0.0361	-0.2698u
Cu 324.754	1.0067	1.0786	1.1410
Fe 271.441	21.6606	21.6219	12.2310
K 766.491	4.6427	1.2832	1.8723
Mg 279.078	9.2284	9.7877	9.1344
Mn 257.610	0.1962	0.2138	0.1707
Mo 202.032	1.3328	1.1806	1.2441

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Label	Replicates Concentration		
Na 330.237	27.0981	-117.591u	123.788
Ni 231.604	0.6446	0.0457	4.5110
Pb 220.353	1.0999	-6.4660u	-8.6497u
Sb 206.834	-4.5932u	3.5813	6.8882
Se 196.026	3.1306	12.8359	-18.0226u
Si 288.158	20.2923	16.7819	15.2814
Sn 189.925	-12.1043u	5.4794	-1.4408u
Sr 216.596	0.3655	-0.2368u	0.7863
Ti 334.941	0.2652	0.2114	0.2573
Tl 190.794	-7.8965u	0.3291	-16.4568u
V 292.401	1.7541	-0.7901u	0.2568
Zn 206.200	-2.1153u	-1.9589u	-1.2052u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1465	ppb	0.4080	278.4	-45.1733	-0.14652
Al 308.215	10.9030	ppb	2.3295	21.4	228.475	10.90299
As 188.980	0.8843	ppb	3.4451	389.6	0.9422	0.88425
B 249.678	12.9413	ppb	2.1876	16.9	82.8140	12.94129
Ba 389.178	0.8889	ppb	0.4074	45.8	-31.0369	0.88894
Be 313.042	0.0429	ppb	0.0138	32.1	-292.305	0.04290
Ca 370.602	-4.613	ppb	2.484	53.8	17.36	-4.61301
Cd 226.502	-0.2867	ppb	0.2250	78.5	0.2911	-0.28673
Co 228.615	-0.0699	ppb	1.0281	1471.4	-12.6527	-0.06988
Cr 267.716	0.0071	ppb	0.2636	3702.9	13.6753	0.00712
Cu 324.754	1.0754	ppb	0.0672	6.2	468.677	1.07544
Fe 271.441	18.5045	ppb	5.4331	29.4	27.4784	18.50451
K 766.491	2.5994	ppb	1.7939	69.0	348.649	2.59940
Mg 279.078	9.3835	ppb	0.3532	3.8	34.2394	9.38350
Mn 257.610	0.1936	ppb	0.0217	11.2	42.6413	0.19356
Mo 202.032	1.2525	ppb	0.0764	6.1	6.1176	1.25250
Na 330.237	11.0984	ppb	121.482	1094.6	37.8807	11.09839
Ni 231.604	1.7338	ppb	2.4237	139.8	0.1735	1.73378
Pb 220.353	-4.6719	ppb	5.1164	109.5	-0.9136	-4.67190
Sb 206.834	1.9588	ppb	5.9102	301.7	6.6898	1.95878
Se 196.026	-0.6854	ppb	15.7792	2302.3	2.5925	-0.68537
Si 288.158	17.4519	ppb	2.5718	14.7	617.054	17.45188
Sn 189.925	-2.6886	ppb	8.8580	329.5	0.3139	-2.68856
Sr 216.596	0.3050	ppb	0.5142	168.6	8.0435	0.30500
Ti 334.941	0.2446	ppb	0.0291	11.9	-3.6450	0.24463
Tl 190.794	-8.0080	ppb	8.3935	104.8	-3.3373	-8.00804
V 292.401	0.4069	ppb	1.2788	314.3	-8.7105	0.40692
Zn 206.200	-1.7598	ppb	0.4866	27.7	-1.0766	-1.75981

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Rack 1, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2694u	-0.4651u	-0.5320u
Al 308.215	44.5225	47.0325	42.4178
As 188.980	8.6003	10.6431	11.3317
B 249.678	14.5141	15.1548	14.1287
Ba 389.178	12.4274	12.3985	11.8507
Be 313.042	-0.1111u	-0.1051u	-0.1179u
Ca 370.602	29206	29328	29288

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Label	Replicates Concentration		
Cd 226.502	-0.1560u	0.0042	-0.6334u
Co 228.615	-1.2533u	0.4362	-1.2556u
Cr 267.716	0.2921	-0.0635u	-0.1178u
Cu 324.754	7.5690	5.1637	7.1056
Fe 271.441	17.6512	22.8060	14.2202
K 766.491	1253.43	1257.52	1246.03
Mg 279.078	8626.90	8638.63	8627.24
Mn 257.610	0.5371	0.7024	0.5792
Mo 202.032	-0.9347u	-1.4635u	-1.0095u
Na 330.237	6553.46	6895.93	6974.46
Ni 231.604	-0.1777u	-1.0772u	-2.5675u
Pb 220.353	2.8308	-0.5314u	11.8622
Sb 206.834	1.8159	11.8198	-5.0755u
Se 196.026	12.0635	9.6271	-3.2321u
Si 288.158	1185.99	1190.75	1191.82
Sn 189.925	-11.7545u	-17.0651u	-13.3248u
Sr 216.596	101.192	100.858	100.206
Ti 334.941	-0.0456	-0.0264	-0.0365
Tl 190.794	-8.2072u	-3.1853u	-9.7120u
V 292.401	-0.1540u	0.7498	1.5864
Zn 206.200	19.6824	15.6409	21.1632

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4222	ppb	0.1365	32.3	-53.9265
Al 308.215	44.6576	ppb	2.3103	5.2	294.484
As 188.980	10.1917	ppb	1.4205	13.9	3.4277
B 249.678	14.5992	ppb	0.5183	3.6	94.1555
Ba 389.178	12.2256	ppb	0.3249	2.7	49.7351
Be 313.042	-0.1114	ppb	0.0064	5.7	-412.603
Ca 370.602	29274	ppb	62.09	0.2	48968
Cd 226.502	-0.2618	ppb	0.3317	126.7	0.6507
Co 228.615	-0.6909	ppb	0.9761	141.3	-15.0945
Cr 267.716	0.0369	ppb	0.2226	602.9	14.2124
Cu 324.754	6.6128	ppb	1.2761	19.3	636.366
Fe 271.441	18.2258	ppb	4.3217	23.7	27.3038
K 766.491	1252.32	ppb	5.8236	0.5	26079.1
Mg 279.078	8630.92	ppb	6.6769	0.1	11563.9
Mn 257.610	0.6062	ppb	0.0859	14.2	109.004
Mo 202.032	-1.1359	ppb	0.2862	25.2	2.0866
Na 330.237	6807.95	ppb	223.862	3.3	221.346
Ni 231.604	-1.2741	ppb	1.2070	94.7	-3.2004
Pb 220.353	4.7205	ppb	6.4093	135.8	2.6433
Sb 206.834	2.8534	ppb	8.4953	297.7	6.9896
Se 196.026	6.1528	ppb	8.2184	133.6	3.8817
Si 288.158	1189.52	ppb	3.1051	0.3	6087.19
Sn 189.925	-14.0481	ppb	2.7282	19.4	-2.5564
Sr 216.596	100.752	ppb	0.5016	0.5	301.290
Ti 334.941	-0.0362	ppb	0.0096	26.6	-5.8564
Tl 190.794	-7.0348	ppb	3.4176	48.6	-3.1040
V 292.401	0.7274	ppb	0.8704	119.7	-5.2588
Zn 206.200	18.8288	ppb	2.8584	15.2	10.2858

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.2339u	-1.0171u	0.3958
Al 308.215	18.0392	21.5047	20.1064
As 188.980	5.1957	-2.2758u	-1.3206u
B 249.678	1.8111	0.2818	0.0398
Ba 389.178	0.4750	5.8489	2.1039
Be 313.042	-0.1362u	-0.1225u	-0.1256u
Ca 370.602	5573	5603	5610
Cd 226.502	-0.0330u	-0.2322u	0.1139
Co 228.615	-1.1094u	-0.5335u	-1.6217u
Cr 267.716	0.0773	-0.5110u	0.1768
Cu 324.754	2.0036	3.0886	1.9402
Fe 271.441	17.1486	14.0211	16.5996
K 766.491	212.791	211.150	209.886
Mg 279.078	1654.03	1664.87	1655.11
Mn 257.610	0.2074	0.1916	0.2448
Mo 202.032	0.9144	0.6634	0.1866
Na 330.237	1257.04	1404.41	1466.90
Ni 231.604	-1.4763u	-0.5474u	-3.0987u
Pb 220.353	-5.1640u	4.6854	-3.4955u
Sb 206.834	1.4554	-10.0170u	-14.5323u
Se 196.026	0.5489	-3.7913u	-13.7718u
Si 288.158	234.340	235.581	235.009
Sn 189.925	-9.6147u	7.0676	-4.1824u
Sr 216.596	19.2536	20.1568	19.8948
Ti 334.941	-0.0795u	-0.0246	-0.0991u
Tl 190.794	-9.7533u	-12.2981u	-3.7631u
V 292.401	0.2451	0.3753	0.7040
Zn 206.200	0.5342	5.2735	3.0196

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6184	ppb	0.8850	143.1	-59.5785
Al 308.215	19.8834	ppb	1.7434	8.8	246.034
As 188.980	0.5331	ppb	4.0661	762.7	0.8486
B 249.678	0.7109	ppb	0.9604	135.1	-0.8980
Ba 389.178	2.8093	ppb	2.7555	98.1	-17.1463
Be 313.042	-0.1281	ppb	0.0072	5.6	-429.452
Ca 370.602	5595	ppb	19.78	0.4	9380
Cd 226.502	-0.0505	ppb	0.1737	344.3	3.3254
Co 228.615	-1.0882	ppb	0.5444	50.0	-16.6830
Cr 267.716	-0.0856	ppb	0.3717	434.1	12.1312
Cu 324.754	2.3441	ppb	0.6455	27.5	507.091
Fe 271.441	15.9231	ppb	1.6699	10.5	26.0114
K 766.491	211.276	ppb	1.4563	0.7	4625.85
Mg 279.078	1658.00	ppb	5.9747	0.4	2238.95
Mn 257.610	0.2146	ppb	0.0273	12.7	50.5415
Mo 202.032	0.5881	ppb	0.3697	62.9	4.9964
Na 330.237	1376.11	ppb	107.753	7.8	74.7323
Ni 231.604	-1.7074	ppb	1.2913	75.6	-3.6861
Pb 220.353	-1.3247	ppb	5.2714	397.9	0.3543
Sb 206.834	-7.6980	ppb	8.2423	107.1	3.3202
Se 196.026	-5.6714	ppb	7.3431	129.5	1.6526
Si 288.158	234.977	ppb	0.6212	0.3	1632.46

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.2432	ppb	8.5086	379.3	0.4266
Sr 216.596	19.7684	ppb	0.4647	2.4	64.8728
Ti 334.941	-0.0678	ppb	0.0386	57.0	-27.0087
Tl 190.794	-8.6048	ppb	4.3819	50.9	-3.4803
V 292.401	0.4415	ppb	0.2365	53.6	-8.2973
Zn 206.200	2.9425	ppb	2.3706	80.6	1.5185

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2480u	-1.5552u	-0.5015u
Al 308.215	5540.06	5504.21	5507.45
As 188.980	103.307	109.686	104.765
B 249.678	243.936	244.930	244.582
Ba 389.178	115.793	120.008	118.122
Be 313.042	59.3723	58.9871	59.0001
Ca 370.602	34495	34390	34304
Cd 226.502	55.8393	55.6610	55.3200
Co 228.615	54.5801	53.5769	55.6612
Cr 267.716	111.365	110.508	110.906
Cu 324.754	116.134	115.020	116.891
Fe 271.441	5490.74	5474.24	5494.90
K 766.491	10957.3	10898.6	10869.3
Mg 279.078	14191.2	14132.6	14121.4
Mn 257.610	541.847	538.094	539.628
Mo 202.032	101.803	104.429	106.966
Na 330.237	12997.5	12332.0	11784.9
Ni 231.604	105.874	105.777	107.477
Pb 220.353	538.907	537.018	538.785
Sb 206.834	43.2114	57.7981	50.6537
Se 196.026	102.095	121.928	88.9883
Si 288.158	1187.26	1184.23	1180.83
Sn 189.925	98.1607	101.966	91.6929
Sr 216.596	209.873	205.890	209.365
Ti 334.941	437.982	436.234	436.045
Tl 190.794	47.2093	37.9055	39.1889
V 292.401	107.720	108.020	108.335
Zn 206.200	131.082	131.568	133.964

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7682	ppb	0.6932	90.2	-65.1401
Al 308.215	5517.24	ppb	19.8278	0.4	11003.6
As 188.980	105.920	ppb	3.3426	3.2	28.9566
B 249.678	244.483	ppb	0.5047	0.2	1662.12
Ba 389.178	117.974	ppb	2.1118	1.8	723.185
Be 313.042	59.1198	ppb	0.2188	0.4	47368.8
Ca 370.602	34396	ppb	96.11	0.3	57540
Cd 226.502	55.6068	ppb	0.2639	0.5	726.267
Co 228.615	54.6061	ppb	1.0424	1.9	206.260
Cr 267.716	110.926	ppb	0.4288	0.4	1870.60
Cu 324.754	116.015	ppb	0.9409	0.8	3952.23
Fe 271.441	5486.63	ppb	10.9222	0.2	3056.95
K 766.491	10908.4	ppb	44.8355	0.4	224563

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	14148.4	ppb	37.4657	0.3	18935.9
Mn 257.610	539.856	ppb	1.8869	0.3	44842.3
Mo 202.032	104.399	ppb	2.5815	2.5	180.115
Na 330.237	12371.5	ppb	607.285	4.9	366.334
Ni 231.604	106.376	ppb	0.9549	0.9	117.519
Pb 220.353	538.237	ppb	1.0573	0.2	204.420
Sb 206.834	50.5544	ppb	7.2939	14.4	24.5703
Se 196.026	104.337	ppb	16.5839	15.9	22.4636
Si 288.158	1184.11	ppb	3.2171	0.3	6104.76
Sn 189.925	97.2732	ppb	5.1937	5.3	25.5789
Sr 216.596	208.376	ppb	2.1674	1.0	614.552
Ti 334.941	436.754	ppb	1.0681	0.2	38754.8
Tl 190.794	41.4346	ppb	5.0421	12.2	8.4013
V 292.401	108.025	ppb	0.3071	0.3	1079.81
Zn 206.200	132.205	ppb	1.5426	1.2	72.8029

190-19425-a-2-c (Samp)

4/20/2019, 9:37:08 AM

Rack 1, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3033	-0.5287u	-1.2378u
Al 308.215	5465.43	5462.20	5484.31
As 188.980	115.331	108.075	113.978
B 249.678	246.518	246.961	249.596
Ba 389.178	118.720	118.838	117.707
Be 313.042	58.4974	58.5732	58.6879
Ca 370.602	34384	34388	34397
Cd 226.502	55.8338	54.8985	55.1297
Co 228.615	53.1541	54.1381	55.0276
Cr 267.716	110.287	111.228	109.826
Cu 324.754	114.891	114.517	115.828
Fe 271.441	5427.39	5416.06	5459.29
K 766.491	10810.1	10808.5	10841.9
Mg 279.078	14099.0	14075.6	14127.0
Mn 257.610	535.179	535.533	537.144
Mo 202.032	101.966	105.945	106.934
Na 330.237	12386.6	12520.5	12489.8
Ni 231.604	111.771	107.339	107.148
Pb 220.353	530.180	546.511	541.208
Sb 206.834	48.2226	46.6229	58.4785
Se 196.026	113.828	93.4301	115.078
Si 288.158	1180.61	1185.57	1188.11
Sn 189.925	100.932	93.0305	98.1746
Sr 216.596	207.519	205.159	208.031
Ti 334.941	432.729	433.129	434.660
Tl 190.794	41.2408	35.8120	36.0958
V 292.401	106.375	107.198	107.838
Zn 206.200	137.992	133.026	128.222

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4877	ppb	0.7714	158.2	-56.6111
Al 308.215	5470.65	ppb	11.9427	0.2	10912.5
As 188.980	112.461	ppb	3.8582	3.4	30.7034
B 249.678	247.692	ppb	1.6638	0.7	1684.13

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	118.422	ppb	0.6214	0.5	725.938
Be 313.042	58.5862	ppb	0.0959	0.2	46938.2
Ca 370.602	34390	ppb	6.975	0.0	57529
Cd 226.502	55.2873	ppb	0.4872	0.9	722.106
Co 228.615	54.1066	ppb	0.9371	1.7	204.247
Cr 267.716	110.447	ppb	0.7145	0.6	1862.58
Cu 324.754	115.079	ppb	0.6753	0.6	3923.89
Fe 271.441	5434.25	ppb	22.4185	0.4	3027.91
K 766.491	10820.2	ppb	18.8442	0.2	222754
Mg 279.078	14100.5	ppb	25.7361	0.2	18872.0
Mn 257.610	535.952	ppb	1.0474	0.2	44518.4
Mo 202.032	104.948	ppb	2.6299	2.5	181.041
Na 330.237	12465.7	ppb	70.1513	0.6	368.895
Ni 231.604	108.752	ppb	2.6159	2.4	120.186
Pb 220.353	539.300	ppb	8.3314	1.5	204.824
Sb 206.834	51.1080	ppb	6.4329	12.6	24.7513
Se 196.026	107.445	ppb	12.1535	11.3	23.0490
Si 288.158	1184.77	ppb	3.8136	0.3	6107.69
Sn 189.925	97.3789	ppb	4.0103	4.1	25.6056
Sr 216.596	206.903	ppb	1.5320	0.7	610.224
Ti 334.941	433.506	ppb	1.0193	0.2	38466.6
Tl 190.794	37.7162	ppb	3.0557	8.1	7.5108
V 292.401	107.137	ppb	0.7336	0.7	1070.68
Zn 206.200	133.080	ppb	4.8852	3.7	73.2863

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Rack 1, Tube 45

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3258u	0.2571	1.0785
Al 308.215	5510.63	5517.92	5534.65
As 188.980	104.998	98.5625	109.767
B 249.678	252.740	252.022	252.985
Ba 389.178	118.365	117.282	119.598
Be 313.042	59.0996	59.1946	59.2840
Ca 370.602	34449	34425	34587
Cd 226.502	55.7670	56.3255	56.4154
Co 228.615	53.4669	53.9840	54.3244
Cr 267.716	110.071	111.404	110.777
Cu 324.754	114.412	117.165	116.749
Fe 271.441	5516.33	5496.00	5501.56
K 766.491	10916.5	10878.8	10927.6
Mg 279.078	14132.4	14190.5	14226.2
Mn 257.610	540.574	540.380	541.922
Mo 202.032	105.165	105.849	104.369
Na 330.237	12422.0	12690.6	12792.2
Ni 231.604	108.821	110.007	109.372
Pb 220.353	534.642	536.223	534.708
Sb 206.834	52.6658	47.2964	53.2343
Se 196.026	105.931	134.458	113.988
Si 288.158	1184.18	1184.43	1188.99
Sn 189.925	91.9065	84.8075	105.517
Sr 216.596	210.521	207.178	206.338
Ti 334.941	437.023	437.814	439.326

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Label	Replicates Concentration		
Tl 190.794	47.2653	40.5734	26.3919
V 292.401	108.500	108.352	108.576
Zn 206.200	136.366	133.906	135.503

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3366	ppb	0.7055	209.6	-31.5809
Al 308.215	5521.07	ppb	12.3171	0.2	11011.2
As 188.980	104.443	ppb	5.6230	5.4	28.5621
B 249.678	252.582	ppb	0.5003	0.2	1717.54
Ba 389.178	118.415	ppb	1.1585	1.0	726.011
Be 313.042	59.1927	ppb	0.0922	0.2	47427.6
Ca 370.602	34487	ppb	87.65	0.3	57692
Cd 226.502	56.1693	ppb	0.3513	0.6	733.521
Co 228.615	53.9251	ppb	0.4318	0.8	203.561
Cr 267.716	110.751	ppb	0.6666	0.6	1867.67
Cu 324.754	116.109	ppb	1.4839	1.3	3955.08
Fe 271.441	5504.63	ppb	10.5031	0.2	3066.88
K 766.491	10907.6	ppb	25.6058	0.2	224551
Mg 279.078	14183.1	ppb	47.3644	0.3	18982.3
Mn 257.610	540.959	ppb	0.8401	0.2	44933.8
Mo 202.032	105.128	ppb	0.7407	0.7	181.343
Na 330.237	12634.9	ppb	191.235	1.5	373.400
Ni 231.604	109.400	ppb	0.5935	0.5	120.913
Pb 220.353	535.191	ppb	0.8943	0.2	203.266
Sb 206.834	51.0655	ppb	3.2765	6.4	24.7444
Se 196.026	118.126	ppb	14.7069	12.5	25.0631
Si 288.158	1185.86	ppb	2.7085	0.2	6112.91
Sn 189.925	94.0770	ppb	10.5240	11.2	24.7711
Sr 216.596	208.013	ppb	2.2129	1.1	613.477
Ti 334.941	438.054	ppb	1.1703	0.3	38870.2
Tl 190.794	38.0769	ppb	10.6583	28.0	7.5960
V 292.401	108.476	ppb	0.1138	0.1	1084.36
Zn 206.200	135.258	ppb	1.2482	0.9	74.4883

190-19428-a-2-c (Samp)

4/20/2019, 9:45:32 AM

Rack 1, Tube 46

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6551u	-0.7717u	-0.7048u
Al 308.215	38.8268	39.0719	43.3384
As 188.980	10.9004	7.3434	1.5957
B 249.678	23.7279	21.8852	21.8486
Ba 389.178	10.6113	14.1554	15.4704
Be 313.042	-0.1259u	-0.1234u	-0.1113u
Ca 370.602	29926	29678	29808
Cd 226.502	0.1608	0.0232	0.2505
Co 228.615	0.4475	-1.5487u	-0.3397u
Cr 267.716	0.3175	0.2779	0.2470
Cu 324.754	8.4367	7.2925	8.6936
Fe 271.441	44.3788	33.6268	25.4041
K 766.491	1286.46	1282.39	1284.09
Mg 279.078	8807.93	8751.35	8788.84
Mn 257.610	0.3348	0.3949	0.3035
Mo 202.032	1.7383	0.7592	0.8249

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Label	Replicates Concentration		
Na 330.237	7504.99	7492.27	7700.34
Ni 231.604	-1.3184u	0.5158	3.2357
Pb 220.353	-4.6281u	11.3532	2.8903
Sb 206.834	8.7857	1.5199	-9.6226u
Se 196.026	-4.7637u	-17.1660u	11.6408
Si 288.158	3486.86	3461.99	3467.63
Sn 189.925	-18.4674u	-3.6117u	-0.6018u
Sr 216.596	105.051	103.528	102.094
Ti 334.941	0.3964	0.4191	0.3533
Tl 190.794	-10.6822u	-9.1860u	-7.6660u
V 292.401	1.1000	0.5153	-0.5152u
Zn 206.200	-2.0024u	1.7399	6.0323

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7105	ppb	0.0585	8.2	-62.6886
Al 308.215	40.4123	ppb	2.5370	6.3	286.203
As 188.980	6.6132	ppb	4.6951	71.0	2.4719
B 249.678	22.4872	ppb	1.0746	4.8	148.145
Ba 389.178	13.4124	ppb	2.5133	18.7	57.3699
Be 313.042	-0.1202	ppb	0.0078	6.5	-419.809
Ca 370.602	29804	ppb	124.0	0.4	49854
Cd 226.502	0.1448	ppb	0.1145	79.0	5.8718
Co 228.615	-0.4803	ppb	1.0055	209.4	-14.2752
Cr 267.716	0.2808	ppb	0.0354	12.6	18.2973
Cu 324.754	8.1409	ppb	0.7459	9.2	682.689
Fe 271.441	34.4699	ppb	9.5154	27.6	36.2959
K 766.491	1284.31	ppb	2.0446	0.2	26729.8
Mg 279.078	8782.71	ppb	28.7830	0.3	11766.9
Mn 257.610	0.3444	ppb	0.0464	13.5	87.8851
Mo 202.032	1.1075	ppb	0.5473	49.4	5.8727
Na 330.237	7565.87	ppb	116.633	1.5	242.014
Ni 231.604	0.8110	ppb	2.2913	282.5	-0.8611
Pb 220.353	3.2052	ppb	7.9953	249.5	2.0689
Sb 206.834	0.2277	ppb	9.2719	4072.8	6.0788
Se 196.026	-3.4296	ppb	14.4497	421.3	2.0753
Si 288.158	3472.16	ppb	13.0387	0.4	16741.0
Sn 189.925	-7.5603	ppb	9.5650	126.5	-0.9166
Sr 216.596	103.558	ppb	1.4789	1.4	309.455
Ti 334.941	0.3896	ppb	0.0334	8.6	32.2992
Tl 190.794	-9.1781	ppb	1.5081	16.4	-3.6180
V 292.401	0.3667	ppb	0.8178	223.0	-9.0858
Zn 206.200	1.9233	ppb	4.0205	209.0	0.9561

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Rack 1, Tube 47

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1032	-1.1185u	-0.3370u
Al 308.215	46.5528	41.4319	45.0280
As 188.980	2.2854	8.6903	-2.6085u
B 249.678	17.8598	17.8092	16.1341
Ba 389.178	14.3674	12.7950	10.1590
Be 313.042	-0.1342u	-0.1087u	-0.1260u
Ca 370.602	29596	29660	29732

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Label	Replicates Concentration		
Cd 226.502	-0.0344u	0.2639	0.6467
Co 228.615	-0.8083u	-0.1459u	-0.1742u
Cr 267.716	-0.5239u	-0.6274u	0.0078
Cu 324.754	81.7995	82.9367	83.8370
Fe 271.441	2.5794	0.6335	1.3720
K 766.491	1300.71	1301.69	1303.65
Mg 279.078	8732.22	8734.58	8763.38
Mn 257.610	0.2132	0.1690	0.1105
Mo 202.032	0.5863	1.0600	0.6000
Na 330.237	9715.58	9778.68	9513.74
Ni 231.604	-2.1430u	-0.9121u	-0.7382u
Pb 220.353	-8.6950u	-0.5223u	-5.2885u
Sb 206.834	2.4838	8.1611	-2.5451u
Se 196.026	-2.7888u	-15.4733u	-6.4829u
Si 288.158	6300.24	6302.39	6322.28
Sn 189.925	1.5016	-4.2419u	4.7206
Sr 216.596	101.897	101.526	99.9081
Ti 334.941	0.2945	-0.0072	0.2113
Tl 190.794	-7.6517u	-10.0200u	-4.9654u
V 292.401	1.6541	0.0349	0.0248
Zn 206.200	0.4317	2.5173	5.0100

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4507	ppb	0.6188	137.3	-54.7923
Al 308.215	44.3376	ppb	2.6293	5.9	293.874
As 188.980	2.7891	ppb	5.6662	203.2	1.4509
B 249.678	17.2677	ppb	0.9820	5.7	112.430
Ba 389.178	12.4405	ppb	2.1265	17.1	51.2074
Be 313.042	-0.1230	ppb	0.0130	10.6	-422.134
Ca 370.602	29663	ppb	68.00	0.2	49619
Cd 226.502	0.2920	ppb	0.3414	116.9	7.7402
Co 228.615	-0.3761	ppb	0.3745	99.6	-13.8591
Cr 267.716	-0.3812	ppb	0.3408	89.4	7.2347
Cu 324.754	82.8577	ppb	1.0210	1.2	2945.85
Fe 271.441	1.5283	ppb	0.9823	64.3	18.0587
K 766.491	1302.02	ppb	1.4986	0.1	27100.0
Mg 279.078	8743.39	ppb	17.3531	0.2	11714.3
Mn 257.610	0.1642	ppb	0.0515	31.4	72.7720
Mo 202.032	0.7488	ppb	0.2696	36.0	5.2674
Na 330.237	9669.33	ppb	138.394	1.4	298.871
Ni 231.604	-1.2644	ppb	0.7658	60.6	-3.1894
Pb 220.353	-4.8353	ppb	4.1052	84.9	-0.9753
Sb 206.834	2.6999	ppb	5.3564	198.4	6.9389
Se 196.026	-8.2483	ppb	6.5239	79.1	1.1668
Si 288.158	6308.30	ppb	12.1530	0.2	29977.9
Sn 189.925	0.6601	ppb	4.5401	687.8	1.1611
Sr 216.596	101.110	ppb	1.0575	1.0	302.327
Ti 334.941	0.1662	ppb	0.1558	93.8	12.3178
Tl 190.794	-7.5457	ppb	2.5289	33.5	-3.2264
V 292.401	0.5713	ppb	0.9378	164.2	-6.9597
Zn 206.200	2.6530	ppb	2.2922	86.4	1.3589

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0488u	-0.5083u	-0.4765u
Al 308.215	39.4364	44.8577	39.2103
As 188.980	4.5167	10.2542	-2.0107u
B 249.678	16.1237	16.4065	16.0667
Ba 389.178	15.6938	17.3437	12.1996
Be 313.042	-0.1128u	-0.1329u	-0.1330u
Ca 370.602	30063	30122	29955
Cd 226.502	0.2059	-0.4126u	0.4627
Co 228.615	0.3670	0.1683	-2.5558u
Cr 267.716	0.0347	0.0176	-0.1910u
Cu 324.754	4.0315	3.9899	4.7510
Fe 271.441	-7.8892u	2.0194	29.7344
K 766.491	1291.37	1297.12	1287.08
Mg 279.078	8803.02	8829.37	8776.19
Mn 257.610	0.4142	0.3098	0.2523
Mo 202.032	0.3250	1.5717	1.8872
Na 330.237	7556.89	7528.39	7623.18
Ni 231.604	0.3155	-0.1971u	-3.4490u
Pb 220.353	-11.4428u	4.4672	0.9102
Sb 206.834	-5.2789u	-2.4699u	-1.0733u
Se 196.026	-2.3474u	-26.6448u	12.1076
Si 288.158	1186.38	1188.94	1187.40
Sn 189.925	-0.9913u	-1.6819u	-7.4198u
Sr 216.596	103.858	105.185	103.977
Ti 334.941	-0.0407	-0.0986	-0.1642
Tl 190.794	-8.1299u	-14.0218u	-2.0110u
V 292.401	0.4598	0.8199	-0.1608u
Zn 206.200	16.1320	14.9907	18.4612

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6779	ppb	0.3216	47.4	-61.7011
Al 308.215	41.1681	ppb	3.1972	7.8	287.677
As 188.980	4.2534	ppb	6.1367	144.3	1.8419
B 249.678	16.1989	ppb	0.1820	1.1	105.111
Ba 389.178	15.0790	ppb	2.6265	17.4	67.8570
Be 313.042	-0.1263	ppb	0.0116	9.2	-424.670
Ca 370.602	30047	ppb	85.10	0.3	50260
Cd 226.502	0.0854	ppb	0.4499	527.1	5.0970
Co 228.615	-0.6735	ppb	1.6331	242.5	-15.0427
Cr 267.716	-0.0462	ppb	0.1256	271.7	12.8251
Cu 324.754	4.2575	ppb	0.4279	10.1	565.057
Fe 271.441	7.9549	ppb	19.5014	245.2	21.6090
K 766.491	1291.86	ppb	5.0406	0.4	26862.0
Mg 279.078	8802.86	ppb	26.5907	0.3	11793.8
Mn 257.610	0.3254	ppb	0.0821	25.2	86.3417
Mo 202.032	1.2613	ppb	0.8261	65.5	6.1325
Na 330.237	7569.48	ppb	48.6334	0.6	241.957
Ni 231.604	-1.1102	ppb	2.0416	183.9	-3.0162
Pb 220.353	-2.0218	ppb	8.3504	413.0	0.0900
Sb 206.834	-2.9407	ppb	2.1420	72.8	4.9967
Se 196.026	-5.6282	ppb	19.5834	348.0	1.6608
Si 288.158	1187.57	ppb	1.2911	0.1	6078.28

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-3.3643	ppb	3.5291	104.9	0.1438
Sr 216.596	104.340	ppb	0.7342	0.7	311.745
Ti 334.941	-0.1012	ppb	0.0618	61.1	-11.2023
Tl 190.794	-8.0542	ppb	6.0058	74.6	-3.3486
V 292.401	0.3730	ppb	0.4960	133.0	-9.0138
Zn 206.200	16.5279	ppb	1.7688	10.7	9.0158

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5143u	-0.7642u	-1.6786u
Al 308.215	55.2309	50.5977	55.0227
As 188.980	-0.3070u	5.5874	-2.4708u
B 249.678	15.3686	14.6073	16.0836
Ba 389.178	11.1827	11.8644	12.6437
Be 313.042	-0.1380u	-0.1288u	-0.1332u
Ca 370.602	28651	28621	28574
Cd 226.502	-0.2598u	0.1241	-0.1844u
Co 228.615	1.0803	-1.3476u	0.3527
Cr 267.716	-0.1293u	-0.2774u	0.3796
Cu 324.754	45.5637	44.8491	44.9676
Fe 271.441	79.7312	62.7259	54.8061
K 766.491	1250.13	1239.81	1246.34
Mg 279.078	8424.66	8429.90	8408.23
Mn 257.610	1.6028	1.5575	1.6091
Mo 202.032	1.4155	0.9559	0.6508
Na 330.237	11285.8	11510.6	11413.6
Ni 231.604	-0.4083u	-2.3911u	0.5973
Pb 220.353	3.3358	-4.0068u	-3.9168u
Sb 206.834	2.6786	-4.2999u	0.5177
Se 196.026	-7.7318u	-10.1664u	8.9330
Si 288.158	8621.96	8617.96	8605.03
Sn 189.925	-7.5072u	-11.8644u	-6.5954u
Sr 216.596	99.0179	96.6769	99.9690
Ti 334.941	0.6776	0.8179	0.5030
Tl 190.794	-2.0673u	-12.2355u	-13.1352u
V 292.401	0.9463	-0.4668u	0.4394
Zn 206.200	32.9529	27.8678	27.5843

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9857	ppb	0.6129	62.2	-71.0380
Al 308.215	53.6171	ppb	2.6170	4.9	312.024
As 188.980	0.9365	ppb	4.1705	445.3	0.9561
B 249.678	15.3532	ppb	0.7383	4.8	99.2699
Ba 389.178	11.8969	ppb	0.7311	6.1	47.4586
Be 313.042	-0.1333	ppb	0.0046	3.4	-430.741
Ca 370.602	28615	ppb	39.08	0.1	47867
Cd 226.502	-0.1067	ppb	0.2034	190.6	2.7016
Co 228.615	0.0285	ppb	1.2460	4379.2	-12.2531
Cr 267.716	-0.0090	ppb	0.3446	3813.3	13.4764
Cu 324.754	45.1268	ppb	0.3830	0.8	1802.99
Fe 271.441	65.7544	ppb	12.7355	19.4	53.6198
K 766.491	1245.43	ppb	5.2176	0.4	25934.7

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	8420.93	ppb	11.3086	0.1	11283.0
Mn 257.610	1.5898	ppb	0.0281	1.8	189.787
Mo 202.032	1.0074	ppb	0.3849	38.2	5.7033
Na 330.237	11403.3	ppb	112.763	1.0	345.418
Ni 231.604	-0.7340	ppb	1.5206	207.2	-2.5946
Pb 220.353	-1.5293	ppb	4.2135	275.5	0.2747
Sb 206.834	-0.3679	ppb	3.5725	971.1	5.8629
Se 196.026	-2.9884	ppb	10.3958	347.9	2.1587
Si 288.158	8614.98	ppb	8.8516	0.1	40742.7
Sn 189.925	-8.6557	ppb	2.8160	32.5	-1.1931
Sr 216.596	98.5546	ppb	1.6942	1.7	294.863
Ti 334.941	0.6661	ppb	0.1578	23.7	55.7773
Tl 190.794	-9.1460	ppb	6.1468	67.2	-3.6118
V 292.401	0.3063	ppb	0.7159	233.7	-9.6822
Zn 206.200	29.4683	ppb	3.0210	10.3	16.1571

190-19429-a-1-c (Samp)

4/20/2019, 10:04:57 AM

Rack 1, Tube 50

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8352u	-0.0858u	-0.6350u
Al 308.215	52.7116	45.6819	45.4415
As 188.980	-0.8025u	-0.2398u	6.5855
B 249.678	15.5714	14.2472	14.9282
Ba 389.178	10.6001	10.9497	10.7844
Be 313.042	-0.1302u	-0.1352u	-0.1272u
Ca 370.602	29883	30112	30015
Cd 226.502	-0.1568u	0.1439	0.1189
Co 228.615	-0.4573u	-1.0422u	-1.6165u
Cr 267.716	0.1797	-0.3638u	-0.7261u
Cu 324.754	104.320	104.434	105.134
Fe 271.441	34.1132	15.9538	0.3231
K 766.491	1308.20	1313.38	1308.36
Mg 279.078	8834.51	8869.89	8857.29
Mn 257.610	0.5183	0.2655	0.2948
Mo 202.032	0.8166	-0.1774u	2.2754
Na 330.237	9384.13	9466.59	9476.09
Ni 231.604	-0.2790u	0.0031	-1.5219u
Pb 220.353	2.7034	2.5137	-8.2606u
Sb 206.834	8.3059	-10.4910u	7.7826
Se 196.026	-5.5769u	-13.6189u	-8.2336u
Si 288.158	5270.45	5293.00	5268.59
Sn 189.925	-9.0102u	-0.1226u	-11.4827u
Sr 216.596	102.234	102.574	103.762
Ti 334.941	0.2289	0.1557	0.1078
Tl 190.794	-11.1945u	-13.7141u	-6.2615u
V 292.401	0.3203	0.6244	0.7834
Zn 206.200	44.2598	48.4137	51.4955

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5187	ppb	0.3880	74.8	-56.8682
Al 308.215	47.9450	ppb	4.1298	8.6	300.937
As 188.980	1.8477	ppb	4.1127	222.6	1.1995
B 249.678	14.9156	ppb	0.6622	4.4	96.3113

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	10.7781	ppb	0.1749	1.6	40.8801
Be 313.042	-0.1309	ppb	0.0041	3.1	-428.469
Ca 370.602	30004	ppb	114.9	0.4	50188
Cd 226.502	0.0354	ppb	0.1669	471.9	4.4755
Co 228.615	-1.0386	ppb	0.5796	55.8	-16.4882
Cr 267.716	-0.3034	ppb	0.4559	150.3	8.5353
Cu 324.754	104.630	ppb	0.4408	0.4	3605.33
Fe 271.441	16.7967	ppb	16.9108	100.7	26.4923
K 766.491	1309.98	ppb	2.9463	0.2	27271.9
Mg 279.078	8853.90	ppb	17.9298	0.2	11862.1
Mn 257.610	0.3595	ppb	0.1382	38.4	89.3695
Mo 202.032	0.9715	ppb	1.2337	127.0	5.6432
Na 330.237	9442.27	ppb	50.5723	0.5	292.208
Ni 231.604	-0.5993	ppb	0.8114	135.4	-2.4428
Pb 220.353	-1.0145	ppb	6.2760	618.6	0.4709
Sb 206.834	1.8658	ppb	10.7045	573.7	6.6346
Se 196.026	-9.1431	ppb	4.0974	44.8	0.9982
Si 288.158	5277.35	ppb	13.5868	0.3	25165.8
Sn 189.925	-6.8718	ppb	5.9743	86.9	-0.7425
Sr 216.596	102.857	ppb	0.8020	0.8	307.416
Ti 334.941	0.1641	ppb	0.0610	37.2	12.4250
Tl 190.794	-10.3900	ppb	3.7909	36.5	-3.9088
V 292.401	0.5760	ppb	0.2353	40.8	-6.9504
Zn 206.200	48.0563	ppb	3.6310	7.6	26.4152

Cont Calib Verif (CCV)

4/20/2019, 10:09:10 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	492.527	495.460	494.877
Al 308.215	10004.1	10036.7	9983.24
As 188.980	484.417	490.213	499.265
B 249.678	516.519	522.530	519.620
Ba 389.178	463.833	465.498	461.113
Be 313.042	537.501	539.413	537.413
Ca 370.602	9860	9870	9853
Cd 226.502	495.583	495.140	495.133
Co 228.615	492.016	497.238	491.228
Cr 267.716	493.423	496.656	491.214
Cu 324.754	491.237	494.654	486.261
Fe 271.441	10004.5	10078.4	10012.0
K 766.491	9726.33	9791.86	9727.68
Mg 279.078	10212.7	10228.3	10213.1
Mn 257.610	487.975	489.867	487.591
Mo 202.032	482.293	484.321	483.910
Na 330.237	10692.9	10422.3	10883.3
Ni 231.604	493.502	496.513	491.125
Pb 220.353	495.435	499.571	487.403
Sb 206.834	461.920	475.243	476.477
Se 196.026	510.458	506.517	547.206
Si 288.158	5093.54	5119.36	5083.01
Sn 189.925	492.172	481.203	489.702
Sr 216.596	485.369	483.909	485.421
Ti 334.941	498.374	499.365	497.834

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	479.199	498.947	479.680
V 292.401	487.903	488.684	486.186
Zn 206.200	1035.61	1033.99	1028.77

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	494.288	ppb	1.5527	0.3	14971.2	98.85764
Al 308.215	10008.0	ppb	26.9574	0.3	19801.9	100.08019
As 188.980	491.298	ppb	7.4837	1.5	131.784	98.25966
B 249.678	519.556	ppb	3.0056	0.6	3540.28	103.91124
Ba 389.178	463.481	ppb	2.2135	0.5	2893.76	92.69621
Be 313.042	538.109	ppb	1.1299	0.2	433779	107.62175
Ca 370.602	9861	ppb	8.677	0.1	16515	98.61272
Cd 226.502	495.285	ppb	0.2579	0.1	6377.29	99.05706
Co 228.615	493.494	ppb	3.2665	0.7	1942.41	98.69881
Cr 267.716	493.764	ppb	2.7368	0.6	8274.47	98.75288
Cu 324.754	490.717	ppb	4.2209	0.9	15306.8	98.14347
Fe 271.441	10031.7	ppb	40.6900	0.4	5590.30	100.26649
K 766.491	9748.62	ppb	37.4515	0.4	198452	97.48624
Mg 279.078	10218.0	ppb	8.9188	0.1	13679.5	102.18042
Mn 257.610	488.478	ppb	1.2182	0.2	40572.5	97.69551
Mo 202.032	483.508	ppb	1.0719	0.2	819.810	96.70157
Na 330.237	10666.2	ppb	231.646	2.2	309.100	106.66171
Ni 231.604	493.713	ppb	2.7001	0.5	551.666	98.74269
Pb 220.353	494.137	ppb	6.1870	1.3	187.404	98.82731
Sb 206.834	471.214	ppb	8.0720	1.7	176.971	94.24271
Se 196.026	521.393	ppb	22.4410	4.3	101.097	104.27869
Si 288.158	5098.64	ppb	18.7013	0.4	24462.0	101.97276
Sn 189.925	487.692	ppb	5.7538	1.2	124.251	97.53846
Sr 216.596	484.900	ppb	0.8584	0.2	1416.73	96.97997
Ti 334.941	498.524	ppb	0.7763	0.2	44223.9	99.70483
Tl 190.794	485.942	ppb	11.2654	2.3	114.814	97.18841
V 292.401	487.591	ppb	1.2778	0.3	4911.03	97.51817
Zn 206.200	1032.79	ppb	3.5756	0.3	569.593	103.27897

Cont Calib Blank (CCB) 4/20/2019, 10:13:23 AM Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2312u	0.4428	0.1299
Al 308.215	12.8354	20.1955	14.3737
As 188.980	3.6305	8.3190	13.4158
B 249.678	12.8732	10.7599	10.3139
Ba 389.178	-0.7528u	0.8213	0.7891
Be 313.042	0.0482	0.0256	0.0173
Ca 370.602	-6.301u	-1.875u	-1.840u
Cd 226.502	0.5317	0.1140	-0.1230u
Co 228.615	0.1168	0.3289	0.2348
Cr 267.716	0.7371	0.4936	0.5910
Cu 324.754	0.5891	0.1448	1.6535
Fe 271.441	19.9838	5.3874	8.5200
K 766.491	0.5888	0.4778	0.6978
Mg 279.078	7.5468	-2.0006u	3.1796
Mn 257.610	0.1557	0.1555	0.2176
Mo 202.032	0.2492	1.9162	-0.7656u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	212.580	97.3077	503.834
Ni 231.604	-1.4702u	-0.3572u	-2.6921u
Pb 220.353	0.2589	-0.5062u	10.3170
Sb 206.834	7.6916	3.5232	-4.5025u
Se 196.026	-7.9341u	-2.1817u	4.5078
Si 288.158	15.1365	10.5195	10.1950
Sn 189.925	0.3634	-1.6458u	-9.1089u
Sr 216.596	-0.8880u	0.9847	-0.2274u
Ti 334.941	0.2695	0.0978	0.3413
Tl 190.794	-9.0602u	-5.0103u	-15.6657u
V 292.401	0.3986	0.4976	1.0089
Zn 206.200	-4.6486u	1.6904	-3.3240u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1138	ppb	0.3373	296.3	-37.2635	0.11383
Al 308.215	15.8015	ppb	3.8822	24.6	238.048	15.80154
As 188.980	8.4551	ppb	4.8941	57.9	2.9639	8.45510
B 249.678	11.3157	ppb	1.3672	12.1	71.6887	11.31570
Ba 389.178	0.2859	ppb	0.8997	314.7	-34.8312	0.28587
Be 313.042	0.0304	ppb	0.0160	52.7	-302.318	0.03038
Ca 370.602	-3.338	ppb	2.566	76.9	19.50	-3.33834
Cd 226.502	0.1742	ppb	0.3314	190.2	6.2060	0.17424
Co 228.615	0.2268	ppb	0.1063	46.9	-11.4662	0.22684
Cr 267.716	0.6072	ppb	0.1226	20.2	23.7133	0.60720
Cu 324.754	0.7958	ppb	0.7753	97.4	460.184	0.79581
Fe 271.441	11.2971	ppb	7.6842	68.0	23.4959	11.29709
K 766.491	0.5881	ppb	0.1100	18.7	327.433	0.58812
Mg 279.078	2.9086	ppb	4.7794	164.3	25.5800	2.90860
Mn 257.610	0.1763	ppb	0.0358	20.3	41.2046	0.17628
Mo 202.032	0.4666	ppb	1.3540	290.2	4.7912	0.46659
Na 330.237	271.241	ppb	209.516	77.2	44.9328	271.24091
Ni 231.604	-1.5065	ppb	1.1679	77.5	-3.4618	-1.50652
Pb 220.353	3.3566	ppb	6.0401	179.9	2.1269	3.35658
Sb 206.834	2.2374	ppb	6.1979	277.0	6.7609	2.23741
Se 196.026	-1.8693	ppb	6.2268	333.1	2.3693	-1.86933
Si 288.158	11.9504	ppb	2.7641	23.1	591.383	11.95035
Sn 189.925	-3.4638	ppb	4.9910	144.1	0.1180	-3.46375
Sr 216.596	-0.0436	ppb	0.9498	2178.8	7.0469	-0.04359
Ti 334.941	0.2362	ppb	0.1251	53.0	-4.3975	0.23618
Tl 190.794	-9.9121	ppb	5.3785	54.3	-3.7928	-9.91207
V 292.401	0.6351	ppb	0.3275	51.6	-6.3038	0.63507
Zn 206.200	-2.0941	ppb	3.3437	159.7	-1.2612	-2.09409

190-19431-a-1-c (Samp)

4/20/2019, 10:17:33 AM

Rack 1, Tube 51

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2127u	-0.2958u	-0.8109u
Al 308.215	78.6837	84.3884	79.3969
As 188.980	10.2723	0.6125	-0.9890u
B 249.678	18.0886	18.0792	18.3241
Ba 389.178	13.1892	13.3824	9.3209
Be 313.042	-0.1243u	-0.1078u	-0.0840u
Ca 370.602	29095	29096	29112

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.2925	0.0517	-0.0211
Co 228.615	-0.2023u	-1.8562u	-0.8405u
Cr 267.716	0.5413	0.6674	0.4645
Cu 324.754	680.159	675.686	673.572
Fe 271.441	186.068	192.328	184.080
K 766.491	1263.43	1271.96	1260.23
Mg 279.078	8555.09	8516.95	8534.17
Mn 257.610	42.3126	42.1755	42.1823
Mo 202.032	3.3619	0.0626	2.2815
Na 330.237	11447.9	11755.0	11425.3
Ni 231.604	3.6629	2.8659	-0.5620u
Pb 220.353	-2.9685u	-1.0353u	-1.8448u
Sb 206.834	-0.2023u	7.8308	0.9323
Se 196.026	15.7142	8.8187	-13.4976u
Si 288.158	6420.35	6410.10	6421.55
Sn 189.925	-5.7228u	-4.8046u	1.9035
Sr 216.596	101.980	103.036	103.217
Ti 334.941	0.8932	1.1153	0.7703
Tl 190.794	-14.0298u	-5.9588u	-3.8039u
V 292.401	0.0619	1.3072	1.3753
Zn 206.200	710.770	700.113	717.524

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4398	ppb	0.3241	73.7	-54.4185
Al 308.215	80.8230	ppb	3.1082	3.8	365.270
As 188.980	3.2986	ppb	6.0923	184.7	1.5864
B 249.678	18.1640	ppb	0.1387	0.8	118.380
Ba 389.178	11.9642	ppb	2.2912	19.2	48.0585
Be 313.042	-0.1054	ppb	0.0202	19.2	-408.073
Ca 370.602	29101	ppb	9.258	0.0	48679
Cd 226.502	0.1077	ppb	0.1641	152.4	5.6502
Co 228.615	-0.9663	ppb	0.8341	86.3	-16.2028
Cr 267.716	0.5577	ppb	0.1025	18.4	23.0239
Cu 324.754	676.472	ppb	3.3633	0.5	20926.5
Fe 271.441	187.492	ppb	4.3047	2.3	120.989
K 766.491	1265.21	ppb	6.0644	0.5	26325.7
Mg 279.078	8535.40	ppb	19.0995	0.2	11435.7
Mn 257.610	42.2235	ppb	0.0772	0.2	3558.68
Mo 202.032	1.9020	ppb	1.6821	88.4	7.2115
Na 330.237	11542.7	ppb	184.151	1.6	341.308
Ni 231.604	1.9889	ppb	2.2448	112.9	0.4610
Pb 220.353	-1.9495	ppb	0.9709	49.8	0.1131
Sb 206.834	2.8536	ppb	4.3476	152.4	7.0191
Se 196.026	3.6785	ppb	15.2692	415.1	3.4199
Si 288.158	6417.33	ppb	6.2943	0.1	30486.5
Sn 189.925	-2.8746	ppb	4.1634	144.8	0.2680
Sr 216.596	102.745	ppb	0.6681	0.7	307.096
Ti 334.941	0.9262	ppb	0.1749	18.9	79.1455
Tl 190.794	-7.9309	ppb	5.3906	68.0	-3.3180
V 292.401	0.9148	ppb	0.7394	80.8	-3.5199
Zn 206.200	709.469	ppb	8.7782	1.2	391.421

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

190-19426-a-1-c (Samp) **4/20/2019, 10:21:44 AM** **Rack 1, Tube 52****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2675	-0.6107u	-0.4866u
Al 308.215	38.4415	30.5621	38.6830
As 188.980	6.2167	-1.5631u	-0.8001u
B 249.678	15.4079	15.4686	16.4820
Ba 389.178	13.7318	12.2496	14.0269
Be 313.042	-0.1299u	-0.1465u	-0.1476u
Ca 370.602	30714	30838	30787
Cd 226.502	0.3581	-0.2216u	-0.0976u
Co 228.615	0.5947	0.0651	0.0562
Cr 267.716	0.9359	0.0956	-0.0951u
Cu 324.754	87.9124	90.3790	88.5022
Fe 271.441	29.3675	18.1265	19.0895
K 766.491	1303.66	1313.18	1307.04
Mg 279.078	9205.46	9242.99	9246.24
Mn 257.610	-0.1609	-0.1782	-0.2465
Mo 202.032	0.6348	0.3510	0.9320
Na 330.237	8611.30	8998.34	8328.58
Ni 231.604	-0.4035u	-1.9860u	1.2706
Pb 220.353	-7.2670u	-1.4650u	-10.3993u
Sb 206.834	-3.9246u	-2.2342u	10.2133
Se 196.026	12.9323	5.0965	1.0399
Si 288.158	3868.85	3885.49	3877.52
Sn 189.925	-6.7717u	-15.7141u	-14.7167u
Sr 216.596	107.450	106.638	106.956
Ti 334.941	-0.1538	0.0531	-0.0694
Tl 190.794	1.1834	-4.6844u	-11.0888u
V 292.401	0.5333	0.0948	0.4547
Zn 206.200	25.1216	22.7277	21.1923

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2766	ppb	0.4753	171.8	-49.5238
Al 308.215	35.8955	ppb	4.6204	12.9	277.363
As 188.980	1.2845	ppb	4.2884	333.9	1.0492
B 249.678	15.7861	ppb	0.6034	3.8	102.292
Ba 389.178	13.3361	ppb	0.9525	7.1	57.3725
Be 313.042	-0.1413	ppb	0.0099	7.0	-436.753
Ca 370.602	30780	ppb	62.23	0.2	51486
Cd 226.502	0.0130	ppb	0.3053	2353.9	4.1584
Co 228.615	0.2386	ppb	0.3084	129.2	-11.4255
Cr 267.716	0.3121	ppb	0.5485	175.7	18.8247
Cu 324.754	88.9312	ppb	1.2880	1.4	3129.82
Fe 271.441	22.1945	ppb	6.2306	28.1	29.5237
K 766.491	1307.96	ppb	4.8238	0.4	27225.7
Mg 279.078	9231.56	ppb	22.6664	0.2	12367.1
Mn 257.610	-0.1952	ppb	0.0453	23.2	44.7865
Mo 202.032	0.6393	ppb	0.2906	45.5	5.0827
Na 330.237	8646.07	ppb	336.233	3.9	270.990
Ni 231.604	-0.3730	ppb	1.6285	436.6	-2.1900
Pb 220.353	-6.3771	ppb	4.5331	71.1	-1.5592
Sb 206.834	1.3515	ppb	7.7209	571.3	6.4607
Se 196.026	6.3562	ppb	6.0455	95.1	3.9199
Si 288.158	3877.29	ppb	8.3234	0.2	18631.1

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-12.4008	ppb	4.9004	39.5	-2.1399
Sr 216.596	107.015	ppb	0.4094	0.4	319.553
Ti 334.941	-0.0567	ppb	0.1040	183.4	-6.1417
Tl 190.794	-4.8633	ppb	6.1381	126.2	-2.5838
V 292.401	0.3609	ppb	0.2338	64.8	-9.1286
Zn 206.200	23.0139	ppb	1.9802	8.6	12.5951

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2568	-0.3184u	-1.1358u
Al 308.215	34.8389	32.7625	40.2947
As 188.980	1.3814	3.3567	1.3531
B 249.678	15.0958	13.8422	14.8217
Ba 389.178	10.8289	12.8981	15.4224
Be 313.042	-0.1532u	-0.1054u	-0.1412u
Ca 370.602	30014	29129	30517
Cd 226.502	-0.2458u	-0.0477u	0.2881
Co 228.615	0.6282	0.2444	0.5059
Cr 267.716	-0.2425u	-0.4356u	0.1486
Cu 324.754	366.208	347.653	371.512
Fe 271.441	12.6953	12.1752	10.6132
K 766.491	1329.79	1302.94	1350.37
Mg 279.078	8813.60	8516.72	8941.16
Mn 257.610	0.0743	0.0729	-0.0088
Mo 202.032	1.3082	1.9997	1.4168
Na 330.237	9850.31	9745.54	10558.1
Ni 231.604	11.8549	6.8189	7.7471
Pb 220.353	-3.8014u	10.6504	7.9030
Sb 206.834	-1.7177u	-11.6564u	2.1966
Se 196.026	11.3275	-15.0207u	-0.1507u
Si 288.158	5619.06	5478.46	5686.63
Sn 189.925	-15.5537u	-1.8567u	0.9508
Sr 216.596	103.470	102.549	105.593
Ti 334.941	-0.0450	-0.3738u	-0.0371
Tl 190.794	0.6431	-3.0102u	-10.0583u
V 292.401	0.7485	0.5948	0.9219
Zn 206.200	117.534	117.980	118.738

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3991	ppb	0.6998	175.3	-53.2291
Al 308.215	35.9654	ppb	3.8904	10.8	277.505
As 188.980	2.0304	ppb	1.1487	56.6	1.2483
B 249.678	14.5866	ppb	0.6590	4.5	94.0851
Ba 389.178	13.0498	ppb	2.3005	17.6	55.0487
Be 313.042	-0.1333	ppb	0.0249	18.7	-430.415
Ca 370.602	29887	ppb	702.6	2.4	49993
Cd 226.502	-0.0018	ppb	0.2699	15076.0	3.9582
Co 228.615	0.4595	ppb	0.1960	42.7	-10.5525
Cr 267.716	-0.1765	ppb	0.2976	168.6	10.6576
Cu 324.754	361.791	ppb	12.5279	3.5	11394.8
Fe 271.441	11.8279	ppb	1.0836	9.2	23.7973
K 766.491	1327.70	ppb	23.7817	1.8	27595.8

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	8757.16	ppb	217.777	2.5	11732.7
Mn 257.610	0.0461	ppb	0.0476	103.1	63.0166
Mo 202.032	1.5749	ppb	0.3719	23.6	6.6617
Na 330.237	10051.3	ppb	442.026	4.4	307.851
Ni 231.604	8.8070	ppb	2.6801	30.4	8.1084
Pb 220.353	4.9173	ppb	7.6746	156.1	2.7179
Sb 206.834	-3.7258	ppb	7.1415	191.7	4.7251
Se 196.026	-1.2813	ppb	13.2104	1031.0	2.4802
Si 288.158	5594.72	ppb	106.200	1.9	26647.0
Sn 189.925	-5.4865	ppb	8.8307	161.0	-0.3923
Sr 216.596	103.871	ppb	1.5612	1.5	310.332
Ti 334.941	-0.1520	ppb	0.1921	126.4	-15.8782
Tl 190.794	-4.1418	ppb	5.4397	131.3	-2.4106
V 292.401	0.7551	ppb	0.1636	21.7	-5.1186
Zn 206.200	118.084	ppb	0.6090	0.5	65.0604

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Rack 1, Tube 54

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3071u	0.7258	-0.0170u
Al 308.215	33.1759	40.6743	39.1668
As 188.980	0.5584	-2.4342u	7.4332
B 249.678	13.1679	13.4097	14.1359
Ba 389.178	9.2245	9.3722	11.2018
Be 313.042	-0.1397u	-0.1566u	-0.1418u
Ca 370.602	29706	29863	29718
Cd 226.502	0.4962	-0.1491u	-0.2680u
Co 228.615	0.6972	0.7798	0.7762
Cr 267.716	0.2405	0.6276	-0.1286u
Cu 324.754	90.4346	89.2810	89.0293
Fe 271.441	37.1574	21.1304	9.5233
K 766.491	1226.97	1228.20	1223.74
Mg 279.078	8931.29	8988.03	8936.67
Mn 257.610	1.2598	1.3670	1.2544
Mo 202.032	0.2122	1.3537	0.0065
Na 330.237	10374.3	9951.64	10131.6
Ni 231.604	2.8704	0.0639	-1.6788u
Pb 220.353	1.9387	6.1864	3.9303
Sb 206.834	-6.7053u	9.4807	6.4381
Se 196.026	10.2628	-0.9680u	0.0054
Si 288.158	4746.34	4761.32	4756.46
Sn 189.925	-6.8973u	1.1922	-8.7188u
Sr 216.596	96.3613	98.8402	98.6079
Ti 334.941	0.1219	0.3348	0.0643
Tl 190.794	0.4372	-1.4627u	-23.3925u
V 292.401	-0.5143u	0.1606	0.0649
Zn 206.200	15.2307	11.0865	10.3960

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1339	ppb	0.5328	397.9	-37.0254
Al 308.215	37.6723	ppb	3.9663	10.5	280.824
As 188.980	1.8525	ppb	5.0594	273.1	1.2008
B 249.678	13.5712	ppb	0.5038	3.7	87.1225

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	9.9329	ppb	1.1014	11.1	35.6659
Be 313.042	-0.1461	ppb	0.0092	6.3	-440.776
Ca 370.602	29762	ppb	87.35	0.3	49785
Cd 226.502	0.0264	ppb	0.4112	1560.4	4.3381
Co 228.615	0.7511	ppb	0.0467	6.2	-9.3922
Cr 267.716	0.2465	ppb	0.3781	153.4	17.7403
Cu 324.754	89.5816	ppb	0.7493	0.8	3149.52
Fe 271.441	22.6037	ppb	13.8758	61.4	29.7623
K 766.491	1226.30	ppb	2.3061	0.2	25527.7
Mg 279.078	8952.00	ppb	31.3218	0.3	11993.3
Mn 257.610	1.2937	ppb	0.0635	4.9	167.158
Mo 202.032	0.5241	ppb	0.7258	138.5	4.8883
Na 330.237	10152.5	ppb	212.112	2.1	311.803
Ni 231.604	0.4185	ppb	2.2953	548.5	-1.3025
Pb 220.353	4.0184	ppb	2.1252	52.9	2.3771
Sb 206.834	3.0712	ppb	8.6022	280.1	7.0893
Se 196.026	3.1001	ppb	6.2222	200.7	3.3063
Si 288.158	4754.71	ppb	7.6412	0.2	22726.6
Sn 189.925	-4.8080	ppb	5.2755	109.7	-0.2208
Sr 216.596	97.9365	ppb	1.3691	1.4	293.053
Ti 334.941	0.1736	ppb	0.1425	82.1	13.4993
Tl 190.794	-8.1393	ppb	13.2437	162.7	-3.3683
V 292.401	-0.0963	ppb	0.3652	379.3	-13.7724
Zn 206.200	12.2377	ppb	2.6149	21.4	6.6482

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Rack 1, Tube 55

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7792	-0.3303u	-0.7008u
Al 308.215	45.0488	52.5600	43.2511
As 188.980	4.0141	2.6648	5.8906
B 249.678	17.8743	18.4797	18.0148
Ba 389.178	12.3463	13.9258	11.5140
Be 313.042	-0.1358u	-0.1391u	-0.1401u
Ca 370.602	28065	28060	28059
Cd 226.502	-0.0684u	0.0680	-0.0491u
Co 228.615	-0.4787u	-3.4724u	-0.6310u
Cr 267.716	0.2624	0.5489	-0.2083u
Cu 324.754	15.6714	15.2389	14.6433
Fe 271.441	28.5026	22.3034	27.0005
K 766.491	1269.64	1266.10	1275.31
Mg 279.078	8555.11	8560.06	8554.25
Mn 257.610	0.0453	0.0441	0.1031
Mo 202.032	-1.2651u	0.3952	1.7369
Na 330.237	14413.9	14041.9	14549.4
Ni 231.604	-0.1887u	-0.0743u	1.0284
Pb 220.353	2.7077	-2.2419u	-3.4582u
Sb 206.834	3.7210	2.5266	5.8727
Se 196.026	7.6921	7.3754	30.5817
Si 288.158	14670.1	14702.7	14665.6
Sn 189.925	-7.3707u	-5.0550u	-7.5817u
Sr 216.596	97.9754	101.439	99.4972
Ti 334.941	0.0156	-0.0453	0.0003

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Label	Replicates Concentration		
Tl 190.794	2.3793	-14.8037u	-15.6547u
V 292.401	1.4998	0.7246	0.9144
Zn 206.200	7.7517	7.1543	7.3457

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0840	ppb	0.7702	917.0	-43.6442
Al 308.215	46.9533	ppb	4.9380	10.5	299.000
As 188.980	4.1898	ppb	1.6200	38.7	1.8249
B 249.678	18.1229	ppb	0.3169	1.7	118.271
Ba 389.178	12.5953	ppb	1.2250	9.7	51.9727
Be 313.042	-0.1383	ppb	0.0022	1.6	-434.929
Ca 370.602	28061	ppb	3.046	0.0	46941
Cd 226.502	-0.0165	ppb	0.0738	447.2	3.7905
Co 228.615	-1.5274	ppb	1.6861	110.4	-18.4194
Cr 267.716	0.2010	ppb	0.3823	190.2	16.9985
Cu 324.754	15.1845	ppb	0.5162	3.4	896.025
Fe 271.441	25.9355	ppb	3.2339	12.5	31.5389
K 766.491	1270.35	ppb	4.6464	0.4	26428.4
Mg 279.078	8556.48	ppb	3.1360	0.0	11464.3
Mn 257.610	0.0642	ppb	0.0337	52.5	63.7486
Mo 202.032	0.2890	ppb	1.5038	520.3	4.4913
Na 330.237	14335.1	ppb	262.767	1.8	424.905
Ni 231.604	0.2551	ppb	0.6721	263.4	-1.4839
Pb 220.353	-0.9975	ppb	3.2659	327.4	0.4778
Sb 206.834	4.0401	ppb	1.6957	42.0	7.4394
Se 196.026	15.2164	ppb	13.3077	87.5	5.5902
Si 288.158	14679.5	ppb	20.2283	0.1	69047.1
Sn 189.925	-6.6691	ppb	1.4019	21.0	-0.6908
Sr 216.596	99.6373	ppb	1.7361	1.7	298.022
Ti 334.941	-0.0098	ppb	0.0316	322.7	-3.9052
Tl 190.794	-9.3597	ppb	10.1752	108.7	-3.6616
V 292.401	1.0463	ppb	0.4041	38.6	-2.1416
Zn 206.200	7.4173	ppb	0.3051	4.1	3.9877

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Rack 1, Tube 56

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9543u	-0.9943u	-0.7783u
Al 308.215	33.3334	40.0749	36.1847
As 188.980	0.8086	-1.6351u	3.8637
B 249.678	13.8241	14.6919	14.7521
Ba 389.178	10.9073	12.5928	8.6592
Be 313.042	-0.1413u	-0.1297u	-0.1294u
Ca 370.602	29959	30030	30225
Cd 226.502	-0.0385u	0.3078	0.4338
Co 228.615	-0.8541u	-0.9867u	-0.7173u
Cr 267.716	-0.3577u	-0.2015u	0.4862
Cu 324.754	11.8755	10.8111	12.7046
Fe 271.441	13.8660	15.7285	-4.7951u
K 766.491	1297.64	1300.91	1307.39
Mg 279.078	8807.66	8846.60	8887.35
Mn 257.610	1.2419	1.2127	1.1910
Mo 202.032	1.1518	2.0555	0.7103

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Label	Replicates Concentration		
Na 330.237	7915.50	8181.67	8290.20
Ni 231.604	0.0783	-0.1356u	0.9177
Pb 220.353	-2.8228u	3.0488	10.9169
Sb 206.834	-6.1453u	-12.0370u	-11.1872u
Se 196.026	6.7407	-27.9693u	5.4161
Si 288.158	1341.85	1348.15	1351.50
Sn 189.925	-1.3073u	-8.6771u	2.1796
Sr 216.596	103.964	104.178	103.197
Ti 334.941	-0.1534	-0.3474u	-0.2064
Tl 190.794	0.3128	-19.8875u	-25.7421u
V 292.401	-0.5266u	0.7958	1.2679
Zn 206.200	103.208	104.343	106.719

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9090	ppb	0.1149	12.6	-68.7164
Al 308.215	36.5310	ppb	3.3841	9.3	278.619
As 188.980	1.0124	ppb	2.7551	272.1	0.9764
B 249.678	14.4227	ppb	0.5193	3.6	92.9383
Ba 389.178	10.7198	ppb	1.9735	18.4	40.5114
Be 313.042	-0.1334	ppb	0.0068	5.1	-430.510
Ca 370.602	30071	ppb	138.0	0.5	50301
Cd 226.502	0.2344	ppb	0.2446	104.4	7.0307
Co 228.615	-0.8527	ppb	0.1347	15.8	-15.7600
Cr 267.716	-0.0244	ppb	0.4490	1843.8	13.1971
Cu 324.754	11.7971	ppb	0.9491	8.0	793.443
Fe 271.441	8.2664	ppb	11.3499	137.3	21.7804
K 766.491	1301.98	ppb	4.9672	0.4	27115.5
Mg 279.078	8847.20	ppb	39.8501	0.5	11853.1
Mn 257.610	1.2152	ppb	0.0255	2.1	160.290
Mo 202.032	1.3059	ppb	0.6857	52.5	6.2075
Na 330.237	8129.12	ppb	192.795	2.4	256.053
Ni 231.604	0.2868	ppb	0.5567	194.1	-1.4489
Pb 220.353	3.7143	ppb	6.8940	185.6	2.2616
Sb 206.834	-9.7898	ppb	3.1847	32.5	2.5274
Se 196.026	-5.2708	ppb	19.6686	373.2	1.7283
Si 288.158	1347.17	ppb	4.9016	0.4	6823.21
Sn 189.925	-2.6016	ppb	5.5429	213.1	0.3366
Sr 216.596	103.780	ppb	0.5160	0.5	310.101
Ti 334.941	-0.2357	ppb	0.1003	42.6	-23.0261
Tl 190.794	-15.1056	ppb	13.6698	90.5	-5.0379
V 292.401	0.5124	ppb	0.9302	181.5	-7.6327
Zn 206.200	104.757	ppb	1.7917	1.7	57.7057

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Rack 1, Tube 57

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4678u	-0.7310u	-1.3121u
Al 308.215	40.2923	38.0696	46.9875
As 188.980	8.7320	5.1261	2.8222
B 249.678	14.3132	14.1969	14.5052
Ba 389.178	8.5558	9.8348	13.5952
Be 313.042	-0.1268u	-0.1513u	-0.1394u
Ca 370.602	29374	29411	29610

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Label	Replicates Concentration		
Cd 226.502	0.2325	-0.0793u	0.1849
Co 228.615	-1.0360u	1.2811	1.0953
Cr 267.716	0.1712	0.6683	1.1132
Cu 324.754	37.2396	37.9694	37.0677
Fe 271.441	18.5667	8.3389	19.2671
K 766.491	1284.48	1299.14	1307.86
Mg 279.078	8945.35	8955.90	8988.60
Mn 257.610	0.0117	0.0543	0.0002
Mo 202.032	0.3586	1.7388	1.1369
Na 330.237	10698.4	10559.2	10148.6
Ni 231.604	-1.5573u	2.5700	-0.5180u
Pb 220.353	-0.6810u	12.0091	-13.1866u
Sb 206.834	1.8123	8.8186	-3.9369u
Se 196.026	0.8836	-35.7504u	-13.8158u
Si 288.158	3893.52	3895.96	3929.57
Sn 189.925	-0.4577u	-6.4037u	-11.7285u
Sr 216.596	102.051	102.995	104.706
Ti 334.941	-0.1621	-0.1900	-0.3336u
Tl 190.794	0.4121	-6.7490u	-16.3694u
V 292.401	0.8734	0.4885	0.8353
Zn 206.200	20.8831	26.9327	28.6843

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8370	ppb	0.4320	51.6	-66.5320
Al 308.215	41.7831	ppb	4.6421	11.1	288.886
As 188.980	5.5601	ppb	2.9787	53.6	2.1908
B 249.678	14.3384	ppb	0.1557	1.1	92.3815
Ba 389.178	10.6619	ppb	2.6195	24.6	40.2648
Be 313.042	-0.1392	ppb	0.0123	8.8	-435.256
Ca 370.602	29465	ppb	126.9	0.4	49287
Cd 226.502	0.1127	ppb	0.1680	149.0	5.4351
Co 228.615	0.4468	ppb	1.2875	288.2	-10.6008
Cr 267.716	0.6509	ppb	0.4712	72.4	24.5029
Cu 324.754	37.4256	ppb	0.4788	1.3	1569.71
Fe 271.441	15.3909	ppb	6.1173	39.7	25.7631
K 766.491	1297.16	ppb	11.8143	0.9	27000.4
Mg 279.078	8963.28	ppb	22.5545	0.3	12008.4
Mn 257.610	0.0221	ppb	0.0285	129.0	61.7876
Mo 202.032	1.0781	ppb	0.6920	64.2	5.8232
Na 330.237	10468.7	ppb	285.845	2.7	320.203
Ni 231.604	0.1649	ppb	2.1467	1301.7	-1.5866
Pb 220.353	-0.6195	ppb	12.5980	2033.6	0.6211
Sb 206.834	2.2313	ppb	6.3881	286.3	6.7747
Se 196.026	-16.2275	ppb	18.4357	113.6	-0.3374
Si 288.158	3906.35	ppb	20.1442	0.5	18767.0
Sn 189.925	-6.1966	ppb	5.6382	91.0	-0.5717
Sr 216.596	103.250	ppb	1.3459	1.3	308.565
Ti 334.941	-0.2286	ppb	0.0920	40.3	-22.1429
Tl 190.794	-7.5688	ppb	8.4208	111.3	-3.2315
V 292.401	0.7324	ppb	0.2121	29.0	-5.3414
Zn 206.200	25.5001	ppb	4.0932	16.1	13.9670

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

ics 680-566947/2-a (Samp) 4/20/2019, 10:46:53 AM Rack 1, Tube 58

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	23.4391	21.6051	22.6918
Al 308.215	2205.43	2195.02	2183.16
As 188.980	46.3476	41.3963	40.4589
B 249.678	88.0816	89.6814	88.8415
Ba 389.178	42.2236	35.7221	45.3866
Be 313.042	23.7548	23.5884	23.4841
Ca 370.602	2190	2181	2158
Cd 226.502	22.4453	22.5787	22.3795
Co 228.615	21.1820	22.4066	21.9472
Cr 267.716	43.8902	43.3989	43.5421
Cu 324.754	44.1889	43.6432	44.1187
Fe 271.441	2224.68	2200.94	2184.07
K 766.491	3753.92	3745.03	3705.80
Mg 279.078	2238.02	2236.12	2225.16
Mn 257.610	175.597	174.822	173.539
Mo 202.032	40.6582	42.6523	40.7922
Na 330.237	2338.83	2539.46	2073.40
Ni 231.604	41.7069	42.8246	42.9535
Pb 220.353	213.850	223.823	214.151
Sb 206.834	4.8823	29.3025	18.3538
Se 196.026	56.6622	41.5679	45.0229
Si 288.158	6.0406	4.9986	3.4010
Sn 189.925	27.9049	38.0288	33.3748
Sr 216.596	42.8795	45.2626	43.1578
Ti 334.941	174.535	174.088	172.812
Tl 190.794	20.1371	-1.9960u	14.3681
V 292.401	43.5437	42.6299	42.3794
Zn 206.200	44.8236	41.8791	44.9995

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	22.5787	ppb	0.9222	4.1	644.759
Al 308.215	2194.53	ppb	11.1440	0.5	4501.55
As 188.980	42.7343	ppb	3.1641	7.4	12.1042
B 249.678	88.8681	ppb	0.8002	0.9	600.298
Ba 389.178	41.1107	ppb	4.9274	12.0	225.300
Be 313.042	23.6091	ppb	0.1365	0.6	18718.5
Ca 370.602	2176	ppb	16.66	0.8	3666
Cd 226.502	22.4678	ppb	0.1015	0.5	295.769
Co 228.615	21.8453	ppb	0.6186	2.8	75.0811
Cr 267.716	43.6104	ppb	0.2527	0.6	743.582
Cu 324.754	43.9836	ppb	0.2969	0.7	1769.19
Fe 271.441	2203.23	ppb	20.4015	0.9	1237.85
K 766.491	3734.92	ppb	25.6020	0.7	77058.6
Mg 279.078	2233.10	ppb	6.9380	0.3	3005.84
Mn 257.610	174.653	ppb	1.0397	0.6	14517.3
Mo 202.032	41.3676	ppb	1.1146	2.7	73.7862
Na 330.237	2317.23	ppb	233.778	10.1	98.0508
Ni 231.604	42.4950	ppb	0.6855	1.6	45.8830
Pb 220.353	217.275	ppb	5.6732	2.6	83.0292
Sb 206.834	17.5129	ppb	12.2318	69.8	12.4871
Se 196.026	47.7510	ppb	7.9083	16.6	11.7487
Si 288.158	4.8134	ppb	1.3295	27.6	574.960

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	33.1028	ppb	5.0674	15.3	9.3598
Sr 216.596	43.7666	ppb	1.3030	3.0	134.559
Ti 334.941	173.811	ppb	0.8944	0.5	15398.7
Tl 190.794	10.8364	ppb	11.4814	106.0	1.1254
V 292.401	42.8510	ppb	0.6128	1.4	420.547
Zn 206.200	43.9007	ppb	1.7530	4.0	24.1020

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9258u	-1.4212u	-1.2173u
Al 308.215	32057.6	31640.1	31452.8
As 188.980	6.0174	7.2389	13.9806
B 249.678	6.6021u	4.7628u	4.6563u
Ba 389.178	199.869	197.010	194.934
Be 313.042	0.6522	0.6310	0.6503
Ca 370.602	3984	3920	3892
Cd 226.502	0.6090	0.3272	0.6344
Co 228.615	2.4225	3.1266	1.9998
Cr 267.716	52.3957	52.4793	52.0590
Cu 324.754	60.7931	59.8286	59.1769
Fe 271.441	47449.1	46699.0	46505.6
K 766.491	492.232	485.725	482.381
Mg 279.078	763.839	747.930	748.030
Mn 257.610	1003.33	988.351	982.082
Mo 202.032	2.4781	5.1504	3.2518
Na 330.237	701.953	51.6877u	571.482
Ni 231.604	6.2361	6.7749	9.2216
Pb 220.353	64.6052	47.0446	61.0598
Sb 206.834	-2.3763u	-2.6371u	5.8994
Se 196.026	-16.8213u	-5.4904u	-1.4120
Si 288.158	6587.20	6488.86	6442.99
Sn 189.925	14.8338	5.3019	9.0277
Sr 216.596	15.9383	18.2037	16.5520
Ti 334.941	375.571	370.786	367.447
Tl 190.794	-4.7135u	8.7949	-1.3674u
V 292.401	110.129	107.155	107.324
Zn 206.200	384.633	383.541	383.639

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.1881	ppb	0.2490	21.0	-83.6829
Al 308.215	31716.8	ppb	309.648	1.0	62253.3
As 188.980	9.0790	ppb	4.2887	47.2	3.0043
B 249.678	5.3404	ppb	1.0939	20.5	-16.8293
Ba 389.178	197.271	ppb	2.4780	1.3	1224.48
Be 313.042	0.6445	ppb	0.0117	1.8	196.828
Ca 370.602	3932	ppb	47.18	1.2	6544
Cd 226.502	0.5235	ppb	0.1705	32.6	83.3866
Co 228.615	2.5163	ppb	0.5692	22.6	-0.7107
Cr 267.716	52.3113	ppb	0.2225	0.4	894.142
Cu 324.754	59.9329	ppb	0.8131	1.4	2259.22
Fe 271.441	46884.6	ppb	498.367	1.1	25971.0
K 766.491	486.779	ppb	5.0094	1.0	10314.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	753.267	ppb	9.1561	1.2	1012.91
Mn 257.610	991.254	ppb	10.9177	1.1	82237.7
Mo 202.032	3.6268	ppb	1.3751	37.9	9.5619
Na 330.237	441.708	ppb	344.009	77.9	40.0395
Ni 231.604	7.4109	ppb	1.5911	21.5	6.5450
Pb 220.353	57.5699	ppb	9.2859	16.1	20.9902
Sb 206.834	0.2953	ppb	4.8551	1643.9	6.9618
Se 196.026	-7.9079	ppb	7.9840	101.0	1.5154
Si 288.158	6506.35	ppb	73.6783	1.1	30920.1
Sn 189.925	9.7211	ppb	4.8037	49.4	3.4502
Sr 216.596	16.8980	ppb	1.1716	6.9	61.8160
Ti 334.941	371.268	ppb	4.0833	1.1	32911.0
Tl 190.794	0.9047	ppb	7.0350	777.6	-3.0536
V 292.401	108.202	ppb	1.6704	1.5	1091.93
Zn 206.200	383.938	ppb	0.6041	0.2	211.846

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	10.3025	10.6307	9.8330
Al 308.215	212.522	221.611	222.058
As 188.980	23.8422	26.4011	7.2395
B 249.678	104.433	106.251	107.076
Ba 389.178	11.4872	7.0418	10.5191
Be 313.042	4.4487	4.4900	4.4947
Ca 370.602	507.7	509.0	514.3
Cd 226.502	5.4677	5.3858	5.5972
Co 228.615	10.1667	11.8012	10.9076
Cr 267.716	10.7741	10.6335	10.2095
Cu 324.754	22.0454	22.2190	20.7449
Fe 271.441	60.4757	69.9924	49.9340
K 766.491	945.350	949.455	947.834
Mg 279.078	537.167	544.423	542.961
Mn 257.610	10.2346	10.4187	10.2430
Mo 202.032	11.8821	9.2966	10.7860
Na 330.237	1125.97	1307.69	1415.02
Ni 231.604	36.2139	39.1825	41.6486
Pb 220.353	1.2602	5.1007	9.4407
Sb 206.834	17.8945	20.8269	5.1892
Se 196.026	13.8045	31.3824	9.3504
Si 288.158	23.0737	21.8805	19.9347
Sn 189.925	43.8612	49.6054	44.1972
Sr 216.596	8.7348	10.6217	10.9623
Ti 334.941	10.1573	10.3977	10.4533
Tl 190.794	14.2756	6.2550	8.4517
V 292.401	10.3365	10.4352	10.4506
Zn 206.200	17.9483	22.1618	20.3083

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.2554	ppb	0.4009	3.9	270.765
Al 308.215	218.730	ppb	5.3815	2.5	635.367
As 188.980	19.1609	ppb	10.4033	54.3	5.8206
B 249.678	105.920	ppb	1.3521	1.3	719.183

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	9.6827	ppb	2.3378	24.1	24.8778
Be 313.042	4.4778	ppb	0.0253	0.6	3285.21
Ca 370.602	510.3	ppb	3.508	0.7	878.6
Cd 226.502	5.4835	ppb	0.1066	1.9	74.4461
Co 228.615	10.9585	ppb	0.8184	7.5	31.0310
Cr 267.716	10.5390	ppb	0.2940	2.8	189.870
Cu 324.754	21.6698	ppb	0.8056	3.7	1092.58
Fe 271.441	60.1340	ppb	10.0336	16.7	50.9507
K 766.491	947.546	ppb	2.0676	0.2	19731.3
Mg 279.078	541.517	ppb	3.8379	0.7	745.723
Mn 257.610	10.2987	ppb	0.1039	1.0	882.510
Mo 202.032	10.6549	ppb	1.2977	12.2	21.9835
Na 330.237	1282.89	ppb	146.113	11.4	71.9116
Ni 231.604	39.0150	ppb	2.7212	7.0	41.9884
Pb 220.353	5.2672	ppb	4.0928	77.7	2.8436
Sb 206.834	14.6369	ppb	8.3123	56.8	11.2742
Se 196.026	18.1791	ppb	11.6493	64.1	6.1498
Si 288.158	21.6296	ppb	1.5845	7.3	642.518
Sn 189.925	45.8880	ppb	3.2238	7.0	12.5909
Sr 216.596	10.1063	ppb	1.1999	11.9	36.3986
Ti 334.941	10.3361	ppb	0.1573	1.5	892.926
Tl 190.794	9.6608	ppb	4.1447	42.9	0.8985
V 292.401	10.4074	ppb	0.0619	0.6	92.3034
Zn 206.200	20.1395	ppb	2.1118	10.5	11.0031

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	497.785	501.510	495.427
Al 308.215	9996.88	10016.3	9957.82
As 188.980	491.680	495.313	503.867
B 249.678	521.676	526.925	523.095
Ba 389.178	460.325	464.181	461.274
Be 313.042	539.788	540.707	536.612
Ca 370.602	9847	9863	9811
Cd 226.502	495.986	497.519	492.987
Co 228.615	495.725	497.372	496.138
Cr 267.716	491.722	493.813	490.552
Cu 324.754	493.885	495.129	488.504
Fe 271.441	10086.5	10108.6	10013.0
K 766.491	9738.26	9779.58	9711.21
Mg 279.078	10251.6	10233.5	10173.7
Mn 257.610	488.200	489.161	486.868
Mo 202.032	482.652	485.471	484.317
Na 330.237	10861.0	11164.1	10555.6
Ni 231.604	492.599	492.735	492.069
Pb 220.353	489.469	483.796	494.827
Sb 206.834	468.082	470.756	472.472
Se 196.026	527.329	532.437	558.563
Si 288.158	5109.89	5112.45	5070.55
Sn 189.925	492.648	488.454	495.274
Sr 216.596	487.402	487.383	481.040
Ti 334.941	496.576	497.809	496.395

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Label	Replicates Concentration		
Tl 190.794	479.833	499.974	484.101
V 292.401	485.457	487.223	484.637
Zn 206.200	1046.71	1046.33	1028.16

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	498.241	ppb	3.0671	0.6	15091.2	99.64810
Al 308.215	9990.33	ppb	29.7795	0.3	19767.3	99.90330
As 188.980	496.954	ppb	6.2568	1.3	133.294	99.39072
B 249.678	523.899	ppb	2.7156	0.5	3569.99	104.77971
Ba 389.178	461.926	ppb	2.0091	0.4	2883.98	92.38525
Be 313.042	539.036	ppb	2.1485	0.4	434527	107.80711
Ca 370.602	9840	ppb	26.58	0.3	16480	98.40154
Cd 226.502	495.497	ppb	2.3051	0.5	6380.02	99.09942
Co 228.615	496.412	ppb	0.8569	0.2	1953.95	99.28236
Cr 267.716	492.029	ppb	1.6521	0.3	8245.45	98.40587
Cu 324.754	492.506	ppb	3.5215	0.7	15361.0	98.50126
Fe 271.441	10069.4	ppb	50.0068	0.5	5611.26	100.64326
K 766.491	9743.02	ppb	34.4297	0.4	198340	97.43017
Mg 279.078	10219.6	ppb	40.7839	0.4	13681.6	102.19609
Mn 257.610	488.076	ppb	1.1515	0.2	40539.2	97.61529
Mo 202.032	484.147	ppb	1.4173	0.3	820.888	96.82939
Na 330.237	10860.2	ppb	304.279	2.8	314.277	108.60229
Ni 231.604	492.468	ppb	0.3517	0.1	550.266	98.49355
Pb 220.353	489.364	ppb	5.5163	1.1	185.596	97.87281
Sb 206.834	470.437	ppb	2.2124	0.5	176.690	94.08733
Se 196.026	539.443	ppb	16.7543	3.1	104.500	107.88859
Si 288.158	5097.63	ppb	23.4870	0.5	24457.7	101.95252
Sn 189.925	492.125	ppb	3.4397	0.7	125.372	98.42509
Sr 216.596	485.275	ppb	3.6676	0.8	1417.83	97.05502
Ti 334.941	496.927	ppb	0.7697	0.2	44082.2	99.38536
Tl 190.794	487.969	ppb	10.6131	2.2	115.300	97.59383
V 292.401	485.772	ppb	1.3215	0.3	4892.52	97.15445
Zn 206.200	1040.40	ppb	10.6033	1.0	573.794	104.03998

Cont Calib Blank (CCB) 4/20/2019, 11:03:45 AM Rack S, Tube 1

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0121	-0.9011u	-0.1704u
Al 308.215	17.5449	9.3873	16.5411
As 188.980	9.1947	9.1461	-1.4181u
B 249.678	13.3608	10.9433	9.6577
Ba 389.178	0.0059	0.1178	0.5437
Be 313.042	0.0391	0.0611	0.0305
Ca 370.602	8.334	5.037	0.1994
Cd 226.502	0.7491	-0.4575u	0.1899
Co 228.615	0.0674	-0.0997u	-0.8910u
Cr 267.716	0.0339	0.2521	0.4544
Cu 324.754	1.9401	1.0873	0.0503
Fe 271.441	16.5884	-1.9772u	-2.9185u
K 766.491	1.4828	3.1835	3.5748
Mg 279.078	11.1262	7.5279	2.7970
Mn 257.610	0.1532	0.1911	0.1578
Mo 202.032	-0.1978u	0.7056	-2.3260u

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Label	Replicates Concentration		
Na 330.237	-226.873u	-17.0463u	-160.281u
Ni 231.604	-0.7882u	-2.4285u	0.2500
Pb 220.353	-8.7387u	-5.1815u	-0.8304u
Sb 206.834	-2.5750u	-0.8325u	-4.3474u
Se 196.026	1.7163	-0.6292u	-1.7956u
Si 288.158	14.0567	11.8423	10.9993
Sn 189.925	7.5135	-2.5648u	-9.3714u
Sr 216.596	-0.7731u	0.4469	-0.0637u
Ti 334.941	0.3694	0.3447	0.2904
Tl 190.794	-6.7522u	-5.5757u	-16.5842u
V 292.401	0.4783	-0.0027	-0.2335u
Zn 206.200	-3.6094u	-3.3315u	-0.3249u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.3531	ppb	0.4832	136.8	-51.4466	-0.35312
Al 308.215	14.4911	ppb	4.4484	30.7	235.464	14.49109
As 188.980	5.6409	ppb	6.1133	108.4	2.2125	5.64093
B 249.678	11.3206	ppb	1.8801	16.6	71.7262	11.32061
Ba 389.178	0.2224	ppb	0.2837	127.6	-35.2325	0.22245
Be 313.042	0.0436	ppb	0.0158	36.2	-291.625	0.04359
Ca 370.602	4.523	ppb	4.091	90.4	32.65	4.52335
Cd 226.502	0.1605	ppb	0.6039	376.2	6.0239	0.16049
Co 228.615	-0.3077	ppb	0.5119	166.3	-13.5784	-0.30775
Cr 267.716	0.2468	ppb	0.2103	85.2	17.6839	0.24679
Cu 324.754	1.0259	ppb	0.9464	92.3	467.146	1.02590
Fe 271.441	3.8976	ppb	11.0007	282.2	19.3774	3.89758
K 766.491	2.7471	ppb	1.1122	40.5	353.384	2.74707
Mg 279.078	7.1504	ppb	4.1774	58.4	31.2526	7.15035
Mn 257.610	0.1674	ppb	0.0207	12.4	40.4694	0.16740
Mo 202.032	-0.6061	ppb	1.5565	256.8	2.9810	-0.60607
Na 330.237	-134.733	ppb	107.221	79.6	33.9447	-134.73338
Ni 231.604	-0.9889	ppb	1.3505	136.6	-2.8806	-0.98889
Pb 220.353	-4.9169	ppb	3.9608	80.6	-1.0058	-4.91685
Sb 206.834	-2.5850	ppb	1.7575	68.0	5.0911	-2.58498
Se 196.026	-0.2362	ppb	1.7886	757.3	2.6772	-0.23619
Si 288.158	12.2994	ppb	1.5791	12.8	593.099	12.29941
Sn 189.925	-1.4742	ppb	8.4951	576.2	0.6208	-1.47423
Sr 216.596	-0.1300	ppb	0.6127	471.4	6.8038	-0.12998
Ti 334.941	0.3349	ppb	0.0404	12.1	4.3605	0.33486
Tl 190.794	-9.6374	ppb	6.0448	62.7	-3.7270	-9.63739
V 292.401	0.0807	ppb	0.3632	449.9	-11.8993	0.08073
Zn 206.200	-2.4219	ppb	1.8214	75.2	-1.4420	-2.42192

mb 680-567050/1-a (Samp) 4/20/2019, 11:07:56 AM Rack 2, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4883u	-0.3775u	-0.3908u
Al 308.215	18.2408	13.5140	11.3667
As 188.980	-1.7675u	4.9147	1.8738
B 249.678	2.9612	2.2035	0.3266
Ba 389.178	-0.5555u	0.7908	-1.7508u
Be 313.042	-0.1232u	-0.1409u	-0.1436u
Ca 370.602	6.685	9.169	6.123

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	0.2453	0.1749	0.4647
Co 228.615	1.0307	0.6894	0.7450
Cr 267.716	0.0871	0.5547	0.2552
Cu 324.754	0.9324	0.2843	1.6194
Fe 271.441	15.4418	32.3796	9.1383
K 766.491	12.6539	12.5640	11.5714
Mg 279.078	3.3089	7.4459	6.0476
Mn 257.610	0.1693	-0.0007u	0.1231
Mo 202.032	0.0929	-1.1082u	0.5080
Na 330.237	366.705	371.039	709.116
Ni 231.604	-1.5635u	-1.7938u	2.1927
Pb 220.353	-7.9351u	-4.0244u	-7.7278u
Sb 206.834	-2.3192u	9.5854	-7.1804u
Se 196.026	-0.3174u	-20.6892u	11.2025
Si 288.158	13.6722	14.7199	17.5614
Sn 189.925	17.0623	12.6392	11.0589
Sr 216.596	0.1404	-2.1135u	-0.9558u
Ti 334.941	0.1003	0.2282	-0.0820u
Tl 190.794	0.9177	-8.5694u	-0.6155u
V 292.401	0.2393	1.0367	-0.2115u
Zn 206.200	0.3513	1.7791	-3.0711u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4189	ppb	0.0605	14.4	-53.4456
Al 308.215	14.3738	ppb	3.5168	24.5	235.243
As 188.980	1.6736	ppb	3.3456	199.9	1.1532
B 249.678	1.8304	ppb	1.3563	74.1	6.7708
Ba 389.178	-0.5052	ppb	1.2716	251.7	-39.8137
Be 313.042	-0.1359	ppb	0.0111	8.1	-436.444
Ca 370.602	7.325	ppb	1.621	22.1	37.33
Cd 226.502	0.2949	ppb	0.1511	51.2	7.7445
Co 228.615	0.8217	ppb	0.1831	22.3	-9.1129
Cr 267.716	0.2990	ppb	0.2369	79.2	18.5573
Cu 324.754	0.9454	ppb	0.6676	70.6	464.711
Fe 271.441	18.9866	ppb	12.0193	63.3	27.7546
K 766.491	12.2631	ppb	0.6007	4.9	523.028
Mg 279.078	5.6008	ppb	2.1044	37.6	29.1806
Mn 257.610	0.0972	ppb	0.0879	90.4	34.6254
Mo 202.032	-0.1691	ppb	0.8394	496.3	3.7185
Na 330.237	482.287	ppb	196.452	40.7	50.6132
Ni 231.604	-0.3882	ppb	2.2381	576.5	-2.2073
Pb 220.353	-6.5624	ppb	2.2004	33.5	-1.6290
Sb 206.834	0.0286	ppb	8.6260	30145.9	6.0460
Se 196.026	-3.2680	ppb	16.1493	494.2	2.1056
Si 288.158	15.3178	ppb	2.0123	13.1	608.693
Sn 189.925	13.5868	ppb	3.1118	22.9	4.4272
Sr 216.596	-0.9763	ppb	1.1271	115.4	4.3235
Ti 334.941	0.0822	ppb	0.1559	189.7	-18.0747
Tl 190.794	-2.7557	ppb	5.0928	184.8	-2.0786
V 292.401	0.3548	ppb	0.6321	178.1	-9.1344
Zn 206.200	-0.3136	ppb	2.4925	794.9	-0.2784

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

ics 680-567050/2-a (Samp) 4/20/2019, 11:12:07 AM Rack 2, Tube 2
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	50.7074	53.1488	51.1008
Al 308.215	4969.53	5021.35	5001.98
As 188.980	94.3350	109.433	101.546
B 249.678	203.875	207.204	207.760
Ba 389.178	93.2123	92.0086	91.2625
Be 313.042	54.9111	55.5042	55.5525
Ca 370.602	4881	4926	4933
Cd 226.502	50.6719	51.5510	51.3740
Co 228.615	50.1503	48.3113	52.2440
Cr 267.716	100.902	101.606	102.013
Cu 324.754	101.133	103.197	102.850
Fe 271.441	4998.03	5009.55	5051.30
K 766.491	7684.93	7739.82	7753.52
Mg 279.078	5077.35	5119.10	5103.85
Mn 257.610	399.581	403.583	403.003
Mo 202.032	99.3406	98.2456	96.2086
Na 330.237	5650.53	5488.94	5476.99
Ni 231.604	98.5580	95.5406	97.0078
Pb 220.353	480.553	500.040	477.975
Sb 206.834	64.2287	61.1112	41.4186
Se 196.026	108.692	101.889	80.2034
Si 288.158	6.8187	13.3103	10.9400
Sn 189.925	99.7490	102.560	118.865
Sr 216.596	97.7185	99.0387	98.5636
Ti 334.941	399.051	403.163	402.834
Tl 190.794	36.8396	37.2821	34.3061
V 292.401	97.3502	96.7509	98.1181
Zn 206.200	102.661	111.932	125.244

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.6524	ppb	1.3108	2.5	1527.44
Al 308.215	4997.62	ppb	26.1821	0.5	9986.85
As 188.980	101.771	ppb	7.5513	7.4	27.8513
B 249.678	206.279	ppb	2.1010	1.0	1401.09
Ba 389.178	92.1611	ppb	0.9838	1.1	550.722
Be 313.042	55.3226	ppb	0.3572	0.6	44301.6
Ca 370.602	4913	ppb	28.34	0.6	8245
Cd 226.502	51.1990	ppb	0.4649	0.9	668.938
Co 228.615	50.2352	ppb	1.9677	3.9	188.729
Cr 267.716	101.507	ppb	0.5624	0.6	1712.74
Cu 324.754	102.394	ppb	1.1051	1.1	3539.51
Fe 271.441	5019.63	ppb	28.0263	0.6	2798.22
K 766.491	7726.09	ppb	36.2972	0.5	159101
Mg 279.078	5100.10	ppb	21.1233	0.4	6837.06
Mn 257.610	402.056	ppb	2.1630	0.5	33384.4
Mo 202.032	97.9316	ppb	1.5895	1.6	169.206
Na 330.237	5538.82	ppb	96.9257	1.7	182.214
Ni 231.604	97.0355	ppb	1.5089	1.6	107.044
Pb 220.353	486.190	ppb	12.0642	2.5	184.727
Sb 206.834	55.5862	ppb	12.3681	22.3	26.2511
Se 196.026	96.9281	ppb	14.8781	15.3	21.0520
Si 288.158	10.3563	ppb	3.2849	31.7	624.941

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	107.058	ppb	10.3213	9.6	28.0511
Sr 216.596	98.4402	ppb	0.6687	0.7	293.687
Ti 334.941	401.683	ppb	2.2850	0.6	35619.9
Tl 190.794	36.1426	ppb	1.6058	4.4	7.1218
V 292.401	97.4063	ppb	0.6853	0.7	972.124
Zn 206.200	113.279	ppb	11.3513	10.0	62.3631

680-167652-a-10-a (Samp) **4/20/2019, 11:16:18 AM** **Rack 2, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3354u	0.1455u	-0.6473u
Al 308.215	53641.8	53881.8	53540.9
As 188.980	30.7728	30.4114	44.7537
B 249.678	58.7550	57.3694	55.9147
Ba 389.178	301.488	303.570	304.182
Be 313.042	2.4848	2.4747	2.4648
Ca 370.602	276742	276652	276234
Cd 226.502	2.1228	1.5640	0.9426
Co 228.615	55.7052	53.0822	53.9326
Cr 267.716	78.5446	79.0726	78.8965
Cu 324.754	220.716	218.652	222.491
Fe 271.441	137046	136873	136557
K 766.491	9670.16	9662.45	9654.16
Mg 279.078	127562	127293	127195
Mn 257.610	3376.41	3373.64	3370.48
Mo 202.032	1.0589	3.8825	0.2820u
Na 330.237	1288.85	861.851	778.259
Ni 231.604	109.189	107.681	98.7859
Pb 220.353	63.4354	61.1331	68.6759
Sb 206.834	8.1120	2.7238	1.0321
Se 196.026	-5.8036u	2.2918	-20.7571u
Si 288.158	5682.10	5685.03	5690.58
Sn 189.925	14.8617	1.5284	8.0316
Sr 216.596	282.600	283.815	286.643
Ti 334.941	934.378	934.089	934.716
Tl 190.794	10.6057u	-7.2644u	6.6568u
V 292.401	122.247	120.568	121.660
Zn 206.200	214.464	221.545	218.851

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2791	ppb	0.3994	143.1	-70.1439
Al 308.215	53688.2	ppb	175.110	0.3	105235
As 188.980	35.3126	ppb	8.1782	23.2	9.7718
B 249.678	57.3464	ppb	1.4203	2.5	247.842
Ba 389.178	303.080	ppb	1.4125	0.5	2067.35
Be 313.042	2.4748	ppb	0.0100	0.4	1712.95
Ca 370.602	276543	ppb	270.9	0.1	462221
Cd 226.502	1.5431	ppb	0.5904	38.3	234.940
Co 228.615	54.2400	ppb	1.3383	2.5	206.398
Cr 267.716	78.8379	ppb	0.2689	0.3	1349.29
Cu 324.754	220.620	ppb	1.9211	0.9	7142.36
Fe 271.441	136825	ppb	248.038	0.2	75759.7
K 766.491	9662.26	ppb	8.0028	0.1	199173

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	127350	ppb	189.755	0.1	170284
Mn 257.610	3373.51	ppb	2.9668	0.1	280258
Mo 202.032	1.7411	ppb	1.8947	108.8	5.3334
Na 330.237	976.320	ppb	273.867	28.1	48.0344
Ni 231.604	105.219	ppb	5.6218	5.3	116.228
Pb 220.353	64.4148	ppb	3.8656	6.0	20.5383
Sb 206.834	3.9560	ppb	3.6973	93.5	9.6250
Se 196.026	-8.0897	ppb	11.6933	144.5	2.0726
Si 288.158	5685.90	ppb	4.3057	0.1	27117.1
Sn 189.925	8.1406	ppb	6.6673	81.9	3.0508
Sr 216.596	284.353	ppb	2.0746	0.7	852.454
Ti 334.941	934.394	ppb	0.3135	0.0	83199.3
Tl 190.794	3.3327	ppb	9.3873	281.7	-5.9536
V 292.401	121.492	ppb	0.8521	0.7	1235.01
Zn 206.200	218.286	ppb	3.5741	1.6	120.610

680-167652-a-10-a (Samp)

4/20/2019, 11:20:30 AM

Rack 2, Tube 4

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7410	-0.0770u	-0.4028u
Al 308.215	10938.0	10854.2	10825.3
As 188.980	1.0014	12.2194	2.0175
B 249.678	11.2343	10.8266	9.5546
Ba 389.178	62.9996	57.1211	58.8681
Be 313.042	0.3908	0.3974	0.3865
Ca 370.602	56803	56620	56422
Cd 226.502	0.3171	0.6758	-0.0996
Co 228.615	11.1782	10.9119	8.7689
Cr 267.716	17.6371	16.3734	16.6365
Cu 324.754	44.7117	43.2597	44.8192
Fe 271.441	28439.2	28374.7	28207.7
K 766.491	1779.98	1772.02	1754.38
Mg 279.078	26167.6	26101.3	25937.4
Mn 257.610	707.336	704.596	700.120
Mo 202.032	3.1396	0.2621	2.5437
Na 330.237	507.685	610.010	450.389
Ni 231.604	20.1726	20.7405	18.6302
Pb 220.353	20.6818	14.4715	2.6172
Sb 206.834	0.1076	0.4691	5.4022
Se 196.026	17.0172	-9.1821u	-12.5392u
Si 288.158	1194.24	1185.93	1180.04
Sn 189.925	4.2535	-7.2010u	-2.8662u
Sr 216.596	58.3878	59.3563	61.4598
Ti 334.941	192.715	192.973	190.523
Tl 190.794	-9.9395u	-4.4540u	6.9867
V 292.401	25.8358	25.7762	25.2656
Zn 206.200	45.9194	46.5495	47.8147

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0871	ppb	0.5893	676.7	-42.4343
Al 308.215	10872.5	ppb	58.5298	0.5	21476.6
As 188.980	5.0794	ppb	6.2043	122.1	1.9867
B 249.678	10.5385	ppb	0.8761	8.3	37.4302

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	59.6630	ppb	3.0188	5.1	379.305
Be 313.042	0.3916	ppb	0.0055	1.4	-2.1108
Ca 370.602	56615	ppb	190.5	0.3	94648
Cd 226.502	0.2978	ppb	0.3881	130.3	51.7660
Co 228.615	10.2863	ppb	1.3209	12.8	29.1630
Cr 267.716	16.8823	ppb	0.6667	3.9	299.491
Cu 324.754	44.2636	ppb	0.8710	2.0	1781.78
Fe 271.441	28340.5	ppb	119.486	0.4	15705.7
K 766.491	1768.79	ppb	13.0992	0.7	36712.8
Mg 279.078	26068.8	ppb	118.519	0.5	34874.5
Mn 257.610	704.017	ppb	3.6427	0.5	58506.0
Mo 202.032	1.9818	ppb	1.5188	76.6	7.0133
Na 330.237	522.695	ppb	80.8624	15.5	48.3917
Ni 231.604	19.8478	ppb	1.0920	5.5	20.4871
Pb 220.353	12.5901	ppb	9.1781	72.9	4.6435
Sb 206.834	1.9929	ppb	2.9580	148.4	7.1518
Se 196.026	-1.5680	ppb	16.1826	1032.0	2.6087
Si 288.158	1186.74	ppb	7.1314	0.6	6083.85
Sn 189.925	-1.9379	ppb	5.7834	298.4	0.5036
Sr 216.596	59.7346	ppb	1.5705	2.6	184.708
Ti 334.941	192.071	ppb	1.3462	0.7	17081.7
Tl 190.794	-2.4690	ppb	8.6359	349.8	-3.1215
V 292.401	25.6259	ppb	0.3134	1.2	250.314
Zn 206.200	46.7612	ppb	0.9652	2.1	25.7530

680-167652-a-10-a (Samp)

4/20/2019, 11:24:41 AM

Rack 2, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	58.7707	58.2086	58.3368
Al 308.215	58144.2	58210.6	58112.0
As 188.980	134.791	152.241	142.395
B 249.678	282.569	285.236	284.184
Ba 389.178	401.052	402.807	402.931
Be 313.042	61.6047	61.8009	61.6549
Ca 370.602	275654	276192	275528
Cd 226.502	54.6160	56.7561	55.0509
Co 228.615	107.308	107.257	105.860
Cr 267.716	186.196	187.163	188.289
Cu 324.754	329.682	329.527	329.383
Fe 271.441	139500	139996	139429
K 766.491	19383.3	19428.9	19452.6
Mg 279.078	130667	130770	130616
Mn 257.610	3848.75	3859.76	3844.02
Mo 202.032	105.295	108.491	106.531
Na 330.237	7376.59	6967.13	7062.23
Ni 231.604	205.706	210.819	207.523
Pb 220.353	606.622	596.667	606.540
Sb 206.834	51.1037	51.3124	56.8870
Se 196.026	115.097	126.083	131.989
Si 288.158	5661.09	5666.31	5673.96
Sn 189.925	117.956	99.0003	116.362
Sr 216.596	388.520	383.950	381.419
Ti 334.941	1346.32	1348.00	1348.37

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	53.4176	39.6068	32.8385
V 292.401	227.381	228.484	228.225
Zn 206.200	320.878	331.352	329.878

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	58.4387	ppb	0.2946	0.5	1713.05
Al 308.215	58155.6	ppb	50.2443	0.1	113978
As 188.980	143.142	ppb	8.7487	6.1	38.5376
B 249.678	283.996	ppb	1.3434	0.5	1795.71
Ba 389.178	402.263	ppb	1.0510	0.3	2696.22
Be 313.042	61.6868	ppb	0.1019	0.2	49478.1
Ca 370.602	275791	ppb	352.7	0.1	460975
Cd 226.502	55.4743	ppb	1.1311	2.0	932.583
Co 228.615	106.809	ppb	0.8215	0.8	416.811
Cr 267.716	187.216	ppb	1.0475	0.6	3163.40
Cu 324.754	329.531	ppb	0.1492	0.0	10443.0
Fe 271.441	139642	ppb	308.820	0.2	77321.5
K 766.491	19421.6	ppb	35.2532	0.2	399868
Mg 279.078	130684	ppb	78.0835	0.1	174736
Mn 257.610	3850.84	ppb	8.0726	0.2	319848
Mo 202.032	106.772	ppb	1.6115	1.5	182.534
Na 330.237	7135.32	ppb	214.292	3.0	209.467
Ni 231.604	208.016	ppb	2.5918	1.2	231.506
Pb 220.353	603.277	ppb	5.7238	0.9	224.410
Sb 206.834	53.1011	ppb	3.2804	6.2	27.5590
Se 196.026	124.390	ppb	8.5723	6.9	27.1055
Si 288.158	5667.12	ppb	6.4739	0.1	27071.4
Sn 189.925	111.106	ppb	10.5141	9.5	29.0743
Sr 216.596	384.629	ppb	3.5994	0.9	1144.07
Ti 334.941	1347.56	ppb	1.0920	0.1	119859
Tl 190.794	41.9543	ppb	10.4885	25.0	3.2682
V 292.401	228.030	ppb	0.5765	0.3	2312.22
Zn 206.200	327.369	ppb	5.6698	1.7	180.755

680-167652-a-10-b ms (Samp) 4/20/2019, 11:28:52 AM Rack 2, Tube 6
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.3349	54.2472	53.5629
Al 308.215	68236.9	68247.7	68294.2
As 188.980	150.230	139.072	139.182
B 249.678	263.788	266.555	266.704
Ba 389.178	446.029	446.374	446.506
Be 313.042	58.1854	58.2761	58.1697
Ca 370.602	320633	320728	320517
Cd 226.502	52.6983	52.5046	52.3235
Co 228.615	108.196	107.138	107.915
Cr 267.716	190.800	192.008	191.310
Cu 324.754	321.356	322.988	324.106
Fe 271.441	155957	155901	155561
K 766.491	20320.7	20331.6	20330.4
Mg 279.078	121560	121545	121313
Mn 257.610	4468.20	4472.58	4463.24
Mo 202.032	97.0413	98.5603	96.6719

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	6876.72	6648.13	6703.97
Ni 231.604	212.417	213.814	206.079
Pb 220.353	543.853	559.014	550.041
Sb 206.834	40.5079	39.8777	36.6975
Se 196.026	95.1011	82.6091	97.0396
Si 288.158	6018.56	6012.71	6012.21
Sn 189.925	130.721	122.985	126.534
Sr 216.596	446.793	444.781	447.032
Ti 334.941	1393.70	1397.41	1395.53
Tl 190.794	44.1241	40.3558	24.8472
V 292.401	236.775	235.882	235.931
Zn 206.200	344.806	342.126	343.462

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.0483	ppb	0.4227	0.8	1577.75
Al 308.215	68259.6	ppb	30.4489	0.0	133743
As 188.980	142.828	ppb	6.4106	4.5	38.4118
B 249.678	265.682	ppb	1.6420	0.6	1653.91
Ba 389.178	446.303	ppb	0.2462	0.1	2969.86
Be 313.042	58.2104	ppb	0.0574	0.1	46681.4
Ca 370.602	320626	ppb	105.9	0.0	535917
Cd 226.502	52.5088	ppb	0.1874	0.4	919.569
Co 228.615	107.750	ppb	0.5482	0.5	420.585
Cr 267.716	191.372	ppb	0.6064	0.3	3235.24
Cu 324.754	322.817	ppb	1.3833	0.4	10242.3
Fe 271.441	155806	ppb	214.262	0.1	86269.4
K 766.491	20327.6	ppb	5.9766	0.0	418515
Mg 279.078	121472	ppb	138.388	0.1	162409
Mn 257.610	4468.01	ppb	4.6750	0.1	370987
Mo 202.032	97.4245	ppb	1.0009	1.0	166.569
Na 330.237	6742.94	ppb	119.176	1.8	197.683
Ni 231.604	210.770	ppb	4.1221	2.0	234.596
Pb 220.353	550.969	ppb	7.6231	1.4	204.055
Sb 206.834	39.0277	ppb	2.0424	5.2	22.8619
Se 196.026	91.5833	ppb	7.8321	8.6	21.0452
Si 288.158	6014.50	ppb	3.5323	0.1	28694.6
Sn 189.925	126.747	ppb	3.8724	3.1	33.0272
Sr 216.596	446.202	ppb	1.2366	0.3	1325.74
Ti 334.941	1395.55	ppb	1.8553	0.1	124091
Tl 190.794	36.4423	ppb	10.2170	28.0	1.3620
V 292.401	236.196	ppb	0.5018	0.2	2397.00
Zn 206.200	343.465	ppb	1.3398	0.4	189.670

680-167652-a-10-c ms (Samp) **4/20/2019, 11:33:04 AM** **Rack 2, Tube 7**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	53.7231	53.5521	54.2138
Al 308.215	79941.3	79879.7	80042.3
As 188.980	144.872	143.565	156.899
B 249.678	260.576	260.551	264.141
Ba 389.178	529.560	528.016	530.923
Be 313.042	58.7156	58.7782	58.7728
Ca 370.602	334626	334747	334586

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Label	Replicates Concentration		
Cd 226.502	52.6477	53.8088	53.8462
Co 228.615	112.397	109.906	109.043
Cr 267.716	206.107	206.579	206.901
Cu 324.754	335.904	344.147	344.091
Fe 271.441	209812	210393	208804
K 766.491	20024.5	20036.3	20015.0
Mg 279.078	89185.3	89299.6	89209.0
Mn 257.610	4051.69	4052.47	4051.16
Mo 202.032	103.863	101.195	97.1471
Na 330.237	6773.17	7050.53	6900.92
Ni 231.604	213.779	210.415	214.256
Pb 220.353	574.843	560.670	567.947
Sb 206.834	31.2923	25.0099	31.0776
Se 196.026	93.3138	83.8734	112.310
Si 288.158	7463.11	7442.10	7435.86
Sn 189.925	106.581	99.8006	107.960
Sr 216.596	460.399	459.744	460.504
Ti 334.941	1561.77	1558.15	1563.18
Tl 190.794	39.9149	37.6536	60.7870
V 292.401	274.215	275.010	276.172
Zn 206.200	353.245	357.073	368.487

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.8297	ppb	0.3434	0.6	1560.61
Al 308.215	79954.5	ppb	82.1025	0.1	156622
As 188.980	148.445	ppb	7.3502	5.0	39.7680
B 249.678	261.756	ppb	2.0651	0.8	1571.80
Ba 389.178	529.499	ppb	1.4543	0.3	3480.65
Be 313.042	58.7555	ppb	0.0347	0.1	47124.5
Ca 370.602	334653	ppb	83.74	0.0	559277
Cd 226.502	53.4342	ppb	0.6814	1.3	1014.73
Co 228.615	110.449	ppb	1.7417	1.6	431.225
Cr 267.716	206.529	ppb	0.3995	0.2	3492.70
Cu 324.754	341.381	ppb	4.7433	1.4	10814.1
Fe 271.441	209670	ppb	804.163	0.4	116086
K 766.491	20025.3	ppb	10.6540	0.1	412327
Mg 279.078	89231.3	ppb	60.3197	0.1	119295
Mn 257.610	4051.77	ppb	0.6560	0.0	336401
Mo 202.032	100.735	ppb	3.3813	3.4	171.517
Na 330.237	6908.21	ppb	138.823	2.0	198.483
Ni 231.604	212.817	ppb	2.0934	1.0	236.892
Pb 220.353	567.820	ppb	7.0877	1.2	208.536
Sb 206.834	29.1266	ppb	3.5668	12.2	20.1724
Se 196.026	96.4992	ppb	14.4835	15.0	22.1543
Si 288.158	7447.02	ppb	14.2753	0.2	35387.1
Sn 189.925	104.780	ppb	4.3673	4.2	27.4755
Sr 216.596	460.216	ppb	0.4121	0.1	1372.84
Ti 334.941	1561.03	ppb	2.5958	0.2	138686
Tl 190.794	46.1185	ppb	12.7535	27.7	1.1695
V 292.401	275.132	ppb	0.9845	0.4	2796.73
Zn 206.200	359.602	ppb	7.9293	2.2	198.685

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680-167652-b-3-a (Samp) **4/20/2019, 11:37:15 AM** **Rack 2, Tube 8**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.5502u	0.4254u	0.2903u
Al 308.215	62895.8	62821.9	62884.0
As 188.980	47.2841	34.1270	35.6986
B 249.678	57.9030	56.4349	57.0383
Ba 389.178	398.017	399.386	395.597
Be 313.042	3.2657	3.2951	3.2526
Ca 370.602	188616	188443	188409
Cd 226.502	1.5649	1.6752	1.0702
Co 228.615	49.6774	50.2864	47.7233
Cr 267.716	92.8480	93.3167	92.5495
Cu 324.754	187.941	192.524	189.081
Fe 271.441	134337	135015	134948
K 766.491	11420.2	11453.2	11429.8
Mg 279.078	64333.3	64360.4	64357.9
Mn 257.610	2975.84	2974.96	2978.61
Mo 202.032	2.9280	4.0404	2.8522
Na 330.237	729.526	1182.27	973.445
Ni 231.604	101.435	101.842	106.730
Pb 220.353	65.9615	53.6660	57.8770
Sb 206.834	-1.2925	16.3205	-10.9507u
Se 196.026	6.4835	3.8172	11.4773
Si 288.158	4979.62	4994.33	4988.75
Sn 189.925	-2.0299u	6.5778	6.4977
Sr 216.596	257.949	255.266	259.279
Ti 334.941	1128.21	1128.25	1129.65
Tl 190.794	-1.0929u	0.1379u	-10.4245u
V 292.401	139.341	139.091	138.489
Zn 206.200	235.368	242.730	230.341

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0552	ppb	0.5286	958.2	-60.1559
Al 308.215	62867.2	ppb	39.6850	0.1	123191
As 188.980	39.0366	ppb	7.1857	18.4	10.7685
B 249.678	57.1254	ppb	0.7379	1.3	247.564
Ba 389.178	397.667	ppb	1.9189	0.5	2592.16
Be 313.042	3.2711	ppb	0.0218	0.7	2343.76
Ca 370.602	188489	ppb	111.0	0.1	315005
Cd 226.502	1.4368	ppb	0.3222	22.4	231.759
Co 228.615	49.2290	ppb	1.3391	2.7	187.995
Cr 267.716	92.9048	ppb	0.3867	0.4	1584.03
Cu 324.754	189.849	ppb	2.3859	1.3	6209.99
Fe 271.441	134767	ppb	373.382	0.3	74620.2
K 766.491	11434.4	ppb	16.9959	0.1	235689
Mg 279.078	64350.5	ppb	14.9346	0.0	86036.0
Mn 257.610	2976.47	ppb	1.9087	0.1	247113
Mo 202.032	3.2735	ppb	0.6652	20.3	7.9308
Na 330.237	961.745	ppb	226.596	23.6	45.8072
Ni 231.604	103.336	ppb	2.9467	2.9	114.122
Pb 220.353	59.1681	ppb	6.2486	10.6	18.5207
Sb 206.834	1.3591	ppb	13.8276	1017.4	8.6839
Se 196.026	7.2593	ppb	3.8885	53.6	4.9234
Si 288.158	4987.57	ppb	7.4295	0.1	23866.9

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	3.6819	ppb	4.9467	134.4	1.9239
Sr 216.596	257.498	ppb	2.0440	0.8	773.925
Ti 334.941	1128.70	ppb	0.8195	0.1	100269
Tl 190.794	-3.7932	ppb	5.7758	152.3	-7.6891
V 292.401	138.974	ppb	0.4379	0.3	1413.07
Zn 206.200	236.146	ppb	6.2311	2.6	130.456

680-167652-b-4-a (Samp) 4/20/2019, 11:41:28 AM Rack 2, Tube 9

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0920u	0.0075u	-0.7324u
Al 308.215	74498.8	74240.9	74321.8
As 188.980	34.1964	52.5947	46.0689
B 249.678	50.4970	50.2544	50.6960
Ba 389.178	443.534	438.655	440.795
Be 313.042	3.4397	3.4299	3.4338
Ca 370.602	200921	200792	200330
Cd 226.502	1.6651	1.1174	1.8212
Co 228.615	57.6086	55.4446	56.9472
Cr 267.716	101.682	101.895	101.200
Cu 324.754	183.394	184.894	182.544
Fe 271.441	148711	148102	147860
K 766.491	10179.2	10132.9	10156.5
Mg 279.078	73751.9	73600.8	73425.6
Mn 257.610	3890.96	3885.09	3882.02
Mo 202.032	3.3616	3.3531	2.9365
Na 330.237	1524.16	1273.19	892.120
Ni 231.604	110.692	109.910	112.593
Pb 220.353	57.2341	53.6813	52.7932
Sb 206.834	-1.5895	-15.5916u	3.4458
Se 196.026	16.6475	3.1864	1.5119
Si 288.158	5532.76	5528.53	5523.43
Sn 189.925	-0.4349u	14.5356	15.1162
Sr 216.596	240.384	239.833	238.181
Ti 334.941	1143.48	1143.87	1144.18
Tl 190.794	-10.5699u	-1.9283u	4.2043u
V 292.401	155.857	156.834	154.298
Zn 206.200	253.805	249.484	256.061

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2723	ppb	0.4016	147.5	-70.8684
Al 308.215	74353.8	ppb	131.889	0.2	145661
As 188.980	44.2867	ppb	9.3278	21.1	12.1338
B 249.678	50.4825	ppb	0.2212	0.4	188.135
Ba 389.178	440.995	ppb	2.4457	0.6	2880.61
Be 313.042	3.4345	ppb	0.0049	0.1	2477.86
Ca 370.602	200681	ppb	310.6	0.2	335379
Cd 226.502	1.5346	ppb	0.3696	24.1	254.468
Co 228.615	56.6668	ppb	1.1089	2.0	217.255
Cr 267.716	101.592	ppb	0.3558	0.4	1731.88
Cu 324.754	183.611	ppb	1.1903	0.6	6023.41
Fe 271.441	148224	ppb	438.673	0.3	82070.1
K 766.491	10156.2	ppb	23.1375	0.2	209402

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	73592.8	ppb	163.274	0.2	98384.3
Mn 257.610	3886.02	ppb	4.5416	0.1	322555
Mo 202.032	3.2171	ppb	0.2430	7.6	7.6731
Na 330.237	1229.82	ppb	318.244	25.9	52.2266
Ni 231.604	111.065	ppb	1.3798	1.2	122.788
Pb 220.353	54.5695	ppb	2.3499	4.3	16.3260
Sb 206.834	-4.5784	ppb	9.8644	215.5	6.7979
Se 196.026	7.1153	ppb	8.2975	116.6	5.0380
Si 288.158	5528.24	ppb	4.6722	0.1	26391.2
Sn 189.925	9.7390	ppb	8.8156	90.5	3.4547
Sr 216.596	239.466	ppb	1.1466	0.5	722.824
Ti 334.941	1143.84	ppb	0.3481	0.0	101637
Tl 190.794	-2.7646	ppb	7.4225	268.5	-7.8539
V 292.401	155.663	ppb	1.2794	0.8	1583.70
Zn 206.200	253.117	ppb	3.3419	1.3	139.846

680-167652-a-5-a (Samp)

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Rack 2, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2634u	0.8467	-1.0738u
Al 308.215	72683.7	72575.6	72709.4
As 188.980	35.8928	45.4362	44.1570
B 249.678	47.3251	49.5491	49.5372
Ba 389.178	323.299	323.249	326.900
Be 313.042	3.3285	3.3340	3.3367
Ca 370.602	137393	137310	137537
Cd 226.502	0.6701	0.8457	0.8197
Co 228.615	52.1511	54.9161	52.5439
Cr 267.716	101.186	101.077	100.978
Cu 324.754	189.499	191.476	190.997
Fe 271.441	150707	150521	150754
K 766.491	12730.5	12716.9	12778.4
Mg 279.078	56315.8	56233.1	56430.0
Mn 257.610	3253.55	3256.24	3259.11
Mo 202.032	3.3238	4.8058	2.0596
Na 330.237	1188.76	551.410u	1433.83
Ni 231.604	106.620	110.072	108.628
Pb 220.353	72.7862	68.6449	62.1128
Sb 206.834	0.3026	-5.9229	-1.0524
Se 196.026	2.6156	0.6658	3.3321
Si 288.158	6429.68	6418.48	6430.89
Sn 189.925	7.0707	21.7008	12.4883
Sr 216.596	201.489	201.963	198.547
Ti 334.941	1128.02	1131.35	1130.68
Tl 190.794	1.7905u	-3.2058u	-18.8889u
V 292.401	156.853	158.043	156.208
Zn 206.200	264.915	264.849	273.105

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1635	ppb	0.9641	589.8	-68.8941
Al 308.215	72656.2	ppb	70.9800	0.1	142340
As 188.980	41.8287	ppb	5.1803	12.4	11.4710
B 249.678	48.8038	ppb	1.2806	2.6	174.145

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	324.483	ppb	2.0936	0.6	2130.15
Be 313.042	3.3331	ppb	0.0042	0.1	2386.69
Ca 370.602	137413	ppb	114.7	0.1	229588
Cd 226.502	0.7785	ppb	0.0948	12.2	248.390
Co 228.615	53.2037	ppb	1.4959	2.8	203.368
Cr 267.716	101.080	ppb	0.1042	0.1	1722.55
Cu 324.754	190.657	ppb	1.0315	0.5	6237.28
Fe 271.441	150661	ppb	123.132	0.1	83418.7
K 766.491	12741.9	ppb	32.2924	0.3	262600
Mg 279.078	56326.3	ppb	98.8613	0.2	75300.4
Mn 257.610	3256.30	ppb	2.7820	0.1	270290
Mo 202.032	3.3964	ppb	1.3745	40.5	7.9469
Na 330.237	1058.00	ppb	455.512	43.1	47.4447
Ni 231.604	108.440	ppb	1.7334	1.6	119.846
Pb 220.353	67.8480	ppb	5.3811	7.9	21.2482
Sb 206.834	-2.2242	ppb	3.2740	147.2	7.6861
Se 196.026	2.2045	ppb	1.3799	62.6	4.0629
Si 288.158	6426.35	ppb	6.8416	0.1	30582.6
Sn 189.925	13.7533	ppb	7.3966	53.8	4.4693
Sr 216.596	200.666	ppb	1.8506	0.9	609.862
Ti 334.941	1130.02	ppb	1.7632	0.2	100365
Tl 190.794	-6.7681	ppb	10.7901	159.4	-9.0595
V 292.401	157.035	ppb	0.9308	0.6	1597.70
Zn 206.200	267.623	ppb	4.7479	1.8	147.857

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	502.111	501.434	499.283
Al 308.215	10058.8	10135.8	10064.6
As 188.980	499.818	487.053	494.747
B 249.678	524.672	530.965	529.122
Ba 389.178	459.652	467.318	461.684
Be 313.042	543.911	547.525	543.678
Ca 370.602	9890	9977	9896
Cd 226.502	499.473	502.372	500.851
Co 228.615	498.717	502.738	497.338
Cr 267.716	499.647	502.913	498.559
Cu 324.754	499.473	497.493	501.346
Fe 271.441	10078.0	10165.3	10062.2
K 766.491	9834.59	9926.84	9825.02
Mg 279.078	10282.3	10367.6	10309.8
Mn 257.610	492.439	496.085	492.489
Mo 202.032	483.121	490.726	483.683
Na 330.237	10890.1	11102.0	10817.0
Ni 231.604	493.628	497.985	499.536
Pb 220.353	483.140	500.039	496.115
Sb 206.834	461.526	472.515	483.973
Se 196.026	546.930	536.262	531.493
Si 288.158	5151.47	5197.17	5138.93
Sn 189.925	491.630	496.699	504.927
Sr 216.596	490.290	492.889	491.579
Ti 334.941	502.547	506.283	502.333

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	495.016	509.904	498.425
V 292.401	491.607	498.397	493.989
Zn 206.200	1035.48	1049.72	1058.74

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	500.943	ppb	1.4767	0.3	15173.3	100.18854
Al 308.215	10086.4	ppb	42.8637	0.4	19955.4	100.86395
As 188.980	493.872	ppb	6.4274	1.3	132.471	98.77449
B 249.678	528.253	ppb	3.2351	0.6	3599.66	105.65067
Ba 389.178	462.885	ppb	3.9719	0.9	2890.18	92.57695
Be 313.042	545.038	ppb	2.1565	0.4	439370	109.00761
Ca 370.602	9921	ppb	48.29	0.5	16615	99.21096
Cd 226.502	500.899	ppb	1.4505	0.3	6449.57	100.17973
Co 228.615	499.597	ppb	2.8057	0.6	1966.60	99.91948
Cr 267.716	500.373	ppb	2.2662	0.5	8385.03	100.07458
Cu 324.754	499.437	ppb	1.9266	0.4	15570.9	99.88743
Fe 271.441	10101.8	ppb	55.5147	0.5	5629.36	100.96754
K 766.491	9862.15	ppb	56.2274	0.6	200716	98.62148
Mg 279.078	10319.9	ppb	43.5724	0.4	13815.6	103.19893
Mn 257.610	493.671	ppb	2.0909	0.4	41003.5	98.73422
Mo 202.032	485.843	ppb	4.2379	0.9	823.748	97.16866
Na 330.237	10936.4	ppb	148.036	1.4	316.205	109.36366
Ni 231.604	497.050	ppb	3.0634	0.6	555.404	99.40993
Pb 220.353	493.098	ppb	8.8439	1.8	187.005	98.61961
Sb 206.834	472.671	ppb	11.2239	2.4	177.605	94.53426
Se 196.026	538.228	ppb	7.9044	1.5	104.272	107.64567
Si 288.158	5162.52	ppb	30.6528	0.6	24761.2	103.25043
Sn 189.925	497.752	ppb	6.7109	1.3	126.794	99.55039
Sr 216.596	491.586	ppb	1.2995	0.3	1436.24	98.31718
Ti 334.941	503.721	ppb	2.2216	0.4	44685.2	100.74422
Tl 190.794	501.115	ppb	7.7999	1.6	118.446	100.22304
V 292.401	494.664	ppb	3.4450	0.7	4982.90	98.93285
Zn 206.200	1047.98	ppb	11.7250	1.1	577.973	104.79800

Cont Calib Blank (CCB) 4/20/2019, 11:54:06 AM Rack S, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4632u	-1.0793u	0.0629
Al 308.215	17.0012	23.1677	17.9215
As 188.980	0.7357	-0.6889u	3.9357
B 249.678	12.5222	11.5685	9.0327
Ba 389.178	-1.9900u	1.3965	3.2079
Be 313.042	0.0527	-0.0032u	0.0278
Ca 370.602	0.0614	11.94	3.067
Cd 226.502	-0.1667u	0.0692	-0.2540u
Co 228.615	1.6391	-0.8382u	-0.9845u
Cr 267.716	0.2286	-0.1194u	0.7454
Cu 324.754	0.0354	-0.0698u	1.9076
Fe 271.441	24.6737	15.2206	0.7963
K 766.491	4.5526	4.7838	3.8883
Mg 279.078	11.9582	0.7767	7.0691
Mn 257.610	0.2979	0.2376	0.1976
Mo 202.032	1.6952	1.5819	-0.0294u

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	6.9964	371.179	147.413
Ni 231.604	1.1626	-6.9745u	-3.4045u
Pb 220.353	-0.1483u	-4.7863u	-6.2739u
Sb 206.834	-3.1886u	-4.6376u	11.8958
Se 196.026	-7.8191u	3.0624	0.3771
Si 288.158	16.3523	19.2953	14.6373
Sn 189.925	-9.0176u	-9.2309u	-11.2360u
Sr 216.596	0.8527	0.6465	-0.4421u
Ti 334.941	0.2287	0.1883	0.3476
Tl 190.794	-3.6315u	-0.7058u	-20.5853u
V 292.401	-0.4495u	0.3405	0.3780
Zn 206.200	-1.3760u	-2.8020u	-3.1297u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.4932	ppb	0.5717	115.9	-55.7056	-0.49323
Al 308.215	19.3635	ppb	3.3265	17.2	245.017	19.36345
As 188.980	1.3275	ppb	2.3684	178.4	1.0605	1.32750
B 249.678	11.0412	ppb	1.8035	16.3	69.7949	11.04115
Ba 389.178	0.8715	ppb	2.6384	302.8	-31.1425	0.87145
Be 313.042	0.0258	ppb	0.0280	108.5	-306.141	0.02577
Ca 370.602	5.023	ppb	6.177	123.0	33.45	5.02318
Cd 226.502	-0.1172	ppb	0.1672	142.7	2.4874	-0.11717
Co 228.615	-0.0612	ppb	1.4743	2409.0	-12.6172	-0.06120
Cr 267.716	0.2849	ppb	0.4352	152.8	18.3239	0.28486
Cu 324.754	0.6244	ppb	1.1125	178.2	455.021	0.62441
Fe 271.441	13.5635	ppb	12.0246	88.7	24.7286	13.56353
K 766.491	4.4082	ppb	0.4649	10.5	388.637	4.40822
Mg 279.078	6.6013	ppb	5.6054	84.9	30.5164	6.60133
Mn 257.610	0.2444	ppb	0.0505	20.7	46.8601	0.24439
Mo 202.032	1.0826	ppb	0.9647	89.1	5.8307	1.08258
Na 330.237	175.196	ppb	183.674	104.8	42.3155	175.19604
Ni 231.604	-3.0721	ppb	4.0787	132.8	-5.2177	-3.07212
Pb 220.353	-3.7362	ppb	3.1950	85.5	-0.5597	-3.73616
Sb 206.834	1.3565	ppb	9.1560	675.0	6.4736	1.35652
Se 196.026	-1.4599	ppb	5.6686	388.3	2.4466	-1.45985
Si 288.158	16.7616	ppb	2.3558	14.1	613.214	16.76161
Sn 189.925	-9.8282	ppb	1.2239	12.5	-1.4905	-9.82817
Sr 216.596	0.3524	ppb	0.6957	197.4	8.1974	0.35237
Ti 334.941	0.2549	ppb	0.0828	32.5	-2.7430	0.25486
Tl 190.794	-8.3075	ppb	10.7331	129.2	-3.4098	-8.30752
V 292.401	0.0897	ppb	0.4673	521.0	-11.9421	0.08970
Zn 206.200	-2.4359	ppb	0.9324	38.3	-1.4496	-2.43587

680-167652-b-6-a (Samp)

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Rack 2, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7686u	-0.1706u	0.1495u
Al 308.215	60064.3	60117.6	60054.8
As 188.980	35.1610	49.6385	37.1935
B 249.678	50.1222	51.5682	49.4040
Ba 389.178	309.960	310.125	307.335
Be 313.042	2.7264	2.7166	2.7004
Ca 370.602	246226	246227	246044

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Label	Replicates Concentration		
Cd 226.502	1.8228	0.9334	1.0159
Co 228.615	55.7870	57.8399	57.5909
Cr 267.716	86.6005	87.0819	86.2372
Cu 324.754	231.088	233.958	235.266
Fe 271.441	146877	147072	146864
K 766.491	10163.4	10192.4	10198.9
Mg 279.078	88441.6	88468.3	88330.3
Mn 257.610	3423.71	3426.15	3418.89
Mo 202.032	-0.4719u	1.4736	3.8490
Na 330.237	1022.69	1084.77	923.198
Ni 231.604	111.855	106.315	108.427
Pb 220.353	155.419	162.492	157.001
Sb 206.834	-10.9951u	1.1611	-7.6488u
Se 196.026	4.1338	-17.4076u	-1.1432
Si 288.158	4351.03	4377.98	4367.65
Sn 189.925	8.9569	13.0059	4.6895
Sr 216.596	317.701	316.251	313.309
Ti 334.941	947.497	949.693	949.693
Tl 190.794	14.2973u	-4.0892u	19.6165u
V 292.401	133.936	132.847	134.030
Zn 206.200	250.658	247.701	244.883

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2632	ppb	0.4660	177.0	-71.3496
Al 308.215	60078.9	ppb	33.8645	0.1	117737
As 188.980	40.6644	ppb	7.8380	19.3	11.1717
B 249.678	50.3648	ppb	1.1023	2.2	188.932
Ba 389.178	309.140	ppb	1.5655	0.5	2067.26
Be 313.042	2.7145	ppb	0.0131	0.5	1902.83
Ca 370.602	246166	ppb	105.3	0.0	411417
Cd 226.502	1.2574	ppb	0.4914	39.1	248.067
Co 228.615	57.0726	ppb	1.1203	2.0	217.474
Cr 267.716	86.6399	ppb	0.4237	0.5	1480.79
Cu 324.754	233.437	ppb	2.1369	0.9	7532.48
Fe 271.441	146938	ppb	116.577	0.1	81357.8
K 766.491	10184.9	ppb	18.9006	0.2	209943
Mg 279.078	88413.4	ppb	73.2130	0.1	118211
Mn 257.610	3422.92	ppb	3.6916	0.1	284216
Mo 202.032	1.6169	ppb	2.1640	133.8	4.9946
Na 330.237	1010.22	ppb	81.5059	8.1	48.1095
Ni 231.604	108.866	ppb	2.7962	2.6	120.318
Pb 220.353	158.304	ppb	3.7119	2.3	55.7066
Sb 206.834	-5.8276	ppb	6.2794	107.8	6.3528
Se 196.026	-4.8057	ppb	11.2281	233.6	2.7408
Si 288.158	4365.56	ppb	13.5943	0.3	20955.2
Sn 189.925	8.8841	ppb	4.1587	46.8	3.2387
Sr 216.596	315.754	ppb	2.2380	0.7	945.363
Ti 334.941	948.961	ppb	1.2679	0.1	84388.5
Tl 190.794	9.9415	ppb	12.4386	125.1	-4.8459
V 292.401	133.604	ppb	0.6576	0.5	1358.76
Zn 206.200	247.747	ppb	2.8877	1.2	136.888

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680-167652-b-7-a (Samp) **4/20/2019, 12:02:31 PM** **Rack 2, Tube 12****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.2496u	0.3063u	-0.3875u
Al 308.215	68905.0	68918.5	68834.4
As 188.980	46.8617	37.0425	48.5646
B 249.678	52.1705	52.7748	54.5928
Ba 389.178	379.175	379.836	379.394
Be 313.042	3.1265	3.1444	3.1043
Ca 370.602	348896	348320	348066
Cd 226.502	2.2949	1.6386	1.9350
Co 228.615	59.2136	58.0456	59.2666
Cr 267.716	94.6912	94.1051	95.2840
Cu 324.754	238.956	243.705	241.238
Fe 271.441	154731	154306	153714
K 766.491	10847.8	10873.3	10822.3
Mg 279.078	97388.8	97103.8	97004.4
Mn 257.610	4019.04	4018.62	4012.42
Mo 202.032	4.5986	4.5937	5.1428
Na 330.237	1078.24	920.008	983.690
Ni 231.604	117.153	116.253	110.765
Pb 220.353	141.529	147.915	149.028
Sb 206.834	5.1951	0.0063	-5.7276
Se 196.026	-13.3674u	-3.1505	3.5618
Si 288.158	4353.36	4319.74	4313.36
Sn 189.925	10.3830	12.5540	9.6005
Sr 216.596	412.677	419.568	414.871
Ti 334.941	1030.93	1030.80	1032.00
Tl 190.794	8.3767u	-7.4386u	2.5913u
V 292.401	153.355	151.781	151.526
Zn 206.200	268.234	272.769	270.787

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1103	ppb	0.3673	333.1	-67.4306
Al 308.215	68886.0	ppb	45.1979	0.1	134965
As 188.980	44.1563	ppb	6.2193	14.1	12.0836
B 249.678	53.1794	ppb	1.2608	2.4	200.561
Ba 389.178	379.469	ppb	0.3368	0.1	2522.25
Be 313.042	3.1251	ppb	0.0201	0.6	2249.94
Ca 370.602	348427	ppb	425.5	0.1	582386
Cd 226.502	1.9562	ppb	0.3287	16.8	268.867
Co 228.615	58.8419	ppb	0.6902	1.2	224.885
Cr 267.716	94.6935	ppb	0.5894	0.6	1617.07
Cu 324.754	241.300	ppb	2.3748	1.0	7771.90
Fe 271.441	154250	ppb	510.965	0.3	85405.8
K 766.491	10847.8	ppb	25.4927	0.2	223643
Mg 279.078	97165.6	ppb	199.524	0.2	129908
Mn 257.610	4016.70	ppb	3.7100	0.1	333478
Mo 202.032	4.7784	ppb	0.3156	6.6	10.2396
Na 330.237	993.980	ppb	79.6178	8.0	46.4180
Ni 231.604	114.724	ppb	3.4578	3.0	126.890
Pb 220.353	146.157	ppb	4.0467	2.8	50.8467
Sb 206.834	-0.1754	ppb	5.4637	3114.9	8.3983
Se 196.026	-4.3187	ppb	8.5249	197.4	2.9192
Si 288.158	4328.82	ppb	21.4935	0.5	20788.2

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	10.8458	ppb	1.5302	14.1	3.7345
Sr 216.596	415.705	ppb	3.5201	0.8	1237.94
Ti 334.941	1031.24	ppb	0.6563	0.1	91710.8
Tl 190.794	1.1764	ppb	8.0020	680.2	-7.1478
V 292.401	152.220	ppb	0.9908	0.7	1548.72
Zn 206.200	270.597	ppb	2.2739	0.8	149.509

680-167652-b-8-a (Samp) 4/20/2019, 12:06:43 PM Rack 2, Tube 13

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-6.1919u	-5.1466u	-5.9248u
Al 308.215	73094.7	73082.5	72930.0
As 188.980	64.8703	61.1043	55.1207
B 249.678	49.2412	49.6468	48.5283
Ba 389.178	346.009	344.228	340.573
Be 313.042	3.3188	3.3102	3.2862
Ca 370.602	205054	205212	204923
Cd 226.502	0.9685	1.3341	1.6694
Co 228.615	57.4942	58.0691	56.3285
Cr 267.716	99.4158	99.1036	98.9201
Cu 324.754	227.337	225.471	225.980
Fe 271.441	152042	152108	152276
K 766.491	9810.09	9802.69	9791.52
Mg 279.078	81242.9	81284.9	81110.7
Mn 257.610	3814.68	3811.00	3808.47
Mo 202.032	1.3507	3.0727	6.4172
Na 330.237	650.283u	667.752u	704.761u
Ni 231.604	105.321	107.825	107.797
Pb 220.353	185.169	190.634	189.524
Sb 206.834	-8.3801u	4.7567	-1.9638
Se 196.026	1.8889	21.5870	11.0002
Si 288.158	4835.56	4848.67	4845.88
Sn 189.925	25.6559	19.9198	21.5192
Sr 216.596	348.561	350.737	346.310
Ti 334.941	1333.47	1333.01	1329.30
Tl 190.794	3.8739u	-7.2579u	-13.9575u
V 292.401	159.127	159.231	158.613
Zn 206.200	276.757	275.945	279.805

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-5.7544	ppb	0.5431	9.4	-238.725
Al 308.215	73035.7	ppb	91.7917	0.1	143082
As 188.980	60.3651	ppb	4.9167	8.1	16.4182
B 249.678	49.1387	ppb	0.5662	1.2	175.544
Ba 389.178	343.603	ppb	2.7717	0.8	2278.08
Be 313.042	3.3051	ppb	0.0169	0.5	2374.13
Ca 370.602	205063	ppb	144.6	0.1	342703
Cd 226.502	1.3240	ppb	0.3505	26.5	256.803
Co 228.615	57.2973	ppb	0.8868	1.5	221.090
Cr 267.716	99.1465	ppb	0.2506	0.3	1691.24
Cu 324.754	226.263	ppb	0.9650	0.4	7315.91
Fe 271.441	152142	ppb	120.753	0.1	84238.9
K 766.491	9801.43	ppb	9.3470	0.1	202075

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	81212.8	ppb	90.9178	0.1	108576
Mn 257.610	3811.38	ppb	3.1218	0.1	316401
Mo 202.032	3.6135	ppb	2.5762	71.3	8.3028
Na 330.237	674.265	ppb	27.8167	4.1	35.1294
Ni 231.604	106.981	ppb	1.4376	1.3	118.206
Pb 220.353	188.442	ppb	2.8887	1.5	66.8838
Sb 206.834	-1.8624	ppb	6.5690	352.7	7.8300
Se 196.026	11.4920	ppb	9.8583	85.8	5.8697
Si 288.158	4843.37	ppb	6.9090	0.1	23204.5
Sn 189.925	22.3650	ppb	2.9601	13.2	6.6457
Sr 216.596	348.536	ppb	2.2134	0.6	1041.60
Ti 334.941	1331.93	ppb	2.2848	0.2	118341
Tl 190.794	-5.7805	ppb	9.0070	155.8	-8.7403
V 292.401	158.991	ppb	0.3306	0.2	1618.60
Zn 206.200	277.502	ppb	2.0354	0.7	153.312

680-167652-b-9-a (Samp)

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Rack 2, Tube 14

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5406u	-0.5189u	0.4281u
Al 308.215	66594.9	66597.9	66620.1
As 188.980	38.6895	23.4836	31.3591
B 249.678	55.8948	57.9888	56.3269
Ba 389.178	373.651	377.171	375.075
Be 313.042	3.0815	3.0897	3.0800
Ca 370.602	310669	310665	310482
Cd 226.502	1.0883	1.6305	1.6217
Co 228.615	59.7028	62.4833	58.8845
Cr 267.716	97.9229	97.1911	96.5292
Cu 324.754	209.282	209.709	206.491
Fe 271.441	155856	155920	156371
K 766.491	10887.8	10920.6	10930.0
Mg 279.078	112170	112116	112144
Mn 257.610	4636.89	4638.27	4636.77
Mo 202.032	1.8268	1.3731	1.5864
Na 330.237	701.023	592.505u	870.581
Ni 231.604	121.163	122.606	117.838
Pb 220.353	70.9341	68.4226	61.9156
Sb 206.834	-11.5102u	1.5763	-5.1649
Se 196.026	-4.3129	0.7856	8.0210
Si 288.158	5399.36	5388.65	5417.79
Sn 189.925	10.2902	24.1771	18.2221
Sr 216.596	389.440	389.708	386.831
Ti 334.941	1056.24	1060.07	1059.07
Tl 190.794	0.7170u	-6.6527u	-5.7603u
V 292.401	148.870	149.718	149.646
Zn 206.200	255.553	252.078	251.880

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2105	ppb	0.5531	262.8	-69.6027
Al 308.215	66604.3	ppb	13.7822	0.0	130502
As 188.980	31.1774	ppb	7.6046	24.4	8.6147
B 249.678	56.7368	ppb	1.1056	1.9	223.521

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	375.299	ppb	1.7706	0.5	2513.07
Be 313.042	3.0837	ppb	0.0052	0.2	2210.65
Ca 370.602	310605	ppb	106.7	0.0	519159
Cd 226.502	1.4468	ppb	0.3106	21.5	264.393
Co 228.615	60.3568	ppb	1.8865	3.1	231.113
Cr 267.716	97.2144	ppb	0.6972	0.7	1660.30
Cu 324.754	208.494	ppb	1.7477	0.8	6778.43
Fe 271.441	156049	ppb	280.696	0.2	86401.6
K 766.491	10912.8	ppb	22.1504	0.2	224964
Mg 279.078	112143	ppb	26.7736	0.0	149932
Mn 257.610	4637.31	ppb	0.8317	0.0	384981
Mo 202.032	1.5955	ppb	0.2270	14.2	4.8524
Na 330.237	721.370	ppb	140.150	19.4	38.9232
Ni 231.604	120.536	ppb	2.4451	2.0	133.409
Pb 220.353	67.0908	ppb	4.6544	6.9	20.8931
Sb 206.834	-5.0329	ppb	6.5442	130.0	6.7457
Se 196.026	1.4979	ppb	6.1978	413.8	4.0798
Si 288.158	5401.93	ppb	14.7435	0.3	25797.9
Sn 189.925	17.5631	ppb	6.9669	39.7	5.4321
Sr 216.596	388.660	ppb	1.5892	0.4	1159.15
Ti 334.941	1058.46	ppb	1.9852	0.2	94164.4
Tl 190.794	-3.8986	ppb	4.0221	103.2	-8.2901
V 292.401	149.411	ppb	0.4702	0.3	1520.56
Zn 206.200	253.171	ppb	2.0659	0.8	139.894

680-167652-a-11-a (Samp)

4/20/2019, 12:15:06 PM

Rack 2, Tube 15

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2311u	-0.3623u	-0.9485u
Al 308.215	66847.6	66861.2	66797.6
As 188.980	29.5150	37.1774	23.9290
B 249.678	49.1785	50.1616	48.4193
Ba 389.178	342.675	339.527	340.026
Be 313.042	2.9716	2.9535	2.9481
Ca 370.602	200383	200462	200161
Cd 226.502	1.2446	1.9128	1.2430
Co 228.615	52.1289	52.2759	54.0578
Cr 267.716	90.9999	90.1497	90.1789
Cu 324.754	196.266	197.560	197.339
Fe 271.441	139414	139082	139077
K 766.491	9604.47	9611.30	9590.08
Mg 279.078	77558.1	78070.9	77889.6
Mn 257.610	3363.81	3358.01	3352.31
Mo 202.032	2.9287	3.1029	1.5997
Na 330.237	799.082	939.706	865.515
Ni 231.604	109.153	103.502	108.417
Pb 220.353	106.152	101.718	99.6493
Sb 206.834	0.6798	-1.9741	-2.2234
Se 196.026	-21.8830u	13.7758	-11.3799u
Si 288.158	5280.08	5274.06	5267.26
Sn 189.925	24.0910	3.0105	30.0900
Sr 216.596	256.511	258.638	256.968
Ti 334.941	1049.14	1048.48	1043.30

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Label	Replicates Concentration		
Tl 190.794	3.3813u	13.4225u	-1.4489u
V 292.401	139.308	139.435	139.554
Zn 206.200	250.413	251.373	251.362

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3599	ppb	0.5898	163.9	-72.8251
Al 308.215	66835.5	ppb	33.4935	0.1	130953
As 188.980	30.2071	ppb	6.6512	22.0	8.3998
B 249.678	49.2531	ppb	0.8735	1.8	189.292
Ba 389.178	340.742	ppb	1.6918	0.5	2250.95
Be 313.042	2.9577	ppb	0.0123	0.4	2092.75
Ca 370.602	200335	ppb	155.8	0.1	334807
Cd 226.502	1.4668	ppb	0.3863	26.3	238.971
Co 228.615	52.8209	ppb	1.0737	2.0	201.534
Cr 267.716	90.4428	ppb	0.4826	0.5	1543.74
Cu 324.754	197.055	ppb	0.6919	0.4	6429.03
Fe 271.441	139191	ppb	193.025	0.1	77069.3
K 766.491	9601.95	ppb	10.8291	0.1	197941
Mg 279.078	77839.5	ppb	260.036	0.3	104070
Mn 257.610	3358.04	ppb	5.7497	0.2	278795
Mo 202.032	2.5438	ppb	0.8222	32.3	6.6489
Na 330.237	868.101	ppb	70.3476	8.1	43.6436
Ni 231.604	107.024	ppb	3.0720	2.9	118.257
Pb 220.353	102.506	ppb	3.3220	3.2	34.8036
Sb 206.834	-1.1726	ppb	1.6090	137.2	7.8957
Se 196.026	-6.4957	ppb	18.3243	282.1	2.3841
Si 288.158	5273.80	ppb	6.4147	0.1	25199.9
Sn 189.925	19.0639	ppb	14.2225	74.6	5.8114
Sr 216.596	257.372	ppb	1.1195	0.4	774.040
Ti 334.941	1046.97	ppb	3.1931	0.3	93054.7
Tl 190.794	5.1183	ppb	7.5863	148.2	-5.6641
V 292.401	139.432	ppb	0.1228	0.1	1417.81
Zn 206.200	251.049	ppb	0.5509	0.2	138.691

680-167652-b-12-a (Samp)

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Rack 2, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6871u	0.2401u	-0.7036u
Al 308.215	66809.3	66746.5	66853.0
As 188.980	30.6314	36.1213	39.3079
B 249.678	48.7774	47.4954	48.8901
Ba 389.178	347.306	346.165	348.808
Be 313.042	3.0306	3.0293	3.0206
Ca 370.602	227263	226925	226862
Cd 226.502	1.7779	1.3267	2.2918
Co 228.615	59.9443	61.0853	60.5481
Cr 267.716	90.4514	89.8203	91.5939
Cu 324.754	209.403	213.880	208.012
Fe 271.441	146506	146332	145130
K 766.491	9721.16	9725.13	9675.81
Mg 279.078	81254.0	81184.7	81154.8
Mn 257.610	3850.67	3847.21	3843.26
Mo 202.032	3.3132	4.4491	4.0453

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Label	Replicates Concentration		
Na 330.237	1091.87	818.121	993.377
Ni 231.604	110.149	108.607	112.768
Pb 220.353	102.821	108.881	103.906
Sb 206.834	-3.9824	3.0139	2.8813
Se 196.026	-18.6532u	-13.2950u	-1.5694
Si 288.158	4128.80	4127.83	4124.96
Sn 189.925	24.5741	16.7175	5.0863
Sr 216.596	280.793	282.568	278.939
Ti 334.941	998.674	995.084	995.929
Tl 190.794	10.7381u	4.4455u	-4.0595u
V 292.401	145.920	144.225	144.237
Zn 206.200	250.969	262.503	257.659

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3835	ppb	0.5402	140.8	-73.8379
Al 308.215	66802.9	ppb	53.5107	0.1	130890
As 188.980	35.3535	ppb	4.3889	12.4	9.7569
B 249.678	48.3876	ppb	0.7747	1.6	176.845
Ba 389.178	347.426	ppb	1.3257	0.4	2299.38
Be 313.042	3.0269	ppb	0.0054	0.2	2152.46
Ca 370.602	227017	ppb	215.8	0.1	379411
Cd 226.502	1.7988	ppb	0.4829	26.8	253.065
Co 228.615	60.5259	ppb	0.5708	0.9	231.535
Cr 267.716	90.6219	ppb	0.8990	1.0	1547.95
Cu 324.754	210.432	ppb	3.0665	1.5	6835.36
Fe 271.441	145989	ppb	749.149	0.5	80832.9
K 766.491	9707.37	ppb	27.4003	0.3	200139
Mg 279.078	81197.8	ppb	50.8952	0.1	108556
Mn 257.610	3847.05	ppb	3.7096	0.1	319348
Mo 202.032	3.9359	ppb	0.5758	14.6	8.9228
Na 330.237	967.790	ppb	138.657	14.3	46.4516
Ni 231.604	110.508	ppb	2.1036	1.9	122.158
Pb 220.353	105.203	ppb	3.2317	3.1	35.6383
Sb 206.834	0.6376	ppb	4.0016	627.6	8.5876
Se 196.026	-11.1725	ppb	8.7374	78.2	1.5747
Si 288.158	4127.20	ppb	1.9984	0.0	19846.3
Sn 189.925	15.4593	ppb	9.8046	63.4	4.9004
Sr 216.596	280.767	ppb	1.8142	0.6	843.031
Ti 334.941	996.563	ppb	1.8769	0.2	88591.9
Tl 190.794	3.7080	ppb	7.4263	200.3	-6.1796
V 292.401	144.794	ppb	0.9753	0.7	1472.50
Zn 206.200	257.044	ppb	5.7918	2.3	142.013

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6252u	-0.0485u	-0.0598u
Al 308.215	67209.4	67308.5	67079.9
As 188.980	57.1510	55.4597	51.4891
B 249.678	54.2040	54.8811	53.6055
Ba 389.178	431.015	433.115	435.802
Be 313.042	3.0829	3.0664	3.0729
Ca 370.602	432402	431587	429997

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Label	Replicates Concentration		
Cd 226.502	1.7053	1.8471	2.0374
Co 228.615	59.3211	63.5880	58.5429
Cr 267.716	93.3349	92.9266	91.1504
Cu 324.754	202.360	204.285	206.602
Fe 271.441	161251	161710	162186
K 766.491	11571.3	11591.9	11585.7
Mg 279.078	94302.1	94343.3	94241.6
Mn 257.610	5004.13	5010.74	5017.86
Mo 202.032	3.7047	2.1623	3.5208
Na 330.237	1178.02	1176.10	1291.17
Ni 231.604	115.472	118.756	115.524
Pb 220.353	67.1183	68.0412	73.2574
Sb 206.834	4.0325	-1.3528	-16.0110u
Se 196.026	4.6056	0.7780	29.7709
Si 288.158	4213.32	4213.39	4214.79
Sn 189.925	22.6571	8.2997	15.0795
Sr 216.596	560.197	558.339	554.968
Ti 334.941	963.572	963.462	959.080
Tl 190.794	2.9423u	2.9237u	-8.0198u
V 292.401	146.685	145.790	145.911
Zn 206.200	257.467	256.751	261.558

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2445	ppb	0.3297	134.9	-71.2533
Al 308.215	67199.3	ppb	114.602	0.2	131666
As 188.980	54.6999	ppb	2.9064	5.3	14.8821
B 249.678	54.2302	ppb	0.6382	1.2	201.133
Ba 389.178	433.311	ppb	2.3995	0.6	2860.34
Be 313.042	3.0741	ppb	0.0083	0.3	2221.41
Ca 370.602	431329	ppb	1223	0.3	720991
Cd 226.502	1.8633	ppb	0.1666	8.9	277.572
Co 228.615	60.4840	ppb	2.7162	4.5	230.773
Cr 267.716	92.4706	ppb	1.1614	1.3	1581.88
Cu 324.754	204.416	ppb	2.1236	1.0	6655.85
Fe 271.441	161716	ppb	467.402	0.3	89538.3
K 766.491	11583.0	ppb	10.5760	0.1	238744
Mg 279.078	94295.7	ppb	51.1614	0.1	126060
Mn 257.610	5010.91	ppb	6.8668	0.1	415888
Mo 202.032	3.1293	ppb	0.8425	26.9	7.3818
Na 330.237	1215.09	ppb	65.8909	5.4	52.8480
Ni 231.604	116.584	ppb	1.8812	1.6	128.976
Pb 220.353	69.4723	ppb	3.3103	4.8	21.6512
Sb 206.834	-4.4438	ppb	10.3731	233.4	7.0293
Se 196.026	11.7182	ppb	15.7508	134.4	6.0625
Si 288.158	4213.83	ppb	0.8310	0.0	20248.8
Sn 189.925	15.3454	ppb	7.1824	46.8	4.8717
Sr 216.596	557.835	ppb	2.6508	0.5	1653.60
Ti 334.941	962.038	ppb	2.5625	0.3	85564.1
Tl 190.794	-0.7179	ppb	6.3236	880.8	-7.6796
V 292.401	146.128	ppb	0.4860	0.3	1487.02
Zn 206.200	258.592	ppb	2.5936	1.0	142.900

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680-167652-b-1-a (Samp) 4/20/2019, 12:27:40 PM Rack 2, Tube 18

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3499u	-2.0613u	-0.7051u
Al 308.215	65216.0	65225.3	65276.8
As 188.980	48.4902	46.8372	40.9341
B 249.678	54.4471	54.8462	55.2717
Ba 389.178	351.260	354.153	352.882
Be 313.042	3.0896	3.1402	3.0987
Ca 370.602	291228	290957	291224
Cd 226.502	1.3540	2.1902	1.3904
Co 228.615	61.6385	63.1116	59.9031
Cr 267.716	92.4874	93.5482	94.0430
Cu 324.754	229.766	230.289	229.626
Fe 271.441	151575	151625	151561
K 766.491	11527.2	11517.1	11535.4
Mg 279.078	97721.1	97608.1	97656.1
Mn 257.610	3573.19	3581.75	3575.51
Mo 202.032	1.1088	-1.7867u	3.0560
Na 330.237	1192.90	1429.18	1038.86
Ni 231.604	110.925	112.289	112.961
Pb 220.353	88.1847	94.1849	92.1760
Sb 206.834	5.9578	4.1342	-2.6870
Se 196.026	-31.5317u	2.5443	17.4806
Si 288.158	5522.75	5507.94	5518.10
Sn 189.925	11.9332	20.5788	15.3068
Sr 216.596	342.254	341.322	340.549
Ti 334.941	1000.16	1004.07	1006.21
Tl 190.794	0.3533u	6.4316u	-0.3075u
V 292.401	144.424	145.743	144.220
Zn 206.200	255.543	254.768	256.065

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.0388	ppb	0.9032	86.9	-95.6749
Al 308.215	65239.4	ppb	32.7405	0.1	127831
As 188.980	45.4205	ppb	3.9723	8.7	12.4290
B 249.678	54.8550	ppb	0.4124	0.8	214.877
Ba 389.178	352.765	ppb	1.4502	0.4	2353.73
Be 313.042	3.1095	ppb	0.0270	0.9	2228.66
Ca 370.602	291136	ppb	155.6	0.1	486598
Cd 226.502	1.6449	ppb	0.4726	28.7	260.466
Co 228.615	61.5511	ppb	1.6061	2.6	235.523
Cr 267.716	93.3595	ppb	0.7948	0.9	1593.85
Cu 324.754	229.894	ppb	0.3496	0.2	7425.91
Fe 271.441	151587	ppb	33.9425	0.0	83931.5
K 766.491	11526.6	ppb	9.1666	0.1	237608
Mg 279.078	97661.8	ppb	56.7131	0.1	130577
Mn 257.610	3576.82	ppb	4.4258	0.1	297012
Mo 202.032	0.7927	ppb	2.4368	307.4	3.5469
Na 330.237	1220.31	ppb	196.596	16.1	53.0313
Ni 231.604	112.058	ppb	1.0369	0.9	123.897
Pb 220.353	91.5152	ppb	3.0542	3.3	30.2412
Sb 206.834	2.4683	ppb	4.5568	184.6	9.2916
Se 196.026	-3.8356	ppb	25.1212	654.9	2.9574
Si 288.158	5516.26	ppb	7.5717	0.1	26329.8

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	15.9396	ppb	4.3574	27.3	5.0219
Sr 216.596	341.375	ppb	0.8538	0.3	1020.68
Ti 334.941	1003.48	ppb	3.0678	0.3	89249.2
Tl 190.794	2.1591	ppb	3.7148	172.1	-6.8823
V 292.401	144.796	ppb	0.8265	0.6	1473.14
Zn 206.200	255.459	ppb	0.6529	0.3	141.150

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	0.0011u	-1.3069u	-0.2636u
Al 308.215	65619.9	65652.2	65616.0
As 188.980	46.6114	42.6607	52.6692
B 249.678	52.5334	51.0871	52.3267
Ba 389.178	341.166	342.726	340.176
Be 313.042	2.9180	2.9308	2.9173
Ca 370.602	287901	287748	287748
Cd 226.502	1.4908	1.0699	1.7089
Co 228.615	56.4000	56.5150	57.6849
Cr 267.716	90.0121	89.6038	89.7575
Cu 324.754	201.457	204.228	199.916
Fe 271.441	141653	140982	140919
K 766.491	11460.8	11445.9	11410.4
Mg 279.078	110690	110665	110636
Mn 257.610	3481.83	3479.99	3481.01
Mo 202.032	0.5406u	1.0483	2.2508
Na 330.237	988.044	1158.41	1088.99
Ni 231.604	110.454	111.332	109.099
Pb 220.353	73.7684	70.2806	58.8388
Sb 206.834	-10.5575u	1.3708	-8.1586u
Se 196.026	-7.0288u	5.1108	0.6369
Si 288.158	6067.53	6078.82	6076.34
Sn 189.925	13.3228	27.3049	31.2604
Sr 216.596	328.233	331.827	335.053
Ti 334.941	1042.93	1043.81	1043.89
Tl 190.794	10.0401u	-6.4457u	-6.8064u
V 292.401	138.453	136.398	137.539
Zn 206.200	249.871	241.357	251.703

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5231	ppb	0.6915	132.2	-78.4013
Al 308.215	65629.4	ppb	19.8507	0.0	128594
As 188.980	47.3138	ppb	5.0411	10.7	12.9622
B 249.678	51.9824	ppb	0.7822	1.5	205.911
Ba 389.178	341.356	ppb	1.2859	0.4	2291.81
Be 313.042	2.9220	ppb	0.0076	0.3	2076.60
Ca 370.602	287799	ppb	88.27	0.0	481036
Cd 226.502	1.4232	ppb	0.3248	22.8	241.604
Co 228.615	56.8666	ppb	0.7109	1.3	217.500
Cr 267.716	89.7912	ppb	0.2062	0.2	1533.19
Cu 324.754	201.867	ppb	2.1847	1.1	6575.16
Fe 271.441	141185	ppb	406.418	0.3	78173.3
K 766.491	11439.0	ppb	25.8956	0.2	235784

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	110664	ppb	26.8513	0.0	147965
Mn 257.610	3480.94	ppb	0.9244	0.0	289107
Mo 202.032	1.2799	ppb	0.8783	68.6	4.4926
Na 330.237	1078.48	ppb	85.6696	7.9	49.3290
Ni 231.604	110.295	ppb	1.1253	1.0	121.922
Pb 220.353	67.6293	ppb	7.8100	11.5	21.5381
Sb 206.834	-5.7818	ppb	6.3093	109.1	6.2565
Se 196.026	-0.4270	ppb	6.1393	1437.7	3.5481
Si 288.158	6074.23	ppb	5.9306	0.1	28935.6
Sn 189.925	23.9627	ppb	9.4243	39.3	7.0496
Sr 216.596	331.704	ppb	3.4119	1.0	991.244
Ti 334.941	1043.54	ppb	0.5329	0.1	92837.6
Tl 190.794	-1.0707	ppb	9.6239	898.9	-7.2094
V 292.401	137.463	ppb	1.0295	0.7	1398.08
Zn 206.200	247.644	ppb	5.5208	2.2	136.816

480-151917-a-54-a (Samp)

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Rack 2, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5554u	-0.6014u	-1.0029u
Al 308.215	45468.4	45434.3	45477.2
As 188.980	24.2195	27.3371	23.9878
B 249.678	36.2931	36.6348	37.0088
Ba 389.178	332.277	328.061	329.697
Be 313.042	2.0189	1.9903	2.0352
Ca 370.602	330045	330074	330058
Cd 226.502	1.2319	1.1338	1.5282
Co 228.615	41.0956	40.6408	41.9295
Cr 267.716	74.6513	73.5565	73.8473
Cu 324.754	70.2162	68.8262	69.1476
Fe 271.441	110358	110284	109814
K 766.491	8350.03	8316.22	8311.60
Mg 279.078	85012.7	85078.3	84983.8
Mn 257.610	4478.40	4471.75	4475.97
Mo 202.032	1.7631	3.2493	0.7466u
Na 330.237	1124.86	1115.12	897.263
Ni 231.604	87.8318	82.1600	88.1506
Pb 220.353	30.8054	27.1680	31.1987
Sb 206.834	1.8861	4.5772	-17.3436u
Se 196.026	1.0427	-2.5536	0.6554
Si 288.158	5132.56	5100.68	5127.89
Sn 189.925	22.5631	20.8501	32.4571
Sr 216.596	492.147	494.545	493.195
Ti 334.941	1390.18	1386.86	1393.90
Tl 190.794	-17.8580u	-2.2239u	7.2989u
V 292.401	129.208	127.322	128.282
Zn 206.200	201.684	204.105	199.708

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7199	ppb	0.2461	34.2	-77.7302
Al 308.215	45460.0	ppb	22.6323	0.0	89138.9
As 188.980	25.1815	ppb	1.8704	7.4	7.1356
B 249.678	36.6456	ppb	0.3580	1.0	132.697

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	330.012	ppb	2.1260	0.6	2178.91
Be 313.042	2.0148	ppb	0.0227	1.1	1350.82
Ca 370.602	330059	ppb	14.44	0.0	551763
Cd 226.502	1.2979	ppb	0.2053	15.8	191.281
Co 228.615	41.2220	ppb	0.6536	1.6	158.808
Cr 267.716	74.0184	ppb	0.5671	0.8	1268.44
Cu 324.754	69.3967	ppb	0.7277	1.0	2557.09
Fe 271.441	110152	ppb	295.277	0.3	60994.3
K 766.491	8325.95	ppb	20.9789	0.3	171682
Mg 279.078	85024.9	ppb	48.4184	0.1	113672
Mn 257.610	4475.38	ppb	3.3661	0.1	371432
Mo 202.032	1.9197	ppb	1.2587	65.6	5.9371
Na 330.237	1045.75	ppb	128.684	12.3	47.0887
Ni 231.604	86.0474	ppb	3.3704	3.9	94.7301
Pb 220.353	29.7240	ppb	2.2223	7.5	8.2976
Sb 206.834	-3.6268	ppb	11.9551	329.6	6.5493
Se 196.026	-0.2852	ppb	1.9741	692.2	3.5409
Si 288.158	5120.38	ppb	17.2191	0.3	24500.1
Sn 189.925	25.2901	ppb	6.2657	24.8	7.3851
Sr 216.596	493.296	ppb	1.2019	0.2	1459.47
Ti 334.941	1390.31	ppb	3.5234	0.3	123530
Tl 190.794	-4.2610	ppb	12.7016	298.1	-6.3689
V 292.401	128.271	ppb	0.9429	0.7	1304.24
Zn 206.200	201.832	ppb	2.2026	1.1	111.476

Cont Calib Verif (CCV)

4/20/2019, 12:40:16 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	499.516	495.832	509.275
Al 308.215	10116.7	10101.9	10160.0
As 188.980	504.729	500.629	506.689
B 249.678	526.023	529.886	535.508
Ba 389.178	463.314	462.861	463.658
Be 313.042	547.708	546.366	551.260
Ca 370.602	9965	9931	9984
Cd 226.502	503.192	498.523	503.999
Co 228.615	498.021	499.094	502.507
Cr 267.716	502.264	498.518	503.135
Cu 324.754	499.644	495.358	506.468
Fe 271.441	10082.4	10107.6	10114.9
K 766.491	9887.12	9918.12	9943.52
Mg 279.078	10373.0	10333.7	10399.5
Mn 257.610	494.480	492.346	496.484
Mo 202.032	485.805	483.148	488.619
Na 330.237	10809.6	10652.5	10589.4
Ni 231.604	495.730	494.935	496.552
Pb 220.353	483.130	487.449	495.636
Sb 206.834	473.661	460.777	484.521
Se 196.026	513.430	552.190	555.008
Si 288.158	5180.83	5174.79	5205.68
Sn 189.925	491.305	470.616	492.735
Sr 216.596	491.339	491.176	493.268
Ti 334.941	503.924	502.322	505.153

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	500.275	498.802	488.436
V 292.401	495.807	494.192	496.330
Zn 206.200	1057.39	1037.08	1054.66

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	501.541	ppb	6.9466	1.4	15191.5	100.30827
Al 308.215	10126.2	ppb	30.1814	0.3	20033.3	101.26199
As 188.980	504.016	ppb	3.0925	0.6	135.179	100.80315
B 249.678	530.473	ppb	4.7694	0.9	3614.84	106.09452
Ba 389.178	463.278	ppb	0.4000	0.1	2892.71	92.65551
Be 313.042	548.445	ppb	2.5285	0.5	442118	109.68896
Ca 370.602	9960	ppb	26.60	0.3	16680	99.59988
Cd 226.502	501.905	ppb	2.9564	0.6	6462.50	100.38094
Co 228.615	499.874	ppb	2.3424	0.5	1967.70	99.97480
Cr 267.716	501.306	ppb	2.4535	0.5	8400.63	100.26114
Cu 324.754	500.490	ppb	5.6030	1.1	15602.8	100.09801
Fe 271.441	10101.6	ppb	17.0574	0.2	5629.28	100.96574
K 766.491	9916.25	ppb	28.2494	0.3	201838	99.16252
Mg 279.078	10368.7	ppb	33.1244	0.3	13880.9	103.68726
Mn 257.610	494.437	ppb	2.0691	0.4	41067.2	98.88737
Mo 202.032	485.857	ppb	2.7359	0.6	823.772	97.17149
Na 330.237	10683.8	ppb	113.390	1.1	309.356	106.83820
Ni 231.604	495.739	ppb	0.8086	0.2	553.933	99.14774
Pb 220.353	488.738	ppb	6.3517	1.3	185.353	97.74768
Sb 206.834	472.986	ppb	11.8862	2.5	177.704	94.59721
Se 196.026	540.209	ppb	23.2344	4.3	104.645	108.04177
Si 288.158	5187.10	ppb	16.3705	0.3	24874.8	103.74202
Sn 189.925	484.885	ppb	12.3787	2.6	123.542	96.97708
Sr 216.596	491.928	ppb	1.1641	0.2	1437.24	98.38551
Ti 334.941	503.800	ppb	1.4193	0.3	44692.3	100.75993
Tl 190.794	495.838	ppb	6.4521	1.3	117.182	99.16754
V 292.401	495.443	ppb	1.1147	0.2	4990.82	99.08860
Zn 206.200	1049.71	ppb	11.0193	1.0	578.928	104.97097

Cont Calib Blank (CCB)

4/20/2019, 12:44:29 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0295u	-0.2739u	-0.2903u
Al 308.215	31.5457	36.0375	28.6762
As 188.980	5.0001	2.6185	1.1372
B 249.678	14.0531	13.4137	9.3467
Ba 389.178	-1.5826u	0.0065	-2.2566u
Be 313.042	0.0848	0.0763	0.0792
Ca 370.602	9.521	14.70	13.90
Cd 226.502	0.3091	0.2657	-0.1462u
Co 228.615	-0.1770u	0.9027	-0.2272u
Cr 267.716	0.0086	-0.1086u	0.2887
Cu 324.754	0.1657	1.4710	0.8684
Fe 271.441	30.2584	31.5100	12.6112
K 766.491	6.5099	7.4203	5.0858
Mg 279.078	8.2937	26.1843	15.3547
Mn 257.610	0.4308	0.4468	0.4119
Mo 202.032	0.2104	0.4463	-0.2147u

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Label	Replicates Concentration		
Na 330.237	26.7430	186.691	379.720
Ni 231.604	0.2601	-0.4400u	2.6412
Pb 220.353	-0.6472u	-2.5519u	7.5296
Sb 206.834	-3.5654u	11.6388	-2.6748u
Se 196.026	-7.3157u	-5.0569u	2.0579
Si 288.158	18.3533	19.2277	20.6836
Sn 189.925	-2.4525u	-3.3716u	-5.8343u
Sr 216.596	-1.2798u	-1.2127u	-0.1336u
Ti 334.941	0.3787	0.4857	0.5771
Tl 190.794	-20.7459u	0.7372	-0.5519u
V 292.401	0.7043	-0.2676u	-0.4191u
Zn 206.200	1.5816	-2.5075u	-0.5576u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.5312	ppb	0.4316	81.2	-56.8613	-0.53124
Al 308.215	32.0865	ppb	3.7103	11.6	269.894	32.08647
As 188.980	2.9186	ppb	1.9489	66.8	1.4855	2.91859
B 249.678	12.2712	ppb	2.5527	20.8	78.2155	12.27118
Ba 389.178	-1.2775	ppb	1.1620	91.0	-44.6438	-1.27754
Be 313.042	0.0801	ppb	0.0043	5.4	-262.237	0.08012
Ca 370.602	12.71	ppb	2.789	21.9	46.31	12.70786
Cd 226.502	0.1428	ppb	0.2513	175.9	5.8237	0.14285
Co 228.615	0.1662	ppb	0.6384	384.2	-11.7087	0.16616
Cr 267.716	0.0629	ppb	0.2042	324.6	14.6113	0.06289
Cu 324.754	0.8350	ppb	0.6533	78.2	461.386	0.83504
Fe 271.441	24.7932	ppb	10.5684	42.6	30.9560	24.79319
K 766.491	6.3387	ppb	1.1766	18.6	428.638	6.33867
Mg 279.078	16.6109	ppb	9.0112	54.2	43.8977	16.61089
Mn 257.610	0.4298	ppb	0.0175	4.1	62.2729	0.42984
Mo 202.032	0.1473	ppb	0.3350	227.3	4.2524	0.14735
Na 330.237	197.718	ppb	176.747	89.4	42.9045	197.71805
Ni 231.604	0.8204	ppb	1.6152	196.9	-0.8511	0.82042
Pb 220.353	1.4435	ppb	5.3561	371.1	1.4018	1.44348
Sb 206.834	1.7995	ppb	8.5327	474.2	6.6288	1.79953
Se 196.026	-3.4382	ppb	4.8920	142.3	2.0736	-3.43824
Si 288.158	19.4215	ppb	1.1771	6.1	626.083	19.42152
Sn 189.925	-3.8862	ppb	1.7486	45.0	0.0112	-3.88616
Sr 216.596	-0.8754	ppb	0.6433	73.5	4.6108	-0.87540
Ti 334.941	0.4805	ppb	0.0993	20.7	17.2994	0.48051
Tl 190.794	-6.8535	ppb	12.0484	175.8	-3.0612	-6.85351
V 292.401	0.0058	ppb	0.6096	10443.4	-12.7319	0.00584
Zn 206.200	-0.4945	ppb	2.0453	413.6	-0.3781	-0.49448

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Rack 2, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9148	1.2014	0.5435u
Al 308.215	144412	145381	145202
As 188.980	16.9843	38.2547	29.6621
B 249.678	66.6447	67.4569	66.2417
Ba 389.178	1285.22	1292.51	1286.84
Be 313.042	7.7816	7.8431	7.8289
Ca 370.602	47079	47447	47347

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Label	Replicates Concentration		
Cd 226.502	6.1549	6.3862	6.3059
Co 228.615	73.9946	76.5729	76.9512
Cr 267.716	181.979	182.920	183.444
Cu 324.754	154.259	156.532	158.934
Fe 271.441	146546	146531	146597
K 766.491	18835.3	18893.5	18928.1
Mg 279.078	41221.0	41567.4	41558.0
Mn 257.610	2026.80	2033.84	2036.89
Mo 202.032	2.0267	4.1804	2.4490
Na 330.237	479.277u	934.148u	858.458u
Ni 231.604	157.244	166.109	163.280
Pb 220.353	185.465	175.745	181.020
Sb 206.834	-8.0835u	-0.0346	-9.5093u
Se 196.026	17.6618	-8.6086u	-9.3598u
Si 288.158	6405.77	6451.15	6444.05
Sn 189.925	31.1983	14.2667	19.8809
Sr 216.596	154.355	157.877	160.671
Ti 334.941	733.373	739.923	739.636
Tl 190.794	9.6249u	4.1727u	-4.1170u
V 292.401	198.676	198.667	200.513
Zn 206.200	2214.28	2252.16	2234.57

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.8866	ppb	0.3299	37.2	-37.6065
Al 308.215	144998	ppb	515.786	0.4	283850
As 188.980	28.3004	ppb	10.7004	37.8	7.8651
B 249.678	66.7811	ppb	0.6190	0.9	301.337
Ba 389.178	1288.19	ppb	3.8302	0.3	8170.86
Be 313.042	7.8179	ppb	0.0322	0.4	5995.37
Ca 370.602	47291	ppb	190.2	0.4	78894
Cd 226.502	6.2824	ppb	0.1174	1.9	315.672
Co 228.615	75.8396	ppb	1.6089	2.1	290.316
Cr 267.716	182.781	ppb	0.7422	0.4	3086.98
Cu 324.754	156.575	ppb	2.3379	1.5	5203.93
Fe 271.441	146558	ppb	34.4578	0.0	81148.4
K 766.491	18885.6	ppb	46.8724	0.2	389033
Mg 279.078	41448.8	ppb	197.315	0.5	55403.2
Mn 257.610	2032.51	ppb	5.1758	0.3	168777
Mo 202.032	2.8853	ppb	1.1412	39.6	7.1246
Na 330.237	757.294	ppb	243.727	32.2	20.1802
Ni 231.604	162.211	ppb	4.5283	2.8	180.162
Pb 220.353	180.743	ppb	4.8658	2.7	63.9068
Sb 206.834	-5.8758	ppb	5.1086	86.9	6.6413
Se 196.026	-0.1022	ppb	15.3886	15053.3	3.4961
Si 288.158	6433.66	ppb	24.4079	0.4	30599.4
Sn 189.925	21.7820	ppb	8.6244	39.6	6.4984
Sr 216.596	157.634	ppb	3.1647	2.0	483.546
Ti 334.941	737.644	ppb	3.7016	0.5	65520.3
Tl 190.794	3.2269	ppb	6.9196	214.4	-6.7276
V 292.401	199.285	ppb	1.0633	0.5	2024.28
Zn 206.200	2233.67	ppb	18.9565	0.8	1232.78

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

480-151917-a-22-a (Samp) **4/20/2019, 12:52:52 PM** **Rack 2, Tube 22****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7483	0.4065	0.1659u
Al 308.215	90131.0	90174.0	90019.7
As 188.980	153.603	148.486	157.693
B 249.678	39.7801	39.7590	38.3093
Ba 389.178	753.065	757.702	754.164
Be 313.042	4.3746	4.3785	4.3830
Ca 370.602	23736	23741	23713
Cd 226.502	3.1355	3.8912	4.2884
Co 228.615	33.5567	32.6759	32.9716
Cr 267.716	107.820	107.187	107.421
Cu 324.754	132.119	130.435	130.230
Fe 271.441	76716.5	76999.6	77059.7
K 766.491	8445.97	8464.25	8449.88
Mg 279.078	20790.0	20802.4	20837.0
Mn 257.610	1319.59	1317.09	1318.47
Mo 202.032	3.8514	4.9469	0.4911u
Na 330.237	322.591u	565.324u	728.864
Ni 231.604	90.8891	89.9310	92.4992
Pb 220.353	507.481	505.834	509.770
Sb 206.834	-7.9711u	6.0925	-8.1496u
Se 196.026	-14.9513u	10.2135	5.7766
Si 288.158	5862.09	5881.04	5857.86
Sn 189.925	14.6555	22.2906	23.3261
Sr 216.596	101.813	101.528	104.384
Ti 334.941	613.841	611.930	610.219
Tl 190.794	-9.2471u	-13.6916u	1.9902u
V 292.401	117.340	116.386	117.421
Zn 206.200	890.897	873.990	871.575

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4402	ppb	0.2927	66.5	-39.6489
Al 308.215	90108.2	ppb	79.6321	0.1	176475
As 188.980	153.261	ppb	4.6133	3.0	41.4191
B 249.678	39.2828	ppb	0.8431	2.1	184.379
Ba 389.178	754.977	ppb	2.4231	0.3	4765.90
Be 313.042	4.3787	ppb	0.0042	0.1	3214.20
Ca 370.602	23730	ppb	14.95	0.1	39604
Cd 226.502	3.7717	ppb	0.5857	15.5	174.155
Co 228.615	33.0681	ppb	0.4482	1.4	121.469
Cr 267.716	107.476	ppb	0.3201	0.3	1820.29
Cu 324.754	130.928	ppb	1.0367	0.8	4415.07
Fe 271.441	76925.3	ppb	183.301	0.2	42601.2
K 766.491	8453.37	ppb	9.6262	0.1	174296
Mg 279.078	20809.8	ppb	24.3273	0.1	27820.2
Mn 257.610	1318.38	ppb	1.2522	0.1	109454
Mo 202.032	3.0965	ppb	2.3219	75.0	8.3096
Na 330.237	538.926	ppb	204.419	37.9	33.6942
Ni 231.604	91.1064	ppb	1.2978	1.4	100.422
Pb 220.353	507.695	ppb	1.9764	0.4	190.221
Sb 206.834	-3.3427	ppb	8.1716	244.5	6.2931
Se 196.026	0.3463	ppb	13.4325	3879.1	3.2273
Si 288.158	5867.00	ppb	12.3418	0.2	27948.7

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	20.0908	ppb	4.7354	23.6	6.0710
Sr 216.596	102.575	ppb	1.5733	1.5	315.073
Ti 334.941	611.997	ppb	1.8120	0.3	54319.2
Tl 190.794	-6.9828	ppb	8.0824	115.7	-6.2286
V 292.401	117.049	ppb	0.5758	0.5	1183.69
Zn 206.200	878.820	ppb	10.5280	1.2	484.987

480-151917-a-82-a (Samp) 4/20/2019, 12:57:05 PM Rack 2, Tube 23

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1973u	-0.8272u	-0.0663u
Al 308.215	80640.0	81346.5	81310.3
As 188.980	58.3081	48.2827	54.2489
B 249.678	23.9327	23.9124	23.6720
Ba 389.178	533.654	537.531	548.737
Be 313.042	2.4912	2.4993	2.5022
Ca 370.602	17624	17765	17797
Cd 226.502	2.4555	2.5137	2.1938
Co 228.615	34.3340	35.3661	34.1524
Cr 267.716	92.7568	92.8226	93.4246
Cu 324.754	74.6617	76.3455	77.8318
Fe 271.441	73198.0	73596.9	73972.9
K 766.491	7331.95	7375.62	7406.07
Mg 279.078	25509.1	25675.5	25750.4
Mn 257.610	737.268	743.566	744.805
Mo 202.032	2.4277	1.5437	2.1345
Na 330.237	586.733u	350.758u	860.914u
Ni 231.604	81.9441	84.5617	80.6046
Pb 220.353	88.6427	88.0690	85.3200
Sb 206.834	-21.9677u	0.4218	-13.5450u
Se 196.026	-6.2029u	-4.5632u	-8.5970u
Si 288.158	6757.01	6787.42	6838.33
Sn 189.925	22.5318	20.1320	22.6150
Sr 216.596	78.0699	79.1474	78.2617
Ti 334.941	1205.73	1213.71	1222.05
Tl 190.794	0.7178u	-8.9373u	-0.4861u
V 292.401	101.953	102.819	102.241
Zn 206.200	977.944	973.904	971.655

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6969	ppb	0.5767	82.7	-75.3604
Al 308.215	81098.9	ppb	397.860	0.5	158851
As 188.980	53.6133	ppb	5.0428	9.4	14.8214
B 249.678	23.8390	ppb	0.1451	0.6	81.8958
Ba 389.178	539.974	ppb	7.8327	1.5	3418.16
Be 313.042	2.4976	ppb	0.0057	0.2	1695.17
Ca 370.602	17729	ppb	92.21	0.5	29579
Cd 226.502	2.3876	ppb	0.1704	7.1	151.049
Co 228.615	34.6175	ppb	0.6547	1.9	132.156
Cr 267.716	93.0013	ppb	0.3680	0.4	1577.43
Cu 324.754	76.2797	ppb	1.5861	2.1	2759.26
Fe 271.441	73589.2	ppb	387.502	0.5	40754.6
K 766.491	7371.21	ppb	37.2541	0.5	152006

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	25645.0	ppb	123.485	0.5	34293.9
Mn 257.610	741.879	ppb	4.0411	0.5	61689.5
Mo 202.032	2.0353	ppb	0.4503	22.1	6.5581
Na 330.237	599.469	ppb	255.316	42.6	29.0498
Ni 231.604	82.3701	ppb	2.0127	2.4	90.6169
Pb 220.353	87.3439	ppb	1.7761	2.0	31.0667
Sb 206.834	-11.6969	ppb	11.3086	96.7	3.2853
Se 196.026	-6.4544	ppb	2.0286	31.4	1.8780
Si 288.158	6794.25	ppb	41.0898	0.6	32303.9
Sn 189.925	21.7596	ppb	1.4102	6.5	6.4928
Sr 216.596	78.4930	ppb	0.5748	0.7	244.468
Ti 334.941	1213.83	ppb	8.1597	0.7	107718
Tl 190.794	-2.9018	ppb	5.2614	181.3	-5.2359
V 292.401	102.338	ppb	0.4410	0.4	1036.57
Zn 206.200	974.501	ppb	3.1869	0.3	537.790

480-151917-a-46-a (Samp)

4/20/2019, 1:01:18 PM

Rack 2, Tube 24

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5549u	-0.2956u	-1.7113u
Al 308.215	105564	105806	106205
As 188.980	16.4438	24.7836	19.9340
B 249.678	29.4368	27.3257	30.4271
Ba 389.178	418.772	420.304	421.889
Be 313.042	2.5979	2.5751	2.5869
Ca 370.602	19036	19095	19186
Cd 226.502	0.9521	1.6839	1.3768
Co 228.615	56.7680	57.6848	56.5601
Cr 267.716	118.464	118.164	119.522
Cu 324.754	51.8448	52.5570	52.1247
Fe 271.441	129469	129402	129823
K 766.491	9162.99	9187.31	9237.23
Mg 279.078	45505.3	45601.8	45770.4
Mn 257.610	1095.74	1097.25	1100.55
Mo 202.032	3.0176	2.3857	1.9764
Na 330.237	1179.63	1163.48	1058.63
Ni 231.604	142.874	137.892	135.799
Pb 220.353	43.5930	41.2807	49.9827
Sb 206.834	-10.7068u	2.1879	-6.1489
Se 196.026	23.4914	-10.8715u	-36.2841u
Si 288.158	6068.10	6053.85	6068.43
Sn 189.925	18.3208	20.6619	15.0983
Sr 216.596	75.4082	76.9183	77.2319
Ti 334.941	1352.68	1353.80	1359.86
Tl 190.794	3.0140u	11.1762u	-5.0221u
V 292.401	148.692	147.554	148.104
Zn 206.200	595.565	596.435	597.526

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8539	ppb	0.7537	88.3	-89.8126
Al 308.215	105858	ppb	323.531	0.3	207286
As 188.980	20.3871	ppb	4.1883	20.5	5.7996
B 249.678	29.0632	ppb	1.5841	5.5	60.1274

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	420.322	ppb	1.5589	0.4	2712.07
Be 313.042	2.5866	ppb	0.0114	0.4	1768.35
Ca 370.602	19106	ppb	75.61	0.4	31796
Cd 226.502	1.3376	ppb	0.3675	27.5	225.028
Co 228.615	57.0043	ppb	0.5984	1.0	220.613
Cr 267.716	118.717	ppb	0.7134	0.6	2012.90
Cu 324.754	52.1755	ppb	0.3588	0.7	2038.99
Fe 271.441	129565	ppb	226.009	0.2	71740.9
K 766.491	9195.84	ppb	37.8498	0.4	189600
Mg 279.078	45625.8	ppb	134.207	0.3	61006.2
Mn 257.610	1097.85	ppb	2.4636	0.2	91311.3
Mo 202.032	2.4599	ppb	0.5245	21.3	6.6093
Na 330.237	1133.91	ppb	65.6955	5.8	44.4892
Ni 231.604	138.855	ppb	3.6346	2.6	153.969
Pb 220.353	44.9521	ppb	4.5074	10.0	13.0370
Sb 206.834	-4.8893	ppb	6.5390	133.7	6.5307
Se 196.026	-7.8881	ppb	29.9992	380.3	1.8723
Si 288.158	6063.46	ppb	8.3246	0.1	28899.2
Sn 189.925	18.0270	ppb	2.7934	15.5	5.5494
Sr 216.596	76.5195	ppb	0.9751	1.3	244.947
Ti 334.941	1355.45	ppb	3.8614	0.3	120334
Tl 190.794	3.0560	ppb	8.0992	265.0	-6.2436
V 292.401	148.116	ppb	0.5692	0.4	1506.12
Zn 206.200	596.509	ppb	0.9826	0.2	329.300

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Rack 2, Tube 25

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1950	0.1735	-0.6816u
Al 308.215	105853	106613	105688
As 188.980	363.779	383.168	376.213
B 249.678	19.4933u	21.4415u	19.8630u
Ba 389.178	982.915	992.851	978.055
Be 313.042	4.1272	4.1514	4.1194
Ca 370.602	11691	11770	11649
Cd 226.502	5.0519	4.1954	4.1300
Co 228.615	68.6220	70.1702	65.8549
Cr 267.716	107.827	108.956	107.569
Cu 324.754	215.640	219.270	218.967
Fe 271.441	185692	186458	184261
K 766.491	9886.01	9933.29	9839.17
Mg 279.078	32030.9	32265.6	31971.6
Mn 257.610	16741.1	16859.1	16702.2
Mo 202.032	7.1161	5.6302	5.9656
Na 330.237	997.884	478.770u	537.562u
Ni 231.604	125.772	134.738	127.587
Pb 220.353	840.742	823.187	825.174
Sb 206.834	-11.2162u	-12.5825u	6.8386
Se 196.026	7.8645	25.5833	-11.4626
Si 288.158	4906.45	4933.13	4871.16
Sn 189.925	20.3977	26.9831	27.3512
Sr 216.596	65.9122	65.5719	64.7969
Ti 334.941	1247.60	1253.72	1237.99

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Label	Replicates Concentration		
Tl 190.794	17.9002u	5.2966u	9.2555u
V 292.401	213.836	213.994	211.826
Zn 206.200	517.246	531.300	521.273

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1044	ppb	0.5000	479.1	-47.6556
Al 308.215	106051	ppb	493.305	0.5	207667
As 188.980	374.387	ppb	9.8229	2.6	100.176
B 249.678	20.2659	ppb	1.0347	5.1	-56.3730
Ba 389.178	984.607	ppb	7.5414	0.8	6268.36
Be 313.042	4.1327	ppb	0.0167	0.4	3013.46
Ca 370.602	11703	ppb	61.07	0.5	19561
Cd 226.502	4.4591	ppb	0.5144	11.5	349.670
Co 228.615	68.2157	ppb	2.1861	3.2	262.913
Cr 267.716	108.117	ppb	0.7375	0.7	1863.54
Cu 324.754	217.959	ppb	2.0139	0.9	7070.14
Fe 271.441	185470	ppb	1115.07	0.6	102688
K 766.491	9886.16	ppb	47.0602	0.5	203766
Mg 279.078	32089.4	ppb	155.487	0.5	42744.5
Mn 257.610	16767.4	ppb	81.6850	0.5	1390253
Mo 202.032	6.2373	ppb	0.7793	12.5	12.3298
Na 330.237	671.405	ppb	284.263	42.3	31.6742
Ni 231.604	129.366	ppb	4.7403	3.7	143.314
Pb 220.353	829.701	ppb	9.6135	1.2	309.132
Sb 206.834	-5.6534	ppb	10.8399	191.7	7.0919
Se 196.026	7.3284	ppb	18.5288	252.8	6.4427
Si 288.158	4903.58	ppb	31.0882	0.6	23482.0
Sn 189.925	24.9107	ppb	3.9127	15.7	7.2891
Sr 216.596	65.4270	ppb	0.5716	0.9	218.932
Ti 334.941	1246.44	ppb	7.9287	0.6	110628
Tl 190.794	10.8174	ppb	6.4453	59.6	-3.4654
V 292.401	213.219	ppb	1.2085	0.6	2171.77
Zn 206.200	523.273	ppb	7.2372	1.4	289.010

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Rack 2, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1486u	0.7662	-0.5251u
Al 308.215	81157.8	81288.7	81296.9
As 188.980	224.065	230.771	229.038
B 249.678	20.5828	19.5690u	18.9095u
Ba 389.178	545.372	544.628	546.629
Be 313.042	3.2090	3.1928	3.2049
Ca 370.602	13661	13710	13708
Cd 226.502	3.1335	3.1266	3.0496
Co 228.615	43.0693	43.5751	43.6131
Cr 267.716	89.4527	89.5955	89.6258
Cu 324.754	210.305	215.750	215.757
Fe 271.441	136613	136629	136925
K 766.491	7801.14	7818.41	7796.04
Mg 279.078	21987.0	22024.5	22072.0
Mn 257.610	6856.82	6861.34	6866.55
Mo 202.032	2.0926	4.4366	4.9790

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Label	Replicates Concentration		
Na 330.237	700.690u	514.485u	1054.95
Ni 231.604	90.8411	88.6132	94.7698
Pb 220.353	702.859	705.137	704.257
Sb 206.834	-2.5493	-10.0769u	-20.2484u
Se 196.026	9.9663	0.9071	-0.3321
Si 288.158	5112.19	5147.15	5159.67
Sn 189.925	15.4000	17.4122	17.1603
Sr 216.596	66.9721	68.8384	69.4651
Ti 334.941	1238.23	1243.60	1238.25
Tl 190.794	6.5091u	-1.9224u	-3.2927u
V 292.401	184.771	183.648	184.990
Zn 206.200	437.168	442.946	436.491

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3025	ppb	0.9766	322.8	-63.2752
Al 308.215	81247.8	ppb	78.0346	0.1	159146
As 188.980	227.958	ppb	3.4810	1.5	61.2076
B 249.678	19.6871	ppb	0.8428	4.3	-10.6992
Ba 389.178	545.543	ppb	1.0113	0.2	3476.12
Be 313.042	3.2022	ppb	0.0084	0.3	2263.53
Ca 370.602	13693	ppb	27.48	0.2	22820
Cd 226.502	3.1032	ppb	0.0466	1.5	256.667
Co 228.615	43.4192	ppb	0.3036	0.7	165.752
Cr 267.716	89.5580	ppb	0.0924	0.1	1534.11
Cu 324.754	213.938	ppb	3.1457	1.5	6939.74
Fe 271.441	136722	ppb	175.857	0.1	75702.8
K 766.491	7805.19	ppb	11.7238	0.2	160967
Mg 279.078	22027.8	ppb	42.5771	0.2	29394.5
Mn 257.610	6861.57	ppb	4.8673	0.1	569020
Mo 202.032	3.8360	ppb	1.5341	40.0	8.8495
Na 330.237	756.710	ppb	274.555	36.3	36.8657
Ni 231.604	91.4080	ppb	3.1172	3.4	100.748
Pb 220.353	704.084	ppb	1.1487	0.2	262.794
Sb 206.834	-10.9582	ppb	8.8824	81.1	4.4126
Se 196.026	3.5138	ppb	5.6223	160.0	4.5912
Si 288.158	5139.67	ppb	24.6079	0.5	24582.3
Sn 189.925	16.6575	ppb	1.0963	6.6	5.2032
Sr 216.596	68.4252	ppb	1.2969	1.9	222.262
Ti 334.941	1240.03	ppb	3.0958	0.2	110033
Tl 190.794	0.4313	ppb	5.3079	1230.6	-5.9182
V 292.401	184.470	ppb	0.7196	0.4	1876.63
Zn 206.200	438.868	ppb	3.5473	0.8	242.335

mb 680-567044/1-a (Samp)

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Rack 2, Tube 27

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5854u	-0.9531u	-0.2543u
Al 308.215	23.1059	20.8760	19.5096
As 188.980	4.3350	8.8397	1.2430
B 249.678	-2.0964u	-2.7764u	-1.9923u
Ba 389.178	-2.0234u	-5.1137u	-2.2804u
Be 313.042	-0.1466u	-0.1490u	-0.1726u
Ca 370.602	15.63	24.45	17.74

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Label	Replicates Concentration		
Cd 226.502	-0.0636u	0.4350	-0.2211u
Co 228.615	0.4966	-0.8657u	-0.4087u
Cr 267.716	0.3884	1.0338	0.4662
Cu 324.754	0.6761	0.5982	1.1740
Fe 271.441	8.1110	7.1775	32.3022
K 766.491	14.3637	14.1391	13.0908
Mg 279.078	6.5355	6.2036	7.8178
Mn 257.610	0.5235	0.3621	0.3390
Mo 202.032	0.3455	-1.1166u	0.5519
Na 330.237	565.136	251.695	-81.7658u
Ni 231.604	0.9816	-0.6848u	-1.6195u
Pb 220.353	-10.7930u	-2.5990u	-3.5281u
Sb 206.834	5.4967	9.0673	-0.4214u
Se 196.026	-3.7863u	-6.0009u	-17.2194u
Si 288.158	26.7272	25.7226	24.2080
Sn 189.925	10.2446	5.8700	0.7252
Sr 216.596	0.7251	-2.1658u	0.2570
Ti 334.941	0.6272	0.5098	0.2045
Tl 190.794	-13.8859u	-9.3155u	-8.2913u
V 292.401	-0.4559u	-0.8619u	0.0337
Zn 206.200	1.6972	5.4501	3.9467

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5976	ppb	0.3496	58.5	-58.8793
Al 308.215	21.1638	ppb	1.8153	8.6	248.513
As 188.980	4.8059	ppb	3.8202	79.5	1.9894
B 249.678	-2.2884	ppb	0.4259	18.6	-21.4511
Ba 389.178	-3.1392	ppb	1.7148	54.6	-56.3559
Be 313.042	-0.1561	ppb	0.0144	9.2	-452.775
Ca 370.602	19.27	ppb	4.603	23.9	57.27
Cd 226.502	0.0501	ppb	0.3425	683.8	4.6461
Co 228.615	-0.2593	ppb	0.6933	267.4	-13.3925
Cr 267.716	0.6295	ppb	0.3523	56.0	24.0904
Cu 324.754	0.8161	ppb	0.3124	38.3	460.810
Fe 271.441	15.8636	ppb	14.2439	89.8	25.9981
K 766.491	13.8645	ppb	0.6794	4.9	591.026
Mg 279.078	6.8523	ppb	0.8524	12.4	30.8497
Mn 257.610	0.4082	ppb	0.1005	24.6	60.4503
Mo 202.032	-0.0730	ppb	0.9096	1245.5	3.8804
Na 330.237	245.022	ppb	323.503	132.0	44.1445
Ni 231.604	-0.4409	ppb	1.3176	298.9	-2.2658
Pb 220.353	-5.6400	ppb	4.4867	79.6	-1.2807
Sb 206.834	4.7142	ppb	4.7925	101.7	7.6450
Se 196.026	-9.0022	ppb	7.2020	80.0	1.0248
Si 288.158	25.5526	ppb	1.2682	5.0	655.166
Sn 189.925	5.6133	ppb	4.7649	84.9	2.4120
Sr 216.596	-0.3946	ppb	1.5517	393.3	6.0209
Ti 334.941	0.4472	ppb	0.2182	48.8	14.3145
Tl 190.794	-10.4975	ppb	2.9787	28.4	-3.9344
V 292.401	-0.4280	ppb	0.4484	104.8	-17.1325
Zn 206.200	3.6980	ppb	1.8888	51.1	1.9353

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

ics 680-567044/2-a (Samp) 4/20/2019, 1:18:06 PM Rack 2, Tube 28

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	53.5842	51.6390	52.3379
Al 308.215	5067.19	5070.30	5083.57
As 188.980	97.9906	101.173	98.1992
B 249.678	208.349	209.567	209.528
Ba 389.178	91.7780	92.6391	93.4181
Be 313.042	56.4085	56.3174	56.5626
Ca 370.602	4971	4943	4986
Cd 226.502	51.5082	51.9179	52.9557
Co 228.615	50.7553	49.7523	51.2346
Cr 267.716	102.407	102.608	103.060
Cu 324.754	105.499	104.460	104.057
Fe 271.441	5084.13	5007.19	5100.45
K 766.491	7846.88	7831.55	7866.14
Mg 279.078	5179.67	5180.23	5207.69
Mn 257.610	408.318	407.556	409.525
Mo 202.032	97.9660	101.331	100.928
Na 330.237	5696.71	5619.81	5377.32
Ni 231.604	99.8839	103.628	103.552
Pb 220.353	503.177	507.021	498.655
Sb 206.834	43.6916	39.8207	42.0503
Se 196.026	107.985	112.194	116.825
Si 288.158	16.3978	14.2204	15.6745
Sn 189.925	109.882	102.901	109.368
Sr 216.596	98.9285	98.9062	99.9780
Ti 334.941	406.224	405.522	407.609
Tl 190.794	18.7839	27.8099	39.9305
V 292.401	98.9287	97.8146	99.8335
Zn 206.200	110.229	109.619	107.713

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.5204	ppb	0.9854	1.9	1553.79
Al 308.215	5073.69	ppb	8.7010	0.2	10135.7
As 188.980	99.1208	ppb	1.7800	1.8	27.1431
B 249.678	209.148	ppb	0.6921	0.3	1420.63
Ba 389.178	92.6117	ppb	0.8204	0.9	553.694
Be 313.042	56.4295	ppb	0.1239	0.2	45194.5
Ca 370.602	4967	ppb	21.53	0.4	8335
Cd 226.502	52.1273	ppb	0.7461	1.4	681.006
Co 228.615	50.5807	ppb	0.7564	1.5	190.111
Cr 267.716	102.692	ppb	0.3348	0.3	1732.58
Cu 324.754	104.672	ppb	0.7440	0.7	3608.56
Fe 271.441	5063.92	ppb	49.8084	1.0	2822.75
K 766.491	7848.19	ppb	17.3279	0.2	161641
Mg 279.078	5189.20	ppb	16.0183	0.3	6956.13
Mn 257.610	408.466	ppb	0.9929	0.2	33916.3
Mo 202.032	100.075	ppb	1.8377	1.8	172.823
Na 330.237	5564.61	ppb	166.699	3.0	182.934
Ni 231.604	102.355	ppb	2.1401	2.1	113.011
Pb 220.353	502.951	ppb	4.1878	0.8	191.071
Sb 206.834	41.8542	ppb	1.9428	4.6	21.3959
Se 196.026	112.334	ppb	4.4217	3.9	23.9573
Si 288.158	15.4309	ppb	1.1089	7.2	649.642

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	107.384	ppb	3.8908	3.6	28.1335
Sr 216.596	99.2709	ppb	0.6124	0.6	296.083
Ti 334.941	406.452	ppb	1.0618	0.3	36043.2
Tl 190.794	28.8414	ppb	10.6109	36.8	5.3703
V 292.401	98.8589	ppb	1.0113	1.0	986.792
Zn 206.200	109.187	ppb	1.3123	1.2	60.1042

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.5208	0.0418u	0.5619u
Al 308.215	67017.9	66726.4	66802.3
As 188.980	40.4156	46.6357	58.6368
B 249.678	59.8742	58.5423	58.6545
Ba 389.178	753.040	754.104	752.895
Be 313.042	3.9776	3.9259	3.9727
Ca 370.602	146422	146069	146148
Cd 226.502	6.0771	5.3773	5.6162
Co 228.615	46.0712	46.7276	46.3570
Cr 267.716	94.9767	94.3024	94.2457
Cu 324.754	204.292	204.976	203.913
Fe 271.441	130008	130070	129963
K 766.491	4473.28	4460.19	4473.57
Mg 279.078	36571.0	36497.5	36465.1
Mn 257.610	865.506	862.945	865.432
Mo 202.032	4.0387	4.7616	5.4983
Na 330.237	1028.55	823.135u	732.701u
Ni 231.604	136.767	136.349	136.339
Pb 220.353	695.057	681.736	709.234
Sb 206.834	-0.9269	-1.4471	10.9616
Se 196.026	16.1642	15.6444	42.3609
Si 288.158	5511.99	5481.57	5509.72
Sn 189.925	532.163	539.536	540.076
Sr 216.596	250.451	245.787	247.294
Ti 334.941	613.804	611.766	612.198
Tl 190.794	2.5735u	-0.0440u	-2.6526u
V 292.401	136.798	135.802	137.171
Zn 206.200	1269.84	1274.32	1277.37

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7082	ppb	0.7503	105.9	-42.4833
Al 308.215	66848.9	ppb	151.225	0.2	130979
As 188.980	48.5627	ppb	9.2622	19.1	13.3254
B 249.678	59.0237	ppb	0.7387	1.3	265.798
Ba 389.178	753.346	ppb	0.6599	0.1	4795.48
Be 313.042	3.9587	ppb	0.0286	0.7	2892.94
Ca 370.602	146213	ppb	185.5	0.1	244290
Cd 226.502	5.6902	ppb	0.3557	6.3	278.646
Co 228.615	46.3853	ppb	0.3291	0.7	172.875
Cr 267.716	94.5083	ppb	0.4067	0.4	1606.92
Cu 324.754	204.394	ppb	0.5384	0.3	6649.69
Fe 271.441	130014	ppb	53.5867	0.0	71989.2
K 766.491	4469.02	ppb	7.6413	0.2	92342.4

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	36511.2	ppb	54.2658	0.1	48826.9
Mn 257.610	864.628	ppb	1.4580	0.2	71932.5
Mo 202.032	4.7662	ppb	0.7298	15.3	10.5104
Na 330.237	861.462	ppb	151.602	17.6	35.8172
Ni 231.604	136.485	ppb	0.2445	0.2	151.315
Pb 220.353	695.342	ppb	13.7512	2.0	259.554
Sb 206.834	2.8625	ppb	7.0189	245.2	9.1644
Se 196.026	24.7231	ppb	15.2770	61.8	7.9954
Si 288.158	5501.09	ppb	16.9477	0.3	26284.9
Sn 189.925	537.258	ppb	4.4211	0.8	136.777
Sr 216.596	247.844	ppb	2.3801	1.0	744.980
Ti 334.941	612.589	ppb	1.0737	0.2	54412.9
Tl 190.794	-0.0410	ppb	2.6130	6369.0	-7.0172
V 292.401	136.590	ppb	0.7077	0.5	1386.16
Zn 206.200	1273.85	ppb	3.7857	0.3	703.106

480-151917-a-112-a (Samp)

4/20/2019, 1:26:29 PM

Rack 2, Tube 30

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8248u	1.1224	1.3629
Al 308.215	12996.2	12997.6	12898.3
As 188.980	6.8803	13.3026	14.1448
B 249.678	9.7945	11.2066	10.5245
Ba 389.178	144.144	144.364	143.408
Be 313.042	0.6419	0.6382	0.6111
Ca 370.602	28421	28440	28234
Cd 226.502	1.6934	1.1695	1.5090
Co 228.615	8.5417	9.0709	7.8679
Cr 267.716	18.5866	18.7878	18.7437
Cu 324.754	38.6449	40.0412	39.3677
Fe 271.441	25131.8	25194.2	25065.3
K 766.491	786.169	789.469	783.341
Mg 279.078	7089.37	7084.24	7032.08
Mn 257.610	168.087	168.265	167.155
Mo 202.032	-0.4094u	2.3780	1.0643
Na 330.237	-127.365u	54.3830u	131.171u
Ni 231.604	28.7016	25.2010	25.8293
Pb 220.353	126.433	142.989	134.447
Sb 206.834	-6.0796u	-3.5050u	-8.5890u
Se 196.026	6.4087	10.8095	12.3953
Si 288.158	1078.24	1087.13	1076.96
Sn 189.925	101.352	108.303	86.4985
Sr 216.596	45.8095	47.9122	46.7892
Ti 334.941	118.472	119.726	118.276
Tl 190.794	3.8731u	-3.9350u	3.1200u
V 292.401	27.0671	26.5885	25.6719
Zn 206.200	253.092	249.581	248.988

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5535	ppb	1.1997	216.7	-28.4302
Al 308.215	12964.0	ppb	56.9034	0.4	25567.8
As 188.980	11.4426	ppb	3.9734	34.7	3.6940
B 249.678	10.5085	ppb	0.7062	6.7	40.4200

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	143.972	ppb	0.5008	0.3	887.123
Be 313.042	0.6304	ppb	0.0168	2.7	186.806
Ca 370.602	28365	ppb	113.7	0.4	47412
Cd 226.502	1.4573	ppb	0.2657	18.2	61.8663
Co 228.615	8.4935	ppb	0.6029	7.1	21.5653
Cr 267.716	18.7060	ppb	0.1058	0.6	328.886
Cu 324.754	39.3513	ppb	0.6983	1.8	1632.41
Fe 271.441	25130.4	ppb	64.4289	0.3	13928.7
K 766.491	786.326	ppb	3.0674	0.4	16462.8
Mg 279.078	7068.56	ppb	31.6963	0.4	9470.37
Mn 257.610	167.836	ppb	0.5961	0.4	13984.4
Mo 202.032	1.0109	ppb	1.3945	137.9	5.4112
Na 330.237	19.3963	ppb	132.771	684.5	33.2018
Ni 231.604	26.5773	ppb	1.8663	7.0	28.0391
Pb 220.353	134.623	ppb	8.2795	6.2	50.9384
Sb 206.834	-6.0579	ppb	2.5421	42.0	4.3313
Se 196.026	9.8712	ppb	3.1016	31.4	4.7017
Si 288.158	1080.78	ppb	5.5370	0.5	5594.03
Sn 189.925	98.7176	ppb	11.1382	11.3	25.9427
Sr 216.596	46.8370	ppb	1.0521	2.2	146.681
Ti 334.941	118.825	ppb	0.7867	0.7	10534.1
Tl 190.794	1.0194	ppb	4.3071	422.5	-2.2616
V 292.401	26.4425	ppb	0.7090	2.7	258.061
Zn 206.200	250.554	ppb	2.2179	0.9	138.209

Cont Calib Verif (CCV)

4/20/2019, 1:30:43 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	502.286	498.396	496.311
Al 308.215	10164.2	10050.4	10094.5
As 188.980	510.441	507.319	496.592
B 249.678	532.460	532.238	534.525
Ba 389.178	461.653	455.059	458.154
Be 313.042	552.460	546.438	547.678
Ca 370.602	9966	9832	9876
Cd 226.502	506.242	500.263	503.293
Co 228.615	505.593	498.746	497.724
Cr 267.716	500.669	496.440	498.213
Cu 324.754	508.065	503.741	497.613
Fe 271.441	10175.5	10022.9	10042.0
K 766.491	9957.62	9846.95	9888.87
Mg 279.078	10429.3	10318.9	10324.7
Mn 257.610	496.352	490.508	492.311
Mo 202.032	485.531	480.747	483.987
Na 330.237	10633.4	11061.6	10734.4
Ni 231.604	502.546	492.575	495.681
Pb 220.353	508.505	484.946	475.322
Sb 206.834	477.851	476.766	474.519
Se 196.026	566.717	566.183	529.404
Si 288.158	5217.70	5148.06	5168.80
Sn 189.925	477.816	477.321	493.600
Sr 216.596	493.598	484.909	484.951
Ti 334.941	503.588	498.143	500.208

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Label	Replicates Concentration		
Tl 190.794	486.990	485.466	495.171
V 292.401	498.922	491.869	493.076
Zn 206.200	1059.88	1046.97	1047.59

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	498.998	ppb	3.0326	0.6	15114.2	99.79951
Al 308.215	10103.0	ppb	57.3690	0.6	19987.9	101.03032
As 188.980	504.784	ppb	7.2639	1.4	135.385	100.95681
B 249.678	533.074	ppb	1.2613	0.2	3632.70	106.61489
Ba 389.178	458.289	ppb	3.2988	0.7	2861.32	91.65779
Be 313.042	548.858	ppb	3.1799	0.6	442452	109.77169
Ca 370.602	9892	ppb	68.09	0.7	16566	98.91589
Cd 226.502	503.266	ppb	2.9895	0.6	6479.90	100.65314
Co 228.615	500.687	ppb	4.2788	0.9	1970.93	100.13747
Cr 267.716	498.441	ppb	2.1237	0.4	8352.71	99.68820
Cu 324.754	503.139	ppb	5.2517	1.0	15683.0	100.62788
Fe 271.441	10080.2	ppb	83.1463	0.8	5617.41	100.75120
K 766.491	9897.81	ppb	55.8728	0.6	201512	98.97814
Mg 279.078	10357.6	ppb	62.1641	0.6	13866.1	103.57644
Mn 257.610	493.057	ppb	2.9927	0.6	40952.7	98.61140
Mo 202.032	483.422	ppb	2.4418	0.5	819.662	96.68437
Na 330.237	10809.8	ppb	223.859	2.1	312.775	108.09810
Ni 231.604	496.934	ppb	5.1021	1.0	555.273	99.38682
Pb 220.353	489.591	ppb	17.0725	3.5	185.678	97.91816
Sb 206.834	476.379	ppb	1.6992	0.4	178.815	95.27574
Se 196.026	554.102	ppb	21.3904	3.9	107.264	110.82033Q
Si 288.158	5178.19	ppb	35.7575	0.7	24833.0	103.56371
Sn 189.925	482.912	ppb	9.2595	1.9	123.043	96.58245
Sr 216.596	487.819	ppb	5.0046	1.0	1425.27	97.56383
Ti 334.941	500.647	ppb	2.7492	0.5	44412.5	100.12930
Tl 190.794	489.209	ppb	5.2192	1.1	115.597	97.84177
V 292.401	494.622	ppb	3.7721	0.8	4982.65	98.92449
Zn 206.200	1051.48	ppb	7.2773	0.7	579.906	105.14795

Cont Calib Blank (CCB) 4/20/2019, 1:34:56 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6251u	-0.9583u	0.1002
Al 308.215	20.8063	16.8516	22.3459
As 188.980	5.4301	7.3927	-0.5590u
B 249.678	14.3665	11.2211	9.3079
Ba 389.178	-0.4712u	-2.4588u	0.6192
Be 313.042	0.1178	0.1255	0.0920
Ca 370.602	9.360	3.147	3.645
Cd 226.502	-0.2003u	-0.1656u	-0.0538u
Co 228.615	1.7475	0.7360	1.3163
Cr 267.716	0.3061	0.3393	1.3595
Cu 324.754	1.1877	0.3062	0.8109
Fe 271.441	18.9610	11.8098	33.0910
K 766.491	5.1534	4.2503	2.5298
Mg 279.078	10.9694	6.1860	10.2293
Mn 257.610	0.4557	0.3397	0.2984
Mo 202.032	1.1811	1.5173	2.5249

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Label	Replicates Concentration		
Na 330.237	331.621	-78.6187u	-20.6032u
Ni 231.604	0.4748	-1.3649u	1.3664
Pb 220.353	-0.4535u	-4.6916u	5.8053
Sb 206.834	8.8650	0.1659u	3.1552
Se 196.026	-10.3506u	-11.6990u	-14.3324u
Si 288.158	18.5814	16.1714	14.8246
Sn 189.925	-0.9141u	-15.6900u	-2.0384u
Sr 216.596	0.3124	0.9379	-1.1533u
Ti 334.941	0.2312	0.5006	0.2795
Tl 190.794	-0.3788u	-25.9065u	-10.4701u
V 292.401	1.0282	0.6878	0.9806
Zn 206.200	0.8558	-3.4829u	-2.4416u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.4944	ppb	0.5412	109.5	-55.7427	-0.49441
Al 308.215	20.0013	ppb	2.8343	14.2	246.297	20.00126
As 188.980	4.0879	ppb	4.1423	101.3	1.7975	4.08794
B 249.678	11.6318	ppb	2.5542	22.0	73.8460	11.63184
Ba 389.178	-0.7703	ppb	1.5607	202.6	-41.4634	-0.77028
Be 313.042	0.1117	ppb	0.0176	15.7	-236.803	0.11174
Ca 370.602	5.384	ppb	3.452	64.1	34.08	5.38378
Cd 226.502	-0.1399	ppb	0.0765	54.7	2.1837	-0.13990
Co 228.615	1.2666	ppb	0.5076	40.1	-7.3617	1.26659
Cr 267.716	0.6683	ppb	0.5988	89.6	24.7351	0.66827
Cu 324.754	0.7683	ppb	0.4423	57.6	459.384	0.76827
Fe 271.441	21.2873	ppb	10.8296	50.9	29.0568	21.28729
K 766.491	3.9778	ppb	1.3328	33.5	400.871	3.97783
Mg 279.078	9.1282	ppb	2.5748	28.2	33.8945	9.12823
Mn 257.610	0.3646	ppb	0.0815	22.4	56.8324	0.36464
Mo 202.032	1.7411	ppb	0.6993	40.2	6.9420	1.74109
Na 330.237	77.4662	ppb	222.008	286.6	39.6869	77.46621
Ni 231.604	0.1588	ppb	1.3928	877.2	-1.5943	0.15878
Pb 220.353	0.2201	ppb	5.2808	2399.7	0.9383	0.22006
Sb 206.834	4.0620	ppb	4.4199	108.8	7.3957	4.06202
Se 196.026	-12.1273	ppb	2.0252	16.7	0.4356	-12.12734Z
Si 288.158	16.5258	ppb	1.9033	11.5	612.142	16.52580
Sn 189.925	-6.2142	ppb	8.2256	132.4	-0.5772	-6.21415
Sr 216.596	0.0323	ppb	1.0733	3319.7	7.2464	0.03233
Ti 334.941	0.3371	ppb	0.1436	42.6	4.5597	0.33709
Tl 190.794	-12.2518	ppb	12.8568	104.9	-4.3534	-12.25178
V 292.401	0.8989	ppb	0.1843	20.5	-3.7572	0.89886
Zn 206.200	-1.6896	ppb	2.2650	134.1	-1.0378	-1.68956

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Rack 2, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	59.7565	59.1900	59.2735
Al 308.215	71074.4	71240.5	71072.0
As 188.980	150.786	153.953	154.212
B 249.678	293.905	297.209	294.550
Ba 389.178	840.080	843.553	837.483
Be 313.042	65.4304	65.4858	65.2896
Ca 370.602	148353	148479	148347

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	62.8274	61.2042	61.4859
Co 228.615	101.746	100.688	101.917
Cr 267.716	203.196	203.649	203.480
Cu 324.754	310.089	311.958	314.329
Fe 271.441	131995	132546	132506
K 766.491	13901.6	13930.3	13893.2
Mg 279.078	41358.8	41449.3	41383.8
Mn 257.610	1381.93	1385.25	1382.83
Mo 202.032	114.585	114.947	113.011
Na 330.237	7372.51	7263.63	7358.01
Ni 231.604	241.596	243.347	244.313
Pb 220.353	1198.84	1236.39	1249.28
Sb 206.834	48.5005	56.7607	47.9085
Se 196.026	143.251	163.370	134.420
Si 288.158	5388.72	5393.78	5371.10
Sn 189.925	619.153	654.056	624.094
Sr 216.596	350.241	349.491	345.818
Ti 334.941	1044.60	1046.26	1045.23
Tl 190.794	51.8175	55.6036	28.0328
V 292.401	241.813	243.456	242.197
Zn 206.200	1367.65	1373.48	1371.72

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	59.4066	ppb	0.3058	0.5	1740.32
Al 308.215	71129.0	ppb	96.6099	0.1	139355
As 188.980	152.984	ppb	1.9076	1.2	41.1825
B 249.678	295.221	ppb	1.7512	0.6	1879.89
Ba 389.178	840.372	ppb	3.0455	0.4	5349.33
Be 313.042	65.4019	ppb	0.1011	0.2	52458.0
Ca 370.602	148393	ppb	74.50	0.1	247947
Cd 226.502	61.8392	ppb	0.8673	1.4	1003.44
Co 228.615	101.450	ppb	0.6654	0.7	393.296
Cr 267.716	203.442	ppb	0.2291	0.1	3430.33
Cu 324.754	312.125	ppb	2.1250	0.7	9914.53
Fe 271.441	132349	ppb	307.385	0.2	73284.1
K 766.491	13908.4	ppb	19.4418	0.1	286377
Mg 279.078	41397.3	ppb	46.7302	0.1	55355.0
Mn 257.610	1383.34	ppb	1.7170	0.1	114959
Mo 202.032	114.181	ppb	1.0294	0.9	195.119
Na 330.237	7331.38	ppb	59.1233	0.8	205.651
Ni 231.604	243.086	ppb	1.3774	0.6	270.857
Pb 220.353	1228.17	ppb	26.2041	2.1	461.168
Sb 206.834	51.0566	ppb	4.9488	9.7	26.8561
Se 196.026	147.014	ppb	14.8372	10.1	31.1081
Si 288.158	5384.53	ppb	11.9060	0.2	25784.1
Sn 189.925	632.435	ppb	18.8874	3.0	160.832
Sr 216.596	348.517	ppb	2.3670	0.7	1037.58
Ti 334.941	1045.36	ppb	0.8376	0.1	92815.7
Tl 190.794	45.1513	ppb	14.9454	33.1	3.8251
V 292.401	242.489	ppb	0.8594	0.4	2456.50
Zn 206.200	1370.95	ppb	2.9901	0.2	756.638

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

480-151917-a-112-b m (Samp) 4/20/2019, 1:43:19 PM Rack 2, Tube 32**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	54.7738	53.7179	53.4351
Al 308.215	70565.2	70515.5	70411.8
As 188.980	159.728	154.730	170.875
B 249.678	250.764	251.335	252.060
Ba 389.178	755.779	752.174	759.319
Be 313.042	60.9354	60.9859	60.8074
Ca 370.602	75159	75143	75102
Cd 226.502	56.7463	56.6026	56.4041
Co 228.615	90.4134	89.3780	89.4609
Cr 267.716	198.156	198.897	197.572
Cu 324.754	308.788	310.294	309.104
Fe 271.441	137950	138024	138036
K 766.491	13214.2	13214.8	13199.4
Mg 279.078	30061.0	30091.7	30018.4
Mn 257.610	1073.29	1072.53	1070.75
Mo 202.032	103.936	106.446	105.659
Na 330.237	6194.14	6306.71	6313.40
Ni 231.604	238.713	242.756	237.699
Pb 220.353	2259.82	2242.30	2248.17
Sb 206.834	44.6812	40.8828	54.8029
Se 196.026	133.434	134.796	141.416
Si 288.158	5561.30	5556.46	5549.67
Sn 189.925	1441.71	1423.16	1419.66
Sr 216.596	274.094	271.420	272.125
Ti 334.941	868.784	868.560	867.630
Tl 190.794	32.2006	37.3387	46.4107
V 292.401	220.325	219.720	220.211
Zn 206.200	1677.54	1666.62	1668.12

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.9756	ppb	0.7056	1.3	1574.25
Al 308.215	70497.5	ppb	78.2628	0.1	138120
As 188.980	161.778	ppb	8.2654	5.1	43.5169
B 249.678	251.386	ppb	0.6493	0.3	1573.98
Ba 389.178	755.757	ppb	3.5721	0.5	4807.32
Be 313.042	60.9096	ppb	0.0920	0.2	48822.8
Ca 370.602	75135	ppb	29.29	0.0	125449
Cd 226.502	56.5843	ppb	0.1718	0.3	944.789
Co 228.615	89.7508	ppb	0.5753	0.6	345.367
Cr 267.716	198.208	ppb	0.6641	0.3	3342.70
Cu 324.754	309.395	ppb	0.7942	0.3	9832.84
Fe 271.441	138003	ppb	46.3633	0.0	76413.7
K 766.491	13209.5	ppb	8.6784	0.1	272015
Mg 279.078	30057.0	ppb	36.8097	0.1	40192.8
Mn 257.610	1072.19	ppb	1.3050	0.1	89124.4
Mo 202.032	105.347	ppb	1.2842	1.2	180.147
Na 330.237	6271.42	ppb	67.0059	1.1	174.858
Ni 231.604	239.723	ppb	2.6752	1.1	267.095
Pb 220.353	2250.10	ppb	8.9150	0.4	847.975
Sb 206.834	46.7890	ppb	7.1954	15.4	25.4470
Se 196.026	136.548	ppb	4.2700	3.1	29.1294
Si 288.158	5555.81	ppb	5.8439	0.1	26642.0

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1428.18	ppb	11.8527	0.8	361.943
Sr 216.596	272.547	ppb	1.3862	0.5	816.579
Ti 334.941	868.325	ppb	0.6118	0.1	77081.2
Tl 190.794	38.6500	ppb	7.1952	18.6	1.9341
V 292.401	220.085	ppb	0.3217	0.1	2228.72
Zn 206.200	1670.76	ppb	5.9197	0.4	922.108

480-151917-a-112-c m (Samp) 4/20/2019, 1:47:31 PM Rack 2, Tube 33

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.7476	52.6043	54.5808
Al 308.215	87071.2	86961.6	86923.0
As 188.980	124.641	136.849	144.732
B 249.678	261.694	260.565	262.420
Ba 389.178	857.122	855.004	854.093
Be 313.042	61.6582	61.7260	61.5973
Ca 370.602	65396	65353	65354
Cd 226.502	55.6428	55.3126	55.3910
Co 228.615	93.5845	94.5848	95.1839
Cr 267.716	214.506	215.307	215.291
Cu 324.754	310.287	310.802	309.862
Fe 271.441	117070	116901	117082
K 766.491	15048.8	15043.1	15054.6
Mg 279.078	32217.7	32211.6	32147.4
Mn 257.610	1160.28	1160.52	1158.03
Mo 202.032	100.465	100.915	102.515
Na 330.237	6233.91	6012.54	6622.82
Ni 231.604	268.785	268.570	265.537
Pb 220.353	1270.83	1246.17	1254.17
Sb 206.834	38.6437	37.5448	45.1256
Se 196.026	125.689	144.514	151.790
Si 288.158	6772.44	6773.94	6748.99
Sn 189.925	461.399	454.264	450.356
Sr 216.596	305.595	305.355	304.067
Ti 334.941	923.645	923.741	923.437
Tl 190.794	38.2189	43.2622	39.3431
V 292.401	240.668	243.152	242.055
Zn 206.200	1082.58	1091.86	1084.91

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.3109	ppb	1.1021	2.1	1557.89
Al 308.215	86985.2	ppb	76.8593	0.1	170372
As 188.980	135.407	ppb	10.1227	7.5	36.5302
B 249.678	261.559	ppb	0.9345	0.4	1664.92
Ba 389.178	855.406	ppb	1.5542	0.2	5427.22
Be 313.042	61.6605	ppb	0.0644	0.1	49428.7
Ca 370.602	65368	ppb	24.41	0.0	109157
Cd 226.502	55.4488	ppb	0.1725	0.3	898.828
Co 228.615	94.4510	ppb	0.8080	0.9	365.178
Cr 267.716	215.035	ppb	0.4578	0.2	3622.64
Cu 324.754	310.317	ppb	0.4709	0.2	9856.83
Fe 271.441	117017	ppb	100.887	0.1	64797.3
K 766.491	15048.8	ppb	5.7823	0.0	309843

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	32192.2	ppb	38.9236	0.1	43044.2
Mn 257.610	1159.61	ppb	1.3772	0.1	96366.1
Mo 202.032	101.298	ppb	1.0778	1.1	173.554
Na 330.237	6289.76	ppb	308.947	4.9	182.429
Ni 231.604	267.631	ppb	1.8160	0.7	298.402
Pb 220.353	1257.05	ppb	12.5799	1.0	472.576
Sb 206.834	40.4380	ppb	4.0965	10.1	22.9357
Se 196.026	140.664	ppb	13.4695	9.6	29.8281
Si 288.158	6765.12	ppb	13.9942	0.2	32204.4
Sn 189.925	455.340	ppb	5.5993	1.2	116.074
Sr 216.596	305.006	ppb	0.8216	0.3	908.848
Ti 334.941	923.608	ppb	0.1553	0.0	81991.0
Tl 190.794	40.2747	ppb	2.6476	6.6	3.2885
V 292.401	241.958	ppb	1.2451	0.5	2450.30
Zn 206.200	1086.45	ppb	4.8320	0.4	599.595

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Rack 2, Tube 34

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7146u	0.0906u	0.4395
Al 308.215	74132.5	74385.6	75123.2
As 188.980	12.9255	12.6297	15.3147
B 249.678	30.9764	28.4196	28.1791
Ba 389.178	160.306	156.042	156.719
Be 313.042	1.2584	1.2722	1.2739
Ca 370.602	3825	3834	3874
Cd 226.502	0.6057	1.0556	1.0106
Co 228.615	6.5819	5.6349	2.7718
Cr 267.716	63.4389	63.1234	63.9631
Cu 324.754	29.8734	30.3100	31.5054
Fe 271.441	62980.0	63665.5	63703.5
K 766.491	1114.32	1125.42	1128.23
Mg 279.078	1558.74	1564.17	1573.42
Mn 257.610	251.527	252.712	254.423
Mo 202.032	4.5403	5.6333	5.2086
Na 330.237	537.970	886.981	546.161
Ni 231.604	16.5084	17.3056	18.5846
Pb 220.353	45.6989	36.4870	55.8142
Sb 206.834	7.4846	0.1139	0.6986
Se 196.026	4.3460	1.9188	-0.9662
Si 288.158	5747.64	5788.31	5820.19
Sn 189.925	10.6890	14.1264	24.4388
Sr 216.596	21.0725	22.8851	21.7474
Ti 334.941	494.925	494.807	500.340
Tl 190.794	-10.4612u	-20.4489u	11.2762u
V 292.401	174.394	174.264	176.995
Zn 206.200	33.2162	41.2656	39.7477

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0615	ppb	0.5919	962.6	-53.8525
Al 308.215	74547.1	ppb	514.715	0.7	146037
As 188.980	13.6233	ppb	1.4723	10.8	4.1726
B 249.678	29.1917	ppb	1.5503	5.3	129.305

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	157.689	ppb	2.2914	1.5	983.754
Be 313.042	1.2682	ppb	0.0085	0.7	703.184
Ca 370.602	3844	ppb	26.04	0.7	6362
Cd 226.502	0.8907	ppb	0.2478	27.8	115.470
Co 228.615	4.9962	ppb	1.9837	39.7	9.6518
Cr 267.716	63.5085	ppb	0.4241	0.7	1081.85
Cu 324.754	30.5630	ppb	0.8449	2.8	1372.23
Fe 271.441	63449.6	ppb	407.187	0.6	35141.1
K 766.491	1122.66	ppb	7.3509	0.7	23441.3
Mg 279.078	1565.44	ppb	7.4231	0.5	2098.32
Mn 257.610	252.888	ppb	1.4560	0.6	21045.6
Mo 202.032	5.1274	ppb	0.5510	10.7	11.8874
Na 330.237	657.037	ppb	199.179	30.3	48.1168
Ni 231.604	17.4662	ppb	1.0474	6.0	17.8301
Pb 220.353	46.0000	ppb	9.6672	21.0	15.8599
Sb 206.834	2.7657	ppb	4.0971	148.1	8.0606
Se 196.026	1.7662	ppb	2.6594	150.6	3.3383
Si 288.158	5785.38	ppb	36.3645	0.6	27562.5
Sn 189.925	16.4181	ppb	7.1556	43.6	5.1428
Sr 216.596	21.9016	ppb	0.9161	4.2	78.2934
Ti 334.941	496.691	ppb	3.1609	0.6	44039.6
Tl 190.794	-6.5446	ppb	16.2211	247.9	-5.7305
V 292.401	175.218	ppb	1.5407	0.9	1775.36
Zn 206.200	38.0765	ppb	4.2770	11.2	21.0100

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Rack 2, Tube 35

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.3215u	-0.0927u	-0.8725u
Al 308.215	42234.4	41519.5	42391.5
As 188.980	10.8839	4.1155	19.8289
B 249.678	7.5233	9.2599	6.6972
Ba 389.178	69.9670	65.0437	70.3517
Be 313.042	0.3682	0.3462	0.3671
Ca 370.602	2031	2003	2055
Cd 226.502	0.4284	-0.6391	0.2458
Co 228.615	2.3872	1.7981	2.0470
Cr 267.716	34.6089	33.7113	34.7466
Cu 324.754	17.8445	17.5684	18.0539
Fe 271.441	18604.7	18301.2	18670.5
K 766.491	573.848	568.690	577.964
Mg 279.078	671.605	661.209	672.676
Mn 257.610	58.7258	57.5352	58.9807
Mo 202.032	21.0513	21.5638	22.0504
Na 330.237	472.651	630.071	288.340
Ni 231.604	5.1083	7.7366	9.2360
Pb 220.353	18.9642	19.0108	2.2655
Sb 206.834	-3.6334u	-5.2464u	-5.9693u
Se 196.026	7.6524	-9.8478u	-31.9709u
Si 288.158	4690.69	4615.38	4710.61
Sn 189.925	10.3267	9.1339	18.1547
Sr 216.596	11.6734	11.4880	12.1174
Ti 334.941	368.954	364.522	372.579

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Label	Replicates Concentration		
Tl 190.794	-17.6910u	-15.5604u	-9.7523u
V 292.401	76.6519	76.0838	76.8033
Zn 206.200	103.823	101.037	106.436

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7622	ppb	0.6218	81.6	-67.3954
Al 308.215	42048.5	ppb	464.792	1.1	82461.7
As 188.980	11.6094	ppb	7.8818	67.9	3.7532
B 249.678	7.8268	ppb	1.3080	16.7	28.9091
Ba 389.178	68.4541	ppb	2.9598	4.3	402.470
Be 313.042	0.3605	ppb	0.0124	3.4	-33.6926
Ca 370.602	2030	ppb	25.88	1.3	3396
Cd 226.502	0.0117	ppb	0.5710	4888.9	34.0618
Co 228.615	2.0774	ppb	0.2957	14.2	-1.9871
Cr 267.716	34.3556	ppb	0.5623	1.6	590.140
Cu 324.754	17.8223	ppb	0.2435	1.4	979.131
Fe 271.441	18525.5	ppb	197.003	1.1	10272.6
K 766.491	573.501	ppb	4.6465	0.8	12126.3
Mg 279.078	668.497	ppb	6.3335	0.9	907.032
Mn 257.610	58.4139	ppb	0.7716	1.3	4889.53
Mo 202.032	21.5552	ppb	0.4996	2.3	40.1530
Na 330.237	463.687	ppb	171.042	36.9	44.9594
Ni 231.604	7.3603	ppb	2.0895	28.4	6.4906
Pb 220.353	13.4135	ppb	9.6544	72.0	5.1345
Sb 206.834	-4.9497	ppb	1.1959	24.2	4.6092
Se 196.026	-11.3888	ppb	19.8566	174.4	0.6561
Si 288.158	4672.22	ppb	50.2292	1.1	22363.0
Sn 189.925	12.5385	ppb	4.9003	39.1	4.1623
Sr 216.596	11.7596	ppb	0.3234	2.8	43.3833
Ti 334.941	368.685	ppb	4.0352	1.1	32681.8
Tl 190.794	-14.3346	ppb	4.1089	28.7	-5.6538
V 292.401	76.5130	ppb	0.3793	0.5	766.622
Zn 206.200	103.765	ppb	2.6998	2.6	57.1796

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Rack 2, Tube 36

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4676u	-2.1215u	-0.1492u
Al 308.215	41765.1	41506.7	42083.7
As 188.980	10.3299	9.0126	3.4669
B 249.678	3.9074	3.6540	4.4577
Ba 389.178	186.659	185.182	191.649
Be 313.042	0.5450	0.5384	0.5328
Ca 370.602	3149	3136	3183
Cd 226.502	-0.0003	-0.4269	-0.2972
Co 228.615	2.5649	3.2188	2.4048
Cr 267.716	42.3887	41.6845	42.5885
Cu 324.754	15.6061	15.6982	15.4192
Fe 271.441	16202.0	16067.8	16388.7
K 766.491	819.928	815.286	829.771
Mg 279.078	953.781	940.750	961.315
Mn 257.610	315.043	312.518	317.257
Mo 202.032	4.7603	3.8132	0.9987

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Label	Replicates Concentration		
Na 330.237	387.658	524.597	444.612
Ni 231.604	13.1321	11.4225	10.8077
Pb 220.353	17.7161	16.4299	22.1712
Sb 206.834	-5.7013u	-2.8177u	-8.4991u
Se 196.026	0.4851	13.8124	6.7850
Si 288.158	4400.03	4373.23	4445.49
Sn 189.925	9.1740	5.9930	9.3063
Sr 216.596	15.9053	17.8387	16.3402
Ti 334.941	527.839	525.523	531.801
Tl 190.794	-14.9335u	14.7431	-6.6437u
V 292.401	68.8312	67.2915	68.9086
Zn 206.200	16.5240	23.2302	22.1810

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9128	ppb	1.0588	116.0	-71.2908
Al 308.215	41785.2	ppb	289.020	0.7	81946.1
As 188.980	7.6031	ppb	3.6421	47.9	2.6910
B 249.678	4.0064	ppb	0.4109	10.3	5.0925
Ba 389.178	187.830	ppb	3.3889	1.8	1152.28
Be 313.042	0.5387	ppb	0.0061	1.1	111.225
Ca 370.602	3156	ppb	24.24	0.8	5290
Cd 226.502	-0.2415	ppb	0.2187	90.6	27.2553
Co 228.615	2.7295	ppb	0.4313	15.8	2.0154
Cr 267.716	42.2206	ppb	0.4749	1.1	722.022
Cu 324.754	15.5745	ppb	0.1422	0.9	910.376
Fe 271.441	16219.5	ppb	161.171	1.0	8996.07
K 766.491	821.662	ppb	7.3966	0.9	17204.5
Mg 279.078	951.949	ppb	10.4038	1.1	1283.55
Mn 257.610	314.939	ppb	2.3715	0.8	26156.8
Mo 202.032	3.1907	ppb	1.9565	61.3	9.1878
Na 330.237	452.289	ppb	68.7917	15.2	44.2772
Ni 231.604	11.7875	ppb	1.2044	10.2	11.4561
Pb 220.353	18.7724	ppb	3.0129	16.0	7.2367
Sb 206.834	-5.6727	ppb	2.8408	50.1	4.3888
Se 196.026	7.0275	ppb	6.6669	94.9	4.1426
Si 288.158	4406.25	ppb	36.5274	0.8	21126.5
Sn 189.925	8.1578	ppb	1.8759	23.0	3.0551
Sr 216.596	16.6947	ppb	1.0143	6.1	57.6989
Ti 334.941	528.388	ppb	3.1744	0.6	46849.2
Tl 190.794	-2.2780	ppb	15.3123	672.2	-2.6059
V 292.401	68.3438	ppb	0.9121	1.3	685.097
Zn 206.200	20.6451	ppb	3.6073	17.5	11.2999

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Rack 2, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8816u	-0.6512u	-0.7180u
Al 308.215	134094	133995	134522
As 188.980	11.5553	12.1532	9.9583
B 249.678	9.0699	10.4502	8.7163
Ba 389.178	286.737	284.585	282.508
Be 313.042	1.1899	1.2034	1.1859
Ca 370.602	5538	5522	5544

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Label	Replicates Concentration		
Cd 226.502	0.5549	0.3398	-0.1208
Co 228.615	7.5749	6.2406	8.2906
Cr 267.716	114.146	114.465	114.184
Cu 324.754	34.4985	34.6952	35.3450
Fe 271.441	49328.0	49007.1	49049.1
K 766.491	2127.18	2131.40	2128.05
Mg 279.078	2138.01	2143.93	2136.89
Mn 257.610	71.0928	70.9224	71.1485
Mo 202.032	6.0867	3.5165	2.2151
Na 330.237	708.625	343.540	573.835
Ni 231.604	32.1902	37.0097	32.6319
Pb 220.353	50.2002	40.9782	50.8011
Sb 206.834	-2.3830	-4.5040u	-9.4700u
Se 196.026	3.7681	-27.7629u	0.5519
Si 288.158	6068.56	6050.39	6076.93
Sn 189.925	17.6213	10.8981	8.6091
Sr 216.596	33.6194	36.4986	35.7130
Ti 334.941	694.935	697.030	697.554
Tl 190.794	13.5183	8.3492u	-20.7337u
V 292.401	192.412	193.422	193.049
Zn 206.200	56.9624	57.4673	60.4543

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7502	ppb	0.1185	15.8	-72.6761
Al 308.215	134204	ppb	280.138	0.2	262732
As 188.980	11.2222	ppb	1.1347	10.1	3.5662
B 249.678	9.4122	ppb	0.9162	9.7	8.3716
Ba 389.178	284.610	ppb	2.1148	0.7	1776.27
Be 313.042	1.1931	ppb	0.0091	0.8	645.974
Ca 370.602	5535	ppb	11.38	0.2	9213
Cd 226.502	0.2579	ppb	0.3452	133.8	87.8883
Co 228.615	7.3687	ppb	1.0405	14.1	20.9208
Cr 267.716	114.265	ppb	0.1744	0.2	1929.77
Cu 324.754	34.8462	ppb	0.4430	1.3	1499.30
Fe 271.441	49128.1	ppb	174.373	0.4	27213.6
K 766.491	2128.87	ppb	2.2277	0.1	44100.9
Mg 279.078	2139.61	ppb	3.7838	0.2	2856.63
Mn 257.610	71.0546	ppb	0.1178	0.2	5968.35
Mo 202.032	3.9395	ppb	1.9702	50.0	10.0448
Na 330.237	542.000	ppb	184.613	34.1	43.5413
Ni 231.604	33.9440	ppb	2.6642	7.8	36.3231
Pb 220.353	47.3265	ppb	5.5060	11.6	16.6239
Sb 206.834	-5.4523	ppb	3.6374	66.7	5.2057
Se 196.026	-7.8143	ppb	17.3507	222.0	1.4571
Si 288.158	6065.29	ppb	13.5651	0.2	28877.8
Sn 189.925	12.3762	ppb	4.6844	37.8	4.1213
Sr 216.596	35.2770	ppb	1.4883	4.2	115.650
Ti 334.941	696.506	ppb	1.3859	0.2	61767.0
Tl 190.794	0.3780	ppb	18.4650	4885.4	-3.4693
V 292.401	192.961	ppb	0.5107	0.3	1954.89
Zn 206.200	58.2947	ppb	1.8872	3.2	32.1083

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

680-167563-d-5-a (Samp) 4/20/2019, 2:08:33 PM Rack 2, Tube 38

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9913u	-1.2407u	-0.2149u
Al 308.215	104168	105273	104609
As 188.980	16.5836	0.4004u	8.6396
B 249.678	4.5514u	5.1613u	3.4848u
Ba 389.178	123.282	125.361	125.635
Be 313.042	0.9519	0.9603	0.9645
Ca 370.602	3730	3767	3739
Cd 226.502	0.2050	0.9050	0.5919
Co 228.615	4.0083	5.6349	6.1678
Cr 267.716	96.0483	97.7059	97.1898
Cu 324.754	44.6516	44.5583	43.9585
Fe 271.441	96773.3	98121.8	97314.1
K 766.491	1091.25	1105.97	1090.44
Mg 279.078	1340.36	1366.57	1359.65
Mn 257.610	61.2830	62.1636	61.6669
Mo 202.032	1.7860	4.8363	3.9749
Na 330.237	-9.3140u	148.520u	530.964u
Ni 231.604	19.0681	19.8465	18.7225
Pb 220.353	52.1407	29.9257	49.1638
Sb 206.834	-9.7120u	4.3562	-4.6904u
Se 196.026	-3.0465u	-4.2881u	-17.0631u
Si 288.158	6340.99	6411.92	6367.45
Sn 189.925	9.0308	10.8998	8.0876
Sr 216.596	22.2634	23.1158	22.3212
Ti 334.941	582.109	587.606	584.018
Tl 190.794	-10.7400u	-0.4688u	-6.8535u
V 292.401	217.428	221.911	219.636
Zn 206.200	594.227	584.570	595.696

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8156	ppb	0.5350	65.6	-83.2443
Al 308.215	104684	ppb	556.097	0.5	204989
As 188.980	8.5412	ppb	8.0921	94.7	2.7241
B 249.678	4.3992	ppb	0.8485	19.3	-75.1870
Ba 389.178	124.759	ppb	1.2866	1.0	791.116
Be 313.042	0.9589	ppb	0.0064	0.7	455.851
Ca 370.602	3745	ppb	18.86	0.5	6140
Cd 226.502	0.5673	ppb	0.3506	61.8	164.747
Co 228.615	5.2703	ppb	1.1249	21.3	10.6385
Cr 267.716	96.9813	ppb	0.8482	0.9	1644.39
Cu 324.754	44.3895	ppb	0.3761	0.8	1796.85
Fe 271.441	97403.1	ppb	678.649	0.7	53936.3
K 766.491	1095.88	ppb	8.7416	0.8	22889.6
Mg 279.078	1355.53	ppb	13.5822	1.0	1813.78
Mn 257.610	61.7045	ppb	0.4415	0.7	5220.12
Mo 202.032	3.5324	ppb	1.5726	44.5	8.7904
Na 330.237	223.390	ppb	277.811	124.4	27.9553
Ni 231.604	19.2123	ppb	0.5757	3.0	19.7942
Pb 220.353	43.7434	ppb	12.0587	27.6	13.7472
Sb 206.834	-3.3487	ppb	7.1294	212.9	6.5248
Se 196.026	-8.1326	ppb	7.7589	95.4	1.5939
Si 288.158	6373.46	ppb	35.8432	0.6	30310.3

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	9.3394	ppb	1.4313	15.3	3.3537
Sr 216.596	22.5668	ppb	0.4763	2.1	84.1782
Ti 334.941	584.578	ppb	2.7909	0.5	51835.7
Tl 190.794	-6.0208	ppb	5.1860	86.1	-7.1646
V 292.401	219.658	ppb	2.2416	1.0	2229.65
Zn 206.200	591.498	ppb	6.0446	1.0	326.475

680-167563-c-6-a (Samp) 4/20/2019, 2:12:45 PM Rack 2, Tube 39

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9426u	-0.0046u	-2.6852u
Al 308.215	70742.1	70482.1	70569.8
As 188.980	29.4386	29.0481	17.4646
B 249.678	16.7340	16.7044	15.6023
Ba 389.178	195.052	193.592	192.268
Be 313.042	1.3370	1.3244	1.3435
Ca 370.602	38384	38189	38267
Cd 226.502	0.9951	0.4210	0.8233
Co 228.615	6.6006	8.1248	8.3269
Cr 267.716	79.7745	78.5726	79.4652
Cu 324.754	623.577	618.591	612.691
Fe 271.441	68612.4	68316.6	68320.2
K 766.491	1614.35	1610.53	1608.81
Mg 279.078	2797.81	2769.51	2781.85
Mn 257.610	374.919	372.926	373.136
Mo 202.032	7.0227	5.6319	3.3338
Na 330.237	205.338u	487.615u	703.134
Ni 231.604	22.2255	22.1949	20.0358
Pb 220.353	102.638	96.9216	88.3757
Sb 206.834	-10.7065u	-0.8174	-2.9676
Se 196.026	-6.1220u	-12.7269u	-16.7939u
Si 288.158	7657.92	7590.27	7572.37
Sn 189.925	9.6227	14.0459	13.7502
Sr 216.596	68.9919	64.6393	66.8497
Ti 334.941	857.645	853.344	856.870
Tl 190.794	-8.0190u	-8.3066u	-9.1963u
V 292.401	153.598	153.906	153.268
Zn 206.200	585.811	585.106	585.345

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.2108	ppb	1.3603	112.3	-90.0951
Al 308.215	70598.0	ppb	132.254	0.2	138311
As 188.980	25.3171	ppb	6.8033	26.9	7.2802
B 249.678	16.3469	ppb	0.6450	3.9	36.0070
Ba 389.178	193.637	ppb	1.3924	0.7	1213.35
Be 313.042	1.3350	ppb	0.0097	0.7	761.552
Ca 370.602	38280	ppb	98.17	0.3	63935
Cd 226.502	0.7465	ppb	0.2946	39.5	121.453
Co 228.615	7.6841	ppb	0.9438	12.3	22.8556
Cr 267.716	79.2708	ppb	0.6241	0.8	1346.39
Cu 324.754	618.286	ppb	5.4495	0.9	19175.5
Fe 271.441	68416.4	ppb	169.769	0.2	37890.4
K 766.491	1611.23	ppb	2.8364	0.2	33492.9

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2783.06	ppb	14.1868	0.5	3726.22
Mn 257.610	373.660	ppb	1.0954	0.3	31071.3
Mo 202.032	5.3295	ppb	1.8630	35.0	12.1707
Na 330.237	465.363	ppb	249.643	53.6	33.2422
Ni 231.604	21.4854	ppb	1.2555	5.8	22.3359
Pb 220.353	95.9783	ppb	7.1776	7.5	34.5795
Sb 206.834	-4.8305	ppb	5.2011	107.7	5.5242
Se 196.026	-11.8809	ppb	5.3860	45.3	0.7986
Si 288.158	7606.85	ppb	45.1232	0.6	36080.2
Sn 189.925	12.4729	ppb	2.4728	19.8	4.1457
Sr 216.596	66.8270	ppb	2.1764	3.3	210.010
Ti 334.941	855.953	ppb	2.2926	0.3	75911.6
Tl 190.794	-8.5073	ppb	0.6138	7.2	-6.4166
V 292.401	153.591	ppb	0.3194	0.2	1556.58
Zn 206.200	585.420	ppb	0.3585	0.1	323.069

680-167563-d-7-a (Samp)

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Rack 2, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.4213u	-0.4378u	-0.6082u
Al 308.215	109865	109800	109941
As 188.980	4.7938	13.7233	7.9892
B 249.678	15.9443	14.7553	15.6425
Ba 389.178	266.655	270.490	268.885
Be 313.042	0.8892	0.8868	0.8937
Ca 370.602	8180	8156	8175
Cd 226.502	-0.2121	-0.3079	0.3977
Co 228.615	6.0104	5.2169	5.4222
Cr 267.716	100.306	100.413	100.562
Cu 324.754	56.5409	56.3168	57.5236
Fe 271.441	21525.3	21443.6	21610.9
K 766.491	2076.54	2077.32	2082.91
Mg 279.078	1905.40	1908.45	1913.22
Mn 257.610	372.756	372.840	373.665
Mo 202.032	2.8700	3.0632	3.5345
Na 330.237	448.093	612.512	258.813u
Ni 231.604	34.0801	28.7320	31.7188
Pb 220.353	47.6185	54.6249	49.3539
Sb 206.834	2.5427	-2.5255u	-7.7801u
Se 196.026	-24.5471u	-0.3951	2.0546
Si 288.158	6353.69	6331.37	6356.44
Sn 189.925	10.2594	6.0308	10.2368
Sr 216.596	47.3299	49.2164	47.0171
Ti 334.941	711.549	708.484	712.657
Tl 190.794	-17.8222u	-6.4445u	-9.0483u
V 292.401	123.350	123.539	123.538
Zn 206.200	85.4476	83.5107	84.4207

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8224	ppb	0.5256	63.9	-69.4941
Al 308.215	109869	ppb	70.2082	0.1	215127
As 188.980	8.8354	ppb	4.5245	51.2	3.0030
B 249.678	15.4474	ppb	0.6181	4.0	78.0252

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	268.677	ppb	1.9260	0.7	1663.90
Be 313.042	0.8899	ppb	0.0035	0.4	399.420
Ca 370.602	8170	ppb	12.49	0.2	13670
Cd 226.502	-0.0407	ppb	0.3827	939.4	40.5197
Co 228.615	5.5498	ppb	0.4118	7.4	14.4847
Cr 267.716	100.427	ppb	0.1289	0.1	1696.49
Cu 324.754	56.7937	ppb	0.6419	1.1	2159.52
Fe 271.441	21526.6	ppb	83.6354	0.4	11934.3
K 766.491	2078.92	ppb	3.4729	0.2	43121.8
Mg 279.078	1909.03	ppb	3.9408	0.2	2549.82
Mn 257.610	373.087	ppb	0.5025	0.1	30987.0
Mo 202.032	3.1559	ppb	0.3418	10.8	9.0582
Na 330.237	439.806	ppb	176.995	40.2	41.3764
Ni 231.604	31.5103	ppb	2.6802	8.5	33.5905
Pb 220.353	50.5324	ppb	3.6488	7.2	18.8587
Sb 206.834	-2.5876	ppb	5.1617	199.5	5.6936
Se 196.026	-7.6292	ppb	14.7024	192.7	1.4067
Si 288.158	6347.17	ppb	13.7494	0.2	30192.9
Sn 189.925	8.8423	ppb	2.4349	27.5	3.2281
Sr 216.596	47.8545	ppb	1.1898	2.5	149.187
Ti 334.941	710.896	ppb	2.1616	0.3	63042.5
Tl 190.794	-11.1050	ppb	5.9612	53.7	-4.9270
V 292.401	123.476	ppb	0.1090	0.1	1246.17
Zn 206.200	84.4597	ppb	0.9691	1.1	46.4948

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.468	503.137	500.558
Al 308.215	10203.5	10091.3	10186.9
As 188.980	501.093	493.186	504.728
B 249.678	532.767	533.741	539.109
Ba 389.178	463.349	456.031	459.114
Be 313.042	553.872	547.835	552.538
Ca 370.602	9944	9852	9930
Cd 226.502	503.573	498.772	503.183
Co 228.615	505.784	500.461	500.621
Cr 267.716	502.057	496.395	500.631
Cu 324.754	499.793	506.888	500.732
Fe 271.441	10236.7	10097.2	10171.6
K 766.491	9991.86	9890.51	9955.48
Mg 279.078	10449.4	10347.5	10442.6
Mn 257.610	496.582	491.813	495.277
Mo 202.032	491.887	482.918	486.906
Na 330.237	11242.1	10466.8	10759.4
Ni 231.604	502.771	498.225	500.878
Pb 220.353	496.026	493.581	488.220
Sb 206.834	472.669	465.503	475.643
Se 196.026	545.775	536.332	556.085
Si 288.158	5246.04	5188.04	5210.22
Sn 189.925	488.155	479.107	489.476
Sr 216.596	488.743	486.717	489.636
Ti 334.941	501.792	496.070	500.881

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	512.504	492.203	497.831
V 292.401	494.816	490.142	494.814
Zn 206.200	1055.25	1042.88	1046.32

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	501.388	ppb	1.5155	0.3	15186.8	100.27753
Al 308.215	10160.5	ppb	60.5775	0.6	20100.4	101.60546
As 188.980	499.669	ppb	5.9017	1.2	134.018	99.93379
B 249.678	535.206	ppb	3.4156	0.6	3647.22	107.04118
Ba 389.178	459.498	ppb	3.6743	0.8	2869.01	91.89955
Be 313.042	551.415	ppb	3.1715	0.6	444514	110.28300Q
Ca 370.602	9909	ppb	49.52	0.5	16595	99.09103
Cd 226.502	501.843	ppb	2.6661	0.5	6461.74	100.36852
Co 228.615	502.289	ppb	3.0281	0.6	1977.24	100.45772
Cr 267.716	499.694	ppb	2.9449	0.6	8373.68	99.93881
Cu 324.754	502.471	ppb	3.8535	0.8	15662.9	100.49421
Fe 271.441	10168.5	ppb	69.8203	0.7	5666.37	101.63443
K 766.491	9945.95	ppb	51.3388	0.5	202455	99.45948
Mg 279.078	10413.2	ppb	56.9632	0.5	13940.4	104.13191
Mn 257.610	494.557	ppb	2.4647	0.5	41077.3	98.91150
Mo 202.032	487.237	ppb	4.4937	0.9	826.100	97.44736
Na 330.237	10822.8	ppb	391.511	3.6	313.126	108.22776
Ni 231.604	500.625	ppb	2.2837	0.5	559.412	100.12492
Pb 220.353	492.609	ppb	3.9926	0.8	186.818	98.52182
Sb 206.834	471.272	ppb	5.2127	1.1	177.100	94.25435
Se 196.026	546.064	ppb	9.8799	1.8	105.749	109.21278
Si 288.158	5214.77	ppb	29.2673	0.6	25004.9	104.29540
Sn 189.925	485.579	ppb	5.6439	1.2	123.717	97.11582
Sr 216.596	488.365	ppb	1.4958	0.3	1426.80	97.67305
Ti 334.941	499.581	ppb	3.0742	0.6	44318.2	99.91621
Tl 190.794	500.846	ppb	10.4808	2.1	118.380	100.16920
V 292.401	493.257	ppb	2.6979	0.5	4968.38	98.65140
Zn 206.200	1048.15	ppb	6.3823	0.6	578.066	104.81493

Cont Calib Blank (CCB) 4/20/2019, 2:25:24 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0884	-0.1024u	-0.7075u
Al 308.215	29.3341	31.6910	25.3822
As 188.980	5.1971	1.5939	-0.8725u
B 249.678	11.6935	11.5057	9.7276
Ba 389.178	0.3525	-0.8384u	-1.8828u
Be 313.042	0.0747	0.0868	0.0757
Ca 370.602	11.65	3.048	-4.101u
Cd 226.502	-0.2689u	0.1250	0.6283
Co 228.615	0.4148	0.5764	0.7548
Cr 267.716	0.0280	0.0565	0.0843
Cu 324.754	1.0206	-0.0126u	1.6960
Fe 271.441	30.1948	26.4248	8.0777
K 766.491	4.5226	3.6572	4.5877
Mg 279.078	14.1950	9.8689	12.0927
Mn 257.610	0.4237	0.2283	0.4002
Mo 202.032	1.8439	0.6915	1.9538

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	299.120	345.943	202.924
Ni 231.604	-0.1028u	0.2773	0.1648
Pb 220.353	2.1760	-2.2487u	-3.5549u
Sb 206.834	16.5377	-9.5728u	10.7899
Se 196.026	-1.6109u	0.5980	-3.8184u
Si 288.158	21.0603	19.3513	20.4137
Sn 189.925	-11.5642u	-6.8479u	-1.1404u
Sr 216.596	1.4178	-0.3746u	0.6358
Ti 334.941	0.3860	0.1922	0.3222
Tl 190.794	-23.2618u	-6.7858u	-7.8817u
V 292.401	-0.4256u	0.1809	0.2215
Zn 206.200	0.6707	0.4272	-1.6179u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0928	ppb	0.9137	984.5	-37.9099	0.09281
Al 308.215	28.8024	ppb	3.1878	11.1	263.479	28.80243
As 188.980	1.9728	ppb	3.0525	154.7	1.2329	1.97284
B 249.678	10.9756	ppb	1.0849	9.9	69.3500	10.97559
Ba 389.178	-0.7896	ppb	1.1185	141.7	-41.5841	-0.78959
Be 313.042	0.0791	ppb	0.0067	8.5	-263.119	0.07907
Ca 370.602	3.531	ppb	7.885	223.3	30.97	3.53067
Cd 226.502	0.1615	ppb	0.4497	278.5	6.0587	0.16148
Co 228.615	0.5820	ppb	0.1701	29.2	-10.0684	0.58202
Cr 267.716	0.0563	ppb	0.0281	50.0	14.4999	0.05627
Cu 324.754	0.9013	ppb	0.8605	95.5	463.404	0.90133
Fe 271.441	21.5658	ppb	11.8321	54.9	29.1862	21.56578
K 766.491	4.2558	ppb	0.5194	12.2	388.319	4.25584
Mg 279.078	12.0522	ppb	2.1633	17.9	37.8029	12.05224
Mn 257.610	0.3507	ppb	0.1067	30.4	55.6811	0.35069
Mo 202.032	1.4964	ppb	0.6992	46.7	6.5292	1.49642
Na 330.237	282.662	ppb	72.9158	25.8	45.2085	282.66199
Ni 231.604	0.1131	ppb	0.1953	172.7	-1.6451	0.11308
Pb 220.353	-1.2092	ppb	3.0035	248.4	0.3972	-1.20919
Sb 206.834	5.9183	ppb	13.7201	231.8	8.0734	5.91826
Se 196.026	-1.6104	ppb	2.2082	137.1	2.4182	-1.61045
Si 288.158	20.2751	ppb	0.8629	4.3	630.375	20.27512
Sn 189.925	-6.5175	ppb	5.2197	80.1	-0.6538	-6.51748
Sr 216.596	0.5597	ppb	0.8986	160.6	8.7943	0.55968
Ti 334.941	0.3002	ppb	0.0988	32.9	1.2836	0.30016
Tl 190.794	-12.6431	ppb	9.2124	72.9	-4.4476	-12.64307Z
V 292.401	-0.0077	ppb	0.3625	4690.6	-12.9182	-0.00773
Zn 206.200	-0.1733	ppb	1.2570	725.2	-0.2010	-0.17332

680-167563-c-8-a (Samp)

4/20/2019, 2:29:35 PM

Rack 2, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5520u	-0.9309u	-0.4980u
Al 308.215	103647	103373	103508
As 188.980	16.0550	16.5431	29.2365
B 249.678	18.3455u	17.2504u	16.1612u
Ba 389.178	131.398	130.349	128.035
Be 313.042	0.8262	0.8162	0.8120
Ca 370.602	4271	4253	4249

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	-0.2060	0.7648	0.3092
Co 228.615	5.8565	6.3178	5.7654
Cr 267.716	116.772	115.447	116.540
Cu 324.754	28.6601	28.5294	29.7037
Fe 271.441	127416	127126	127143
K 766.491	1644.83	1638.22	1640.00
Mg 279.078	1294.53	1291.43	1293.28
Mn 257.610	73.4055	73.3919	73.1855
Mo 202.032	7.9747	7.1318	7.5308
Na 330.237	631.553	496.028	305.009u
Ni 231.604	20.7602	23.1761	16.8160
Pb 220.353	49.8699	49.6507	35.6547
Sb 206.834	0.6695	-2.6017	0.0238
Se 196.026	-4.5581u	13.8177	-1.5298
Si 288.158	5731.54	5703.01	5718.72
Sn 189.925	21.5971	13.3672	28.2949
Sr 216.596	27.1859	29.2216	26.7525
Ti 334.941	643.584	641.803	642.016
Tl 190.794	-14.4955u	2.7942u	-12.3611u
V 292.401	353.466	352.886	353.023
Zn 206.200	39.4225	38.9736	34.6716

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6603	ppb	0.2359	35.7	-83.8532
Al 308.215	103509	ppb	137.143	0.1	202697
As 188.980	20.6115	ppb	7.4734	36.3	5.8665
B 249.678	17.2523	ppb	1.0921	6.3	-17.8450
Ba 389.178	129.927	ppb	1.7205	1.3	836.483
Be 313.042	0.8181	ppb	0.0073	0.9	344.992
Ca 370.602	4258	ppb	11.58	0.3	6949
Cd 226.502	0.2893	ppb	0.4857	167.9	207.152
Co 228.615	5.9799	ppb	0.2961	5.0	13.1628
Cr 267.716	116.253	ppb	0.7076	0.6	1969.08
Cu 324.754	28.9644	ppb	0.6436	2.2	1334.25
Fe 271.441	127228	ppb	163.126	0.1	70446.9
K 766.491	1641.02	ppb	3.4187	0.2	34137.0
Mg 279.078	1293.08	ppb	1.5627	0.1	1730.41
Mn 257.610	73.3276	ppb	0.1233	0.2	6204.01
Mo 202.032	7.5458	ppb	0.4216	5.6	15.1909
Na 330.237	477.530	ppb	164.056	34.4	39.5803
Ni 231.604	20.2508	ppb	3.2105	15.9	20.9580
Pb 220.353	45.0584	ppb	8.1446	18.1	13.2319
Sb 206.834	-0.6361	ppb	1.7326	272.4	7.9391
Se 196.026	2.5766	ppb	9.8521	382.4	3.7367
Si 288.158	5717.76	ppb	14.2928	0.2	27252.8
Sn 189.925	21.0864	ppb	7.4770	35.5	6.3226
Sr 216.596	27.7200	ppb	1.3184	4.8	102.642
Ti 334.941	642.468	ppb	0.9729	0.2	56970.7
Tl 190.794	-8.0208	ppb	9.4266	117.5	-8.9518
V 292.401	353.125	ppb	0.3033	0.1	3590.08
Zn 206.200	37.6893	ppb	2.6230	7.0	20.9066

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5427	-0.2339u	-0.4514u
Al 308.215	59813.1	59474.0	59561.4
As 188.980	15.0378	5.9726	5.8321
B 249.678	8.4776u	8.6837u	8.7835u
Ba 389.178	221.165	219.048	221.457
Be 313.042	1.4281	1.4227	1.4228
Ca 370.602	44704	44839	45474
Cd 226.502	0.6629	0.9939	0.7089
Co 228.615	6.5488	4.9569	4.7167
Cr 267.716	66.9802	66.5242	66.1081
Cu 324.754	34.2093	34.3103	34.8424
Fe 271.441	72174.9	71419.8	71547.6
K 766.491	1638.36	1633.97	1645.73
Mg 279.078	4880.09	4879.35	4932.94
Mn 257.610	919.137	921.509	932.879
Mo 202.032	3.8825	1.6869	4.5133
Na 330.237	740.769	388.278u	536.561
Ni 231.604	15.0935	16.5719	12.2750
Pb 220.353	69.0204	83.8988	84.7884
Sb 206.834	-6.4957u	-8.1458u	-4.2537u
Se 196.026	6.3523	2.6863	24.2432
Si 288.158	6015.83	5974.83	5985.41
Sn 189.925	20.5808	22.3953	15.6977
Sr 216.596	150.637	149.013	156.699
Ti 334.941	760.301	760.723	758.273
Tl 190.794	-14.5999u	-20.8746u	-2.4428u
V 292.401	169.442	168.245	166.638
Zn 206.200	103.891	100.913	107.961

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0476	ppb	0.5226	1098.8	-54.4666
Al 308.215	59616.1	ppb	176.032	0.3	116830
As 188.980	8.9475	ppb	5.2748	59.0	2.9023
B 249.678	8.6483	ppb	0.1560	1.8	-19.8040
Ba 389.178	220.557	ppb	1.3147	0.6	1386.22
Be 313.042	1.4245	ppb	0.0031	0.2	834.748
Ca 370.602	45006	ppb	411.5	0.9	75181
Cd 226.502	0.7885	ppb	0.1793	22.7	126.287
Co 228.615	5.4075	ppb	0.9957	18.4	13.0757
Cr 267.716	66.5375	ppb	0.4362	0.7	1134.35
Cu 324.754	34.4540	ppb	0.3401	1.0	1491.58
Fe 271.441	71714.1	ppb	404.149	0.6	39715.9
K 766.491	1639.35	ppb	5.9442	0.4	34097.2
Mg 279.078	4897.46	ppb	30.7247	0.6	6550.31
Mn 257.610	924.508	ppb	7.3457	0.8	76743.1
Mo 202.032	3.3609	ppb	1.4836	44.1	8.8102
Na 330.237	555.203	ppb	176.983	31.9	41.9473
Ni 231.604	14.6468	ppb	2.1830	14.9	14.6640
Pb 220.353	79.2359	ppb	8.8580	11.2	28.2099
Sb 206.834	-6.2984	ppb	1.9535	31.0	4.9761
Se 196.026	11.0940	ppb	11.5342	104.0	5.1941
Si 288.158	5992.02	ppb	21.2884	0.4	28538.5

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	19.5579	ppb	3.4640	17.7	5.9363
Sr 216.596	152.116	ppb	4.0509	2.7	459.397
Ti 334.941	759.766	ppb	1.3098	0.2	67384.6
Tl 190.794	-12.6391	ppb	9.3711	74.1	-7.4204
V 292.401	168.108	ppb	1.4069	0.8	1704.69
Zn 206.200	104.255	ppb	3.5380	3.4	57.5479

680-167563-c-10-a (Samp) 4/20/2019, 2:37:59 PM Rack 2, Tube 43

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	-1.2678u	-0.6498u	-1.1550u
Al 308.215	89792.7	89938.9	90086.0
As 188.980	15.9340	15.2151	23.1117
B 249.678	17.3783	16.7664	16.6163
Ba 389.178	137.863	138.045	140.898
Be 313.042	0.6700	0.6321	0.6546
Ca 370.602	3208	3210	3221
Cd 226.502	-0.0346	0.5703	0.4352
Co 228.615	3.4729	5.4768	2.3354
Cr 267.716	92.0852	91.7684	91.8659
Cu 324.754	31.7901	33.0320	33.2388
Fe 271.441	63770.0	64270.4	64642.1
K 766.491	773.799	774.803	775.929
Mg 279.078	1794.60	1810.79	1804.31
Mn 257.610	83.2939	84.0345	84.0476
Mo 202.032	1.4157	4.0490	4.8603
Na 330.237	783.491	669.252	573.920
Ni 231.604	14.8289	17.3857	14.7154
Pb 220.353	42.0939	48.7634	39.9316
Sb 206.834	-14.5410u	10.7585	0.2900
Se 196.026	6.1349	16.4087	20.8142
Si 288.158	6239.41	6246.43	6276.92
Sn 189.925	16.9621	26.3350	7.6477
Sr 216.596	25.0568	22.2201	23.3196
Ti 334.941	555.400	556.918	558.498
Tl 190.794	12.5867	4.4586u	16.4787
V 292.401	240.950	241.515	244.424
Zn 206.200	27.7817	20.7419	25.6244

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.0242	ppb	0.3291	32.1	-83.5198
Al 308.215	89939.2	ppb	146.668	0.2	176147
As 188.980	18.0869	ppb	4.3664	24.1	5.3610
B 249.678	16.9203	ppb	0.4036	2.4	44.4920
Ba 389.178	138.935	ppb	1.7019	1.2	866.489
Be 313.042	0.6522	ppb	0.0191	2.9	208.569
Ca 370.602	3213	ppb	7.020	0.2	5305
Cd 226.502	0.3236	ppb	0.3175	98.1	110.002
Co 228.615	3.7617	ppb	1.5905	42.3	5.2323
Cr 267.716	91.9065	ppb	0.1623	0.2	1556.69
Cu 324.754	32.6870	ppb	0.7836	2.4	1436.28
Fe 271.441	64227.5	ppb	437.609	0.7	35572.0
K 766.491	774.844	ppb	1.0656	0.1	16207.2

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1803.23	ppb	8.1487	0.5	2415.09
Mn 257.610	83.7920	ppb	0.4314	0.5	7030.53
Mo 202.032	3.4417	ppb	1.8008	52.3	9.0218
Na 330.237	675.555	ppb	104.928	15.5	48.2028
Ni 231.604	15.6433	ppb	1.5100	9.7	15.7889
Pb 220.353	43.5963	ppb	4.6036	10.6	14.8612
Sb 206.834	-1.1642	ppb	12.7123	1092.0	6.8906
Se 196.026	14.4526	ppb	7.5326	52.1	5.7172
Si 288.158	6254.25	ppb	19.9374	0.3	29753.1
Sn 189.925	16.9816	ppb	9.3436	55.0	5.2852
Sr 216.596	23.5322	ppb	1.4302	6.1	83.1688
Ti 334.941	556.938	ppb	1.5489	0.3	49384.8
Tl 190.794	11.1746	ppb	6.1332	54.9	-1.5404
V 292.401	242.296	ppb	1.8641	0.8	2458.16
Zn 206.200	24.7160	ppb	3.6067	14.6	13.6227

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Rack 2, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5278u	-0.8717u	-1.7823u
Al 308.215	32245.2	31849.7	32074.7
As 188.980	4.6408	7.7570	11.3917
B 249.678	18.5194	17.6259	19.6185
Ba 389.178	176.680	184.253	180.883
Be 313.042	0.4324	0.4450	0.4507
Ca 370.602	5517	5446	5488
Cd 226.502	-0.0874	0.3787	-0.3174
Co 228.615	1.3950	1.6298	2.7521
Cr 267.716	40.7066	39.0030	40.4650
Cu 324.754	25.7314	24.1831	25.7434
Fe 271.441	13057.1	12892.6	12919.4
K 766.491	928.602	916.390	922.068
Mg 279.078	1289.99	1277.60	1285.66
Mn 257.610	265.553	262.155	263.330
Mo 202.032	2.6292	4.3551	3.3509
Na 330.237	700.917	556.891	50.8915u
Ni 231.604	7.7702	10.3859	6.3580
Pb 220.353	22.3381	14.3551	16.0779
Sb 206.834	-0.1233	-4.5639u	5.9422
Se 196.026	2.6113	2.7785	11.0323
Si 288.158	4277.08	4218.50	4253.98
Sn 189.925	13.0110	8.0202	10.4456
Sr 216.596	46.7378	47.6508	49.0862
Ti 334.941	509.614	501.401	508.938
Tl 190.794	-2.0632u	-3.6614u	-24.6211u
V 292.401	52.1369	50.6020	51.4142
Zn 206.200	25.7966	28.7110	28.9564

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.0606	ppb	0.6482	61.1	-75.3953
Al 308.215	32056.5	ppb	198.414	0.6	62915.2
As 188.980	7.9298	ppb	3.3788	42.6	2.7869
B 249.678	18.5879	ppb	0.9980	5.4	108.238

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	180.605	ppb	3.7945	2.1	1105.82
Be 313.042	0.4427	ppb	0.0094	2.1	33.3160
Ca 370.602	5484	ppb	35.96	0.7	9186
Cd 226.502	-0.0087	ppb	0.3546	4069.7	24.8575
Co 228.615	1.9256	ppb	0.7253	37.7	-1.2561
Cr 267.716	40.0582	ppb	0.9218	2.3	685.484
Cu 324.754	25.2193	ppb	0.8974	3.6	1202.04
Fe 271.441	12956.4	ppb	88.2760	0.7	7189.67
K 766.491	922.353	ppb	6.1112	0.7	19289.0
Mg 279.078	1284.42	ppb	6.2851	0.5	1730.54
Mn 257.610	263.680	ppb	1.7255	0.7	21906.3
Mo 202.032	3.4451	ppb	0.8668	25.2	9.6581
Na 330.237	436.233	ppb	341.397	78.3	44.0708
Ni 231.604	8.1714	ppb	2.0437	25.0	7.3981
Pb 220.353	17.5904	ppb	4.2009	23.9	6.9290
Sb 206.834	0.4183	ppb	5.2740	1260.7	6.4584
Se 196.026	5.4740	ppb	4.8143	87.9	3.8315
Si 288.158	4249.85	ppb	29.5109	0.7	20395.5
Sn 189.925	10.4922	ppb	2.4957	23.8	3.6451
Sr 216.596	47.8249	ppb	1.1839	2.5	148.207
Ti 334.941	506.651	ppb	4.5588	0.9	44921.7
Tl 190.794	-10.1152	ppb	12.5879	124.4	-4.3521
V 292.401	51.3844	ppb	0.7679	1.5	512.159
Zn 206.200	27.8213	ppb	1.7578	6.3	15.2540

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Rack 2, Tube 45

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4361u	0.5848u	0.4907u
Al 308.215	121647	122127	121666
As 188.980	32.8087	25.9182	32.7743
B 249.678	49.3070	48.0402	49.7511
Ba 389.178	140.214	138.706	137.736
Be 313.042	0.9247	0.9516	0.9352
Ca 370.602	3151	3153	3160
Cd 226.502	1.0009	0.6855	1.0186
Co 228.615	4.7532	6.4667	6.7254
Cr 267.716	122.086	121.227	121.104
Cu 324.754	57.8880	57.5539	56.4801
Fe 271.441	135839	135603	136221
K 766.491	1386.85	1391.72	1390.01
Mg 279.078	1946.61	1955.21	1943.96
Mn 257.610	90.8895	90.9330	90.4772
Mo 202.032	7.8459	6.0027	7.2302
Na 330.237	582.276	719.561	522.010
Ni 231.604	19.9822	21.8556	21.2927
Pb 220.353	53.6413	56.1290	58.7360
Sb 206.834	0.9345	3.1142	-5.8972
Se 196.026	-18.0462u	-9.4495u	-5.4738u
Si 288.158	6394.17	6419.88	6396.61
Sn 189.925	15.5114	21.1273	16.0877
Sr 216.596	30.9851	30.0211	30.7592
Ti 334.941	660.544	665.268	659.951

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-13.5197u	-5.1711u	-1.2639u
V 292.401	319.697	320.549	319.358
Zn 206.200	34.8704	38.8811	38.4848

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2131	ppb	0.5642	264.7	-58.9209
Al 308.215	121813	ppb	272.093	0.2	238501
As 188.980	30.5004	ppb	3.9684	13.0	8.4833
B 249.678	49.0327	ppb	0.8878	1.8	190.639
Ba 389.178	138.886	ppb	1.2486	0.9	897.302
Be 313.042	0.9371	ppb	0.0136	1.4	440.695
Ca 370.602	3154	ppb	4.442	0.1	5090
Cd 226.502	0.9017	ppb	0.1874	20.8	229.315
Co 228.615	5.9818	ppb	1.0718	17.9	13.1112
Cr 267.716	121.472	ppb	0.5347	0.4	2057.28
Cu 324.754	57.3074	ppb	0.7356	1.3	2194.55
Fe 271.441	135887	ppb	312.046	0.2	75240.0
K 766.491	1389.52	ppb	2.4742	0.2	28991.8
Mg 279.078	1948.59	ppb	5.8841	0.3	2603.35
Mn 257.610	90.7666	ppb	0.2515	0.3	7658.19
Mo 202.032	7.0262	ppb	0.9384	13.4	14.2162
Na 330.237	607.949	ppb	101.247	16.7	42.6062
Ni 231.604	21.0435	ppb	0.9612	4.6	21.8502
Pb 220.353	56.1688	ppb	2.5476	4.5	17.0835
Sb 206.834	-0.6162	ppb	4.7016	763.0	8.0517
Se 196.026	-10.9898	ppb	6.4262	58.5	1.2173
Si 288.158	6403.55	ppb	14.1962	0.2	30455.3
Sn 189.925	17.5755	ppb	3.0894	17.6	5.4353
Sr 216.596	30.5884	ppb	0.5042	1.6	112.036
Ti 334.941	661.921	ppb	2.9137	0.4	58698.4
Tl 190.794	-6.6516	ppb	6.2606	94.1	-9.0278
V 292.401	319.868	ppb	0.6137	0.2	3251.92
Zn 206.200	37.4121	ppb	2.2101	5.9	20.7701

480-151917-a-53-a (Samp)

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Rack 2, Tube 46

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5457u	-0.9071u	-0.6279u
Al 308.215	41110.6	41125.3	41190.9
As 188.980	6.8487	-0.2620u	10.7430
B 249.678	31.9315	33.3410	31.7654
Ba 389.178	426.867	428.423	423.999
Be 313.042	1.8251	1.8181	1.8479
Ca 370.602	340559	340438	340404
Cd 226.502	1.0827	1.2942	0.7247
Co 228.615	38.0340	38.4169	37.3626
Cr 267.716	66.5747	66.2557	67.5470
Cu 324.754	84.0619	82.9319	84.2912
Fe 271.441	95990.3	95769.9	95647.2
K 766.491	6022.75	6033.49	6023.49
Mg 279.078	72861.4	72937.2	72845.6
Mn 257.610	3748.03	3748.93	3749.68
Mo 202.032	0.9911	-0.6087u	1.3451

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	1355.95	650.172	1203.34
Ni 231.604	73.6894	73.1189	67.2313
Pb 220.353	25.7236	36.1757	23.8549
Sb 206.834	-10.8021u	-6.3187u	-4.9004u
Se 196.026	-14.1084u	22.6052	-9.4298u
Si 288.158	4397.54	4384.32	4364.15
Sn 189.925	11.4368	6.4095	16.9531
Sr 216.596	484.385	486.107	486.168
Ti 334.941	1206.98	1210.67	1207.64
Tl 190.794	-10.4293u	-1.9556u	6.7158u
V 292.401	122.088	121.904	123.187
Zn 206.200	183.517	183.225	177.942

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6936	ppb	0.1894	27.3	-75.3827
Al 308.215	41142.3	ppb	42.7242	0.1	80692.3
As 188.980	5.7766	ppb	5.5803	96.6	1.9930
B 249.678	32.3459	ppb	0.8657	2.7	118.077
Ba 389.178	426.430	ppb	2.2440	0.5	2765.56
Be 313.042	1.8304	ppb	0.0156	0.9	1203.76
Ca 370.602	340467	ppb	81.65	0.0	569174
Cd 226.502	1.0339	ppb	0.2879	27.8	165.460
Co 228.615	37.9378	ppb	0.5337	1.4	144.804
Cr 267.716	66.7924	ppb	0.6726	1.0	1145.15
Cu 324.754	83.7617	ppb	0.7277	0.9	2989.62
Fe 271.441	95802.5	ppb	173.861	0.2	53051.0
K 766.491	6026.58	ppb	5.9957	0.1	124348
Mg 279.078	72881.4	ppb	48.9571	0.1	97440.7
Mn 257.610	3748.88	ppb	0.8304	0.0	311151
Mo 202.032	0.5758	ppb	1.0410	180.8	3.8395
Na 330.237	1069.82	ppb	371.349	34.7	50.0859
Ni 231.604	71.3465	ppb	3.5753	5.0	78.2405
Pb 220.353	28.5847	ppb	6.6401	23.2	8.3564
Sb 206.834	-7.3404	ppb	3.0807	42.0	5.0200
Se 196.026	-0.3110	ppb	19.9834	6425.3	3.4081
Si 288.158	4382.00	ppb	16.8145	0.4	21045.0
Sn 189.925	11.5998	ppb	5.2737	45.5	3.9251
Sr 216.596	485.554	ppb	1.0120	0.2	1435.27
Ti 334.941	1208.43	ppb	1.9679	0.2	107364
Tl 190.794	-1.8897	ppb	8.5727	453.7	-5.3085
V 292.401	122.393	ppb	0.6939	0.6	1242.98
Zn 206.200	181.561	ppb	3.1380	1.7	100.262

480-151917-a-72-a (Samp) 4/20/2019, 2:54:49 PM Rack 2, Tube 47
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.4100u	-0.2464u	-1.2511u
Al 308.215	89615.8	88431.1	89463.6
As 188.980	54.4662	60.5237	57.8422
B 249.678	15.5524u	15.8066u	15.5523u
Ba 389.178	560.846	553.296	554.289
Be 313.042	3.5521	3.5269	3.5502
Ca 370.602	21872	21600	21828

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	2.3688	2.2151	3.1622
Co 228.615	53.0302	53.1600	52.1531
Cr 267.716	91.5268	90.3463	90.7685
Cu 324.754	204.553	199.529	204.857
Fe 271.441	169553	168054	169662
K 766.491	5188.46	5133.64	5187.36
Mg 279.078	29930.5	29544.5	29839.7
Mn 257.610	12198.9	12055.9	12172.0
Mo 202.032	5.9231	5.2631	5.9225
Na 330.237	589.305u	647.145u	1405.22
Ni 231.604	114.455	110.862	108.549
Pb 220.353	107.018	100.469	106.687
Sb 206.834	-5.9422	-8.5737u	-4.5357
Se 196.026	5.2225	13.2610	14.0326
Si 288.158	4415.54	4357.58	4417.22
Sn 189.925	11.3973	11.4181	8.9187
Sr 216.596	54.8611	55.2340	59.5436
Ti 334.941	1236.98	1224.92	1233.05
Tl 190.794	9.9197u	28.3653	-12.5413u
V 292.401	195.725	192.213	194.835
Zn 206.200	351.981	348.829	349.703

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.9691	ppb	0.6310	65.1	-79.5534
Al 308.215	89170.1	ppb	644.561	0.7	174645
As 188.980	57.6107	ppb	3.0354	5.3	15.6375
B 249.678	15.6371	ppb	0.1468	0.9	-71.3914
Ba 389.178	556.144	ppb	4.1023	0.7	3565.10
Be 313.042	3.5431	ppb	0.0140	0.4	2539.22
Ca 370.602	21767	ppb	146.0	0.7	36344
Cd 226.502	2.5820	ppb	0.5083	19.7	299.862
Co 228.615	52.7811	ppb	0.5477	1.0	202.029
Cr 267.716	90.8805	ppb	0.5982	0.7	1566.86
Cu 324.754	202.980	ppb	2.9925	1.5	6613.58
Fe 271.441	169090	ppb	898.397	0.5	93620.3
K 766.491	5169.82	ppb	31.3375	0.6	106708
Mg 279.078	29771.6	ppb	201.815	0.7	39695.1
Mn 257.610	12142.3	ppb	75.9722	0.6	1006824
Mo 202.032	5.7029	ppb	0.3809	6.7	11.6217
Na 330.237	880.557	ppb	455.291	51.7	40.0520
Ni 231.604	111.289	ppb	2.9761	2.7	123.045
Pb 220.353	104.725	ppb	3.6891	3.5	34.9738
Sb 206.834	-6.3505	ppb	2.0497	32.3	6.5335
Se 196.026	10.8387	ppb	4.8791	45.0	6.6018
Si 288.158	4396.78	ppb	33.9564	0.8	21115.0
Sn 189.925	10.5781	ppb	1.4370	13.6	3.6668
Sr 216.596	56.5462	ppb	2.6025	4.6	191.208
Ti 334.941	1231.65	ppb	6.1507	0.5	109310
Tl 190.794	8.5812	ppb	20.4861	238.7	-4.2743
V 292.401	194.258	ppb	1.8255	0.9	1978.09
Zn 206.200	350.171	ppb	1.6271	0.5	193.457

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480-151917-a-79-a (Samp) 4/20/2019, 2:59:02 PM Rack 2, Tube 48**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.9966u	0.4399	-1.1027u
Al 308.215	72208.0	72020.7	72358.9
As 188.980	209.464	214.353	210.020
B 249.678	33.9978	34.6042	34.5900
Ba 389.178	638.118	638.238	642.366
Be 313.042	3.0188	3.0332	3.0422
Ca 370.602	28167	28062	28233
Cd 226.502	4.6827	4.7576	3.9006
Co 228.615	28.7006	29.2940	30.2115
Cr 267.716	88.0368	87.5650	87.2513
Cu 324.754	211.176	213.027	213.929
Fe 271.441	70287.3	70238.8	70589.6
K 766.491	10630.2	10587.5	10616.8
Mg 279.078	20060.9	20034.2	20109.2
Mn 257.610	1444.25	1440.52	1447.18
Mo 202.032	2.7027	2.0407	2.6187
Na 330.237	734.820	626.661u	240.271u
Ni 231.604	76.3270	79.5655	79.4424
Pb 220.353	1092.24	1122.73	1136.56
Sb 206.834	1.4535	6.0427	7.6952
Se 196.026	-8.5195u	-18.8855u	17.4738
Si 288.158	4987.39	4989.85	5040.06
Sn 189.925	21.8037	12.5233	4.7864
Sr 216.596	111.314	111.585	111.460
Ti 334.941	760.869	758.883	764.061
Tl 190.794	-4.1808u	-9.4357u	-19.0309u
V 292.401	99.1140	98.0694	99.6650
Zn 206.200	807.952	795.004	811.361

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5531	ppb	0.8616	155.8	-68.6538
Al 308.215	72195.9	ppb	169.444	0.2	141436
As 188.980	211.279	ppb	2.6768	1.3	56.9293
B 249.678	34.3973	ppb	0.3461	1.0	157.706
Ba 389.178	639.574	ppb	2.4188	0.4	4036.71
Be 313.042	3.0314	ppb	0.0118	0.4	2126.74
Ca 370.602	28154	ppb	86.09	0.3	47016
Cd 226.502	4.4470	ppb	0.4746	10.7	171.924
Co 228.615	29.4020	ppb	0.7612	2.6	108.217
Cr 267.716	87.6177	ppb	0.3954	0.5	1487.82
Cu 324.754	212.711	ppb	1.4037	0.7	6891.19
Fe 271.441	70371.9	ppb	190.102	0.3	38973.4
K 766.491	10611.5	ppb	21.8107	0.2	218744
Mg 279.078	20068.1	ppb	38.0534	0.2	26830.5
Mn 257.610	1443.98	ppb	3.3393	0.2	119861
Mo 202.032	2.4540	ppb	0.3604	14.7	7.3058
Na 330.237	533.918	ppb	259.992	48.7	33.2936
Ni 231.604	78.4450	ppb	1.8353	2.3	86.2176
Pb 220.353	1117.18	ppb	22.6732	2.0	421.285
Sb 206.834	5.0638	ppb	3.2339	63.9	9.0401
Se 196.026	-3.3104	ppb	18.7310	565.8	2.5226
Si 288.158	5005.77	ppb	29.7269	0.6	23935.1

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	13.0378	ppb	8.5203	65.4	4.2885
Sr 216.596	111.453	ppb	0.1355	0.1	340.287
Ti 334.941	761.271	ppb	2.6123	0.3	67558.5
Tl 190.794	-10.8825	ppb	7.5300	69.2	-6.8439
V 292.401	98.9495	ppb	0.8105	0.8	1000.08
Zn 206.200	804.772	ppb	8.6299	1.1	444.119

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.3103u	0.7724	-0.0738u
Al 308.215	96855.7	96462.5	96559.9
As 188.980	42.0503	39.5061	30.3560
B 249.678	34.5692	32.9933	33.8742
Ba 389.178	851.148	843.367	845.228
Be 313.042	3.9940	3.9926	3.9598
Ca 370.602	20756	20640	20676
Cd 226.502	1.9461	2.1900	2.0378
Co 228.615	37.0812	35.0231	35.8844
Cr 267.716	111.357	111.291	110.841
Cu 324.754	86.1220	85.3475	87.3947
Fe 271.441	82438.2	82081.6	82338.8
K 766.491	7805.78	7753.28	7797.96
Mg 279.078	23904.5	23796.0	23860.4
Mn 257.610	874.497	870.551	871.432
Mo 202.032	3.2126	1.7745	3.8093
Na 330.237	1073.01	718.110u	463.157u
Ni 231.604	88.6687	88.6530	91.0063
Pb 220.353	131.945	134.014	120.228
Sb 206.834	4.5630	-13.3662u	-0.3396
Se 196.026	8.3952	1.1297	-8.4414u
Si 288.158	6865.70	6849.52	6873.84
Sn 189.925	16.9127	6.3219	11.9666
Sr 216.596	104.298	103.274	104.756
Ti 334.941	682.086	675.024	678.257
Tl 190.794	7.3883u	0.3692u	-7.3508u
V 292.401	123.753	121.461	121.796
Zn 206.200	972.113	964.279	977.348

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2039	ppb	1.0474	513.8	-61.0982
Al 308.215	96626.0	ppb	204.801	0.2	189225
As 188.980	37.3041	ppb	6.1502	16.5	10.4428
B 249.678	33.8123	ppb	0.7897	2.3	141.395
Ba 389.178	846.581	ppb	4.0629	0.5	5347.52
Be 313.042	3.9821	ppb	0.0193	0.5	2894.19
Ca 370.602	20691	ppb	59.66	0.3	34508
Cd 226.502	2.0580	ppb	0.1232	6.0	160.725
Co 228.615	35.9962	ppb	1.0336	2.9	133.454
Cr 267.716	111.163	ppb	0.2805	0.3	1881.81
Cu 324.754	86.2881	ppb	1.0336	1.2	3063.86
Fe 271.441	82286.2	ppb	184.029	0.2	45568.9
K 766.491	7785.67	ppb	28.3246	0.4	160560

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	23853.6	ppb	54.5764	0.2	31894.0
Mn 257.610	872.160	ppb	2.0713	0.2	72479.6
Mo 202.032	2.9322	ppb	1.0460	35.7	7.9681
Na 330.237	751.425	ppb	306.288	40.8	37.5401
Ni 231.604	89.4427	ppb	1.3542	1.5	98.5539
Pb 220.353	128.729	ppb	7.4347	5.8	46.4796
Sb 206.834	-3.0476	ppb	9.2663	304.1	6.4787
Se 196.026	0.3612	ppb	8.4446	2338.2	3.2103
Si 288.158	6863.02	ppb	12.3785	0.2	32598.9
Sn 189.925	11.7338	ppb	5.2993	45.2	3.9589
Sr 216.596	104.109	ppb	0.7591	0.7	320.187
Ti 334.941	678.456	ppb	3.5353	0.5	60222.7
Tl 190.794	0.1356	ppb	7.3723	5438.0	-4.8611
V 292.401	122.337	ppb	1.2381	1.0	1238.06
Zn 206.200	971.246	ppb	6.5774	0.7	536.002

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Rack 2, Tube 50

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3778u	0.9064	0.6167u
Al 308.215	141198	142737	142477
As 188.980	20.0508	24.6647	20.6260
B 249.678	61.7193	63.8027	62.9523
Ba 389.178	1259.42	1273.25	1270.41
Be 313.042	7.6649	7.6947	7.7251
Ca 370.602	34021	34398	34371
Cd 226.502	5.7506	4.7820	5.8876
Co 228.615	72.3783	73.6205	73.8982
Cr 267.716	176.842	178.374	178.383
Cu 324.754	152.007	151.633	150.549
Fe 271.441	142525	143749	142999
K 766.491	19325.7	19516.0	19437.0
Mg 279.078	37653.6	38004.2	37984.4
Mn 257.610	1746.58	1763.26	1756.09
Mo 202.032	0.6916u	0.6992u	4.7682
Na 330.237	596.891u	456.120u	311.400u
Ni 231.604	154.547	157.422	157.126
Pb 220.353	186.641	173.244	181.916
Sb 206.834	4.7513	13.2599	-6.1539
Se 196.026	-13.0256u	-2.5773	-19.7457u
Si 288.158	8500.09	8582.93	8549.18
Sn 189.925	12.1289	13.2739	10.8741
Sr 216.596	136.906	135.900	133.883
Ti 334.941	719.056	726.907	725.206
Tl 190.794	-13.9617u	-8.4076u	-13.3676u
V 292.401	192.681	193.224	191.823
Zn 206.200	2203.08	2216.56	2222.47

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3818	ppb	0.6735	176.4	-52.6561
Al 308.215	142137	ppb	823.720	0.6	278254
As 188.980	21.7805	ppb	2.5143	11.5	6.1347
B 249.678	62.8248	ppb	1.0475	1.7	278.231

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1267.70	ppb	7.3057	0.6	8036.46
Be 313.042	7.6949	ppb	0.0301	0.4	5894.03
Ca 370.602	34264	ppb	210.5	0.6	57116
Cd 226.502	5.4734	ppb	0.6027	11.0	299.203
Co 228.615	73.2990	ppb	0.8094	1.1	280.252
Cr 267.716	177.866	ppb	0.8872	0.5	3004.02
Cu 324.754	151.396	ppb	0.7574	0.5	5046.40
Fe 271.441	143091	ppb	617.097	0.4	79229.3
K 766.491	19426.2	ppb	95.6453	0.5	400197
Mg 279.078	37880.7	ppb	196.926	0.5	50634.9
Mn 257.610	1755.31	ppb	8.3662	0.5	145782
Mo 202.032	2.0530	ppb	2.3515	114.5	5.7664
Na 330.237	454.804	ppb	142.750	31.4	12.4377
Ni 231.604	156.365	ppb	1.5811	1.0	173.605
Pb 220.353	180.600	ppb	6.7947	3.8	63.9799
Sb 206.834	3.9524	ppb	9.7315	246.2	9.9724
Se 196.026	-11.7829	ppb	8.6514	73.4	1.2521
Si 288.158	8544.07	ppb	41.6554	0.5	40447.3
Sn 189.925	12.0923	ppb	1.2003	9.9	4.0494
Sr 216.596	135.563	ppb	1.5395	1.1	418.693
Ti 334.941	723.723	ppb	4.1303	0.6	64276.0
Tl 190.794	-11.9123	ppb	3.0497	25.6	-10.2409
V 292.401	192.576	ppb	0.7063	0.4	1955.76
Zn 206.200	2214.04	ppb	9.9394	0.4	1221.94

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	497.775	503.742	491.219
Al 308.215	10166.6	10246.7	10197.8
As 188.980	511.506	516.213	513.630
B 249.678	534.183	540.715	544.155
Ba 389.178	456.939	459.396	454.438
Be 313.042	551.932	556.358	553.981
Ca 370.602	9864	9955	9913
Cd 226.502	503.237	506.509	502.293
Co 228.615	497.910	503.159	501.553
Cr 267.716	496.802	503.026	498.885
Cu 324.754	498.843	507.581	496.060
Fe 271.441	10095.7	10240.9	10263.6
K 766.491	9926.02	10022.3	9985.74
Mg 279.078	10399.1	10482.2	10468.3
Mn 257.610	493.074	498.271	495.789
Mo 202.032	479.821	488.380	486.803
Na 330.237	10575.7	11006.9	11264.7
Ni 231.604	493.095	505.395	504.021
Pb 220.353	479.301	494.406	505.983
Sb 206.834	463.258	493.010	483.626
Se 196.026	548.162	550.493	534.178
Si 288.158	5224.61	5269.91	5231.76
Sn 189.925	481.269	498.029	510.613
Sr 216.596	486.568	490.802	488.144
Ti 334.941	497.767	502.648	498.791

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Label	Replicates Concentration		
Tl 190.794	470.149	489.847	498.092
V 292.401	493.690	497.164	493.763
Zn 206.200	1066.91	1059.61	1052.74

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	497.579	ppb	6.2639	1.3	15071.1	99.51577
Al 308.215	10203.7	ppb	40.3756	0.4	20184.9	102.03687
As 188.980	513.783	ppb	2.3576	0.5	137.787	102.75658
B 249.678	539.684	ppb	5.0654	0.9	3677.85	107.93687
Ba 389.178	456.924	ppb	2.4791	0.5	2852.88	91.38486
Be 313.042	554.091	ppb	2.2152	0.4	446673	110.81812Q
Ca 370.602	9911	ppb	45.50	0.5	16597	99.10532
Cd 226.502	504.013	ppb	2.2125	0.4	6489.64	100.80266
Co 228.615	500.874	ppb	2.6893	0.5	1971.64	100.17477
Cr 267.716	499.571	ppb	3.1682	0.6	8371.63	99.91424
Cu 324.754	500.828	ppb	6.0116	1.2	15613.1	100.16560
Fe 271.441	10200.0	ppb	91.0864	0.9	5683.79	101.94936
K 766.491	9978.03	ppb	48.6190	0.5	203166	99.78030
Mg 279.078	10449.9	ppb	44.4870	0.4	13989.4	104.49873
Mn 257.610	495.711	ppb	2.5990	0.5	41173.1	99.14225
Mo 202.032	485.001	ppb	4.5549	0.9	822.327	97.00029
Na 330.237	10949.1	ppb	348.121	3.2	316.418	109.49117
Ni 231.604	500.837	ppb	6.7401	1.3	559.651	100.16740
Pb 220.353	493.230	ppb	13.3800	2.7	187.052	98.64599
Sb 206.834	479.965	ppb	15.2104	3.2	180.080	95.99292
Se 196.026	544.278	ppb	8.8240	1.6	105.413	108.85558
Si 288.158	5242.09	ppb	24.3516	0.5	25132.7	104.84190
Sn 189.925	496.637	ppb	14.7217	3.0	126.512	99.32735
Sr 216.596	488.505	ppb	2.1397	0.4	1427.22	97.70091
Ti 334.941	499.736	ppb	2.5738	0.5	44332.0	99.94711
Tl 190.794	486.029	ppb	14.3570	3.0	114.831	97.20585
V 292.401	494.872	ppb	1.9847	0.4	4984.91	98.97445
Zn 206.200	1059.75	ppb	7.0832	0.7	584.471	105.97524

Cont Calib Blank (CCB) 4/20/2019, 3:15:53 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2422	-1.0578u	-0.5126u
Al 308.215	37.0627	30.1666	25.8263
As 188.980	-3.0829u	9.4395	1.1383
B 249.678	14.2408	12.4594	10.6830
Ba 389.178	1.0036	0.5319	-3.4452u
Be 313.042	0.1264	0.0886	0.0718
Ca 370.602	14.69	7.438	7.605
Cd 226.502	-0.0964u	0.2306	-0.2897u
Co 228.615	-0.9536u	1.4535	0.6582
Cr 267.716	0.5064	0.5928	0.5375
Cu 324.754	1.8176	1.7639	0.5339
Fe 271.441	39.4251	30.0760	24.5930
K 766.491	7.5426	4.5753	4.0456
Mg 279.078	17.4061	9.5563	13.3398
Mn 257.610	0.5668	0.6344	0.3838
Mo 202.032	-0.5008u	-0.1752u	3.3668

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	249.257	319.114	161.149
Ni 231.604	-2.0081u	0.2316	-0.5196u
Pb 220.353	-6.1460u	-9.0132u	-3.4442u
Sb 206.834	5.4204	12.6422	-10.1603u
Se 196.026	14.9985	-1.1774u	-11.6509u
Si 288.158	23.0337	20.5973	19.0974
Sn 189.925	-9.6396u	-14.0766u	-12.4707u
Sr 216.596	0.4420	1.2423	-0.2774u
Ti 334.941	0.5221	0.3908	0.3265
Tl 190.794	-3.6275u	-16.3853u	-4.0087u
V 292.401	1.3013	0.0529	0.8559
Zn 206.200	1.0342	-0.0327u	-0.3527u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.4427	ppb	0.6528	147.4	-54.1755	-0.44275
Al 308.215	31.0185	ppb	5.6664	18.3	267.836	31.01850
As 188.980	2.4983	ppb	6.3710	255.0	1.3731	2.49827
B 249.678	12.4611	ppb	1.7789	14.3	79.5084	12.46108
Ba 389.178	-0.6366	ppb	2.4437	383.9	-40.6110	-0.63656
Be 313.042	0.0956	ppb	0.0280	29.3	-249.801	0.09557
Ca 370.602	9.912	ppb	4.142	41.8	41.63	9.91230
Cd 226.502	-0.0518	ppb	0.2630	507.6	3.3355	-0.05182
Co 228.615	0.3861	ppb	1.2264	317.7	-10.8460	0.38606
Cr 267.716	0.5456	ppb	0.0438	8.0	22.6841	0.54559
Cu 324.754	1.3718	ppb	0.7261	52.9	477.656	1.37181
Fe 271.441	31.3647	ppb	7.4996	23.9	34.6158	31.36471Z
K 766.491	5.3878	ppb	1.8848	35.0	413.462	5.38783
Mg 279.078	13.4341	ppb	3.9257	29.2	39.6488	13.43406
Mn 257.610	0.5283	ppb	0.1297	24.5	70.4358	0.52832
Mo 202.032	0.8969	ppb	2.1452	239.2	5.5172	0.89692
Na 330.237	243.174	ppb	79.1580	32.6	44.1399	243.17371
Ni 231.604	-0.7654	ppb	1.1399	148.9	-2.6306	-0.76539
Pb 220.353	-6.2011	ppb	2.7849	44.9	-1.4935	-6.20113Z
Sb 206.834	2.6341	ppb	11.6538	442.4	6.9166	2.63410
Se 196.026	0.7234	ppb	13.4260	1856.0	2.8582	0.72339
Si 288.158	20.9095	ppb	1.9866	9.5	633.308	20.90946
Sn 189.925	-12.0623	ppb	2.2465	18.6	-2.0552	-12.06229
Sr 216.596	0.4690	ppb	0.7602	162.1	8.5275	0.46896
Ti 334.941	0.4132	ppb	0.0997	24.1	11.3259	0.41316
Tl 190.794	-8.0072	ppb	7.2582	90.6	-3.3375	-8.00718
V 292.401	0.7367	ppb	0.6327	85.9	-5.3522	0.73672
Zn 206.200	0.2163	ppb	0.7262	335.8	0.0141	0.21627

480-151917-a-9-a (Samp)

4/20/2019, 3:20:04 PM

Rack 2, Tube 51

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.9796u	-2.0342u	-0.0023u
Al 308.215	124989	125571	124510
As 188.980	37.0774	33.9701	43.3588
B 249.678	38.3898	39.0525	36.9867
Ba 389.178	1163.25	1168.43	1159.94
Be 313.042	5.4802	5.5277	5.4560
Ca 370.602	26222	26412	26086

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	2.8754	2.8295	2.5641
Co 228.615	37.8392	38.6636	38.5091
Cr 267.716	141.650	141.984	140.716
Cu 324.754	146.668	146.744	144.781
Fe 271.441	90724.4	90504.2	89625.8
K 766.491	9263.83	9286.67	9195.21
Mg 279.078	28905.1	29051.6	28795.7
Mn 257.610	854.310	857.354	848.383
Mo 202.032	1.8800	-1.0266u	4.8193
Na 330.237	431.489u	888.576	996.599
Ni 231.604	108.542	116.174	114.849
Pb 220.353	185.338	171.725	165.711
Sb 206.834	-5.0901u	2.6131	-15.1895u
Se 196.026	-3.4986u	22.0645	1.1105
Si 288.158	8306.35	8333.74	8233.16
Sn 189.925	8.4988	17.2721	18.2011
Sr 216.596	126.631	125.935	124.878
Ti 334.941	1162.05	1167.06	1160.52
Tl 190.794	4.2273u	7.2600u	0.6461u
V 292.401	154.145	154.082	152.009
Zn 206.200	818.994	828.600	811.608

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.3387	ppb	1.1577	86.5	-97.5693
Al 308.215	125023	ppb	531.454	0.4	244774
As 188.980	38.1354	ppb	4.7829	12.5	10.6428
B 249.678	38.1430	ppb	1.0548	2.8	163.101
Ba 389.178	1163.87	ppb	4.2773	0.4	7351.25
Be 313.042	5.4880	ppb	0.0365	0.7	4111.68
Ca 370.602	26240	ppb	163.7	0.6	43783
Cd 226.502	2.7563	ppb	0.1680	6.1	182.624
Co 228.615	38.3373	ppb	0.4382	1.1	146.213
Cr 267.716	141.450	ppb	0.6573	0.5	2389.44
Cu 324.754	146.064	ppb	1.1120	0.8	4875.68
Fe 271.441	90284.8	ppb	581.209	0.6	49996.9
K 766.491	9248.57	ppb	47.6034	0.5	190624
Mg 279.078	28917.4	ppb	128.363	0.4	38660.6
Mn 257.610	853.349	ppb	4.5618	0.5	70952.1
Mo 202.032	1.8909	ppb	2.9229	154.6	6.1148
Na 330.237	772.221	ppb	299.985	38.8	35.2529
Ni 231.604	113.189	ppb	4.0778	3.6	125.195
Pb 220.353	174.258	ppb	10.0556	5.8	63.3069
Sb 206.834	-5.8888	ppb	8.9281	151.6	5.7583
Se 196.026	6.5588	ppb	13.6247	207.7	4.4087
Si 288.158	8291.08	ppb	51.9997	0.6	39287.2
Sn 189.925	14.6573	ppb	5.3537	36.5	4.6978
Sr 216.596	125.815	ppb	0.8825	0.7	384.344
Ti 334.941	1163.21	ppb	3.4172	0.3	103237
Tl 190.794	4.0444	ppb	3.3107	81.9	-4.2678
V 292.401	153.412	ppb	1.2154	0.8	1556.32
Zn 206.200	819.734	ppb	8.5201	1.0	452.389

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

480-151917-a-35-a (Samp) 4/20/2019, 3:24:16 PM Rack 2, Tube 52**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4512u	0.1012u	-0.2614u
Al 308.215	73476.9	73433.4	73238.3
As 188.980	20.1469	31.2370	34.6710
B 249.678	60.1100	60.8160	59.6817
Ba 389.178	730.395	730.020	726.527
Be 313.042	3.5291	3.5159	3.5237
Ca 370.602	386523	386182	385735
Cd 226.502	1.7885	2.3700	2.3679
Co 228.615	64.5425	63.3853	64.5411
Cr 267.716	110.072	110.764	110.199
Cu 324.754	199.057	201.451	198.461
Fe 271.441	157849	157799	157418
K 766.491	12814.0	12794.4	12748.6
Mg 279.078	99035.2	98935.6	98795.1
Mn 257.610	7157.34	7147.02	7126.16
Mo 202.032	4.1606	3.5373	3.7934
Na 330.237	1356.07	1319.79	1535.60
Ni 231.604	134.487	135.904	140.998
Pb 220.353	56.6216	49.6672	50.9277
Sb 206.834	-8.8237u	4.1732	-10.1523u
Se 196.026	-2.8280	2.3653	-20.2548u
Si 288.158	5743.83	5742.18	5733.29
Sn 189.925	10.0528	12.0291	12.1328
Sr 216.596	540.624	534.339	537.988
Ti 334.941	1724.62	1721.78	1717.17
Tl 190.794	-2.7836u	1.6451u	7.2662u
V 292.401	174.277	174.590	173.512
Zn 206.200	378.245	366.484	379.291

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2038	ppb	0.2806	137.7	-66.1462
Al 308.215	73382.9	ppb	127.029	0.2	143762
As 188.980	28.6849	ppb	7.5909	26.5	7.9448
B 249.678	60.2026	ppb	0.5728	1.0	245.927
Ba 389.178	728.981	ppb	2.1329	0.3	4722.77
Be 313.042	3.5229	ppb	0.0067	0.2	2576.92
Ca 370.602	386147	ppb	395.3	0.1	645505
Cd 226.502	2.1755	ppb	0.3352	15.4	275.768
Co 228.615	64.1563	ppb	0.6677	1.0	251.102
Cr 267.716	110.345	ppb	0.3683	0.3	1884.26
Cu 324.754	199.656	ppb	1.5826	0.8	6510.85
Fe 271.441	157689	ppb	235.692	0.1	87309.4
K 766.491	12785.7	ppb	33.5508	0.3	263489
Mg 279.078	98922.0	ppb	120.617	0.1	132224
Mn 257.610	7143.50	ppb	15.8875	0.2	592700
Mo 202.032	3.8305	ppb	0.3133	8.2	8.6051
Na 330.237	1403.82	ppb	115.559	8.2	49.9916
Ni 231.604	137.129	ppb	3.4241	2.5	152.021
Pb 220.353	52.4055	ppb	3.7052	7.1	15.3011
Sb 206.834	-4.9343	ppb	7.9152	160.4	6.8702
Se 196.026	-6.9058	ppb	11.8486	171.6	2.7369
Si 288.158	5739.77	ppb	5.6697	0.1	27405.6

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	11.4049	ppb	1.1721	10.3	3.8758
Sr 216.596	537.650	ppb	3.1560	0.6	1594.12
Ti 334.941	1721.19	ppb	3.7625	0.2	152918
Tl 190.794	2.0426	ppb	5.0367	246.6	-6.3771
V 292.401	174.126	ppb	0.5548	0.3	1774.45
Zn 206.200	374.673	ppb	7.1111	1.9	206.942

X (Samp) 4/20/2019, 3:28:28 PM **Rack 2, Tube 53**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	9.6802	11.1413	10.9323
Al 308.215	238.090	238.060	232.704
As 188.980	20.2050	19.1412	21.2823
B 249.678	114.976	111.230	111.551
Ba 389.178	11.6462	9.2245	12.2723
Be 313.042	4.6922	4.5971	4.6463
Ca 370.602	534.4	527.2	539.2
Cd 226.502	5.8174	5.1094	5.2325
Co 228.615	11.2225	9.9946	10.4918
Cr 267.716	11.1160	9.8740	11.4020
Cu 324.754	23.9662	22.2661	23.8963
Fe 271.441	70.0587	73.1028	67.7763
K 766.491	992.884	977.366	979.405
Mg 279.078	567.188	559.142	563.825
Mn 257.610	10.8956	10.8056	10.9370
Mo 202.032	12.3274	9.6105	9.5491
Na 330.237	1467.01	1203.56	1326.90
Ni 231.604	38.9352	43.8824	39.8353
Pb 220.353	13.5619	10.1114	10.3786
Sb 206.834	17.2392	21.1214	5.5284
Se 196.026	7.2315	19.0253	14.9544
Si 288.158	34.0024	31.4547	31.2818
Sn 189.925	48.4808	48.2277	44.6055
Sr 216.596	9.5408	10.6976	10.2940
Ti 334.941	10.9723	10.9425	10.8499
Tl 190.794	16.6030	21.7917	36.8236
V 292.401	11.5680	10.8773	9.9176
Zn 206.200	20.2810	21.3738	19.8953

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.5846	ppb	0.7902	7.5	280.772
Al 308.215	236.285	ppb	3.1011	1.3	669.710
As 188.980	20.2095	ppb	1.0705	5.3	6.1007
B 249.678	112.586	ppb	2.0762	1.8	764.808
Ba 389.178	11.0477	ppb	1.6096	14.6	33.4856
Be 313.042	4.6452	ppb	0.0476	1.0	3420.34
Ca 370.602	533.6	ppb	6.043	1.1	917.5
Cd 226.502	5.3864	ppb	0.3783	7.0	73.2048
Co 228.615	10.5697	ppb	0.6176	5.8	29.4997
Cr 267.716	10.7974	ppb	0.8123	7.5	194.194
Cu 324.754	23.3762	ppb	0.9620	4.1	1144.26
Fe 271.441	70.3126	ppb	2.6723	3.8	56.5746
K 766.491	983.218	ppb	8.4329	0.9	20372.2

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	563.385	ppb	4.0410	0.7	774.958
Mn 257.610	10.8794	ppb	0.0672	0.6	930.741
Mo 202.032	10.4957	ppb	1.5866	15.1	21.7147
Na 330.237	1332.49	ppb	131.812	9.9	73.2283
Ni 231.604	40.8843	ppb	2.6352	6.4	44.0859
Pb 220.353	11.3506	ppb	1.9197	16.9	5.1472
Sb 206.834	14.6297	ppb	8.1174	55.5	11.3992
Se 196.026	13.7370	ppb	5.9904	43.6	5.3125
Si 288.158	32.2463	ppb	1.5233	4.7	692.477
Sn 189.925	47.1046	ppb	2.1680	4.6	12.8985
Sr 216.596	10.1775	ppb	0.5871	5.8	36.6068
Ti 334.941	10.9216	ppb	0.0638	0.6	944.916
Tl 190.794	25.0728	ppb	10.5020	41.9	4.5896
V 292.401	10.7876	ppb	0.8288	7.7	96.2250
Zn 206.200	20.5167	ppb	0.7669	3.7	11.2114

Cont Calib Verif (CCV)

4/20/2019, 3:32:42 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	502.366	508.804	499.023
Al 308.215	10194.5	10183.1	10074.1
As 188.980	513.141	510.906	499.606
B 249.678	541.293	542.938	541.518
Ba 389.178	454.730	460.837	455.057
Be 313.042	556.565	556.413	552.567
Ca 370.602	9940	9935	9864
Cd 226.502	507.394	505.858	501.531
Co 228.615	499.892	505.010	499.875
Cr 267.716	501.781	500.723	498.362
Cu 324.754	505.557	510.181	497.178
Fe 271.441	10147.7	10223.6	10058.2
K 766.491	9971.12	9991.51	9908.62
Mg 279.078	10495.8	10507.7	10404.2
Mn 257.610	496.877	496.682	493.670
Mo 202.032	488.259	486.780	484.445
Na 330.237	10834.7	10947.7	11312.7
Ni 231.604	500.695	504.860	497.289
Pb 220.353	492.993	511.485	499.341
Sb 206.834	470.566	477.541	475.512
Se 196.026	558.854	580.053	559.485
Si 288.158	5241.01	5232.73	5183.72
Sn 189.925	490.682	477.876	474.985
Sr 216.596	489.074	484.887	482.465
Ti 334.941	498.364	498.638	495.650
Tl 190.794	483.686	496.195	490.419
V 292.401	496.137	496.651	492.805
Zn 206.200	1065.09	1076.25	1062.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	503.398	ppb	4.9715	1.0	15247.9	100.67957
Al 308.215	10150.5	ppb	66.4712	0.7	20080.9	101.50550
As 188.980	507.884	ppb	7.2554	1.4	136.211	101.57683
B 249.678	541.917	ppb	0.8920	0.2	3693.16	108.38332

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	456.875	ppb	3.4355	0.8	2852.59	91.37495
Be 313.042	555.182	ppb	2.2654	0.4	447553	111.03636Q
Ca 370.602	9913	ppb	42.72	0.4	16601	99.12744
Cd 226.502	504.927	ppb	3.0403	0.6	6501.32	100.98547
Co 228.615	501.592	ppb	2.9601	0.6	1974.47	100.31847
Cr 267.716	500.289	ppb	1.7504	0.3	8383.62	100.05770
Cu 324.754	504.306	ppb	6.5913	1.3	15718.4	100.86115
Fe 271.441	10143.2	ppb	82.8072	0.8	5652.34	101.38119
K 766.491	9957.08	ppb	43.1939	0.4	202758	99.57083
Mg 279.078	10469.2	ppb	56.5973	0.5	14015.3	104.69241
Mn 257.610	495.743	ppb	1.7984	0.4	41175.8	99.14864
Mo 202.032	486.495	ppb	1.9234	0.4	824.848	97.29897
Na 330.237	11031.7	ppb	249.845	2.3	318.547	110.31683Q
Ni 231.604	500.948	ppb	3.7919	0.8	559.775	100.18962
Pb 220.353	501.273	ppb	9.3964	1.9	190.099	100.25461
Sb 206.834	474.540	ppb	3.5877	0.8	178.146	94.90792
Se 196.026	566.131	ppb	12.0611	2.1	109.532	113.22611Q
Si 288.158	5219.15	ppb	30.9598	0.6	25024.9	104.38306
Sn 189.925	481.181	ppb	8.3544	1.7	122.606	96.23620
Sr 216.596	485.475	ppb	3.3434	0.7	1418.36	97.09504
Ti 334.941	497.550	ppb	1.6519	0.3	44138.2	99.51009
Tl 190.794	490.100	ppb	6.2610	1.3	115.807	98.01996
V 292.401	495.198	ppb	2.0878	0.4	4988.14	99.03958
Zn 206.200	1067.98	ppb	7.2673	0.7	589.012	106.79834

Cont Calib Blank (CCB)

4/20/2019, 3:36:55 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1321	-0.3856u	-0.3286u
Al 308.215	32.5187	20.4876	29.5344
As 188.980	5.5285	3.8506	2.4465
B 249.678	13.6028	13.0636	10.0934
Ba 389.178	-1.5038u	-2.8181u	-0.4992u
Be 313.042	0.1394	0.1255	0.0602
Ca 370.602	12.75	8.530	3.909
Cd 226.502	0.2361	-0.1739u	0.6265
Co 228.615	1.5629	0.5740	0.5499
Cr 267.716	0.3894	0.1068	-0.2390u
Cu 324.754	1.3435	1.7334	1.2313
Fe 271.441	8.0081	24.7634	3.8865
K 766.491	5.9138	5.2145	2.8865
Mg 279.078	13.8737	20.9009	4.4850
Mn 257.610	0.4521	0.3255	0.3558
Mo 202.032	1.4290	0.8585	1.8900
Na 330.237	-170.817u	350.031	613.691
Ni 231.604	-1.5137u	-0.2437u	0.3262
Pb 220.353	1.3353	-11.2054u	1.7318
Sb 206.834	4.0429	-2.6864u	-4.4326u
Se 196.026	2.6279	9.0703	-11.1297u
Si 288.158	26.1558	23.5270	21.5377
Sn 189.925	-1.6467u	-9.9203u	-5.5667u
Sr 216.596	-0.0691u	0.2506	-0.3178u
Ti 334.941	0.5081	0.5422	0.2791

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-19.4338u	-3.4611u	2.2627
V 292.401	-0.6933u	0.7159	1.6176
Zn 206.200	-1.0715u	0.2775	1.5725

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1941	ppb	0.2839	146.3	-46.6155	-0.19406
Al 308.215	27.5136	ppb	6.2650	22.8	260.978	27.51359
As 188.980	3.9419	ppb	1.5430	39.1	1.7586	3.94189
B 249.678	12.2533	ppb	1.8899	15.4	78.1005	12.25328
Ba 389.178	-1.6070	ppb	1.1629	72.4	-46.7222	-1.60702
Be 313.042	0.1084	ppb	0.0423	39.0	-239.521	0.10836
Ca 370.602	8.395	ppb	4.421	52.7	39.11	8.39540
Cd 226.502	0.2296	ppb	0.4003	174.4	6.9256	0.22956
Co 228.615	0.8956	ppb	0.5780	64.5	-8.8303	0.89561
Cr 267.716	0.0857	ppb	0.3147	367.1	14.9905	0.08573
Cu 324.754	1.4361	ppb	0.2635	18.4	479.611	1.43608
Fe 271.441	12.2193	ppb	11.0573	90.5	24.0284	12.21934
K 766.491	4.6716	ppb	1.5850	33.9	407.798	4.67158
Mg 279.078	13.0865	ppb	8.2362	62.9	39.1858	13.08653
Mn 257.610	0.3778	ppb	0.0661	17.5	57.9321	0.37780
Mo 202.032	1.3925	ppb	0.5167	37.1	6.3538	1.39251
Na 330.237	264.302	ppb	399.218	151.0	44.7026	264.30185
Ni 231.604	-0.4770	ppb	0.9419	197.4	-2.3074	-0.47704
Pb 220.353	-2.7128	ppb	7.3575	271.2	-0.1722	-2.71276
Sb 206.834	-1.0254	ppb	4.4753	436.5	5.6194	-1.02536
Se 196.026	0.1895	ppb	10.3184	5445.8	2.7575	0.18948
Si 288.158	23.7402	ppb	2.3164	9.8	646.095	23.74020
Sn 189.925	-5.7112	ppb	4.1387	72.5	-0.4501	-5.71122
Sr 216.596	-0.0455	ppb	0.2849	626.7	7.0171	-0.04547
Ti 334.941	0.4431	ppb	0.1431	32.3	13.9741	0.44313
Tl 190.794	-6.8774	ppb	11.2445	163.5	-3.0665	-6.87737
V 292.401	0.5467	ppb	1.1647	213.0	-7.3364	0.54673
Zn 206.200	0.2595	ppb	1.3221	509.5	0.0376	0.25949

mb 680-566859/1-a (Samp) 4/20/2019, 3:41:06 PM Rack 3, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1070u	-0.6973u	-1.1355u
Al 308.215	24.5428	23.6411	27.1992
As 188.980	0.5100	7.1848	7.9986
B 249.678	2.5118	3.0967	0.0078
Ba 389.178	-0.3474u	-5.4692u	-1.2449u
Be 313.042	-0.1458u	-0.1784u	-0.1972u
Ca 370.602	19.89	19.55	21.29
Cd 226.502	-0.0674u	0.0231	0.2114
Co 228.615	-1.0566u	0.8499	0.0802
Cr 267.716	1.6833	1.5017	1.7052
Cu 324.754	1.8969	2.0323	2.8287
Fe 271.441	39.1096	27.5469	17.2851
K 766.491	15.5745	16.8186	15.9527
Mg 279.078	8.4485	1.5514	5.6295
Mn 257.610	0.4952	0.6435	0.4589
Mo 202.032	1.5571	1.1365	-0.2980u

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Label	Replicates Concentration		
Na 330.237	-34.9408u	-130.260u	730.553
Ni 231.604	-0.3354u	-1.2842u	-0.0611u
Pb 220.353	-2.6360u	3.5011	-6.8425u
Sb 206.834	6.9408	7.9343	3.3296
Se 196.026	1.3660	-20.7351u	11.7397
Si 288.158	26.7804	28.1207	30.1289
Sn 189.925	12.4048	4.2688	8.1757
Sr 216.596	0.6133	0.7260	-0.0545u
Ti 334.941	0.1644	0.2302	0.1769
Tl 190.794	-8.9767u	3.1476	-11.3230u
V 292.401	-0.8314u	0.8255	-0.0587u
Zn 206.200	-2.6149u	1.8807	-3.2257u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6466	ppb	0.5161	79.8	-60.3653
Al 308.215	25.1277	ppb	1.8498	7.4	256.290
As 188.980	5.2311	ppb	4.1088	78.5	2.1028
B 249.678	1.8721	ppb	1.6408	87.6	7.0233
Ba 389.178	-2.3538	ppb	2.7350	116.2	-51.4135
Be 313.042	-0.1738	ppb	0.0260	15.0	-467.111
Ca 370.602	20.24	ppb	0.9227	4.6	58.88
Cd 226.502	0.0557	ppb	0.1422	255.3	4.7235
Co 228.615	-0.0422	ppb	0.9591	2274.7	-12.5436
Cr 267.716	1.6301	ppb	0.1117	6.9	40.8273
Cu 324.754	2.2526	ppb	0.5035	22.4	504.337
Fe 271.441	27.9805	ppb	10.9187	39.0	32.7089
K 766.491	16.1153	ppb	0.6378	4.0	617.216
Mg 279.078	5.2098	ppb	3.4676	66.6	28.6511
Mn 257.610	0.5326	ppb	0.0978	18.4	70.7614
Mo 202.032	0.7985	ppb	0.9726	121.8	5.3513
Na 330.237	188.451	ppb	471.888	250.4	42.6793
Ni 231.604	-0.5602	ppb	0.6418	114.6	-2.3997
Pb 220.353	-1.9924	ppb	5.2018	261.1	0.1004
Sb 206.834	6.0683	ppb	2.4232	39.9	8.1529
Se 196.026	-2.5431	ppb	16.5866	652.2	2.2424
Si 288.158	28.3434	ppb	1.6853	5.9	668.977
Sn 189.925	8.2831	ppb	4.0691	49.1	3.0868
Sr 216.596	0.4283	ppb	0.4219	98.5	8.4149
Ti 334.941	0.1905	ppb	0.0349	18.3	-8.4434
Tl 190.794	-5.7174	ppb	7.7664	135.8	-2.7899
V 292.401	-0.0215	ppb	0.8291	3853.7	-13.0821
Zn 206.200	-1.3200	ppb	2.7886	211.3	-0.8346

ics 680-566859/2-a (Samp)

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Rack 3, Tube 2

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	53.5445	53.9287	53.0163
Al 308.215	10161.0	10150.6	10134.9
As 188.980	210.226	202.366	212.695
B 249.678	425.546	428.213	430.768
Ba 389.178	180.997	190.158	184.895
Be 313.042	114.257	113.986	114.159
Ca 370.602	9879	9866	9864

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Label	Replicates Concentration		
Cd 226.502	103.800	103.416	104.000
Co 228.615	103.464	100.261	101.908
Cr 267.716	205.546	204.544	203.997
Cu 324.754	207.712	209.788	206.279
Fe 271.441	10142.2	10111.4	10130.6
K 766.491	16176.5	16112.5	16168.8
Mg 279.078	10380.4	10345.7	10353.9
Mn 257.610	816.770	812.270	814.408
Mo 202.032	198.171	198.340	196.469
Na 330.237	11411.9	10405.1	10877.7
Ni 231.604	200.375	200.995	201.877
Pb 220.353	986.908	1004.39	993.716
Sb 206.834	90.8468	92.3775	88.6161
Se 196.026	222.183	234.122	224.342
Si 288.158	17.7996	12.6193	18.6113
Sn 189.925	202.471	205.904	198.647
Sr 216.596	198.066	196.451	194.829
Ti 334.941	801.845	801.404	800.254
Tl 190.794	66.2065	82.6612	67.1202
V 292.401	199.416	199.470	200.857
Zn 206.200	212.890	213.113	217.705

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.4965	ppb	0.4581	0.9	1582.63
Al 308.215	10148.8	ppb	13.1369	0.1	20067.2
As 188.980	208.429	ppb	5.3938	2.6	56.3003
B 249.678	428.176	ppb	2.6116	0.6	2914.66
Ba 389.178	185.350	ppb	4.5976	2.5	1144.81
Be 313.042	114.134	ppb	0.1371	0.1	91744.3
Ca 370.602	9870	ppb	8.497	0.1	16539
Cd 226.502	103.738	ppb	0.2968	0.3	1351.40
Co 228.615	101.877	ppb	1.6018	1.6	395.386
Cr 267.716	204.696	ppb	0.7856	0.4	3440.09
Cu 324.754	207.926	ppb	1.7640	0.8	6738.08
Fe 271.441	10128.0	ppb	15.5595	0.2	5628.42
K 766.491	16152.6	ppb	34.9098	0.2	332350
Mg 279.078	10360.0	ppb	18.1024	0.2	13866.0
Mn 257.610	814.483	ppb	2.2506	0.3	67602.9
Mo 202.032	197.660	ppb	1.0348	0.5	337.438
Na 330.237	10898.2	ppb	503.743	4.6	322.153
Ni 231.604	201.082	ppb	0.7549	0.4	223.725
Pb 220.353	995.003	ppb	8.8102	0.9	377.159
Sb 206.834	90.6134	ppb	1.8915	2.1	39.2504
Se 196.026	226.882	ppb	6.3624	2.8	45.6099
Si 288.158	16.3434	ppb	3.2506	19.9	692.917
Sn 189.925	202.341	ppb	3.6303	1.8	52.1330
Sr 216.596	196.449	ppb	1.6187	0.8	578.903
Ti 334.941	801.168	ppb	0.8211	0.1	71070.7
Tl 190.794	71.9960	ppb	9.2476	12.8	15.5886
V 292.401	199.914	ppb	0.8171	0.4	2008.74
Zn 206.200	214.569	ppb	2.7180	1.3	118.214

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480-151917-a-45-a (Samp) 4/20/2019, 3:49:32 PM Rack 3, Tube 3**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.8020u	-1.6913u	-0.8191u
Al 308.215	107359	106909	106655
As 188.980	10.5627	9.1998	16.5678
B 249.678	39.3255	38.9845	36.5741
Ba 389.178	445.013	438.795	439.601
Be 313.042	2.8377	2.7897	2.8287
Ca 370.602	19789	19735	19649
Cd 226.502	2.2790	1.8092	1.5104
Co 228.615	61.8166	60.9601	60.7214
Cr 267.716	116.682	116.925	115.914
Cu 324.754	57.5636	57.1479	56.7578
Fe 271.441	132837	132752	132090
K 766.491	9710.43	9693.20	9667.44
Mg 279.078	46333.6	46209.2	46043.7
Mn 257.610	1293.61	1290.56	1286.88
Mo 202.032	0.7940u	1.5210	2.0001
Na 330.237	1322.15	973.753	901.074
Ni 231.604	150.580	145.508	140.179
Pb 220.353	52.5747	45.1549	51.1552
Sb 206.834	8.4427	14.6463	-9.0421u
Se 196.026	-21.2095u	16.2700	8.6768
Si 288.158	3196.49	3185.15	3178.05
Sn 189.925	14.2442	-2.7754u	12.9419
Sr 216.596	76.1294	73.5520	74.5472
Ti 334.941	1276.45	1269.70	1271.71
Tl 190.794	2.5239u	-12.3768u	-6.2910u
V 292.401	137.096	136.196	137.387
Zn 206.200	649.270	650.206	648.482

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.1041	ppb	0.5086	46.1	-97.3836
Al 308.215	106974	ppb	356.785	0.3	209469
As 188.980	12.1101	ppb	3.9202	32.4	3.5839
B 249.678	38.2947	ppb	1.4998	3.9	121.056
Ba 389.178	441.136	ppb	3.3811	0.8	2844.54
Be 313.042	2.8187	ppb	0.0255	0.9	1955.47
Ca 370.602	19724	ppb	70.45	0.4	32829
Cd 226.502	1.8662	ppb	0.3874	20.8	235.287
Co 228.615	61.1660	ppb	0.5759	0.9	236.505
Cr 267.716	116.507	ppb	0.5279	0.5	1976.37
Cu 324.754	57.1564	ppb	0.4030	0.7	2190.31
Fe 271.441	132560	ppb	409.006	0.3	73399.1
K 766.491	9690.36	ppb	21.6352	0.2	199831
Mg 279.078	46195.5	ppb	145.467	0.3	61765.8
Mn 257.610	1290.35	ppb	3.3676	0.3	107272
Mo 202.032	1.4384	ppb	0.6073	42.2	4.8613
Na 330.237	1065.66	ppb	225.078	21.1	42.5821
Ni 231.604	145.423	ppb	5.2010	3.6	161.333
Pb 220.353	49.6283	ppb	3.9385	7.9	14.7476
Sb 206.834	4.6823	ppb	12.2838	262.3	9.8477
Se 196.026	1.2458	ppb	19.8140	1590.5	3.6213
Si 288.158	3186.56	ppb	9.3041	0.3	15468.4

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	8.1369	ppb	9.4727	116.4	3.0498
Sr 216.596	74.7429	ppb	1.2998	1.7	239.998
Ti 334.941	1272.62	ppb	3.4668	0.3	112988
Tl 190.794	-5.3813	ppb	7.4919	139.2	-8.3237
V 292.401	136.893	ppb	0.6212	0.5	1391.79
Zn 206.200	649.319	ppb	0.8632	0.1	358.450

480-151917-a-45-a (Samp) **4/20/2019, 3:53:45 PM** **Rack 3, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3081u	0.1024u	0.0392u
Al 308.215	20549.5	20691.9	20734.4
As 188.980	4.7643	17.3025	-1.4672u
B 249.678	7.7753	6.2860	7.3341
Ba 389.178	83.8981	85.5958	85.0975
Be 313.042	0.3984	0.4278	0.4007
Ca 370.602	3817	3837	3849
Cd 226.502	0.8592	0.3815	0.7999
Co 228.615	12.2448	11.9104	11.3089
Cr 267.716	21.9495	22.7705	22.4689
Cu 324.754	11.2790	11.1237	12.2730
Fe 271.441	25486.6	25666.1	25652.8
K 766.491	1732.65	1732.43	1732.79
Mg 279.078	8848.04	8868.32	8898.40
Mn 257.610	250.144	251.280	251.119
Mo 202.032	0.3752	0.4333	-1.7611u
Na 330.237	344.533	120.880u	458.581
Ni 231.604	28.1501	25.4911	29.5657
Pb 220.353	-1.8304u	-6.1690u	12.2627
Sb 206.834	-3.4829u	-3.6492u	-6.1264u
Se 196.026	-18.0112u	12.3018	5.6189
Si 288.158	620.361	632.751	629.885
Sn 189.925	1.3043	5.5755	-3.6519u
Sr 216.596	14.3868	15.1685	16.4604
Ti 334.941	245.932	246.167	246.781
Tl 190.794	-1.7174u	-19.8494u	-7.6043u
V 292.401	26.9216	26.1719	26.5701
Zn 206.200	127.149	127.760	126.518

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0555	ppb	0.2210	398.4	-46.8702
Al 308.215	20658.6	ppb	96.8343	0.5	40619.3
As 188.980	6.8665	ppb	9.5598	139.2	2.4710
B 249.678	7.1318	ppb	0.7650	10.7	16.9348
Ba 389.178	84.8638	ppb	0.8727	1.0	517.647
Be 313.042	0.4090	ppb	0.0163	4.0	4.7577
Ca 370.602	3834	ppb	16.03	0.4	6402
Cd 226.502	0.6802	ppb	0.2604	38.3	52.7273
Co 228.615	11.8214	ppb	0.4743	4.0	35.7376
Cr 267.716	22.3963	ppb	0.4153	1.9	390.885
Cu 324.754	11.5585	ppb	0.6236	5.4	790.616
Fe 271.441	25601.8	ppb	100.021	0.4	14189.7
K 766.491	1732.62	ppb	0.1772	0.0	36005.2

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	8871.59	ppb	25.3377	0.3	11879.2
Mn 257.610	250.848	ppb	0.6146	0.2	20874.8
Mo 202.032	-0.3175	ppb	1.2505	393.8	3.1649
Na 330.237	307.998	ppb	171.790	55.8	41.3008
Ni 231.604	27.7356	ppb	2.0687	7.5	29.3369
Pb 220.353	1.4211	ppb	9.6365	678.1	0.4479
Sb 206.834	-4.4195	ppb	1.4805	33.5	4.8296
Se 196.026	-0.0302	ppb	15.9265	52788.4	2.8445
Si 288.158	627.666	ppb	6.4862	1.0	3476.67
Sn 189.925	1.0760	ppb	4.6179	429.2	1.2653
Sr 216.596	15.3386	ppb	1.0472	6.8	54.7834
Ti 334.941	246.293	ppb	0.4379	0.2	21846.3
Tl 190.794	-9.7237	ppb	9.2499	95.1	-4.8315
V 292.401	26.5545	ppb	0.3751	1.4	259.702
Zn 206.200	127.142	ppb	0.6213	0.5	70.1023

480-151917-a-45-a (Samp)

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Rack 3, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	55.8009	57.1906	57.8193
Al 308.215	111094	110506	110816
As 188.980	123.782	116.225	120.423
B 249.678	262.991	262.419	262.814
Ba 389.178	538.861	535.340	538.414
Be 313.042	64.0324	63.7938	63.8288
Ca 370.602	24643	24457	24570
Cd 226.502	57.4503	56.9255	57.3204
Co 228.615	113.168	117.105	114.267
Cr 267.716	224.274	224.151	223.198
Cu 324.754	167.477	168.701	168.474
Fe 271.441	135166	134621	135323
K 766.491	19021.8	18904.5	19030.7
Mg 279.078	51028.6	50861.8	50943.4
Mn 257.610	1801.74	1792.98	1798.82
Mo 202.032	105.228	108.431	107.266
Na 330.237	6624.15	6534.43	6958.71
Ni 231.604	242.108	246.730	249.415
Pb 220.353	574.196	581.679	587.427
Sb 206.834	40.3156	40.9714	59.5897
Se 196.026	107.792	91.3020	104.414
Si 288.158	3403.19	3386.68	3376.03
Sn 189.925	113.061	113.178	117.636
Sr 216.596	176.056	177.299	177.755
Ti 334.941	1695.61	1689.02	1691.96
Tl 190.794	56.3205	27.9438	40.5159
V 292.401	242.930	241.854	241.442
Zn 206.200	754.275	752.389	747.789

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	56.9369	ppb	1.0329	1.8	1665.38
Al 308.215	110806	ppb	294.277	0.3	216968
As 188.980	120.143	ppb	3.7863	3.2	32.4053
B 249.678	262.741	ppb	0.2925	0.1	1654.42

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	537.538	ppb	1.9166	0.4	3457.29
Be 313.042	63.8850	ppb	0.1288	0.2	51217.2
Ca 370.602	24556	ppb	93.54	0.4	40919
Cd 226.502	57.2321	ppb	0.2733	0.5	950.458
Co 228.615	114.847	ppb	2.0317	1.8	451.363
Cr 267.716	223.874	ppb	0.5887	0.3	3773.58
Cu 324.754	168.218	ppb	0.6511	0.4	5555.99
Fe 271.441	135037	ppb	368.386	0.3	74772.8
K 766.491	18985.7	ppb	70.4459	0.4	390904
Mg 279.078	50944.6	ppb	83.4301	0.2	68110.9
Mn 257.610	1797.85	ppb	4.4610	0.2	149368
Mo 202.032	106.975	ppb	1.6210	1.5	182.922
Na 330.237	6705.76	ppb	223.609	3.3	190.036
Ni 231.604	246.085	ppb	3.6962	1.5	274.214
Pb 220.353	581.101	ppb	6.6344	1.1	215.843
Sb 206.834	46.9589	ppb	10.9435	23.3	25.4519
Se 196.026	101.170	ppb	8.7109	8.6	22.5177
Si 288.158	3388.63	ppb	13.6874	0.4	16453.4
Sn 189.925	114.625	ppb	2.6079	2.3	29.9636
Sr 216.596	177.037	ppb	0.8794	0.5	537.421
Ti 334.941	1692.20	ppb	3.2969	0.2	150220
Tl 190.794	41.5934	ppb	14.2190	34.2	2.9304
V 292.401	242.075	ppb	0.7686	0.3	2455.13
Zn 206.200	751.484	ppb	3.3364	0.4	414.777

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.8909	55.9555	56.6250
Al 308.215	116196	115978	116136
As 188.980	215.789	215.687	209.509
B 249.678	439.181	441.167	441.504
Ba 389.178	596.871	596.302	593.674
Be 313.042	118.221	118.035	118.148
Ca 370.602	28860	28800	28801
Cd 226.502	108.354	107.812	107.633
Co 228.615	161.060	159.383	160.187
Cr 267.716	320.782	319.993	320.712
Cu 324.754	258.634	259.244	257.415
Fe 271.441	134914	134765	134586
K 766.491	25246.5	25193.5	25292.3
Mg 279.078	54781.1	54666.6	54657.3
Mn 257.610	1858.07	1855.78	1854.38
Mo 202.032	200.942	198.190	198.311
Na 330.237	13148.1	12919.9	13184.9
Ni 231.604	336.612	343.165	336.979
Pb 220.353	1062.25	1037.60	1061.06
Sb 206.834	85.1648	93.4623	78.4009
Se 196.026	226.451	232.855	227.720
Si 288.158	3339.90	3356.91	3345.18
Sn 189.925	214.621	210.899	211.303
Sr 216.596	274.620	273.767	273.864
Ti 334.941	2373.56	2369.32	2375.88

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Label	Replicates Concentration		
Tl 190.794	78.9610	82.3359	81.1266
V 292.401	336.847	334.879	335.607
Zn 206.200	796.210	792.758	796.384

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.8238	ppb	0.8746	1.6	1630.78
Al 308.215	116104	ppb	112.523	0.1	227334
As 188.980	213.661	ppb	3.5964	1.7	57.3621
B 249.678	440.617	ppb	1.2551	0.3	2872.47
Ba 389.178	595.615	ppb	1.7054	0.3	3826.51
Be 313.042	118.135	ppb	0.0938	0.1	94980.2
Ca 370.602	28820	ppb	34.42	0.1	48064
Cd 226.502	107.933	ppb	0.3756	0.3	1600.54
Co 228.615	160.210	ppb	0.8388	0.5	635.463
Cr 267.716	320.496	ppb	0.4365	0.1	5390.27
Cu 324.754	258.431	ppb	0.9309	0.4	8289.43
Fe 271.441	134755	ppb	164.072	0.1	74619.0
K 766.491	25244.1	ppb	49.4607	0.2	519497
Mg 279.078	54701.7	ppb	68.9602	0.1	73133.6
Mn 257.610	1856.08	ppb	1.8604	0.1	154220
Mo 202.032	199.148	ppb	1.5551	0.8	338.470
Na 330.237	13084.3	ppb	143.559	1.1	355.863
Ni 231.604	338.919	ppb	3.6821	1.1	378.321
Pb 220.353	1053.64	ppb	13.8995	1.3	394.674
Sb 206.834	85.6760	ppb	7.5437	8.8	39.6879
Se 196.026	229.009	ppb	3.3912	1.5	46.6202
Si 288.158	3347.33	ppb	8.7059	0.3	16313.5
Sn 189.925	212.274	ppb	2.0423	1.0	54.6437
Sr 216.596	274.084	ppb	0.4668	0.2	819.319
Ti 334.941	2372.92	ppb	3.3299	0.1	210614
Tl 190.794	80.8078	ppb	1.7099	2.1	12.3787
V 292.401	335.778	ppb	0.9948	0.3	3403.58
Zn 206.200	795.117	ppb	2.0450	0.3	438.801

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.5508	55.3370	55.4944
Al 308.215	113577	113059	113429
As 188.980	215.879	212.181	216.351
B 249.678	443.413	442.654	446.580
Ba 389.178	718.391	720.649	721.119
Be 313.042	119.591	118.740	119.117
Ca 370.602	32058	31873	31933
Cd 226.502	107.197	106.223	107.134
Co 228.615	159.455	156.157	156.004
Cr 267.716	314.132	313.233	313.203
Cu 324.754	279.104	275.238	277.772
Fe 271.441	129229	127786	127964
K 766.491	25057.8	24843.5	24904.9
Mg 279.078	51942.4	51568.7	51727.5
Mn 257.610	1951.72	1939.15	1945.32
Mo 202.032	199.963	200.066	199.751

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Label	Replicates Concentration		
Na 330.237	12297.2	11738.4	11865.5
Ni 231.604	333.033	332.340	337.754
Pb 220.353	1065.68	1067.38	1059.02
Sb 206.834	75.7614	80.5539	85.3629
Se 196.026	232.550	215.645	216.997
Si 288.158	2350.28	2327.06	2336.23
Sn 189.925	218.414	200.712	209.267
Sr 216.596	469.029	470.844	469.732
Ti 334.941	1975.40	1963.28	1969.49
Tl 190.794	86.5020	80.9444	72.5989
V 292.401	338.158	335.268	335.828
Zn 206.200	830.788	802.756	824.867

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.1274	ppb	0.5055	0.9	1610.83
Al 308.215	113355	ppb	266.914	0.2	221958
As 188.980	214.804	ppb	2.2835	1.1	57.6841
B 249.678	444.216	ppb	2.0825	0.5	2903.59
Ba 389.178	720.053	ppb	1.4586	0.2	4602.88
Be 313.042	119.149	ppb	0.4262	0.4	95799.3
Ca 370.602	31955	ppb	94.62	0.3	53308
Cd 226.502	106.851	ppb	0.5452	0.5	1576.90
Co 228.615	157.205	ppb	1.9496	1.2	620.657
Cr 267.716	313.522	ppb	0.5279	0.2	5272.94
Cu 324.754	277.372	ppb	1.9638	0.7	8862.02
Fe 271.441	128326	ppb	786.664	0.6	71060.2
K 766.491	24935.4	ppb	110.366	0.4	513123
Mg 279.078	51746.2	ppb	187.540	0.4	69180.9
Mn 257.610	1945.40	ppb	6.2870	0.3	161603
Mo 202.032	199.926	ppb	0.1605	0.1	339.858
Na 330.237	11967.0	ppb	292.901	2.4	329.194
Ni 231.604	334.376	ppb	2.9460	0.9	373.227
Pb 220.353	1064.03	ppb	4.4165	0.4	398.890
Sb 206.834	80.5594	ppb	4.8007	6.0	37.7995
Se 196.026	221.731	ppb	9.3943	4.2	45.2306
Si 288.158	2337.86	ppb	11.6973	0.5	11583.0
Sn 189.925	209.464	ppb	8.8527	4.2	53.9333
Sr 216.596	469.869	ppb	0.9150	0.2	1390.11
Ti 334.941	1969.39	ppb	6.0598	0.3	174810
Tl 190.794	80.0151	ppb	6.9980	8.7	12.4917
V 292.401	336.418	ppb	1.5325	0.5	3408.12
Zn 206.200	819.470	ppb	14.7749	1.8	452.231

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1214u	-0.4453u	0.5935u
Al 308.215	88385.6	89136.5	88591.9
As 188.980	19.7890	18.3288	13.7504
B 249.678	40.8112	39.1354	40.9578
Ba 389.178	517.375	518.933	513.280
Be 313.042	3.3859	3.4068	3.3946
Ca 370.602	16602	16752	16634

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Label	Replicates Concentration		
Cd 226.502	3.2045	2.8720	1.9131
Co 228.615	46.8224	46.3596	47.0943
Cr 267.716	104.249	105.760	105.004
Cu 324.754	109.821	110.782	110.533
Fe 271.441	106346	107757	106526
K 766.491	9054.18	9170.89	9103.90
Mg 279.078	32248.1	32583.5	32349.3
Mn 257.610	1174.62	1190.14	1178.70
Mo 202.032	5.6246	4.6051	6.9622
Na 330.237	884.712	1153.38	1063.34
Ni 231.604	109.683	116.614	107.924
Pb 220.353	89.9668	78.0742	78.1564
Sb 206.834	-2.8694	-0.1454	12.3163
Se 196.026	-10.1990u	-1.8493	2.1744
Si 288.158	4177.22	4230.64	4190.30
Sn 189.925	8.1558	7.0126	8.9372
Sr 216.596	62.4808	63.8788	63.9231
Ti 334.941	1048.45	1057.97	1049.92
Tl 190.794	2.0361u	14.9799u	0.2345u
V 292.401	124.376	126.021	125.719
Zn 206.200	626.186	641.719	628.550

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0899	ppb	0.5201	578.5	-56.3649
Al 308.215	88704.7	ppb	387.945	0.4	173731
As 188.980	17.2894	ppb	3.1506	18.2	5.0346
B 249.678	40.3014	ppb	1.0125	2.5	160.996
Ba 389.178	516.529	ppb	2.9199	0.6	3292.33
Be 313.042	3.3958	ppb	0.0105	0.3	2419.69
Ca 370.602	16663	ppb	79.22	0.5	27746
Cd 226.502	2.6632	ppb	0.6705	25.2	205.427
Co 228.615	46.7588	ppb	0.3714	0.8	178.319
Cr 267.716	105.004	ppb	0.7556	0.7	1781.48
Cu 324.754	110.379	ppb	0.4988	0.5	3797.97
Fe 271.441	106876	ppb	768.090	0.7	59181.3
K 766.491	9109.66	ppb	58.5663	0.6	187821
Mg 279.078	32393.7	ppb	172.020	0.5	43313.0
Mn 257.610	1181.15	ppb	8.0454	0.7	98147.9
Mo 202.032	5.7306	ppb	1.1821	20.6	12.4068
Na 330.237	1033.81	ppb	136.746	13.2	44.8219
Ni 231.604	111.407	ppb	4.5945	4.1	123.183
Pb 220.353	82.0658	ppb	6.8426	8.3	27.9765
Sb 206.834	3.1005	ppb	8.0965	261.1	8.9589
Se 196.026	-3.2913	ppb	6.3115	191.8	2.6505
Si 288.158	4199.39	ppb	27.8463	0.7	20184.8
Sn 189.925	8.0352	ppb	0.9679	12.0	3.0241
Sr 216.596	63.4276	ppb	0.8202	1.3	204.112
Ti 334.941	1052.11	ppb	5.1235	0.5	93390.8
Tl 190.794	5.7502	ppb	8.0438	139.9	-4.5380
V 292.401	125.372	ppb	0.8758	0.7	1271.92
Zn 206.200	632.151	ppb	8.3694	1.3	348.926

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Label	Replicates Concentration		
Ag 328.068	0.3093u	-0.4446u	-0.2966u
Al 308.215	59774.3	59580.5	60042.6
As 188.980	66.6943	62.7717	51.3674
B 249.678	45.5489	45.9961	45.4358
Ba 389.178	474.627	477.841	477.643
Be 313.042	3.0773	3.0887	3.1126
Ca 370.602	31805	31637	32001
Cd 226.502	3.4411	3.0530	3.4400
Co 228.615	36.6188	35.9538	35.9548
Cr 267.716	85.0706	85.6877	86.0686
Cu 324.754	144.164	144.915	146.715
Fe 271.441	92738.6	92250.4	93417.7
K 766.491	9118.08	9054.23	9158.97
Mg 279.078	21998.9	21892.4	22081.2
Mn 257.610	1182.83	1177.97	1186.41
Mo 202.032	4.4429	4.0575	5.1575
Na 330.237	815.569	878.234	1000.50
Ni 231.604	100.693	93.8157	101.170
Pb 220.353	333.334	324.824	334.912
Sb 206.834	-9.0537u	0.1861	-2.2902
Se 196.026	-9.4526u	-10.5898u	17.8778
Si 288.158	2707.77	2695.79	2738.60
Sn 189.925	12.3386	14.1564	16.1453
Sr 216.596	121.665	118.803	118.869
Ti 334.941	843.775	842.527	847.744
Tl 190.794	6.5623u	-11.6979u	7.7020u
V 292.401	131.770	132.022	133.122
Zn 206.200	597.164	597.129	598.754

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1440	ppb	0.3994	277.4	-60.8529
Al 308.215	59799.1	ppb	232.046	0.4	117188
As 188.980	60.2778	ppb	7.9620	13.2	16.5514
B 249.678	45.6603	ppb	0.2963	0.6	212.033
Ba 389.178	476.704	ppb	1.8013	0.4	3024.47
Be 313.042	3.0929	ppb	0.0180	0.6	2177.00
Ca 370.602	31814	ppb	182.4	0.6	53097
Cd 226.502	3.3113	ppb	0.2238	6.8	191.062
Co 228.615	36.1758	ppb	0.3836	1.1	135.152
Cr 267.716	85.6089	ppb	0.5036	0.6	1455.62
Cu 324.754	145.265	ppb	1.3111	0.9	4852.06
Fe 271.441	92802.2	ppb	586.264	0.6	51390.2
K 766.491	9110.43	ppb	52.7850	0.6	187822
Mg 279.078	21990.8	ppb	94.6506	0.4	29406.7
Mn 257.610	1182.40	ppb	4.2354	0.4	98200.4
Mo 202.032	4.5526	ppb	0.5581	12.3	10.5817
Na 330.237	898.100	ppb	94.0508	10.5	43.9386
Ni 231.604	98.5597	ppb	4.1154	4.2	108.775
Pb 220.353	331.023	ppb	5.4262	1.6	122.843
Sb 206.834	-3.7193	ppb	4.7828	128.6	6.3100
Se 196.026	-0.7215	ppb	16.1175	2233.8	3.0774
Si 288.158	2714.05	ppb	22.0860	0.8	13243.5

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	14.2135	ppb	1.9040	13.4	4.5856
Sr 216.596	119.779	ppb	1.6336	1.4	367.057
Ti 334.941	844.682	ppb	2.7242	0.3	74962.6
Tl 190.794	0.8555	ppb	10.8864	1272.6	-5.0793
V 292.401	132.305	ppb	0.7193	0.5	1341.39
Zn 206.200	597.682	ppb	0.9283	0.2	329.885

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	-0.3709u	-1.0830u	-0.3552u
Al 308.215	65474.7	65923.6	65853.3
As 188.980	30.0060	33.8003	42.3832
B 249.678	14.6986	14.1910	14.7230
Ba 389.178	326.568	330.498	332.674
Be 313.042	1.1433	1.1245	1.1204
Ca 370.602	7276	7313	7324
Cd 226.502	1.0134	0.6357	0.7930
Co 228.615	28.7700	28.8404	27.4164
Cr 267.716	70.7612	71.0459	71.4992
Cu 324.754	42.0375	42.3581	40.4502
Fe 271.441	87764.6	88321.8	88262.5
K 766.491	4736.23	4790.51	4764.98
Mg 279.078	21681.8	21783.7	21789.7
Mn 257.610	887.018	893.782	892.419
Mo 202.032	1.9065	0.9124	2.0503
Na 330.237	654.643u	569.997u	765.197
Ni 231.604	74.2130	68.4917	66.1449
Pb 220.353	91.7196	89.3516	78.7615
Sb 206.834	8.6666	8.8802	0.9022
Se 196.026	3.4089	-24.8453u	11.4275
Si 288.158	4065.86	4049.40	4025.26
Sn 189.925	10.3107	16.1086	7.2590
Sr 216.596	32.9982	32.7988	33.0752
Ti 334.941	1439.43	1444.14	1446.89
Tl 190.794	14.8937u	-13.6902u	-22.5669u
V 292.401	100.001	102.902	102.459
Zn 206.200	316.377	315.249	318.698

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6030	ppb	0.4157	68.9	-74.9452
Al 308.215	65750.5	ppb	241.469	0.4	128828
As 188.980	35.3965	ppb	6.3411	17.9	9.9209
B 249.678	14.5375	ppb	0.3004	2.1	3.7022
Ba 389.178	329.913	ppb	3.0947	0.9	2099.34
Be 313.042	1.1294	ppb	0.0122	1.1	589.075
Ca 370.602	7304	ppb	25.11	0.3	12134
Cd 226.502	0.8140	ppb	0.1897	23.3	152.012
Co 228.615	28.3423	ppb	0.8026	2.8	108.717
Cr 267.716	71.1021	ppb	0.3722	0.5	1212.60
Cu 324.754	41.6153	ppb	1.0216	2.5	1711.84
Fe 271.441	88116.3	ppb	306.005	0.3	48795.8
K 766.491	4763.91	ppb	27.1529	0.6	98369.5

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	21751.8	ppb	60.6249	0.3	29088.9
Mn 257.610	891.073	ppb	3.5775	0.4	74055.9
Mo 202.032	1.6231	ppb	0.6196	38.2	5.6964
Na 330.237	663.279	ppb	97.8861	14.8	35.7146
Ni 231.604	69.6165	ppb	4.1500	6.0	76.3116
Pb 220.353	86.6109	ppb	6.9001	8.0	30.3321
Sb 206.834	6.1497	ppb	4.5457	73.9	9.6543
Se 196.026	-3.3363	ppb	19.0539	571.1	2.5382
Si 288.158	4046.84	ppb	20.4189	0.5	19490.6
Sn 189.925	11.2261	ppb	4.4952	40.0	3.8306
Sr 216.596	32.9574	ppb	0.1427	0.4	113.237
Ti 334.941	1443.48	ppb	3.7747	0.3	128080
Tl 190.794	-7.1211	ppb	19.5752	274.9	-6.8559
V 292.401	101.787	ppb	1.5625	1.5	1033.19
Zn 206.200	316.774	ppb	1.7585	0.6	174.861

Cont Calib Verif (CCV)

4/20/2019, 4:23:16 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	511.084	502.220	495.971
Al 308.215	10302.6	10177.3	10184.7
As 188.980	509.235	512.166	509.451
B 249.678	545.130	543.153	544.221
Ba 389.178	456.746	453.849	454.335
Be 313.042	562.480	556.509	555.965
Ca 370.602	10035	9926	9896
Cd 226.502	510.577	505.263	504.694
Co 228.615	509.274	503.260	505.026
Cr 267.716	502.673	499.976	498.561
Cu 324.754	514.551	507.536	499.777
Fe 271.441	10320.6	10243.9	10189.5
K 766.491	10129.4	9988.80	9974.90
Mg 279.078	10612.7	10511.9	10485.6
Mn 257.610	502.052	496.970	497.067
Mo 202.032	491.118	487.792	489.147
Na 330.237	11022.3	11418.7	11018.7
Ni 231.604	508.704	503.010	506.324
Pb 220.353	500.859	493.444	495.522
Sb 206.834	495.359	480.920	503.039
Se 196.026	599.168	535.822	539.942
Si 288.158	5292.75	5238.73	5237.26
Sn 189.925	498.982	500.235	488.383
Sr 216.596	487.910	486.322	485.593
Ti 334.941	504.045	497.672	498.081
Tl 190.794	497.333	496.907	479.154
V 292.401	500.815	495.876	494.858
Zn 206.200	1082.75	1065.99	1059.50

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	503.092	ppb	7.5941	1.5	15238.6	100.61835
Al 308.215	10221.5	ppb	70.2812	0.7	20219.9	102.21527
As 188.980	510.284	ppb	1.6334	0.3	136.852	102.05683
B 249.678	544.168	ppb	0.9893	0.2	3708.50	108.83360

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	454.977	ppb	1.5514	0.3	2840.77	90.99532
Be 313.042	558.318	ppb	3.6148	0.6	450083	111.66361Q
Ca 370.602	9952	ppb	73.39	0.7	16668	99.52449
Cd 226.502	506.845	ppb	3.2446	0.6	6526.05	101.36899
Co 228.615	505.854	ppb	3.0909	0.6	1991.33	101.17072
Cr 267.716	500.404	ppb	2.0891	0.4	8385.55	100.08070
Cu 324.754	507.288	ppb	7.3903	1.5	15808.9	101.45763
Fe 271.441	10251.3	ppb	65.8979	0.6	5712.37	102.46213
K 766.491	10031.0	ppb	85.4706	0.9	204230	100.31035
Mg 279.078	10536.7	ppb	67.1240	0.6	14105.5	105.36725
Mn 257.610	498.696	ppb	2.9064	0.6	41421.0	99.73928
Mo 202.032	489.353	ppb	1.6725	0.3	829.669	97.87051
Na 330.237	11153.2	ppb	229.877	2.1	321.773	111.53220Q
Ni 231.604	506.012	ppb	2.8599	0.6	565.453	101.20249
Pb 220.353	496.608	ppb	3.8249	0.8	188.328	99.32159
Sb 206.834	493.106	ppb	11.2304	2.3	184.746	98.62117
Se 196.026	558.311	ppb	35.4437	6.3	108.058	111.66215Q
Si 288.158	5256.24	ppb	31.6227	0.6	25198.7	105.12489
Sn 189.925	495.867	ppb	6.5111	1.3	126.317	99.17339
Sr 216.596	486.608	ppb	1.1849	0.2	1421.61	97.32168
Ti 334.941	499.932	ppb	3.5670	0.7	44349.7	99.98649
Tl 190.794	491.132	ppb	10.3748	2.1	116.053	98.22630
V 292.401	497.183	ppb	3.1865	0.6	5008.03	99.43665
Zn 206.200	1069.41	ppb	11.9991	1.1	589.802	106.94148

Cont Calib Blank (CCB)

4/20/2019, 4:27:29 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5889u	-1.1042u	-0.2756u
Al 308.215	29.9302	25.4009	19.5587
As 188.980	5.8417	-2.1750u	-0.6299u
B 249.678	14.4840	12.0398	10.6700
Ba 389.178	-3.2722u	-0.1242u	-1.2515u
Be 313.042	0.0485	0.0303	0.0020
Ca 370.602	8.532	-0.2794u	-7.957u
Cd 226.502	0.3913	-0.1847u	0.4498
Co 228.615	0.2720	-0.8540u	-0.1227u
Cr 267.716	1.1352	0.3451	0.1859
Cu 324.754	1.7626	2.1762	1.8655
Fe 271.441	10.0219	12.8409	3.0702
K 766.491	6.8181	8.0635	6.4200
Mg 279.078	16.2378	13.0467	6.5174
Mn 257.610	0.5109	0.3438	0.2957
Mo 202.032	2.4057	1.5382	2.5577
Na 330.237	124.962	320.612	203.546
Ni 231.604	-1.0064u	0.1809	1.5853
Pb 220.353	-4.6103u	-9.8111u	6.7717
Sb 206.834	8.2135	-3.7981u	7.4134
Se 196.026	-7.1381u	20.1375	-19.0761u
Si 288.158	24.2133	25.7169	18.1633
Sn 189.925	-2.4550u	-7.2304u	5.4976
Sr 216.596	3.2305	0.7081	0.3090
Ti 334.941	0.6049	0.4942	0.3860

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-5.6775u	-3.2648u	3.6751
V 292.401	1.1033	-0.3347u	-0.3852u
Zn 206.200	-1.3776u	-2.1234u	3.2166

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.6562	ppb	0.4184	63.8	-60.6604	-0.65621
Al 308.215	24.9633	ppb	5.1996	20.8	255.986	24.96327
As 188.980	1.0123	ppb	4.2532	420.2	0.9763	1.01227
B 249.678	12.3979	ppb	1.9320	15.6	79.0946	12.39793
Ba 389.178	-1.5493	ppb	1.5950	102.9	-46.3651	-1.54932
Be 313.042	0.0269	ppb	0.0235	87.1	-305.236	0.02692
Ca 370.602	0.0986	ppb	8.251	8371.1	25.25	0.09856
Cd 226.502	0.2188	ppb	0.3506	160.3	6.7809	0.21879
Co 228.615	-0.2349	ppb	0.5713	243.2	-13.3090	-0.23488
Cr 267.716	0.5554	ppb	0.5084	91.5	22.8487	0.55541
Cu 324.754	1.9348	ppb	0.2153	11.1	494.716	1.93476
Fe 271.441	8.6443	ppb	5.0289	58.2	22.0098	8.64433
K 766.491	7.1005	ppb	0.8573	12.1	410.874	7.10053
Mg 279.078	11.9340	ppb	4.9548	41.5	37.6448	11.93396
Mn 257.610	0.3835	ppb	0.1130	29.5	58.3877	0.38346
Mo 202.032	2.1672	ppb	0.5500	25.4	7.6613	2.16720
Na 330.237	216.373	ppb	98.4538	45.5	43.4180	216.37302
Ni 231.604	0.2533	ppb	1.2974	512.3	-1.4871	0.25326
Pb 220.353	-2.5499	ppb	8.4812	332.6	-0.1102	-2.54992
Sb 206.834	3.9429	ppb	6.7159	170.3	7.4293	3.94293
Se 196.026	-2.0256	ppb	20.1005	992.3	2.3399	-2.02558
Si 288.158	22.6979	ppb	3.9983	17.6	641.430	22.69785
Sn 189.925	-1.3959	ppb	6.4298	460.6	0.6406	-1.39594
Sr 216.596	1.4159	ppb	1.5841	111.9	11.2836	1.41586
Ti 334.941	0.4950	ppb	0.1095	22.1	18.5625	0.49501
Tl 190.794	-1.7557	ppb	4.8555	276.6	-1.8402	-1.75574
V 292.401	0.1278	ppb	0.8452	661.4	-11.5971	0.12780
Zn 206.200	-0.0948	ppb	2.8919	3051.1	-0.1579	-0.09478

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Rack 3, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4920u	0.8980	-0.1419u
Al 308.215	135403	135193	134945
As 188.980	22.3750	26.4138	19.7939
B 249.678	61.8752	61.4552	62.3933
Ba 389.178	1140.53	1143.82	1141.29
Be 313.042	7.3443	7.3589	7.3544
Ca 370.602	37463	37371	37308
Cd 226.502	6.2832	6.3855	6.0535
Co 228.615	76.4185	72.9745	72.5918
Cr 267.716	171.951	171.988	171.126
Cu 324.754	237.681	238.783	236.289
Fe 271.441	141158	140732	140761
K 766.491	26117.6	26140.9	26077.4
Mg 279.078	38011.2	37983.1	37907.6
Mn 257.610	2047.67	2041.84	2038.58
Mo 202.032	6.1282	1.7255	1.4866

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	653.940u	862.261u	986.349u
Ni 231.604	158.040	159.182	157.367
Pb 220.353	189.594	179.255	187.041
Sb 206.834	2.7386	3.0483	1.2862
Se 196.026	13.6532	5.1951	5.5283
Si 288.158	2523.69	2534.35	2526.94
Sn 189.925	14.6331	4.9793	0.5658
Sr 216.596	135.185	130.497	133.188
Ti 334.941	639.906	636.988	634.680
Tl 190.794	5.3001u	10.3935u	-2.5630u
V 292.401	187.639	187.724	187.609
Zn 206.200	2202.92	2174.91	2186.99

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4160	ppb	0.5241	126.0	-50.6387
Al 308.215	135180	ppb	229.420	0.2	264645
As 188.980	22.8609	ppb	3.3366	14.6	6.4290
B 249.678	61.9079	ppb	0.4699	0.8	274.045
Ba 389.178	1141.88	ppb	1.7251	0.2	7244.71
Be 313.042	7.3525	ppb	0.0075	0.1	5617.73
Ca 370.602	37381	ppb	78.23	0.2	62333
Cd 226.502	6.2407	ppb	0.1700	2.7	305.675
Co 228.615	73.9949	ppb	2.1076	2.8	282.424
Cr 267.716	171.689	ppb	0.4875	0.3	2900.87
Cu 324.754	237.584	ppb	1.2498	0.5	7656.71
Fe 271.441	140883	ppb	237.962	0.2	78007.2
K 766.491	26112.0	ppb	32.0941	0.1	537750
Mg 279.078	37967.3	ppb	53.6134	0.1	50749.1
Mn 257.610	2042.70	ppb	4.6068	0.2	169603
Mo 202.032	3.1134	ppb	2.6136	83.9	7.5808
Na 330.237	834.183	ppb	167.974	20.1	23.7464
Ni 231.604	158.196	ppb	0.9178	0.6	175.659
Pb 220.353	185.297	ppb	5.3858	2.9	65.8731
Sb 206.834	2.3577	ppb	0.9408	39.9	9.4251
Se 196.026	8.1255	ppb	4.7900	59.0	5.0238
Si 288.158	2528.33	ppb	5.4646	0.2	12366.5
Sn 189.925	6.7261	ppb	7.1945	107.0	2.6932
Sr 216.596	132.956	ppb	2.3526	1.8	410.840
Ti 334.941	637.191	ppb	2.6186	0.4	56600.3
Tl 190.794	4.3769	ppb	6.5274	149.1	-6.1876
V 292.401	187.657	ppb	0.0596	0.0	1905.37
Zn 206.200	2188.27	ppb	14.0503	0.6	1207.72

480-151917-a-38-a (Samp)

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Rack 3, Tube 12

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7482u	-0.5155u	-0.2427u
Al 308.215	65507.7	65530.9	65489.1
As 188.980	27.5017	36.5659	19.1925
B 249.678	66.9274	67.4553	67.8427
Ba 389.178	633.619	633.749	629.358
Be 313.042	3.4086	3.3986	3.4017
Ca 370.602	509157	510552	509287

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	2.0684	2.4930	1.6562
Co 228.615	65.8076	64.8675	64.0256
Cr 267.716	110.553	111.308	110.256
Cu 324.754	170.577	176.219	176.623
Fe 271.441	171733	170777	170522
K 766.491	13000.7	12979.7	12986.7
Mg 279.078	130937	130714	130373
Mn 257.610	5826.73	5815.05	5813.58
Mo 202.032	6.6334	3.2482	5.3851
Na 330.237	1508.28	1534.83	1423.01
Ni 231.604	135.731	139.022	142.661
Pb 220.353	59.0000	39.3206	50.5808
Sb 206.834	2.9807	-9.7151u	-0.8162
Se 196.026	13.4616	-6.2551	-25.0714u
Si 288.158	3054.98	3055.91	3073.32
Sn 189.925	13.8273	0.8864	4.8345
Sr 216.596	740.674	745.304	737.981
Ti 334.941	1329.19	1332.16	1328.28
Tl 190.794	-0.4493u	-5.9999u	0.6447u
V 292.401	176.464	176.437	175.700
Zn 206.200	342.316	347.343	342.254

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5021	ppb	0.2530	50.4	-80.5196
Al 308.215	65509.3	ppb	20.9428	0.0	128361
As 188.980	27.7534	ppb	8.6894	31.3	7.6609
B 249.678	67.4085	ppb	0.4595	0.7	281.708
Ba 389.178	632.242	ppb	2.4983	0.4	4155.32
Be 313.042	3.4030	ppb	0.0051	0.2	2498.02
Ca 370.602	509665	ppb	770.3	0.2	851966
Cd 226.502	2.0725	ppb	0.4184	20.2	294.725
Co 228.615	64.9002	ppb	0.8915	1.4	250.829
Cr 267.716	110.705	ppb	0.5422	0.5	1889.11
Cu 324.754	174.473	ppb	3.3803	1.9	5750.43
Fe 271.441	171010	ppb	638.291	0.4	94683.7
K 766.491	12989.0	ppb	10.6912	0.1	267703
Mg 279.078	130675	ppb	284.037	0.2	174702
Mn 257.610	5818.45	ppb	7.2031	0.1	482979
Mo 202.032	5.0889	ppb	1.7120	33.6	10.5739
Na 330.237	1488.71	ppb	58.4260	3.9	55.5988
Ni 231.604	139.138	ppb	3.4668	2.5	154.272
Pb 220.353	49.6338	ppb	9.8738	19.9	13.8157
Sb 206.834	-2.5168	ppb	6.5165	258.9	7.8782
Se 196.026	-5.9549	ppb	19.2682	323.6	2.8458
Si 288.158	3061.40	ppb	10.3331	0.3	14887.1
Sn 189.925	6.5161	ppb	6.6323	101.8	2.6402
Sr 216.596	741.320	ppb	3.7042	0.5	2190.16
Ti 334.941	1329.87	ppb	2.0269	0.2	118290
Tl 190.794	-1.9349	ppb	3.5627	184.1	-8.2105
V 292.401	176.200	ppb	0.4334	0.2	1794.90
Zn 206.200	343.971	ppb	2.9202	0.8	190.027

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

480-151917-a-23-a (Samp) 4/20/2019, 4:40:06 PM Rack 3, Tube 13**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.3558u	0.9627	0.4612u
Al 308.215	106059	106447	106674
As 188.980	213.107	215.137	207.401
B 249.678	39.9479	38.7945	38.5283
Ba 389.178	788.296	797.229	797.263
Be 313.042	4.9247	4.9543	4.9814
Ca 370.602	40552	40770	40797
Cd 226.502	3.4597	2.8316	3.4074
Co 228.615	43.7380	44.3601	42.0916
Cr 267.716	129.729	131.524	132.736
Cu 324.754	162.855	161.971	163.287
Fe 271.441	100499	100975	100893
K 766.491	9622.00	9663.84	9654.20
Mg 279.078	29620.2	29741.1	29794.8
Mn 257.610	1886.21	1896.45	1898.18
Mo 202.032	5.3021	4.7474	4.0888
Na 330.237	836.305	263.964u	567.642u
Ni 231.604	114.472	111.162	109.204
Pb 220.353	639.029	639.691	644.068
Sb 206.834	6.7847	3.6050	-0.5929
Se 196.026	-14.0825u	-1.1909	16.9055
Si 288.158	2779.36	2800.87	2804.33
Sn 189.925	25.0073	5.1626	2.9046
Sr 216.596	129.121	128.315	130.190
Ti 334.941	576.039	577.638	580.223
Tl 190.794	-12.9011u	-7.4564u	7.3911u
V 292.401	141.190	142.048	142.983
Zn 206.200	988.535	991.877	1003.66

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3560	ppb	0.6655	186.9	-45.3925
Al 308.215	106393	ppb	310.703	0.3	208331
As 188.980	211.882	ppb	4.0109	1.9	57.0086
B 249.678	39.0902	ppb	0.7546	1.9	159.308
Ba 389.178	794.263	ppb	5.1673	0.7	5032.70
Be 313.042	4.9535	ppb	0.0284	0.6	3681.16
Ca 370.602	40706	ppb	134.4	0.3	67957
Cd 226.502	3.2329	ppb	0.3485	10.8	203.627
Co 228.615	43.3966	ppb	1.1722	2.7	161.630
Cr 267.716	131.330	ppb	1.5130	1.2	2222.11
Cu 324.754	162.704	ppb	0.6710	0.4	5381.63
Fe 271.441	100789	ppb	254.349	0.3	55811.4
K 766.491	9646.68	ppb	21.9068	0.2	198880
Mg 279.078	29718.7	ppb	89.4030	0.3	39725.1
Mn 257.610	1893.61	ppb	6.4710	0.3	157187
Mo 202.032	4.7128	ppb	0.6074	12.9	10.7617
Na 330.237	555.970	ppb	286.349	51.5	32.1246
Ni 231.604	111.613	ppb	2.6630	2.4	123.420
Pb 220.353	640.930	ppb	2.7383	0.4	239.872
Sb 206.834	3.2656	ppb	3.7005	113.3	9.0044
Se 196.026	0.5441	ppb	15.5667	2861.3	3.4141
Si 288.158	2794.85	ppb	13.5298	0.5	13608.3

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	11.0248	ppb	12.1617	110.3	3.7797
Sr 216.596	129.209	ppb	0.9407	0.7	395.386
Ti 334.941	577.967	ppb	2.1115	0.4	51324.3
Tl 190.794	-4.3221	ppb	10.5029	243.0	-6.5027
V 292.401	142.073	ppb	0.8968	0.6	1439.14
Zn 206.200	994.691	ppb	7.9458	0.8	548.968

480-151917-a-93-a (Samp) 4/20/2019, 4:44:19 PM Rack 3, Tube 14

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3635u	0.2397u	-0.6558u
Al 308.215	62705.4	63013.2	62704.0
As 188.980	63.8553	45.9931	52.3324
B 249.678	58.8470	59.9192	59.4809
Ba 389.178	435.238	436.788	429.678
Be 313.042	3.8021	3.8325	3.8133
Ca 370.602	51654	51830	51706
Cd 226.502	7.5343	6.6355	7.8744
Co 228.615	140.488	139.486	140.451
Cr 267.716	91.3797	91.9238	91.6225
Cu 324.754	243.013	241.344	240.524
Fe 271.441	235900	235908	235618
K 766.491	8134.91	8162.85	8143.56
Mg 279.078	32236.4	32289.7	32283.2
Mn 257.610	2704.33	2707.72	2696.35
Mo 202.032	5.3037	3.7435	6.7261
Na 330.237	630.955u	1269.54	900.251u
Ni 231.604	210.565	214.470	211.786
Pb 220.353	178.032	167.205	176.493
Sb 206.834	-10.8402u	-13.2999u	-9.5371
Se 196.026	0.4766	-0.9492	2.5354
Si 288.158	4527.88	4526.72	4526.13
Sn 189.925	15.3317	17.1671	-2.8956u
Sr 216.596	134.303	137.614	136.435
Ti 334.941	963.216	965.205	959.303
Tl 190.794	-2.1009u	16.2754u	-0.2990u
V 292.401	134.840	134.461	134.340
Zn 206.200	992.218	1013.46	996.662

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2598	ppb	0.4566	175.7	-87.5060
Al 308.215	62807.5	ppb	178.123	0.3	123077
As 188.980	54.0603	ppb	9.0556	16.8	14.5154
B 249.678	59.4157	ppb	0.5391	0.9	160.844
Ba 389.178	433.901	ppb	3.7389	0.9	2827.68
Be 313.042	3.8160	ppb	0.0154	0.4	2761.88
Ca 370.602	51730	ppb	90.34	0.2	86184
Cd 226.502	7.3481	ppb	0.6401	8.7	461.423
Co 228.615	140.141	ppb	0.5681	0.4	544.663
Cr 267.716	91.6420	ppb	0.2726	0.3	1570.67
Cu 324.754	241.627	ppb	1.2683	0.5	7796.40
Fe 271.441	235809	ppb	165.054	0.1	130555
K 766.491	8147.11	ppb	14.3050	0.2	168036

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	32269.8	ppb	29.0893	0.1	43136.8
Mn 257.610	2702.80	ppb	5.8357	0.2	224370
Mo 202.032	5.2578	ppb	1.4919	28.4	10.1098
Na 330.237	933.583	ppb	320.596	34.3	33.7977
Ni 231.604	212.274	ppb	1.9978	0.9	236.254
Pb 220.353	173.910	ppb	5.8575	3.4	58.5848
Sb 206.834	-11.2257	ppb	1.9108	17.0	5.7154
Se 196.026	0.6876	ppb	1.7518	254.8	4.0696
Si 288.158	4526.91	ppb	0.8933	0.0	21710.1
Sn 189.925	9.8677	ppb	11.0914	112.4	3.4872
Sr 216.596	136.117	ppb	1.6780	1.2	430.678
Ti 334.941	962.575	ppb	3.0030	0.3	85447.6
Tl 190.794	4.6252	ppb	10.1295	219.0	-10.2089
V 292.401	134.547	ppb	0.2607	0.2	1373.21
Zn 206.200	1000.78	ppb	11.2064	1.1	552.645

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Rack 3, Tube 15

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0959u	-0.4959u	-0.4778u
Al 308.215	83532.4	83115.3	83608.3
As 188.980	259.164	261.294	266.230
B 249.678	29.5494	28.8309	27.9911
Ba 389.178	619.760	614.618	621.171
Be 313.042	3.2292	3.1860	3.2315
Ca 370.602	17813	17720	17829
Cd 226.502	4.5531	4.2918	4.6884
Co 228.615	80.2498	81.8896	80.2238
Cr 267.716	3541.84	3527.34	3554.04
Cu 324.754	259.376	259.768	261.378
Fe 271.441	105549	105003	105467
K 766.491	10029.6	10010.0	10040.7
Mg 279.078	22516.4	22405.0	22493.8
Mn 257.610	1969.60	1958.62	1971.27
Mo 202.032	381.520	380.987	381.595
Na 330.237	821.881u	327.202u	600.948u
Ni 231.604	2842.48	2826.14	2837.52
Pb 220.353	1531.65	1544.16	1522.44
Sb 206.834	89.9995	79.4698	90.6823
Se 196.026	13.1183	2.7287	-1.9981
Si 288.158	3282.09	3270.55	3290.58
Sn 189.925	8.5708	10.3649	13.1255
Sr 216.596	80.3983	77.6494	80.3308
Ti 334.941	720.043	717.522	722.452
Tl 190.794	-12.0688u	-17.0500u	-0.5345u
V 292.401	118.068	116.658	118.104
Zn 206.200	1189.59	1156.86	1167.30

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3565	ppb	0.2259	63.4	-67.7878
Al 308.215	83418.7	ppb	265.429	0.3	163395
As 188.980	262.229	ppb	3.6247	1.4	70.2142
B 249.678	28.7905	ppb	0.7799	2.7	83.8361

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	618.516	ppb	3.4492	0.6	3922.40
Be 313.042	3.2155	ppb	0.0256	0.8	2249.01
Ca 370.602	17788	ppb	59.07	0.3	29634
Cd 226.502	4.5111	ppb	0.2016	4.5	226.547
Co 228.615	80.7878	ppb	0.9543	1.2	310.064
Cr 267.716	3541.07	ppb	13.3688	0.4	59261.2
Cu 324.754	260.174	ppb	1.0611	0.4	8341.31
Fe 271.441	105339	ppb	294.576	0.3	58333.9
K 766.491	10026.8	ppb	15.5335	0.2	206749
Mg 279.078	22471.7	ppb	58.8896	0.3	30037.3
Mn 257.610	1966.50	ppb	6.8735	0.3	163207
Mo 202.032	381.367	ppb	0.3313	0.1	646.382
Na 330.237	583.343	ppb	247.809	42.5	29.4323
Ni 231.604	2835.38	ppb	8.3811	0.3	3179.08
Pb 220.353	1532.75	ppb	10.9014	0.7	577.561
Sb 206.834	86.7172	ppb	6.2857	7.2	49.8732
Se 196.026	4.6163	ppb	7.7329	167.5	4.2086
Si 288.158	3281.07	ppb	10.0552	0.3	15934.6
Sn 189.925	10.6870	ppb	2.2944	21.5	3.6943
Sr 216.596	79.4595	ppb	1.5680	2.0	235.011
Ti 334.941	720.006	ppb	2.4653	0.3	63904.6
Tl 190.794	-9.8844	ppb	8.4717	85.7	-8.1238
V 292.401	117.610	ppb	0.8248	0.7	1097.64
Zn 206.200	1171.25	ppb	16.7179	1.4	644.502

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Rack 3, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6368	0.6398	0.0917u
Al 308.215	72816.9	72983.0	73025.4
As 188.980	206.367	213.826	211.410
B 249.678	14.8679u	13.1789u	14.0249u
Ba 389.178	367.591	365.739	362.726
Be 313.042	2.1640	2.1771	2.1662
Ca 370.602	8306	8305	8343
Cd 226.502	2.4297	1.9819	2.4355
Co 228.615	40.7222	41.7228	40.2046
Cr 267.716	109.508	108.069	109.125
Cu 324.754	124.769	125.271	126.950
Fe 271.441	126723	126705	126675
K 766.491	6842.99	6843.83	6856.04
Mg 279.078	23370.1	23429.8	23455.2
Mn 257.610	3941.41	3946.50	3951.53
Mo 202.032	6.9451	8.4879	6.3793
Na 330.237	830.312	652.560u	978.024
Ni 231.604	107.369	106.345	101.382
Pb 220.353	633.994	644.658	622.188
Sb 206.834	6.4107	-5.5908	-3.5752
Se 196.026	-21.2390u	-9.1258u	-9.8287u
Si 288.158	3254.33	3237.59	3255.13
Sn 189.925	4.8272	7.4088	5.4814
Sr 216.596	33.7498	34.1161	35.4050
Ti 334.941	997.586	999.322	999.244

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Label	Replicates Concentration		
Tl 190.794	12.5261u	5.4787u	3.0650u
V 292.401	153.788	154.156	154.470
Zn 206.200	375.036	374.676	382.726

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4561	ppb	0.3156	69.2	-43.4368
Al 308.215	72941.8	ppb	110.160	0.2	142898
As 188.980	210.534	ppb	3.8055	1.8	56.5814
B 249.678	14.0239	ppb	0.8445	6.0	-38.8206
Ba 389.178	365.352	ppb	2.4554	0.7	2340.36
Be 313.042	2.1691	ppb	0.0070	0.3	1428.37
Ca 370.602	8318	ppb	21.67	0.3	13802
Cd 226.502	2.2824	ppb	0.2602	11.4	229.888
Co 228.615	40.8832	ppb	0.7718	1.9	154.179
Cr 267.716	108.901	ppb	0.7454	0.7	1852.30
Cu 324.754	125.663	ppb	1.1423	0.9	4264.28
Fe 271.441	126701	ppb	24.6299	0.0	70155.2
K 766.491	6847.62	ppb	7.3052	0.1	141216
Mg 279.078	23418.4	ppb	43.6456	0.2	31285.2
Mn 257.610	3946.48	ppb	5.0579	0.1	327363
Mo 202.032	7.2708	ppb	1.0914	15.0	14.7731
Na 330.237	820.299	ppb	162.963	19.9	41.7415
Ni 231.604	105.032	ppb	3.2021	3.0	116.034
Pb 220.353	633.613	ppb	11.2396	1.8	236.372
Sb 206.834	-0.9185	ppb	6.4267	699.7	7.9095
Se 196.026	-13.3978	ppb	6.7997	50.8	1.0858
Si 288.158	3249.02	ppb	9.9070	0.3	15747.8
Sn 189.925	5.9058	ppb	1.3421	22.7	2.4859
Sr 216.596	34.4236	ppb	0.8694	2.5	121.716
Ti 334.941	998.717	ppb	0.9805	0.1	88630.4
Tl 190.794	7.0232	ppb	4.9160	70.0	-4.5097
V 292.401	154.138	ppb	0.3413	0.2	1565.66
Zn 206.200	377.479	ppb	4.5473	1.2	208.424

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Rack 3, Tube 17

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5253	-0.7856u	-0.5427u
Al 308.215	61776.9	61759.1	62488.2
As 188.980	13.8556	12.1909	8.2575
B 249.678	21.2576	22.0023	22.0834
Ba 389.178	472.617	475.186	478.594
Be 313.042	2.3546	2.3790	2.3920
Ca 370.602	8358	8362	8468
Cd 226.502	2.7326	2.4808	3.0511
Co 228.615	22.8361	24.4159	23.9014
Cr 267.716	73.9623	73.5219	75.3004
Cu 324.754	64.4965	65.5130	65.7353
Fe 271.441	70868.0	70974.6	71667.7
K 766.491	4714.98	4741.85	4782.27
Mg 279.078	15666.9	15637.9	15839.8
Mn 257.610	734.181	734.832	741.400
Mo 202.032	2.7159	3.1005	4.0804

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Label	Replicates Concentration		
Na 330.237	137.369u	239.026u	613.736
Ni 231.604	67.7498	68.4320	67.1120
Pb 220.353	72.7794	49.1929	49.5364
Sb 206.834	-12.2661u	12.6527	4.0190
Se 196.026	-0.1937	-16.9789u	23.6027
Si 288.158	3690.23	3721.67	3828.55
Sn 189.925	12.6645	12.3879	7.8399
Sr 216.596	41.7452	41.3565	42.0001
Ti 334.941	778.875	780.241	782.582
Tl 190.794	2.2018u	-26.2955u	1.5768u
V 292.401	98.2475	99.4833	101.513
Zn 206.200	501.598	493.870	496.545

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2677	ppb	0.6973	260.5	-61.1559
Al 308.215	62008.1	ppb	415.890	0.7	121507
As 188.980	11.4347	ppb	2.8746	25.1	3.5681
B 249.678	21.7811	ppb	0.4551	2.1	70.9424
Ba 389.178	475.466	ppb	2.9984	0.6	3000.35
Be 313.042	2.3752	ppb	0.0190	0.8	1594.33
Ca 370.602	8396	ppb	62.36	0.7	13972
Cd 226.502	2.7548	ppb	0.2858	10.4	150.390
Co 228.615	23.7178	ppb	0.8057	3.4	85.8416
Cr 267.716	74.2615	ppb	0.9262	1.2	1263.34
Cu 324.754	65.2483	ppb	0.6604	1.0	2424.61
Fe 271.441	71170.1	ppb	434.201	0.6	39415.0
K 766.491	4746.37	ppb	33.8702	0.7	98036.4
Mg 279.078	15714.8	ppb	109.139	0.7	21017.9
Mn 257.610	736.805	ppb	3.9932	0.5	61222.9
Mo 202.032	3.2989	ppb	0.7036	21.3	8.7269
Na 330.237	330.044	ppb	250.888	76.0	31.1048
Ni 231.604	67.7646	ppb	0.6601	1.0	74.2391
Pb 220.353	57.1696	ppb	13.5196	23.6	19.8584
Sb 206.834	1.4685	ppb	12.6537	861.7	7.7319
Se 196.026	2.1434	ppb	20.3915	951.4	3.4857
Si 288.158	3746.82	ppb	72.5067	1.9	18060.3
Sn 189.925	10.9641	ppb	2.7092	24.7	3.7644
Sr 216.596	41.7006	ppb	0.3241	0.8	136.755
Ti 334.941	780.566	ppb	1.8747	0.2	69258.4
Tl 190.794	-7.5056	ppb	16.2755	216.8	-6.2071
V 292.401	99.7478	ppb	1.6486	1.7	1008.56
Zn 206.200	497.338	ppb	3.9244	0.8	274.467

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Rack 3, Tube 18

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4717u	-0.2185u	-1.4020u
Al 308.215	63528.9	63418.2	64310.9
As 188.980	163.917	159.928	164.842
B 249.678	15.7880	16.5135	15.7162
Ba 389.178	378.389	373.316	379.710
Be 313.042	1.9502	1.9343	1.9852
Ca 370.602	11542	11523	11687

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Label	Replicates Concentration		
Cd 226.502	2.1360	1.6722	2.6256
Co 228.615	29.8913	30.7639	29.5915
Cr 267.716	78.0719	78.1909	79.1325
Cu 324.754	98.6644	98.7498	100.200
Fe 271.441	103408	103057	105016
K 766.491	7478.76	7444.67	7564.20
Mg 279.078	18833.9	18805.6	19071.8
Mn 257.610	2394.90	2388.23	2423.21
Mo 202.032	5.0382	5.4275	5.3671
Na 330.237	915.085	898.748	844.809
Ni 231.604	71.6776	72.8481	68.4629
Pb 220.353	570.819	548.633	583.195
Sb 206.834	-6.5687u	-1.8964	-2.8531
Se 196.026	-2.8950	-15.1823u	-7.9877u
Si 288.158	2690.20	2678.50	2734.87
Sn 189.925	17.6201	22.1167	14.0590
Sr 216.596	43.7923	41.5009	47.1453
Ti 334.941	1117.77	1116.58	1130.62
Tl 190.794	14.7980u	4.2246u	0.3897u
V 292.401	137.967	137.159	139.560
Zn 206.200	380.130	371.184	378.574

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6974	ppb	0.6232	89.4	-77.4226
Al 308.215	63752.7	ppb	486.653	0.8	124922
As 188.980	162.896	ppb	2.6112	1.6	43.9230
B 249.678	16.0059	ppb	0.4411	2.8	-2.0827
Ba 389.178	377.139	ppb	3.3756	0.9	2399.77
Be 313.042	1.9565	ppb	0.0261	1.3	1257.18
Ca 370.602	11584	ppb	89.56	0.8	19280
Cd 226.502	2.1446	ppb	0.4767	22.2	192.889
Co 228.615	30.0822	ppb	0.6091	2.0	112.817
Cr 267.716	78.4651	ppb	0.5811	0.7	1339.05
Cu 324.754	99.2049	ppb	0.8632	0.9	3458.85
Fe 271.441	103827	ppb	1044.28	1.0	57492.9
K 766.491	7495.87	ppb	61.5787	0.8	154555
Mg 279.078	18903.8	ppb	146.206	0.8	25265.2
Mn 257.610	2402.11	ppb	18.5761	0.8	199311
Mo 202.032	5.2776	ppb	0.2095	4.0	11.6769
Na 330.237	886.214	ppb	36.7764	4.1	43.2975
Ni 231.604	70.9962	ppb	2.2707	3.2	77.8581
Pb 220.353	567.549	ppb	17.5111	3.1	212.055
Sb 206.834	-3.7727	ppb	2.4682	65.4	6.4775
Se 196.026	-8.6883	ppb	6.1735	71.1	1.7351
Si 288.158	2701.19	ppb	29.7504	1.1	13196.4
Sn 189.925	17.9319	ppb	4.0379	22.5	5.5254
Sr 216.596	44.1462	ppb	2.8388	6.4	147.641
Ti 334.941	1121.66	ppb	7.7887	0.7	99523.9
Tl 190.794	6.4708	ppb	7.4621	115.3	-3.9626
V 292.401	138.229	ppb	1.2215	0.9	1403.48
Zn 206.200	376.629	ppb	4.7796	1.3	207.922

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Label	Replicates Concentration		
Ag 328.068	-1.2802u	-1.3623u	-0.8455u
Al 308.215	103473	103892	102934
As 188.980	12.0014	12.5644	9.2220
B 249.678	24.0537	23.4981	24.8322
Ba 389.178	537.722	543.582	533.910
Be 313.042	2.4713	2.4682	2.4554
Ca 370.602	21372	21457	21230
Cd 226.502	1.7910	2.2391	0.9201
Co 228.615	54.4006	53.5404	55.9880
Cr 267.716	106.284	107.663	105.899
Cu 324.754	50.0386	48.7839	47.1931
Fe 271.441	118382	118362	117104
K 766.491	8561.42	8583.57	8525.83
Mg 279.078	41504.0	41612.5	41277.0
Mn 257.610	1093.47	1096.03	1086.20
Mo 202.032	0.6561u	0.2824u	1.9575
Na 330.237	883.285	1050.96	1057.88
Ni 231.604	130.223	133.917	131.619
Pb 220.353	39.0117	38.5128	46.5617
Sb 206.834	0.7933	3.6361	3.8506
Se 196.026	1.3837	-11.8598u	-8.2519u
Si 288.158	4249.84	4275.01	4240.44
Sn 189.925	15.7772	6.6653	8.6937
Sr 216.596	79.3815	77.7366	78.3632
Ti 334.941	1242.78	1246.70	1235.27
Tl 190.794	-4.5730u	-16.4817u	-6.9488u
V 292.401	127.307	125.277	126.674
Zn 206.200	642.618	637.135	619.701

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.1626	ppb	0.2777	23.9	-96.8122
Al 308.215	103433	ppb	480.152	0.5	202542
As 188.980	11.2626	ppb	1.7895	15.9	3.3974
B 249.678	24.1280	ppb	0.6701	2.8	39.2968
Ba 389.178	538.405	ppb	4.8721	0.9	3444.46
Be 313.042	2.4650	ppb	0.0084	0.3	1670.20
Ca 370.602	21353	ppb	114.5	0.5	35572
Cd 226.502	1.6501	ppb	0.6707	40.6	209.512
Co 228.615	54.6430	ppb	1.2417	2.3	210.783
Cr 267.716	106.615	ppb	0.9278	0.9	1809.37
Cu 324.754	48.6719	ppb	1.4261	2.9	1930.70
Fe 271.441	117949	ppb	731.956	0.6	65310.9
K 766.491	8556.94	ppb	29.1270	0.3	176491
Mg 279.078	41464.5	ppb	171.179	0.4	55441.6
Mn 257.610	1091.90	ppb	5.1012	0.5	90793.0
Mo 202.032	0.9654	ppb	0.8793	91.1	4.2387
Na 330.237	997.375	ppb	98.8655	9.9	41.7147
Ni 231.604	131.920	ppb	1.8653	1.4	146.191
Pb 220.353	41.3621	ppb	4.5099	10.9	12.1240
Sb 206.834	2.7600	ppb	1.7066	61.8	8.9411
Se 196.026	-6.2426	ppb	6.8466	109.7	2.1299
Si 288.158	4255.10	ppb	17.8731	0.4	20453.6

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	10.3787	ppb	4.7839	46.1	3.6164
Sr 216.596	78.4938	ppb	0.8302	1.1	249.291
Ti 334.941	1241.58	ppb	5.8089	0.5	110222
Tl 190.794	-9.3345	ppb	6.3026	67.5	-8.6491
V 292.401	126.419	ppb	1.0390	0.8	1284.29
Zn 206.200	633.151	ppb	11.9668	1.9	349.500

480-151917-a-106-a (Samp) 4/20/2019, 5:09:36 PM Rack 3, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0534u	-0.5313u	-0.6214u
Al 308.215	140358	141421	140741
As 188.980	32.1392	33.2957	38.5700
B 249.678	56.2343	57.1971	58.0823
Ba 389.178	1206.87	1213.95	1206.80
Be 313.042	7.7838	7.8553	7.7770
Ca 370.602	28590	28838	28719
Cd 226.502	4.2612	5.6703	5.2614
Co 228.615	67.8294	67.9654	63.8106
Cr 267.716	171.655	172.263	172.489
Cu 324.754	175.199	175.577	172.730
Fe 271.441	129110	129878	129172
K 766.491	14967.1	15091.2	14991.6
Mg 279.078	34882.5	35103.5	34995.9
Mn 257.610	2136.99	2149.56	2139.92
Mo 202.032	4.6921	2.3301	6.2106
Na 330.237	488.719u	875.394u	332.254u
Ni 231.604	161.246	156.412	157.415
Pb 220.353	215.065	225.592	224.760
Sb 206.834	-12.8743u	3.6087	1.2532
Se 196.026	-3.1320	-15.1838u	27.3042
Si 288.158	4735.95	4762.13	4716.90
Sn 189.925	5.2249	14.3875	14.6401
Sr 216.596	125.831	123.405	126.387
Ti 334.941	626.787	632.509	629.006
Tl 190.794	5.8045u	7.0558u	6.9136u
V 292.401	184.265	187.548	184.909
Zn 206.200	2015.83	2017.77	2034.83

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3664	ppb	0.3664	100.0	-71.9360
Al 308.215	140840	ppb	538.101	0.4	275716
As 188.980	34.6683	ppb	3.4281	9.9	9.6138
B 249.678	57.1712	ppb	0.9242	1.6	254.153
Ba 389.178	1209.21	ppb	4.1103	0.3	7659.43
Be 313.042	7.8053	ppb	0.0434	0.6	5982.17
Ca 370.602	28716	ppb	124.2	0.4	47868
Cd 226.502	5.0643	ppb	0.7249	14.3	271.950
Co 228.615	66.5351	ppb	2.3605	3.5	253.081
Cr 267.716	172.136	ppb	0.4314	0.3	2907.51
Cu 324.754	174.502	ppb	1.5459	0.9	5743.80
Fe 271.441	129387	ppb	426.577	0.3	71642.9
K 766.491	15016.6	ppb	65.7408	0.4	309385

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	34993.9	ppb	110.471	0.3	46770.6
Mn 257.610	2142.16	ppb	6.5751	0.3	177829
Mo 202.032	4.4109	ppb	1.9555	44.3	9.9142
Na 330.237	565.456	ppb	279.583	49.4	18.9142
Ni 231.604	158.358	ppb	2.5514	1.6	175.848
Pb 220.353	221.805	ppb	5.8524	2.6	80.1004
Sb 206.834	-2.6708	ppb	8.9146	333.8	7.4924
Se 196.026	2.9961	ppb	21.8968	730.8	4.0158
Si 288.158	4738.32	ppb	22.7098	0.5	22681.0
Sn 189.925	11.4175	ppb	5.3644	47.0	3.8789
Sr 216.596	125.208	ppb	1.5859	1.3	386.783
Ti 334.941	629.434	ppb	2.8852	0.5	55904.4
Tl 190.794	6.5913	ppb	0.6851	10.4	-5.0877
V 292.401	185.574	ppb	1.7393	0.9	1883.19
Zn 206.200	2022.81	ppb	10.4569	0.5	1116.38

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	503.663	511.832	509.486
Al 308.215	10273.9	10290.4	10372.0
As 188.980	511.594	502.673	521.746
B 249.678	545.683	550.666	557.820
Ba 389.178	454.068	453.863	460.215
Be 313.042	561.775	564.052	568.959
Ca 370.602	9976	9964	10050
Cd 226.502	506.159	506.269	509.909
Co 228.615	503.823	505.221	509.971
Cr 267.716	500.483	502.097	507.694
Cu 324.754	510.948	515.194	516.206
Fe 271.441	10302.0	10323.0	10510.0
K 766.491	10099.8	10167.3	10250.5
Mg 279.078	10575.8	10611.9	10719.5
Mn 257.610	498.410	500.162	505.399
Mo 202.032	487.574	486.777	489.005
Na 330.237	11502.2	11308.3	10837.3
Ni 231.604	508.591	502.523	504.923
Pb 220.353	497.076	494.614	500.181
Sb 206.834	472.810	479.665	483.526
Se 196.026	531.641	552.941	570.698
Si 288.158	5292.78	5309.26	5356.13
Sn 189.925	499.938	507.252	503.514
Sr 216.596	485.001	484.635	488.532
Ti 334.941	500.113	501.045	505.465
Tl 190.794	492.979	488.274	486.933
V 292.401	497.952	499.932	504.952
Zn 206.200	1067.39	1074.79	1073.88

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	508.327	ppb	4.2063	0.8	15397.6	101.66541
Al 308.215	10312.1	ppb	52.5534	0.5	20397.1	103.12092
As 188.980	512.004	ppb	9.5433	1.9	137.310	102.40086
B 249.678	551.390	ppb	6.1008	1.1	3757.82	110.27794Q

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	456.048	ppb	3.6094	0.8	2847.65	91.20969
Be 313.042	564.929	ppb	3.6715	0.6	455417	112.98574Q
Ca 370.602	9997	ppb	46.30	0.5	16741	99.96609
Cd 226.502	507.445	ppb	2.1339	0.4	6533.93	101.48910
Co 228.615	506.338	ppb	3.2230	0.6	1993.28	101.26765
Cr 267.716	503.425	ppb	3.7842	0.8	8436.10	100.68498
Cu 324.754	514.116	ppb	2.7900	0.5	16015.6	102.82318
Fe 271.441	10378.3	ppb	114.504	1.1	5782.69	103.73119
K 766.491	10172.6	ppb	75.4545	0.7	207162	101.72556
Mg 279.078	10635.7	ppb	74.7327	0.7	14237.9	106.35733
Mn 257.610	501.324	ppb	3.6361	0.7	41639.3	100.26478
Mo 202.032	487.786	ppb	1.1290	0.2	827.023	97.55711
Na 330.237	11215.9	ppb	341.898	3.0	323.391	112.15929Q
Ni 231.604	505.346	ppb	3.0561	0.6	564.705	101.06915
Pb 220.353	497.290	ppb	2.7897	0.6	188.583	99.45810
Sb 206.834	478.667	ppb	5.4273	1.1	179.663	95.73338
Se 196.026	551.760	ppb	19.5555	3.5	106.824	110.35194Q
Si 288.158	5319.39	ppb	32.8687	0.6	25494.9	106.38779
Sn 189.925	503.568	ppb	3.6571	0.7	128.264	100.71364
Sr 216.596	486.056	ppb	2.1517	0.4	1420.02	97.21118
Ti 334.941	502.208	ppb	2.8594	0.6	44551.8	100.44152
Tl 190.794	489.395	ppb	3.1753	0.6	115.635	97.87907
V 292.401	500.946	ppb	3.6085	0.7	5046.34	100.18913
Zn 206.200	1072.02	ppb	4.0369	0.4	591.237	107.20183

Cont Calib Blank (CCB)

4/20/2019, 5:18:03 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5686	-0.3921u	-2.2625u
Al 308.215	29.3906	39.7266	30.3473
As 188.980	-0.6455u	0.4210	11.1501
B 249.678	12.8759	10.9599	10.5372
Ba 389.178	-0.1563u	-1.6990u	2.1717
Be 313.042	0.1335	0.1229	0.0809
Ca 370.602	8.566	6.363	-5.725u
Cd 226.502	0.4611	-0.2337u	0.3328
Co 228.615	-1.3154u	0.1869	-1.0778u
Cr 267.716	-0.2099u	-0.4338u	0.2549
Cu 324.754	2.2418	1.6926	2.1498
Fe 271.441	4.5919	14.9612	10.5794
K 766.491	9.4983	7.6524	5.3731
Mg 279.078	13.2770	19.9785	16.9580
Mn 257.610	0.5638	0.5718	0.4100
Mo 202.032	2.0322	-0.5356u	1.3109
Na 330.237	175.740	101.010	377.539
Ni 231.604	1.4798	-1.3974u	-2.0733u
Pb 220.353	-4.9390u	-4.4917u	-3.4950u
Sb 206.834	1.5004	6.9318	5.1319
Se 196.026	2.5760	-1.6014u	7.5997
Si 288.158	26.5872	24.2811	24.3367
Sn 189.925	9.6580	2.2584	1.6400
Sr 216.596	1.1269	2.1884	-0.7699u
Ti 334.941	0.3137	0.4745	0.4512

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-3.0392u	-19.5779u	-6.8648u
V 292.401	0.2224	0.2222	0.6277
Zn 206.200	-2.1438u	-7.1190u	1.1740

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.6954	ppb	1.4397	207.0	-61.8516	-0.69536
Al 308.215	33.1548	ppb	5.7114	17.2	271.996	33.15481
As 188.980	3.6419	ppb	6.5241	179.1	1.6786	3.64187
B 249.678	11.4576	ppb	1.2463	10.9	72.6432	11.45764
Ba 389.178	0.1055	ppb	1.9486	1847.2	-35.9488	0.10549
Be 313.042	0.1125	ppb	0.0279	24.8	-236.134	0.11246
Ca 370.602	3.068	ppb	7.694	250.8	30.19	3.06802
Cd 226.502	0.1867	ppb	0.3697	198.0	6.3927	0.18674
Co 228.615	-0.7354	ppb	0.8076	109.8	-15.2818	-0.73543
Cr 267.716	-0.1296	ppb	0.3513	271.0	11.3910	-0.12960
Cu 324.754	2.0281	ppb	0.2941	14.5	497.520	2.02805
Fe 271.441	10.0442	ppb	5.2053	51.8	22.7722	10.04418
K 766.491	7.5079	ppb	2.0663	27.5	451.780	7.50793
Mg 279.078	16.7378	ppb	3.3561	20.1	44.0659	16.73785
Mn 257.610	0.5152	ppb	0.0912	17.7	69.3435	0.51520
Mo 202.032	0.9358	ppb	1.3244	141.5	5.5830	0.93583
Na 330.237	218.096	ppb	143.048	65.6	43.4974	218.09610
Ni 231.604	-0.6636	ppb	1.8868	284.3	-2.5154	-0.66362
Pb 220.353	-4.3086	ppb	0.7392	17.2	-0.7763	-4.30856
Sb 206.834	4.5214	ppb	2.7667	61.2	7.5881	4.52136
Se 196.026	2.8581	ppb	4.6070	161.2	3.2606	2.85810
Si 288.158	25.0684	ppb	1.3157	5.2	652.598	25.06836
Sn 189.925	4.5188	ppb	4.4614	98.7	2.1354	4.51880
Sr 216.596	0.8485	ppb	1.4987	176.6	9.6454	0.84846
Ti 334.941	0.4131	ppb	0.0869	21.0	11.3184	0.41313
Tl 190.794	-9.8273	ppb	8.6582	88.1	-3.7736	-9.82731
V 292.401	0.3574	ppb	0.2341	65.5	-9.1577	0.35745
Zn 206.200	-2.6963	ppb	4.1740	154.8	-1.5934	-2.69626

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Rack 3, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6860u	1.4746	1.0409
Al 308.215	99582.1	99943.5	99600.2
As 188.980	14.0294	19.3554	17.6577
B 249.678	44.2551	43.5758	44.7144
Ba 389.178	909.329	914.576	907.340
Be 313.042	5.4904	5.5023	5.4820
Ca 370.602	40218	40318	40219
Cd 226.502	4.2653	3.6747	4.3577
Co 228.615	44.5883	44.5084	47.0021
Cr 267.716	124.034	124.323	124.195
Cu 324.754	183.211	184.345	187.194
Fe 271.441	91787.8	91817.8	91807.7
K 766.491	8164.23	8195.68	8164.04
Mg 279.078	28921.8	29042.4	28960.3
Mn 257.610	676.433	678.609	677.177
Mo 202.032	1.8565	1.5595	2.6059

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Label	Replicates Concentration		
Na 330.237	1359.42	1015.58	292.308u
Ni 231.604	109.841	111.453	109.832
Pb 220.353	4815.05	4830.43	4803.75
Sb 206.834	53.1425	50.2688	45.6395
Se 196.026	10.6959	-19.4321u	2.4670
Si 288.158	4973.54	4976.66	4975.20
Sn 189.925	2671.15	2659.11	2654.15
Sr 216.596	144.863	144.492	145.397
Ti 334.941	594.427	595.299	598.465
Tl 190.794	-15.7607u	-5.7857u	-12.2848u
V 292.401	138.169	137.568	137.479
Zn 206.200	1372.86	1379.15	1383.07

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6098	ppb	1.1430	187.4	-38.4400
Al 308.215	99708.6	ppb	203.654	0.2	195255
As 188.980	17.0142	ppb	2.7207	16.0	5.0007
B 249.678	44.1818	ppb	0.5729	1.3	203.082
Ba 389.178	910.415	ppb	3.7383	0.4	5758.39
Be 313.042	5.4915	ppb	0.0102	0.2	4115.02
Ca 370.602	40252	ppb	57.49	0.1	67193
Cd 226.502	4.0992	ppb	0.3705	9.0	201.084
Co 228.615	45.3662	ppb	1.4172	3.1	169.164
Cr 267.716	124.184	ppb	0.1449	0.1	2100.02
Cu 324.754	184.917	ppb	2.0523	1.1	6052.84
Fe 271.441	91804.4	ppb	15.2840	0.0	50838.2
K 766.491	8174.65	ppb	18.2131	0.2	168634
Mg 279.078	28974.9	ppb	61.5930	0.2	38744.0
Mn 257.610	677.406	ppb	1.1061	0.2	56359.0
Mo 202.032	2.0073	ppb	0.5392	26.9	6.2985
Na 330.237	889.104	ppb	544.683	61.3	36.8630
Ni 231.604	110.375	ppb	0.9334	0.8	122.030
Pb 220.353	4816.41	ppb	13.3942	0.3	1821.31
Sb 206.834	49.6836	ppb	3.7856	7.6	25.2829
Se 196.026	-2.0897	ppb	15.5723	745.2	2.7672
Si 288.158	4975.13	ppb	1.5639	0.0	24010.9
Sn 189.925	2661.47	ppb	8.7447	0.3	673.640
Sr 216.596	144.918	ppb	0.4550	0.3	440.285
Ti 334.941	596.064	ppb	2.1248	0.4	52927.6
Tl 190.794	-11.2771	ppb	5.0633	44.9	-8.0370
V 292.401	137.739	ppb	0.3753	0.3	1395.01
Zn 206.200	1378.36	ppb	5.1495	0.4	760.683

480-151917-a-8-a (Samp)

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Rack 3, Tube 22

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3107u	-0.5924u	-0.0908u
Al 308.215	113696	114931	114478
As 188.980	189.545	187.697	191.012
B 249.678	32.8666	32.0665	31.9792
Ba 389.178	962.920	970.963	968.499
Be 313.042	5.3246	5.3928	5.3650
Ca 370.602	21523	21805	21694

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	4.2261	3.9440	3.5153
Co 228.615	35.5845	34.3330	34.0086
Cr 267.716	129.677	130.819	130.538
Cu 324.754	200.321	203.686	200.936
Fe 271.441	84781.6	85975.8	85187.2
K 766.491	10968.7	11082.6	11002.1
Mg 279.078	24583.9	24858.2	24768.7
Mn 257.610	1259.20	1274.30	1269.74
Mo 202.032	4.6736	2.9143	1.7255
Na 330.237	585.902u	746.499	762.666
Ni 231.604	98.5032	101.592	99.4655
Pb 220.353	666.021	684.762	689.039
Sb 206.834	5.5271	-4.1429	3.2034
Se 196.026	13.8261	2.2496	8.7205
Si 288.158	3850.90	3888.13	3887.14
Sn 189.925	12.7551	22.9289	30.0430
Sr 216.596	102.201	104.736	104.113
Ti 334.941	762.340	770.813	764.589
Tl 190.794	5.0700u	-2.1793u	-5.7455u
V 292.401	136.786	138.711	137.294
Zn 206.200	869.594	872.862	878.452

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3313	ppb	0.2514	75.9	-64.7436
Al 308.215	114368	ppb	625.110	0.5	223931
As 188.980	189.418	ppb	1.6613	0.9	51.0515
B 249.678	32.3041	ppb	0.4891	1.5	128.539
Ba 389.178	967.460	ppb	4.1210	0.4	6109.51
Be 313.042	5.3608	ppb	0.0343	0.6	4007.50
Ca 370.602	21674	ppb	142.2	0.7	36156
Cd 226.502	3.8952	ppb	0.3579	9.2	188.807
Co 228.615	34.6421	ppb	0.8322	2.4	128.733
Cr 267.716	130.345	ppb	0.5950	0.5	2203.59
Cu 324.754	201.648	ppb	1.7923	0.9	6558.46
Fe 271.441	85314.8	ppb	607.248	0.7	47245.5
K 766.491	11017.8	ppb	58.5833	0.5	227073
Mg 279.078	24736.9	ppb	139.879	0.6	33067.8
Mn 257.610	1267.75	ppb	7.7453	0.6	105279
Mo 202.032	3.1045	ppb	1.4832	47.8	8.2273
Na 330.237	698.356	ppb	97.7226	14.0	36.3087
Ni 231.604	99.8534	ppb	1.5803	1.6	110.237
Pb 220.353	679.941	ppb	12.2431	1.8	255.083
Sb 206.834	1.5292	ppb	5.0477	330.1	8.2042
Se 196.026	8.2654	ppb	5.8016	70.2	4.7477
Si 288.158	3875.39	ppb	21.2162	0.5	18660.6
Sn 189.925	21.9090	ppb	8.6890	39.7	6.5305
Sr 216.596	103.683	ppb	1.3209	1.3	319.181
Ti 334.941	765.914	ppb	4.3894	0.6	67983.4
Tl 190.794	-0.9516	ppb	5.5113	579.2	-5.1437
V 292.401	137.597	ppb	0.9972	0.7	1393.54
Zn 206.200	873.636	ppb	4.4797	0.5	482.130

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

480-151917-a-49-a (Samp) 4/20/2019, 5:30:41 PM Rack 3, Tube 23**Weight: 1 Volume: 1 Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.9088u	-0.4187u	0.2058u
Al 308.215	57324.2	57705.8	57574.5
As 188.980	15.0802	16.6955	7.3320
B 249.678	16.1315	14.7901	14.7881
Ba 389.178	446.898	449.476	448.836
Be 313.042	2.2947	2.3261	2.2938
Ca 370.602	7313	7352	7333
Cd 226.502	1.7780	1.5954	2.5427
Co 228.615	28.6085	28.3015	28.6396
Cr 267.716	76.0852	76.6750	76.4948
Cu 324.754	87.2304	87.1041	86.9797
Fe 271.441	89776.2	89966.4	90009.0
K 766.491	4080.84	4094.23	4089.56
Mg 279.078	17699.9	17808.5	17750.1
Mn 257.610	691.623	694.617	695.063
Mo 202.032	2.3974	1.4831	2.7197
Na 330.237	868.610	908.794	799.622
Ni 231.604	66.5246	68.2433	70.6223
Pb 220.353	48.3186	50.6336	35.5892
Sb 206.834	-7.7341u	-1.3156	2.2209
Se 196.026	-12.0773u	-14.3958u	-10.7112u
Si 288.158	3515.47	3542.28	3564.25
Sn 189.925	1.8046	20.9723	8.1327
Sr 216.596	35.0761	37.2411	35.4804
Ti 334.941	1522.07	1528.48	1534.03
Tl 190.794	13.9222u	-7.2749u	9.7061u
V 292.401	129.108	128.763	127.788
Zn 206.200	349.111	344.200	335.385

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3739	ppb	0.5586	149.4	-68.7412
Al 308.215	57534.9	ppb	193.835	0.3	112758
As 188.980	13.0359	ppb	5.0053	38.4	3.9454
B 249.678	15.2365	ppb	0.7750	5.1	6.6685
Ba 389.178	448.403	ppb	1.3425	0.3	2840.65
Be 313.042	2.3048	ppb	0.0184	0.8	1537.77
Ca 370.602	7333	ppb	19.76	0.3	12177
Cd 226.502	1.9720	ppb	0.5026	25.5	169.250
Co 228.615	28.5165	ppb	0.1868	0.7	110.009
Cr 267.716	76.4184	ppb	0.3022	0.4	1301.37
Cu 324.754	87.1048	ppb	0.1253	0.1	3089.87
Fe 271.441	89917.2	ppb	123.949	0.1	49792.9
K 766.491	4088.21	ppb	6.7978	0.2	84457.7
Mg 279.078	17752.9	ppb	54.3573	0.3	23744.7
Mn 257.610	693.768	ppb	1.8706	0.3	57687.7
Mo 202.032	2.2001	ppb	0.6415	29.2	6.6448
Na 330.237	859.009	ppb	55.2155	6.4	39.8408
Ni 231.604	68.4634	ppb	2.0577	3.0	75.0166
Pb 220.353	44.8471	ppb	8.1007	18.1	14.4609
Sb 206.834	-2.2763	ppb	5.0465	221.7	6.7452
Se 196.026	-12.3948	ppb	1.8627	15.0	0.8192
Si 288.158	3540.67	ppb	24.4268	0.7	17132.5

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	10.3032	ppb	9.7665	94.8	3.5974
Sr 216.596	35.9325	ppb	1.1511	3.2	122.125
Ti 334.941	1528.19	ppb	5.9822	0.4	135583
Tl 190.794	5.4511	ppb	11.2209	205.8	-3.9598
V 292.401	128.553	ppb	0.6849	0.5	1306.05
Zn 206.200	342.899	ppb	6.9552	2.0	189.279

480-151917-a-62-a (Samp) 4/20/2019, 5:34:54 PM Rack 3, Tube 24

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6288u	-0.7400u	-0.7019u
Al 308.215	81348.9	81955.2	82653.4
As 188.980	30.0119	39.3821	32.2698
B 249.678	18.2102u	17.0369u	18.7346u
Ba 389.178	439.421	440.409	445.907
Be 313.042	3.1345	3.1286	3.1825
Ca 370.602	11859	11931	12097
Cd 226.502	2.2836	1.9848	3.2487
Co 228.615	68.0605	68.4438	69.5379
Cr 267.716	88.3238	87.8625	88.9089
Cu 324.754	358.372	356.499	360.021
Fe 271.441	186633	187842	189674
K 766.491	6354.75	6398.80	6469.24
Mg 279.078	43199.3	43462.4	43860.7
Mn 257.610	16883.0	17001.5	17134.3
Mo 202.032	4.1009	3.8087	1.2082u
Na 330.237	622.216u	822.718	548.259u
Ni 231.604	148.696	146.256	152.019
Pb 220.353	48.0626	43.0424	51.6464
Sb 206.834	-0.7245	1.0543	-5.6514
Se 196.026	-16.4300u	-17.8837u	0.0107
Si 288.158	1987.07	1991.08	1999.87
Sn 189.925	8.8518	-1.6470u	8.8300
Sr 216.596	61.0995	59.3579	62.5026
Ti 334.941	729.138	728.640	737.374
Tl 190.794	11.2996u	-10.8088u	2.5825u
V 292.401	154.690	155.002	155.460
Zn 206.200	369.887	367.132	360.066

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6902	ppb	0.0565	8.2	-65.0369
Al 308.215	81985.8	ppb	652.808	0.8	160591
As 188.980	33.8879	ppb	4.8902	14.4	9.2542
B 249.678	17.9939	ppb	0.8693	4.8	-74.3887
Ba 389.178	441.913	ppb	3.4948	0.8	2870.04
Be 313.042	3.1486	ppb	0.0295	0.9	2217.42
Ca 370.602	11962	ppb	122.1	1.0	19983
Cd 226.502	2.5057	ppb	0.6606	26.4	327.539
Co 228.615	68.6807	ppb	0.7667	1.1	260.906
Cr 267.716	88.3651	ppb	0.5244	0.6	1533.35
Cu 324.754	358.297	ppb	1.7621	0.5	11321.7
Fe 271.441	188050	ppb	1531.01	0.8	104116
K 766.491	6407.60	ppb	57.7527	0.9	132198

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	43507.5	ppb	333.000	0.8	58016.1
Mn 257.610	17006.3	ppb	125.723	0.7	1410087
Mo 202.032	3.0393	ppb	1.5925	52.4	6.9143
Na 330.237	664.398	ppb	142.008	21.4	37.7352
Ni 231.604	148.990	ppb	2.8930	1.9	165.326
Pb 220.353	47.5838	ppb	4.3219	9.1	13.0296
Sb 206.834	-1.7738	ppb	3.4738	195.8	8.3871
Se 196.026	-11.4343	ppb	9.9383	86.9	2.9381
Si 288.158	1992.67	ppb	6.5479	0.3	9870.60
Sn 189.925	5.3449	ppb	6.0552	113.3	2.3441
Sr 216.596	60.9867	ppb	1.5754	2.6	206.196
Ti 334.941	731.717	ppb	4.9054	0.7	64998.9
Tl 190.794	1.0244	ppb	11.1363	1087.1	-5.8837
V 292.401	155.051	ppb	0.3873	0.2	1578.35
Zn 206.200	365.695	ppb	5.0660	1.4	202.066

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Rack 3, Tube 25

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2584u	-0.4296u	0.1842u
Al 308.215	123682	123912	124020
As 188.980	183.168	187.499	201.885
B 249.678	38.7275	40.0324	39.7231
Ba 389.178	1010.63	1012.31	1016.18
Be 313.042	5.2511	5.2386	5.2705
Ca 370.602	26632	26676	26730
Cd 226.502	4.7986	3.9374	4.7262
Co 228.615	41.3048	43.6076	41.0688
Cr 267.716	138.331	139.240	138.700
Cu 324.754	227.883	229.114	226.544
Fe 271.441	89657.6	89677.8	89641.8
K 766.491	11975.8	11961.0	11990.6
Mg 279.078	28143.5	28210.8	28207.4
Mn 257.610	1415.79	1419.08	1421.29
Mo 202.032	2.1813	3.2044	1.4578
Na 330.237	895.144u	760.839u	521.433u
Ni 231.604	113.610	114.365	112.825
Pb 220.353	601.518	600.408	600.313
Sb 206.834	1.5209	11.2883	7.2353
Se 196.026	19.9428	-17.3995u	-2.0664
Si 288.158	4849.19	4828.26	4847.06
Sn 189.925	7.9699	-0.4395u	10.4291
Sr 216.596	130.937	129.752	133.676
Ti 334.941	682.219	682.358	684.323
Tl 190.794	-9.3300u	-11.6944u	-8.4930u
V 292.401	137.833	138.252	138.460
Zn 206.200	1304.96	1297.24	1317.66

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1679	ppb	0.3167	188.6	-60.2496
Al 308.215	123871	ppb	172.511	0.1	242520
As 188.980	190.851	ppb	9.7980	5.1	51.4226
B 249.678	39.4943	ppb	0.6819	1.7	173.496

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1013.04	ppb	2.8452	0.3	6401.65
Be 313.042	5.2534	ppb	0.0161	0.3	3922.00
Ca 370.602	26679	ppb	48.74	0.2	44519
Cd 226.502	4.4874	ppb	0.4777	10.6	203.220
Co 228.615	41.9937	ppb	1.4026	3.3	157.159
Cr 267.716	138.757	ppb	0.4568	0.3	2344.85
Cu 324.754	227.847	ppb	1.2853	0.6	7352.76
Fe 271.441	89659.0	ppb	18.0533	0.0	49650.5
K 766.491	11975.8	ppb	14.7700	0.1	246836
Mg 279.078	28187.2	ppb	37.9058	0.1	37678.6
Mn 257.610	1418.72	ppb	2.7673	0.2	117808
Mo 202.032	2.2812	ppb	0.8776	38.5	6.7891
Na 330.237	725.806	ppb	189.303	26.1	32.5776
Ni 231.604	113.600	ppb	0.7700	0.7	125.654
Pb 220.353	600.746	ppb	0.6701	0.1	224.942
Sb 206.834	6.6815	ppb	4.9072	73.4	10.0411
Se 196.026	0.1590	ppb	18.7703	11804.9	3.2509
Si 288.158	4841.50	ppb	11.5205	0.2	23164.6
Sn 189.925	5.9865	ppb	5.6993	95.2	2.5063
Sr 216.596	131.455	ppb	2.0128	1.5	400.682
Ti 334.941	682.967	ppb	1.1764	0.2	60634.7
Tl 190.794	-9.8391	ppb	1.6603	16.9	-7.4243
V 292.401	138.182	ppb	0.3195	0.2	1399.30
Zn 206.200	1306.62	ppb	10.3146	0.8	721.079

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Rack 3, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3739u	0.4802u	1.3896
Al 308.215	67958.4	68169.9	67863.2
As 188.980	199.832	196.383	206.533
B 249.678	17.2735u	17.2477u	16.4867u
Ba 389.178	400.044	401.637	400.962
Be 313.042	2.1359	2.1013	2.1079
Ca 370.602	8884	8901	8869
Cd 226.502	2.4242	2.4055	2.5176
Co 228.615	34.7455	35.3104	35.2523
Cr 267.716	77.7764	76.1836	76.7925
Cu 324.754	118.561	117.976	118.685
Fe 271.441	116876	117380	117609
K 766.491	7332.21	7373.82	7352.00
Mg 279.078	21138.0	21203.6	21124.7
Mn 257.610	2777.07	2786.18	2779.22
Mo 202.032	2.6207	2.9999	5.9092
Na 330.237	837.954	631.152	588.984u
Ni 231.604	81.7531	79.0996	76.6748
Pb 220.353	646.726	659.081	679.016
Sb 206.834	-0.0073	-8.3998u	-7.9532u
Se 196.026	-2.5475	14.6899	-19.3630u
Si 288.158	3753.37	3780.91	3797.24
Sn 189.925	20.2482	24.1489	9.5805
Sr 216.596	38.5479	40.7851	40.3663
Ti 334.941	882.545	892.365	881.208

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Label	Replicates Concentration		
Tl 190.794	-9.2410u	0.1555u	3.4344u
V 292.401	125.287	126.696	126.182
Zn 206.200	402.225	395.555	393.350

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7479	ppb	0.5583	74.6	-34.9500
Al 308.215	67997.2	ppb	156.946	0.2	133224
As 188.980	200.916	ppb	5.1612	2.6	54.0401
B 249.678	17.0026	ppb	0.4470	2.6	-8.8451
Ba 389.178	400.881	ppb	0.7995	0.2	2557.19
Be 313.042	2.1151	ppb	0.0184	0.9	1384.48
Ca 370.602	8885	ppb	15.78	0.2	14746
Cd 226.502	2.4491	ppb	0.0601	2.5	217.451
Co 228.615	35.1027	ppb	0.3107	0.9	130.649
Cr 267.716	76.9175	ppb	0.8037	1.0	1314.70
Cu 324.754	118.408	ppb	0.3785	0.3	4042.93
Fe 271.441	117288	ppb	375.250	0.3	64944.5
K 766.491	7352.67	ppb	20.8161	0.3	151655
Mg 279.078	21155.4	ppb	42.2249	0.2	28271.7
Mn 257.610	2780.82	ppb	4.7602	0.2	230717
Mo 202.032	3.8433	ppb	1.7992	46.8	9.1030
Na 330.237	686.030	ppb	133.248	19.4	39.2399
Ni 231.604	79.1758	ppb	2.5400	3.2	87.0314
Pb 220.353	661.608	ppb	16.2928	2.5	247.262
Sb 206.834	-5.4534	ppb	4.7217	86.6	6.0112
Se 196.026	-2.4069	ppb	17.0269	707.4	3.0095
Si 288.158	3777.17	ppb	22.1735	0.6	18206.7
Sn 189.925	17.9925	ppb	7.5416	41.9	5.5407
Sr 216.596	39.8998	ppb	1.1893	3.0	136.772
Ti 334.941	885.373	ppb	6.0924	0.7	78569.9
Tl 190.794	-1.8837	ppb	6.5792	349.3	-6.4813
V 292.401	126.055	ppb	0.7133	0.6	1279.56
Zn 206.200	397.043	ppb	4.6208	1.2	219.218

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Rack 3, Tube 27

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6100u	-0.6702u	-0.0699u
Al 308.215	33.7579	33.2012	32.4485
As 188.980	-0.1613u	-1.5029u	-2.7746u
B 249.678	-2.7126u	-3.2456u	-3.3715u
Ba 389.178	-0.7686u	-2.3785u	0.1048
Be 313.042	-0.1975u	-0.2132u	-0.1954u
Ca 370.602	10.25	17.17	21.80
Cd 226.502	0.1373	0.1885	-0.3480u
Co 228.615	-1.2932u	-0.5889u	-1.8397u
Cr 267.716	0.5965	0.8813	1.3799
Cu 324.754	2.1583	3.3694	3.2540
Fe 271.441	41.5878	20.3326	21.1672
K 766.491	20.6848	22.2239	21.6817
Mg 279.078	12.7253	19.5672	11.2835
Mn 257.610	0.4650	0.4321	0.4911
Mo 202.032	-0.1369u	0.5004	1.1556

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Label	Replicates Concentration		
Na 330.237	0.6392u	356.147	237.896
Ni 231.604	0.9490	0.8502	3.1631
Pb 220.353	3.8768	-12.6353u	2.2875
Sb 206.834	-7.3334u	9.4498	0.3274
Se 196.026	3.9112	-11.0860u	-4.6975u
Si 288.158	31.5234	28.8894	36.2415
Sn 189.925	0.2143	8.4825	11.0857
Sr 216.596	-0.5275u	-1.5574u	-0.3391u
Ti 334.941	0.6700	0.4101	0.5341
Tl 190.794	-5.1309u	-5.3578u	-1.4964u
V 292.401	0.1124	0.1569	0.1199
Zn 206.200	4.4368	2.0429	2.6044

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4500	ppb	0.3306	73.5	-54.3948
Al 308.215	33.1359	ppb	0.6571	2.0	271.952
As 188.980	-1.4796	ppb	1.3068	88.3	0.3110
B 249.678	-3.1099	ppb	0.3498	11.2	-27.0764
Ba 389.178	-1.0141	ppb	1.2597	124.2	-42.9901
Be 313.042	-0.2020	ppb	0.0097	4.8	-489.834
Ca 370.602	16.41	ppb	5.813	35.4	52.48
Cd 226.502	-0.0074	ppb	0.2961	3990.6	3.9113
Co 228.615	-1.2406	ppb	0.6271	50.5	-17.2832
Cr 267.716	0.9526	ppb	0.3965	41.6	29.4945
Cu 324.754	2.9272	ppb	0.6684	22.8	524.757
Fe 271.441	27.6959	ppb	12.0380	43.5	32.5149
K 766.491	21.5302	ppb	0.7807	3.6	726.650
Mg 279.078	14.5253	ppb	4.4255	30.5	41.1076
Mn 257.610	0.4627	ppb	0.0295	6.4	64.9842
Mo 202.032	0.5064	ppb	0.6463	127.6	4.8582
Na 330.237	198.227	ppb	181.043	91.3	42.8870
Ni 231.604	1.6541	ppb	1.3077	79.1	0.0855
Pb 220.353	-2.1570	ppb	9.1092	422.3	0.0384
Sb 206.834	0.8146	ppb	8.4022	1031.5	6.3073
Se 196.026	-3.9574	ppb	7.5260	190.2	1.9758
Si 288.158	32.2181	ppb	3.7250	11.6	686.857
Sn 189.925	6.5941	ppb	5.6763	86.1	2.6599
Sr 216.596	-0.8080	ppb	0.6558	81.2	4.8138
Ti 334.941	0.5380	ppb	0.1300	24.2	22.3878
Tl 190.794	-3.9950	ppb	2.1669	54.2	-2.3775
V 292.401	0.1298	ppb	0.0238	18.4	-11.4792
Zn 206.200	3.0280	ppb	1.2519	41.3	1.5652

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Rack 3, Tube 28

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.9982	55.7724	53.1563
Al 308.215	5580.70	5611.96	5582.25
As 188.980	111.474	124.393	113.796
B 249.678	232.792	234.325	234.609
Ba 389.178	99.9741	97.9089	97.1789
Be 313.042	62.9862	63.2924	62.8461
Ca 370.602	5437	5443	5384

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	58.0276	57.5208	56.3186
Co 228.615	53.6763	55.0512	54.4661
Cr 267.716	111.661	112.939	112.020
Cu 324.754	116.457	116.959	116.174
Fe 271.441	5592.79	5628.90	5572.32
K 766.491	8793.70	8814.74	8757.51
Mg 279.078	5780.06	5772.62	5762.38
Mn 257.610	449.009	450.720	446.578
Mo 202.032	107.137	108.657	108.024
Na 330.237	5508.51	5927.54	6532.34
Ni 231.604	111.713	112.176	110.974
Pb 220.353	542.000	562.260	541.924
Sb 206.834	56.6973	56.2860	47.5982
Se 196.026	131.743	130.401	109.000
Si 288.158	28.8211	28.6054	31.0305
Sn 189.925	121.747	95.8167	122.260
Sr 216.596	107.397	106.789	108.526
Ti 334.941	440.236	440.913	437.553
Tl 190.794	34.1605	29.2702	36.3190
V 292.401	108.393	109.281	107.471
Zn 206.200	126.651	116.931	119.521

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.6423	ppb	1.3438	2.5	1618.16
Al 308.215	5591.64	ppb	17.6179	0.3	11149.2
As 188.980	116.554	ppb	6.8873	5.9	31.7953
B 249.678	233.909	ppb	0.9777	0.4	1589.59
Ba 389.178	98.3540	ppb	1.4498	1.5	590.680
Be 313.042	63.0416	ppb	0.2282	0.4	50528.5
Ca 370.602	5422	ppb	32.73	0.6	9096
Cd 226.502	57.2890	ppb	0.8778	1.5	748.062
Co 228.615	54.3979	ppb	0.6900	1.3	205.421
Cr 267.716	112.207	ppb	0.6592	0.6	1891.86
Cu 324.754	116.530	ppb	0.3976	0.3	3967.92
Fe 271.441	5598.00	ppb	28.6458	0.5	3118.58
K 766.491	8788.65	ppb	28.9434	0.3	180979
Mg 279.078	5771.69	ppb	8.8744	0.2	7734.59
Mn 257.610	448.769	ppb	2.0812	0.5	37260.4
Mo 202.032	107.939	ppb	0.7633	0.7	186.087
Na 330.237	5989.46	ppb	514.716	8.6	193.933
Ni 231.604	111.621	ppb	0.6063	0.5	123.404
Pb 220.353	548.728	ppb	11.7193	2.1	208.382
Sb 206.834	53.5272	ppb	5.1388	9.6	25.5672
Se 196.026	123.715	ppb	12.7610	10.3	26.1085
Si 288.158	29.4857	ppb	1.3422	4.6	718.286
Sn 189.925	113.274	ppb	15.1209	13.3	29.6223
Sr 216.596	107.571	ppb	0.8816	0.8	320.245
Ti 334.941	439.567	ppb	1.7771	0.4	38982.3
Tl 190.794	33.2499	ppb	3.6116	10.9	6.4138
V 292.401	108.382	ppb	0.9049	0.8	1083.14
Zn 206.200	121.034	ppb	5.0340	4.2	66.6376

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

480-151917-a-56-a (Samp) **4/20/2019, 5:55:59 PM** **Rack 3, Tube 29****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1177u	-1.0643u	0.1359u
Al 308.215	65937.6	65910.6	65935.3
As 188.980	33.5616	16.2041	28.5504
B 249.678	62.7226	59.7953	60.3820
Ba 389.178	621.105	626.147	622.434
Be 313.042	3.3143	3.3036	3.3362
Ca 370.602	437728	427862	437852
Cd 226.502	2.1222	2.1813	2.3239
Co 228.615	60.7398	59.8453	60.6899
Cr 267.716	107.684	106.633	106.689
Cu 324.754	80.7152	81.3754	81.4227
Fe 271.441	164175	163877	163456
K 766.491	13276.8	13191.3	13223.7
Mg 279.078	95897.1	95819.0	95898.5
Mn 257.610	5343.09	5329.54	5341.36
Mo 202.032	4.4703	4.9266	3.8143
Na 330.237	1651.12	1555.56	1799.29
Ni 231.604	133.791	126.651	129.749
Pb 220.353	55.4410	47.3053	37.9607
Sb 206.834	-7.7333u	-12.0841u	9.1982
Se 196.026	3.9801	1.2094	-6.3214u
Si 288.158	3735.13	3722.21	3766.91
Sn 189.925	9.2732	-9.5300u	11.0449
Sr 216.596	691.653	686.007	695.059
Ti 334.941	1696.34	1693.06	1698.22
Tl 190.794	-4.5775u	-2.4956u	15.5879u
V 292.401	170.178	169.921	169.343
Zn 206.200	314.098	316.099	306.648

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2702	ppb	0.6877	254.5	-72.9858
Al 308.215	65927.8	ppb	14.9662	0.0	129179
As 188.980	26.1054	ppb	8.9333	34.2	7.2417
B 249.678	60.9666	ppb	1.5487	2.5	245.548
Ba 389.178	623.229	ppb	2.6129	0.4	4056.85
Be 313.042	3.3180	ppb	0.0166	0.5	2418.88
Ca 370.602	434481	ppb	5732	1.3	726278
Cd 226.502	2.2092	ppb	0.1037	4.7	284.336
Co 228.615	60.4250	ppb	0.5027	0.8	236.033
Cr 267.716	107.002	ppb	0.5911	0.6	1826.04
Cu 324.754	81.1711	ppb	0.3955	0.5	2922.94
Fe 271.441	163836	ppb	360.967	0.2	90712.2
K 766.491	13230.6	ppb	43.1417	0.3	272653
Mg 279.078	95871.5	ppb	45.4745	0.0	128165
Mn 257.610	5338.00	ppb	7.3775	0.1	443021
Mo 202.032	4.4037	ppb	0.5591	12.7	9.5092
Na 330.237	1668.66	ppb	122.808	7.4	57.8699
Ni 231.604	130.064	ppb	3.5802	2.8	144.097
Pb 220.353	46.9024	ppb	8.7471	18.6	12.9693
Sb 206.834	-3.5398	ppb	11.2438	317.6	7.4216
Se 196.026	-0.3773	ppb	5.3309	1412.9	3.8200
Si 288.158	3741.42	ppb	23.0037	0.6	18077.4

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	3.5960	ppb	11.4019	317.1	1.9022
Sr 216.596	690.906	ppb	4.5721	0.7	2042.16
Ti 334.941	1695.88	ppb	2.6113	0.2	150665
Tl 190.794	2.8383	ppb	11.0905	390.7	-6.8251
V 292.401	169.814	ppb	0.4277	0.3	1730.85
Zn 206.200	312.282	ppb	4.9806	1.6	172.524

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0377u	-1.2156u	-0.4233u
Al 308.215	13376.5	13219.0	13082.7
As 188.980	20.4646	3.5129	-1.7552u
B 249.678	11.4030	11.5268	11.9802
Ba 389.178	124.395	122.317	120.646
Be 313.042	0.5503	0.5483	0.5131
Ca 370.602	88312	87400	86747
Cd 226.502	0.3213	0.1516	0.3394
Co 228.615	11.6212	10.0195	12.1480
Cr 267.716	21.7088	21.6071	21.7890
Cu 324.754	17.8393	18.5730	17.2893
Fe 271.441	33547.7	33180.6	33083.7
K 766.491	2354.91	2338.42	2326.27
Mg 279.078	19592.1	19389.6	19259.0
Mn 257.610	1104.67	1092.19	1082.69
Mo 202.032	-0.6114u	2.4227	-0.0768u
Na 330.237	772.043	-41.1672u	196.384
Ni 231.604	24.6711	27.3240	23.4612
Pb 220.353	16.6388	14.3591	6.8518
Sb 206.834	-8.0319u	-8.3561u	-7.6742u
Se 196.026	-14.7109u	-25.5900u	4.8686
Si 288.158	844.171	822.562	811.027
Sn 189.925	-14.5895u	-3.0925u	-3.2385u
Sr 216.596	141.273	140.847	139.431
Ti 334.941	349.634	346.088	342.363
Tl 190.794	-12.6746u	-4.7359u	-6.6573u
V 292.401	34.9098	34.2424	33.5103
Zn 206.200	63.0384	58.2912	60.5091

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5337	ppb	0.6339	118.8	-61.8239
Al 308.215	13226.1	ppb	147.001	1.1	26080.8
As 188.980	7.4074	ppb	11.6105	156.7	2.5955
B 249.678	11.6367	ppb	0.3039	2.6	40.0357
Ba 389.178	122.453	ppb	1.8780	1.5	768.815
Be 313.042	0.5372	ppb	0.0209	3.9	120.490
Ca 370.602	87486	ppb	786.1	0.9	146262
Cd 226.502	0.2707	ppb	0.1036	38.3	58.8256
Co 228.615	11.2629	ppb	1.1086	9.8	34.0917
Cr 267.716	21.7016	ppb	0.0912	0.4	381.187
Cu 324.754	17.9005	ppb	0.6441	3.6	984.040
Fe 271.441	33270.7	ppb	244.790	0.7	18434.9
K 766.491	2339.86	ppb	14.3751	0.6	48467.7

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	19413.6	ppb	167.833	0.9	25970.0
Mn 257.610	1093.19	ppb	11.0228	1.0	90748.1
Mo 202.032	0.5782	ppb	1.6196	280.1	4.5868
Na 330.237	309.087	ppb	418.156	135.3	40.8959
Ni 231.604	25.1521	ppb	1.9758	7.9	26.4370
Pb 220.353	12.6166	ppb	5.1209	40.6	4.4829
Sb 206.834	-8.0207	ppb	0.3411	4.3	3.7184
Se 196.026	-11.8108	ppb	15.4350	130.7	0.7341
Si 288.158	825.920	ppb	16.8252	2.0	4406.06
Sn 189.925	-6.9735	ppb	6.5960	94.6	-0.7691
Sr 216.596	140.517	ppb	0.9642	0.7	421.063
Ti 334.941	346.028	ppb	3.6360	1.1	30721.1
Tl 190.794	-8.0226	ppb	4.1417	51.6	-4.5809
V 292.401	34.2208	ppb	0.7000	2.0	338.656
Zn 206.200	60.6129	ppb	2.3753	3.9	33.4046

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	506.803	507.521	509.793
Al 308.215	10366.1	10318.8	10314.0
As 188.980	527.104	519.460	512.125
B 249.678	554.470	553.704	557.251
Ba 389.178	455.791	455.152	454.886
Be 313.042	570.781	569.285	568.900
Ca 370.602	10069	10040	10041
Cd 226.502	511.582	507.991	509.801
Co 228.615	510.542	509.269	510.375
Cr 267.716	507.221	505.325	505.295
Cu 324.754	513.764	517.486	515.327
Fe 271.441	10369.3	10325.7	10389.0
K 766.491	10230.2	10228.9	10216.0
Mg 279.078	10707.4	10700.7	10686.4
Mn 257.610	502.794	502.180	502.724
Mo 202.032	489.537	485.425	490.441
Na 330.237	11171.0	11198.2	10976.5
Ni 231.604	512.649	516.659	510.415
Pb 220.353	506.297	498.600	498.636
Sb 206.834	499.642	482.516	471.985
Se 196.026	558.058	544.813	565.946
Si 288.158	5363.69	5330.15	5325.51
Sn 189.925	491.367	482.725	496.370
Sr 216.596	489.593	491.384	486.626
Ti 334.941	503.988	503.139	503.079
Tl 190.794	520.126	480.679	504.651
V 292.401	502.354	500.874	500.162
Zn 206.200	1082.26	1079.81	1071.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	508.039	ppb	1.5614	0.3	15388.8	101.60777
Al 308.215	10333.0	ppb	28.7809	0.3	20438.0	103.32977
As 188.980	519.563	ppb	7.4902	1.4	139.329	103.91260
B 249.678	555.142	ppb	1.8666	0.3	3783.51	111.02836Q

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	455.276	ppb	0.4655	0.1	2842.87	91.05527
Be 313.042	569.655	ppb	0.9936	0.2	459230	113.93102Q
Ca 370.602	10050	ppb	16.41	0.2	16831	100.49950
Cd 226.502	509.792	ppb	1.7955	0.4	6564.03	101.95833
Co 228.615	510.062	ppb	0.6918	0.1	2008.04	102.01239
Cr 267.716	505.947	ppb	1.1031	0.2	8478.29	101.18939
Cu 324.754	515.526	ppb	1.8685	0.4	16058.4	103.10514
Fe 271.441	10361.4	ppb	32.3905	0.3	5773.43	103.56172
K 766.491	10225.0	ppb	7.8254	0.1	208182	102.25024
Mg 279.078	10698.2	ppb	10.7565	0.1	14321.4	106.98166
Mn 257.610	502.566	ppb	0.3365	0.1	41742.5	100.51321
Mo 202.032	488.468	ppb	2.6735	0.5	828.175	97.69362
Na 330.237	11115.2	ppb	120.922	1.1	320.597	111.15216Q
Ni 231.604	513.241	ppb	3.1642	0.6	573.559	102.64821
Pb 220.353	501.178	ppb	4.4335	0.9	190.054	100.23561
Sb 206.834	484.714	ppb	13.9589	2.9	181.881	96.94289
Se 196.026	556.273	ppb	10.6788	1.9	107.675	111.25450Q
Si 288.158	5339.78	ppb	20.8365	0.4	25589.5	106.79568
Sn 189.925	490.154	ppb	6.9026	1.4	124.873	98.03077
Sr 216.596	489.201	ppb	2.4029	0.5	1429.17	97.84019
Ti 334.941	503.402	ppb	0.5083	0.1	44657.9	100.68040
Tl 190.794	501.819	ppb	19.8753	4.0	118.612	100.36372
V 292.401	501.130	ppb	1.1182	0.2	5048.14	100.22606
Zn 206.200	1077.90	ppb	5.5803	0.5	594.478	107.78951

Cont Calib Blank (CCB)

4/20/2019, 6:08:40 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9590u	-0.8396u	-0.0397u
Al 308.215	30.8695	29.1168	30.9103
As 188.980	3.6137	-0.7810u	-0.6912u
B 249.678	13.4880	12.7556	9.3302
Ba 389.178	-0.3305u	0.2815	0.5832
Be 313.042	0.0453	0.0280	0.0141
Ca 370.602	7.051	21.07	12.29
Cd 226.502	-0.0827u	0.1210	-0.1541u
Co 228.615	0.3932	-1.2751u	-0.0348u
Cr 267.716	0.2565	0.3001	0.1194
Cu 324.754	4.2556	2.4945	2.8170
Fe 271.441	36.9167	6.4069	26.1159
K 766.491	5.3757	4.5165	3.7696
Mg 279.078	16.9324	11.1733	12.3409
Mn 257.610	0.3844	0.4411	0.1824
Mo 202.032	1.5614	1.2608	1.6925
Na 330.237	95.9731	100.455	792.703
Ni 231.604	1.9447	-0.3205u	1.5981
Pb 220.353	-6.8261u	-4.7124u	-10.0755u
Sb 206.834	-2.7348u	-3.1383u	-2.9229u
Se 196.026	-17.4300u	-15.4106u	7.1330
Si 288.158	28.6041	24.1769	25.7832
Sn 189.925	-7.6414u	-9.4014u	-9.9862u
Sr 216.596	-0.8284u	-0.4033u	-0.0778u
Ti 334.941	0.4763	0.2930	0.2475

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Label	Replicates Concentration		
Tl 190.794	-22.3611u	-4.2182u	-0.6823u
V 292.401	0.5553	-0.2398u	-1.2506u
Zn 206.200	-1.4317u	1.0291	3.1726

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.6128	ppb	0.4999	81.6	-59.3421	-0.61278
Al 308.215	30.2989	ppb	1.0239	3.4	266.400	30.29886
As 188.980	0.7138	ppb	2.5117	351.9	0.8967	0.71381
B 249.678	11.8579	ppb	2.2195	18.7	75.3843	11.85792
Ba 389.178	0.1781	ppb	0.4655	261.4	-35.4937	0.17807
Be 313.042	0.0291	ppb	0.0156	53.7	-303.438	0.02914
Ca 370.602	13.47	ppb	7.083	52.6	47.57	13.46877
Cd 226.502	-0.0386	ppb	0.1427	369.6	3.4979	-0.03862
Co 228.615	-0.3056	ppb	0.8665	283.6	-13.5878	-0.30556
Cr 267.716	0.2253	ppb	0.0943	41.9	17.3297	0.22533
Cu 324.754	3.1890	ppb	0.9377	29.4	532.707	3.18904
Fe 271.441	23.1465	ppb	15.4701	66.8	30.0341	23.14649
K 766.491	4.5539	ppb	0.8037	17.6	412.757	4.55395
Mg 279.078	13.4822	ppb	3.0444	22.6	39.7146	13.48219
Mn 257.610	0.3360	ppb	0.1360	40.5	54.4774	0.33595
Mo 202.032	1.5049	ppb	0.2213	14.7	6.5435	1.50488
Na 330.237	329.710	ppb	400.970	121.6	46.4771	329.71014
Ni 231.604	1.0741	ppb	1.2202	113.6	-0.5663	1.07410
Pb 220.353	-7.2047	ppb	2.7015	37.5	-1.8733	-7.20469Z
Sb 206.834	-2.9320	ppb	0.2019	6.9	4.9379	-2.93201
Se 196.026	-8.5692	ppb	13.6359	159.1	1.1064	-8.56922
Si 288.158	26.1880	ppb	2.2412	8.6	657.871	26.18803
Sn 189.925	-9.0097	ppb	1.2205	13.5	-1.2837	-9.00969
Sr 216.596	-0.4365	ppb	0.3764	86.2	5.8786	-0.43650
Ti 334.941	0.3390	ppb	0.1211	35.7	4.7325	0.33895
Tl 190.794	-9.0872	ppb	11.6307	128.0	-3.5967	-9.08717
V 292.401	-0.3117	ppb	0.9051	290.4	-16.0326	-0.31169
Zn 206.200	0.9233	ppb	2.3040	249.5	0.4043	0.92334

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Rack 3, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	56.9144	57.0418	57.3696
Al 308.215	69980.4	70089.0	69907.0
As 188.980	129.186	152.473	134.605
B 249.678	287.833	293.776	292.913
Ba 389.178	708.041	706.786	710.712
Be 313.042	61.8920	62.0353	61.9032
Ca 370.602	432453	433218	432521
Cd 226.502	54.5634	54.5063	55.5869
Co 228.615	112.223	113.526	109.844
Cr 267.716	208.673	209.981	209.363
Cu 324.754	191.148	190.293	190.201
Fe 271.441	165209	166161	165875
K 766.491	22975.4	23022.8	22961.2
Mg 279.078	99142.7	99392.3	99321.2
Mn 257.610	5727.86	5748.83	5733.43
Mo 202.032	104.286	105.134	103.959

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Label	Replicates Concentration		
Na 330.237	7763.19	7528.25	7567.67
Ni 231.604	236.002	231.896	236.374
Pb 220.353	560.500	557.654	577.094
Sb 206.834	49.8568	38.5825	54.6170
Se 196.026	100.092	90.7339	131.018
Si 288.158	3802.75	3842.66	3823.61
Sn 189.925	114.677	105.972	103.110
Sr 216.596	777.753	776.703	776.134
Ti 334.941	2080.40	2083.51	2075.42
Tl 190.794	31.9107	36.1976	38.1750
V 292.401	269.133	270.293	270.805
Zn 206.200	411.295	402.437	414.519

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	57.1086	ppb	0.2348	0.4	1669.76
Al 308.215	69992.1	ppb	91.5921	0.1	137133
As 188.980	138.755	ppb	12.1855	8.8	37.2994
B 249.678	291.507	ppb	3.2110	1.1	1821.81
Ba 389.178	708.513	ppb	2.0049	0.3	4597.71
Be 313.042	61.9435	ppb	0.0797	0.1	49710.7
Ca 370.602	432730	ppb	423.2	0.1	723363
Cd 226.502	54.8855	ppb	0.6081	1.1	963.218
Co 228.615	111.864	ppb	1.8669	1.7	441.838
Cr 267.716	209.339	ppb	0.6546	0.3	3538.82
Cu 324.754	190.547	ppb	0.5221	0.3	6237.34
Fe 271.441	165748	ppb	488.871	0.3	91773.1
K 766.491	22986.5	ppb	32.2455	0.1	473253
Mg 279.078	99285.4	ppb	128.601	0.1	132725
Mn 257.610	5736.71	ppb	10.8609	0.2	476093
Mo 202.032	104.460	ppb	0.6064	0.6	178.335
Na 330.237	7619.70	ppb	125.817	1.7	214.090
Ni 231.604	234.758	ppb	2.4849	1.1	261.502
Pb 220.353	565.083	ppb	10.4991	1.9	209.069
Sb 206.834	47.6854	ppb	8.2348	17.3	26.0754
Se 196.026	107.281	ppb	21.0822	19.7	24.1595
Si 288.158	3823.01	ppb	19.9590	0.5	18498.5
Sn 189.925	107.920	ppb	6.0242	5.6	28.2691
Sr 216.596	776.863	ppb	0.8213	0.1	2291.80
Ti 334.941	2079.78	ppb	4.0820	0.2	184728
Tl 190.794	35.4278	ppb	3.2024	9.0	1.0115
V 292.401	270.077	ppb	0.8567	0.3	2744.24
Zn 206.200	409.417	ppb	6.2559	1.5	226.075

480-151917-a-56-b ms (Samp) 4/20/2019, 6:17:05 PM Rack 3, Tube 32

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	58.2084	56.8395	56.4156
Al 308.215	68286.8	68232.8	68366.4
As 188.980	133.024	134.933	133.501
B 249.678	282.707	284.361	284.294
Ba 389.178	669.073	672.267	667.425
Be 313.042	62.7274	62.7654	62.9070
Ca 370.602	620433	621304	622440

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	55.0116	55.6249	55.6187
Co 228.615	105.942	106.739	108.099
Cr 267.716	204.332	204.229	204.820
Cu 324.754	196.524	198.195	196.991
Fe 271.441	158817	159129	160034
K 766.491	23305.0	23283.2	23396.6
Mg 279.078	119585	119521	119832
Mn 257.610	5930.76	5940.90	5952.53
Mo 202.032	103.988	105.692	103.793
Na 330.237	8179.95	8125.29	7925.03
Ni 231.604	216.313	218.581	219.621
Pb 220.353	551.180	561.632	564.227
Sb 206.834	31.2715	63.2507	39.2150
Se 196.026	117.063	83.5003	111.250
Si 288.158	4459.14	4445.32	4447.15
Sn 189.925	97.8737	98.8442	102.732
Sr 216.596	1584.67	1583.88	1579.82
Ti 334.941	2151.23	2150.01	2150.34
Tl 190.794	40.4227	40.7468	45.6403
V 292.401	269.479	269.502	268.783
Zn 206.200	377.167	356.964	368.908

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	57.1545	ppb	0.9370	1.6	1669.88
Al 308.215	68295.3	ppb	67.2409	0.1	133814
As 188.980	133.819	ppb	0.9934	0.7	35.9985
B 249.678	283.787	ppb	0.9359	0.3	1775.34
Ba 389.178	669.588	ppb	2.4619	0.4	4372.74
Be 313.042	62.7999	ppb	0.0946	0.2	50430.1
Ca 370.602	621392	ppb	1006	0.2	1038801
Cd 226.502	55.4184	ppb	0.3523	0.6	960.490
Co 228.615	106.927	ppb	1.0907	1.0	422.944
Cr 267.716	204.460	ppb	0.3157	0.2	3457.05
Cu 324.754	197.237	ppb	0.8619	0.4	6438.84
Fe 271.441	159327	ppb	632.218	0.4	88218.5
K 766.491	23328.2	ppb	60.1810	0.3	480282
Mg 279.078	119646	ppb	164.198	0.1	159952
Mn 257.610	5941.40	ppb	10.8940	0.2	493135
Mo 202.032	104.491	ppb	1.0448	1.0	178.460
Na 330.237	8076.76	ppb	134.210	1.7	226.578
Ni 231.604	218.172	ppb	1.6918	0.8	242.899
Pb 220.353	559.013	ppb	6.9068	1.2	206.987
Sb 206.834	44.5790	ppb	16.6508	37.4	24.8819
Se 196.026	103.938	ppb	17.9363	17.3	23.5230
Si 288.158	4450.54	ppb	7.5052	0.2	21430.1
Sn 189.925	99.8166	ppb	2.5709	2.6	26.2212
Sr 216.596	1582.79	ppb	2.6006	0.2	4643.73
Ti 334.941	2150.53	ppb	0.6330	0.0	191058
Tl 190.794	42.2699	ppb	2.9233	6.9	2.9729
V 292.401	269.255	ppb	0.4091	0.2	2736.03
Zn 206.200	367.680	ppb	10.1577	2.8	203.031

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480-151917-a-56-c ms (Samp) 4/20/2019, 6:21:18 PM Rack 3, Tube 33**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	55.9945	56.4680	55.4756
Al 308.215	67791.5	67731.0	67721.8
As 188.980	135.694	133.365	133.620
B 249.678	277.494	278.701	277.482
Ba 389.178	668.578	665.810	669.174
Be 313.042	61.9448	61.8661	61.9710
Ca 370.602	480235	478367	478767
Cd 226.502	55.2116	55.6293	54.0195
Co 228.615	105.117	105.541	104.262
Cr 267.716	202.315	203.034	202.673
Cu 324.754	220.339	220.155	218.133
Fe 271.441	158357	158674	158247
K 766.491	22105.1	22131.3	22115.6
Mg 279.078	119466	119264	119189
Mn 257.610	5944.74	5942.44	5930.27
Mo 202.032	101.775	100.955	101.530
Na 330.237	8028.09	7341.86	7247.95
Ni 231.604	221.204	220.614	219.024
Pb 220.353	574.041	540.687	558.522
Sb 206.834	24.6932	15.7769	35.3203
Se 196.026	129.080	91.2822	112.747
Si 288.158	2658.39	2647.96	2650.29
Sn 189.925	105.620	105.928	97.4197
Sr 216.596	848.316	848.501	847.385
Ti 334.941	2192.72	2190.63	2190.09
Tl 190.794	36.5128	50.3623	52.1952
V 292.401	275.877	275.918	275.014
Zn 206.200	349.568	361.971	354.509

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	55.9794	ppb	0.4964	0.9	1636.55
Al 308.215	67748.1	ppb	37.8372	0.1	132743
As 188.980	134.226	ppb	1.2776	1.0	36.1084
B 249.678	277.892	ppb	0.7004	0.3	1735.32
Ba 389.178	667.854	ppb	1.7952	0.3	4361.35
Be 313.042	61.9273	ppb	0.0546	0.1	49704.6
Ca 370.602	479123	ppb	983.7	0.2	800943
Cd 226.502	54.9535	ppb	0.8354	1.5	953.989
Co 228.615	104.973	ppb	0.6511	0.6	415.511
Cr 267.716	202.674	ppb	0.3594	0.2	3427.15
Cu 324.754	219.543	ppb	1.2243	0.6	7114.34
Fe 271.441	158426	ppb	221.959	0.1	87719.7
K 766.491	22117.3	ppb	13.1814	0.1	455324
Mg 279.078	119306	ppb	143.194	0.1	159498
Mn 257.610	5939.15	ppb	7.7729	0.1	492947
Mo 202.032	101.420	ppb	0.4207	0.4	173.280
Na 330.237	7539.30	ppb	425.904	5.6	211.853
Ni 231.604	220.281	ppb	1.1276	0.5	245.267
Pb 220.353	557.750	ppb	16.6903	3.0	206.517
Sb 206.834	25.2635	ppb	9.7842	38.7	18.1303
Se 196.026	111.036	ppb	18.9568	17.1	24.8596
Si 288.158	2652.21	ppb	5.4751	0.2	13038.7

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	102.990	ppb	4.8261	4.7	27.0230
Sr 216.596	848.067	ppb	0.5984	0.1	2498.98
Ti 334.941	2191.14	ppb	1.3883	0.1	194660
Tl 190.794	46.3568	ppb	8.5743	18.5	3.9676
V 292.401	275.603	ppb	0.5102	0.2	2801.02
Zn 206.200	355.350	ppb	6.2439	1.8	196.227

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7592u	0.8651	0.4176u
Al 308.215	91353.2	90720.1	90999.0
As 188.980	146.733	135.872	132.316
B 249.678	52.0794	51.2429	50.5870
Ba 389.178	736.922	731.247	731.314
Be 313.042	5.2348	5.1903	5.1815
Ca 370.602	35007	34782	34840
Cd 226.502	6.9569	6.4366	5.8396
Co 228.615	35.7911	37.8186	35.9773
Cr 267.716	108.659	107.626	108.357
Cu 324.754	140.392	141.694	139.630
Fe 271.441	81275.9	80976.7	80624.1
K 766.491	9948.56	9883.52	9887.30
Mg 279.078	24007.4	23872.2	23881.6
Mn 257.610	1510.94	1503.73	1502.04
Mo 202.032	3.0183	3.3048	3.2383
Na 330.237	1055.92	928.201	579.527u
Ni 231.604	98.3827	93.4054	94.4035
Pb 220.353	535.411	537.538	521.885
Sb 206.834	-7.0719u	1.3003	-14.2086u
Se 196.026	-1.2057	-18.7658u	-5.0986u
Si 288.158	4378.23	4375.02	4385.12
Sn 189.925	5.2529	7.4332	6.3418
Sr 216.596	129.683	128.729	128.923
Ti 334.941	624.190	620.310	623.595
Tl 190.794	1.3127u	-2.6839u	-12.5379u
V 292.401	123.187	122.473	121.483
Zn 206.200	920.538	917.189	933.949

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1745	ppb	0.8390	480.8	-48.1310
Al 308.215	91024.1	ppb	317.336	0.3	178267
As 188.980	138.307	ppb	7.5109	5.4	37.4168
B 249.678	51.3031	ppb	0.7480	1.5	263.044
Ba 389.178	733.161	ppb	3.2574	0.4	4633.69
Be 313.042	5.2022	ppb	0.0286	0.5	3880.30
Ca 370.602	34876	ppb	117.1	0.3	58237
Cd 226.502	6.4110	ppb	0.5591	8.7	213.521
Co 228.615	36.5290	ppb	1.1207	3.1	135.209
Cr 267.716	108.214	ppb	0.5311	0.5	1833.23
Cu 324.754	140.572	ppb	1.0438	0.7	4707.79
Fe 271.441	80958.9	ppb	326.252	0.4	44834.2
K 766.491	9906.46	ppb	36.5058	0.4	204195

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	23920.4	ppb	75.4870	0.3	31977.9
Mn 257.610	1505.57	ppb	4.7287	0.3	124985
Mo 202.032	3.1871	ppb	0.1499	4.7	8.4205
Na 330.237	854.548	ppb	246.587	28.9	41.3915
Ni 231.604	95.3972	ppb	2.6332	2.8	105.233
Pb 220.353	531.611	ppb	8.4899	1.6	199.162
Sb 206.834	-6.6601	ppb	7.7627	116.6	5.1934
Se 196.026	-8.3567	ppb	9.2223	110.4	1.6188
Si 288.158	4379.46	ppb	5.1640	0.1	21005.0
Sn 189.925	6.3426	ppb	1.0901	17.2	2.5964
Sr 216.596	129.112	ppb	0.5040	0.4	392.922
Ti 334.941	622.698	ppb	2.0895	0.3	55276.7
Tl 190.794	-4.6364	ppb	7.1288	153.8	-5.7825
V 292.401	122.381	ppb	0.8558	0.7	1238.24
Zn 206.200	923.892	ppb	8.8690	1.0	509.866

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Rack 3, Tube 35

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0829u	-0.0529u	-0.8699u
Al 308.215	50937.9	50927.6	50899.8
As 188.980	36.4602	37.9898	44.2550
B 249.678	60.3422	63.8241	62.4054
Ba 389.178	374.421	373.105	374.174
Be 313.042	2.8943	2.9104	2.8837
Ca 370.602	103075	103088	103076
Cd 226.502	2.8961	2.4623	2.7361
Co 228.615	38.3493	39.2950	39.9862
Cr 267.716	78.1830	76.9137	76.9578
Cu 324.754	387.816	389.637	388.329
Fe 271.441	91222.2	91783.4	92025.2
K 766.491	9282.51	9325.69	9338.67
Mg 279.078	35842.7	35852.9	35861.5
Mn 257.610	2144.95	2152.04	2152.45
Mo 202.032	4.3647	4.6427	2.2955
Na 330.237	1010.79	1388.22	1248.14
Ni 231.604	88.6165	89.6313	89.7964
Pb 220.353	113.900	117.708	122.883
Sb 206.834	-2.9355	-10.7930u	8.0231
Se 196.026	19.9682	11.5150	-9.7406u
Si 288.158	3923.02	3968.63	3949.76
Sn 189.925	8.7594	8.0089	4.7017
Sr 216.596	197.678	198.076	195.777
Ti 334.941	886.652	887.076	884.008
Tl 190.794	6.7142u	-6.6814u	-4.8617u
V 292.401	126.856	127.190	127.192
Zn 206.200	512.118	506.087	505.565

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3352	ppb	0.4633	138.2	-65.0425
Al 308.215	50921.8	ppb	19.7532	0.0	99822.2
As 188.980	39.5684	ppb	4.1302	10.4	11.0262
B 249.678	62.1906	ppb	1.7509	2.8	326.720

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	373.900	ppb	0.6996	0.2	2392.71
Be 313.042	2.8961	ppb	0.0134	0.5	2028.48
Ca 370.602	103080	ppb	6.956	0.0	172264
Cd 226.502	2.6981	ppb	0.2194	8.1	180.582
Co 228.615	39.2102	ppb	0.8218	2.1	147.531
Cr 267.716	77.3515	ppb	0.7204	0.9	1318.83
Cu 324.754	388.594	ppb	0.9392	0.2	12222.3
Fe 271.441	91676.9	ppb	411.927	0.4	50767.3
K 766.491	9315.62	ppb	29.3987	0.3	192047
Mg 279.078	35852.3	ppb	9.4244	0.0	47935.7
Mn 257.610	2149.82	ppb	4.2155	0.2	178447
Mo 202.032	3.7676	ppb	1.2825	34.0	9.2752
Na 330.237	1215.71	ppb	190.792	15.7	53.2400
Ni 231.604	89.3481	ppb	0.6389	0.7	98.4372
Pb 220.353	118.164	ppb	4.5091	3.8	42.3556
Sb 206.834	-1.9018	ppb	9.4506	496.9	6.8955
Se 196.026	7.2475	ppb	15.3072	211.2	4.6647
Si 288.158	3947.13	ppb	22.9180	0.6	18999.8
Sn 189.925	7.1567	ppb	2.1589	30.2	2.8021
Sr 216.596	197.177	ppb	1.2288	0.6	592.861
Ti 334.941	885.912	ppb	1.6626	0.2	78656.4
Tl 190.794	-1.6096	ppb	7.2659	451.4	-5.3938
V 292.401	127.079	ppb	0.1932	0.2	1288.53
Zn 206.200	507.923	ppb	3.6418	0.7	280.352

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Rack 3, Tube 36

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1326u	-1.5449u	-0.3521u
Al 308.215	38596.1	38591.4	38514.1
As 188.980	15.8174	7.8582	22.1862
B 249.678	33.0438	34.4022	32.5559
Ba 389.178	298.586	294.904	295.010
Be 313.042	1.9340	1.9139	1.8997
Ca 370.602	327165	327151	326309
Cd 226.502	1.6913	1.6792	2.0143
Co 228.615	38.0920	39.9235	37.5460
Cr 267.716	72.3215	71.5768	72.6376
Cu 324.754	70.7760	70.9075	69.5349
Fe 271.441	105885	106138	105713
K 766.491	6782.78	6797.65	6771.76
Mg 279.078	77444.7	77336.8	77252.5
Mn 257.610	4040.94	4043.21	4027.85
Mo 202.032	3.6572	1.3103	3.5357
Na 330.237	1251.69	1105.15	872.541
Ni 231.604	81.7001	79.7353	76.7348
Pb 220.353	25.9559	18.7126	36.3861
Sb 206.834	5.7037	11.6113	-1.1722
Se 196.026	11.0501	-15.3900u	18.5651
Si 288.158	3133.34	3133.66	3124.02
Sn 189.925	13.0226	6.8784	6.4883
Sr 216.596	469.413	474.129	473.714
Ti 334.941	1274.23	1275.11	1271.26

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-3.8425u	-10.5678u	-15.6645u
V 292.401	130.454	132.311	131.115
Zn 206.200	190.015	184.496	181.659

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.0099	ppb	0.6058	60.0	-86.3029
Al 308.215	38567.2	ppb	46.0398	0.1	75655.7
As 188.980	15.2873	ppb	7.1787	47.0	4.5060
B 249.678	33.3339	ppb	0.9567	2.9	114.789
Ba 389.178	296.166	ppb	2.0960	0.7	1955.70
Be 313.042	1.9159	ppb	0.0172	0.9	1270.51
Ca 370.602	326875	ppb	490.0	0.1	546439
Cd 226.502	1.7949	ppb	0.1901	10.6	190.239
Co 228.615	38.5205	ppb	1.2453	3.2	147.380
Cr 267.716	72.1786	ppb	0.5447	0.8	1236.52
Cu 324.754	70.4061	ppb	0.7574	1.1	2586.83
Fe 271.441	105912	ppb	213.829	0.2	58647.1
K 766.491	6784.07	ppb	12.9925	0.2	140003
Mg 279.078	77344.7	ppb	96.3613	0.1	103407
Mn 257.610	4037.33	ppb	8.2885	0.2	335087
Mo 202.032	2.8344	ppb	1.3213	46.6	7.5348
Na 330.237	1076.46	ppb	191.198	17.8	49.2446
Ni 231.604	79.3900	ppb	2.5006	3.1	87.2630
Pb 220.353	27.0182	ppb	8.8845	32.9	7.4441
Sb 206.834	5.3809	ppb	6.3978	118.9	9.5650
Se 196.026	4.7418	ppb	17.8349	376.1	4.4281
Si 288.158	3130.34	ppb	5.4780	0.2	15206.0
Sn 189.925	8.7964	ppb	3.6652	41.7	3.2166
Sr 216.596	472.419	ppb	2.6111	0.6	1398.01
Ti 334.941	1273.53	ppb	2.0130	0.2	113150
Tl 190.794	-10.0250	ppb	5.9297	59.1	-7.6347
V 292.401	131.294	ppb	0.9414	0.7	1334.23
Zn 206.200	185.390	ppb	4.2487	2.3	102.393

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Rack 3, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.0825u	0.4002	-1.0777u
Al 308.215	82643.5	82573.2	82810.8
As 188.980	429.253	415.882	412.828
B 249.678	27.3564	27.0617	26.7615
Ba 389.178	894.106	901.267	902.395
Be 313.042	3.8876	3.8720	3.8811
Ca 370.602	27730	27688	27805
Cd 226.502	4.1906	4.2283	5.0467
Co 228.615	43.8209	44.6230	44.1991
Cr 267.716	91.2275	91.3299	92.2626
Cu 324.754	212.030	215.717	215.444
Fe 271.441	137060	137033	137273
K 766.491	11067.3	11048.3	11096.7
Mg 279.078	19993.2	19942.4	20009.3
Mn 257.610	13038.7	13080.8	13095.2
Mo 202.032	8.3058	5.2728	5.4274

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Na 330.237	846.996	666.363u	667.650u
Ni 231.604	96.3505	101.233	100.143
Pb 220.353	1555.38	1556.05	1550.32
Sb 206.834	4.5354	9.7172	-0.0261
Se 196.026	14.9989	-25.4240u	-2.3598
Si 288.158	3823.82	3816.19	3848.64
Sn 189.925	18.3305	24.5979	10.4946
Sr 216.596	107.846	106.740	106.891
Ti 334.941	1304.55	1302.21	1307.95
Tl 190.794	-2.3505u	14.4276	-11.2630u
V 292.401	190.821	190.108	191.561
Zn 206.200	501.234	505.531	507.850

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5867	ppb	0.8547	145.7	-60.5706
Al 308.215	82675.8	ppb	122.034	0.1	161940
As 188.980	419.321	ppb	8.7356	2.1	112.304
B 249.678	27.0599	ppb	0.2974	1.1	39.8548
Ba 389.178	899.256	ppb	4.4954	0.5	5697.58
Be 313.042	3.8802	ppb	0.0079	0.2	2811.79
Ca 370.602	27741	ppb	59.06	0.2	46401
Cd 226.502	4.4885	ppb	0.4838	10.8	274.365
Co 228.615	44.2143	ppb	0.4013	0.9	169.413
Cr 267.716	91.6067	ppb	0.5704	0.6	1577.76
Cu 324.754	214.397	ppb	2.0546	1.0	6953.64
Fe 271.441	137122	ppb	131.282	0.1	75924.2
K 766.491	11070.8	ppb	24.4220	0.2	228145
Mg 279.078	19981.6	ppb	34.9534	0.2	26594.7
Mn 257.610	13071.6	ppb	29.3479	0.2	1083804
Mo 202.032	6.3353	ppb	1.7082	27.0	13.0674
Na 330.237	727.003	ppb	103.919	14.3	34.6558
Ni 231.604	99.2423	ppb	2.5630	2.6	109.537
Pb 220.353	1553.91	ppb	3.1306	0.2	584.903
Sb 206.834	4.7422	ppb	4.8749	102.8	9.9823
Se 196.026	-4.2616	ppb	20.2785	475.8	3.7101
Si 288.158	3829.55	ppb	16.9641	0.4	18471.8
Sn 189.925	17.8077	ppb	7.0662	39.7	5.4940
Sr 216.596	107.159	ppb	0.5993	0.6	335.258
Ti 334.941	1304.90	ppb	2.8891	0.2	115782
Tl 190.794	0.2714	ppb	13.0445	4806.9	-4.6135
V 292.401	190.830	ppb	0.7264	0.4	1941.45
Zn 206.200	504.872	ppb	3.3573	0.7	278.758

480-151917-a-6-a (Samp)

4/20/2019, 6:42:24 PM

Rack 3, Tube 38

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5479u	-0.8804u	-0.8558u
Al 308.215	74955.7	75068.8	75352.6
As 188.980	138.301	127.485	123.596
B 249.678	30.5108	28.2970	30.6792
Ba 389.178	652.953	650.787	651.458
Be 313.042	3.3929	3.4103	3.3983
Ca 370.602	24113	24099	24221

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Cd 226.502	3.4455	3.0102	3.5928
Co 228.615	25.3453	25.5719	26.4763
Cr 267.716	90.7158	89.9081	90.6658
Cu 324.754	146.500	149.123	148.702
Fe 271.441	64162.4	64119.6	64554.6
K 766.491	10030.0	10062.6	10089.0
Mg 279.078	18539.4	18543.3	18644.2
Mn 257.610	1425.57	1427.77	1433.64
Mo 202.032	0.9217	4.7609	1.8002
Na 330.237	582.902u	563.897u	556.598u
Ni 231.604	69.4402	71.2416	71.5271
Pb 220.353	664.975	652.934	643.640
Sb 206.834	-6.4270u	12.8762	-3.9414u
Se 196.026	4.3501	-18.1808u	-0.0137
Si 288.158	3532.41	3548.02	3561.96
Sn 189.925	8.2547	5.2435	4.1643
Sr 216.596	96.4533	98.1930	96.8301
Ti 334.941	728.200	725.637	726.653
Tl 190.794	-3.7586u	4.3508u	16.5078
V 292.401	98.3507	98.8401	97.4383
Zn 206.200	631.658	627.324	635.397

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7614	ppb	0.1853	24.3	-73.7233
Al 308.215	75125.7	ppb	204.450	0.3	147166
As 188.980	129.794	ppb	7.6196	5.9	35.1890
B 249.678	29.8290	ppb	1.3294	4.5	133.154
Ba 389.178	651.732	ppb	1.1090	0.2	4108.67
Be 313.042	3.4005	ppb	0.0089	0.3	2424.21
Ca 370.602	24144	ppb	66.88	0.3	40323
Cd 226.502	3.3495	ppb	0.3029	9.0	147.868
Co 228.615	25.7978	ppb	0.5984	2.3	93.8625
Cr 267.716	90.4299	ppb	0.4526	0.5	1534.29
Cu 324.754	148.108	ppb	1.4084	1.0	4933.20
Fe 271.441	64278.9	ppb	239.774	0.4	35600.4
K 766.491	10060.5	ppb	29.5293	0.3	207348
Mg 279.078	18575.6	ppb	59.4082	0.3	24834.1
Mn 257.610	1428.99	ppb	4.1751	0.3	118608
Mo 202.032	2.4943	ppb	2.0115	80.6	7.4506
Na 330.237	567.799	ppb	13.5792	2.4	36.7209
Ni 231.604	70.7363	ppb	1.1315	1.6	77.5732
Pb 220.353	653.850	ppb	10.6969	1.6	246.047
Sb 206.834	0.8359	ppb	10.5010	1256.2	7.5482
Se 196.026	-4.6148	ppb	11.9494	258.9	2.2484
Si 288.158	3547.46	ppb	14.7849	0.4	17127.1
Sn 189.925	5.8875	ppb	2.1199	36.0	2.4813
Sr 216.596	97.1588	ppb	0.9152	0.9	297.834
Ti 334.941	726.830	ppb	1.2908	0.2	64499.4
Tl 190.794	5.7000	ppb	10.2004	179.0	-2.5816
V 292.401	98.2097	ppb	0.7114	0.7	991.952
Zn 206.200	631.460	ppb	4.0402	0.6	348.459

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

480-151917-a-34-a (Samp) 4/20/2019, 6:46:38 PM Rack 3, Tube 39**Weight: 1 Volume: 1 Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1008u	-1.8287u	0.3877u
Al 308.215	119721	119811	119733
As 188.980	35.1298	29.5388	31.9650
B 249.678	85.3700	87.1506	87.3860
Ba 389.178	885.136	887.144	889.989
Be 313.042	5.6385	5.6314	5.6310
Ca 370.602	594465	597482	595596
Cd 226.502	3.8721	3.2955	4.5213
Co 228.615	87.4608	88.1580	89.7711
Cr 267.716	173.176	174.102	173.120
Cu 324.754	390.054	389.527	386.991
Fe 271.441	210410	210281	210614
K 766.491	20322.1	20350.4	20386.7
Mg 279.078	170501	170354	170158
Mn 257.610	5643.65	5636.69	5636.02
Mo 202.032	4.9503	5.2015	3.2390
Na 330.237	1647.17	1781.19	1793.14
Ni 231.604	210.340	210.629	209.595
Pb 220.353	120.881	121.832	146.213
Sb 206.834	-6.7261	-2.2522	-3.4784
Se 196.026	-29.7185u	-14.4097u	9.5879
Si 288.158	3493.89	3481.10	3482.19
Sn 189.925	-2.7941u	-0.6040u	7.0401
Sr 216.596	752.195	756.771	747.768
Ti 334.941	2025.10	2029.64	2026.29
Tl 190.794	12.8568u	-23.2224u	3.9145u
V 292.401	234.422	235.441	234.274
Zn 206.200	582.618	579.310	568.312

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4467	ppb	1.2054	269.8	-87.0744
Al 308.215	119755	ppb	49.1482	0.0	234475
As 188.980	32.2112	ppb	2.8036	8.7	8.7462
B 249.678	86.6355	ppb	1.1023	1.3	373.994
Ba 389.178	887.423	ppb	2.4384	0.3	5819.66
Be 313.042	5.6336	ppb	0.0042	0.1	4313.54
Ca 370.602	595848	ppb	1524	0.3	996002
Cd 226.502	3.8963	ppb	0.6133	15.7	379.340
Co 228.615	88.4633	ppb	1.1851	1.3	348.577
Cr 267.716	173.466	ppb	0.5517	0.3	2942.44
Cu 324.754	388.858	ppb	1.6378	0.4	12250.7
Fe 271.441	210435	ppb	168.010	0.1	116509
K 766.491	20353.1	ppb	32.3835	0.2	419303
Mg 279.078	170338	ppb	172.336	0.1	227736
Mn 257.610	5638.79	ppb	4.2248	0.1	468269
Mo 202.032	4.4636	ppb	1.0679	23.9	9.0589
Na 330.237	1740.50	ppb	81.0462	4.7	52.0751
Ni 231.604	210.188	ppb	0.5332	0.3	233.967
Pb 220.353	129.642	ppb	14.3588	11.1	42.5465
Sb 206.834	-4.1523	ppb	2.3118	55.7	8.0278
Se 196.026	-11.5134	ppb	19.8126	172.1	1.9391
Si 288.158	3485.73	ppb	7.0878	0.2	16898.7

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.2140	ppb	5.1631	425.3	1.3002
Sr 216.596	752.245	ppb	4.5018	0.6	2226.20
Ti 334.941	2027.01	ppb	2.3538	0.1	180236
Tl 190.794	-2.1504	ppb	18.7887	873.8	-10.0054
V 292.401	234.712	ppb	0.6354	0.3	2394.60
Zn 206.200	576.746	ppb	7.4897	1.3	318.534

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Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1110	-0.2609u	-1.1081u
Al 308.215	83253.1	83208.2	82765.5
As 188.980	30.6683	29.2511	21.1706
B 249.678	22.3306	23.2674	22.5204
Ba 389.178	323.401	320.710	321.928
Be 313.042	2.0447	2.0073	2.0326
Ca 370.602	20833	20823	20677
Cd 226.502	1.1674	1.2988	1.3219
Co 228.615	48.4762	47.2017	46.5543
Cr 267.716	93.0318	93.3589	93.0063
Cu 324.754	32.2956	32.5956	32.4675
Fe 271.441	122506	122512	121940
K 766.491	7466.62	7452.73	7434.32
Mg 279.078	35131.4	35032.3	34914.6
Mn 257.610	996.957	995.098	991.337
Mo 202.032	2.7948	4.0846	1.7123
Na 330.237	1038.94	984.074	1040.29
Ni 231.604	102.821	107.018	102.219
Pb 220.353	62.9245	62.8298	60.9199
Sb 206.834	-2.9461	-8.1340u	0.6982
Se 196.026	-18.1680u	11.6371	-20.8397u
Si 288.158	4041.42	4072.86	4049.34
Sn 189.925	9.6484	5.5131	25.6947
Sr 216.596	53.8081	55.7460	54.2275
Ti 334.941	1462.00	1460.96	1450.59
Tl 190.794	9.6020u	-10.1597u	9.6730u
V 292.401	112.823	111.821	111.160
Zn 206.200	339.142	347.573	339.693

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0860	ppb	1.1199	1302.0	-65.2731
Al 308.215	83075.6	ppb	269.503	0.3	162719
As 188.980	27.0300	ppb	5.1236	19.0	7.5964
B 249.678	22.7061	ppb	0.4953	2.2	25.0489
Ba 389.178	322.013	ppb	1.3472	0.4	2078.76
Be 313.042	2.0282	ppb	0.0191	0.9	1316.58
Ca 370.602	20778	ppb	87.36	0.4	34606
Cd 226.502	1.2627	ppb	0.0833	6.6	210.451
Co 228.615	47.4107	ppb	0.9779	2.1	183.590
Cr 267.716	93.1323	ppb	0.1966	0.2	1584.13
Cu 324.754	32.4529	ppb	0.1505	0.5	1440.34
Fe 271.441	122320	ppb	328.339	0.3	67729.8
K 766.491	7451.22	ppb	16.2052	0.2	153698

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	35026.1	ppb	108.509	0.3	46836.4
Mn 257.610	994.464	ppb	2.8632	0.3	82698.3
Mo 202.032	2.8639	ppb	1.1877	41.5	7.3936
Na 330.237	1021.10	ppb	32.0730	3.1	43.6872
Ni 231.604	104.019	ppb	2.6145	2.5	114.893
Pb 220.353	62.2247	ppb	1.1310	1.8	19.9048
Sb 206.834	-3.4606	ppb	4.4386	128.3	6.8178
Se 196.026	-9.1236	ppb	18.0288	197.6	1.5957
Si 288.158	4054.54	ppb	16.3543	0.4	19527.8
Sn 189.925	13.6187	ppb	10.6605	78.3	4.4353
Sr 216.596	54.5939	ppb	1.0196	1.9	180.140
Ti 334.941	1457.85	ppb	6.3072	0.4	129389
Tl 190.794	3.0384	ppb	11.4300	376.2	-5.9127
V 292.401	111.935	ppb	0.8371	0.7	1138.14
Zn 206.200	342.136	ppb	4.7163	1.4	188.919

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	511.396	517.142	516.984
Al 308.215	10431.3	10389.4	10452.7
As 188.980	502.704	517.672	529.814
B 249.678	557.550	559.652	566.673
Ba 389.178	453.003	452.181	459.396
Be 313.042	575.529	574.445	579.018
Ca 370.602	10094	10047	10107
Cd 226.502	511.226	509.913	516.367
Co 228.615	512.386	512.249	516.637
Cr 267.716	510.393	508.389	513.615
Cu 324.754	519.035	521.597	522.654
Fe 271.441	10500.7	10462.7	10489.7
K 766.491	10318.2	10288.0	10358.7
Mg 279.078	10768.8	10767.2	10832.0
Mn 257.610	504.617	503.234	507.480
Mo 202.032	487.470	487.935	490.519
Na 330.237	11521.5	11125.9	11643.7
Ni 231.604	515.259	508.569	510.299
Pb 220.353	491.499	496.484	506.198
Sb 206.834	485.028	486.682	491.157
Se 196.026	587.236	574.706	580.356
Si 288.158	5409.02	5393.71	5414.86
Sn 189.925	503.652	482.995	488.254
Sr 216.596	490.064	490.049	493.945
Ti 334.941	506.282	505.736	509.142
Tl 190.794	497.312	489.492	516.960
V 292.401	503.489	499.358	505.566
Zn 206.200	1080.69	1086.14	1092.77

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	515.174	ppb	3.2730	0.6	15605.5	103.03475
Al 308.215	10424.5	ppb	32.1893	0.3	20617.0	104.24480
As 188.980	516.730	ppb	13.5797	2.6	138.572	103.34599
B 249.678	561.292	ppb	4.7773	0.9	3825.49	112.25832Q

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	454.860	ppb	3.9500	0.9	2840.39	90.97197
Be 313.042	576.331	ppb	2.3896	0.4	464615	115.26616Q
Ca 370.602	10082	ppb	31.08	0.3	16885	100.82486
Cd 226.502	512.502	ppb	3.4111	0.7	6598.99	102.50039
Co 228.615	513.757	ppb	2.4947	0.5	2022.71	102.75142
Cr 267.716	510.799	ppb	2.6367	0.5	8559.47	102.15981
Cu 324.754	521.095	ppb	1.8613	0.4	16227.1	104.21907
Fe 271.441	10484.4	ppb	19.5474	0.2	5841.69	104.79152
K 766.491	10321.6	ppb	35.5202	0.3	210181	103.21635
Mg 279.078	10789.4	ppb	36.9857	0.3	14443.3	107.89351
Mn 257.610	505.110	ppb	2.1657	0.4	41953.8	101.02209
Mo 202.032	488.641	ppb	1.6426	0.3	828.465	97.72823
Na 330.237	11430.3	ppb	270.679	2.4	329.011	114.30336Q
Ni 231.604	511.376	ppb	3.4726	0.7	571.463	102.27514
Pb 220.353	498.060	ppb	7.4751	1.5	188.869	99.61203
Sb 206.834	487.622	ppb	3.1708	0.7	182.908	97.52446
Se 196.026	580.766	ppb	6.2751	1.1	112.293	116.15318Q
Si 288.158	5405.86	ppb	10.9207	0.2	25897.4	108.11729
Sn 189.925	491.633	ppb	10.7353	2.2	125.247	98.32670
Sr 216.596	491.353	ppb	2.2453	0.5	1435.47	98.27052
Ti 334.941	507.053	ppb	1.8296	0.4	44982.0	101.41067
Tl 190.794	501.254	ppb	14.1521	2.8	118.474	100.25087
V 292.401	502.805	ppb	3.1601	0.6	5065.11	100.56091
Zn 206.200	1086.53	ppb	6.0537	0.6	599.242	108.65326

Cont Calib Blank (CCB)

4/20/2019, 6:59:19 PM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2682u	-0.1123u	0.3841
Al 308.215	34.6229	40.2736	37.2597
As 188.980	-1.6174u	4.5695	-0.2498u
B 249.678	13.1465	11.8546	10.1455
Ba 389.178	-0.1471u	-1.1779u	0.5395
Be 313.042	0.1170	0.0996	0.0300
Ca 370.602	15.91	6.187	6.158
Cd 226.502	0.3903	0.1535	-0.1121u
Co 228.615	-1.0224u	0.3406	0.4772
Cr 267.716	-0.0879u	0.4744	0.7441
Cu 324.754	3.0909	3.0129	2.3798
Fe 271.441	25.9456	28.6253	-4.4815u
K 766.491	6.7953	7.1282	7.4070
Mg 279.078	27.8283	15.2599	19.2201
Mn 257.610	0.7903	0.5445	0.4003
Mo 202.032	2.3061	1.1202	0.7380
Na 330.237	436.019	-181.466u	-14.6463u
Ni 231.604	-4.4504u	0.9801	3.5243
Pb 220.353	-3.9720u	-5.2047u	-9.5443u
Sb 206.834	13.5119	7.8163	4.8276
Se 196.026	-4.4062u	-5.0060u	-3.8120u
Si 288.158	30.0402	27.0804	30.0277
Sn 189.925	-3.9060u	-1.1248u	-5.5122u
Sr 216.596	0.6856	-2.2444u	1.8209
Ti 334.941	0.7923	0.7245	0.6650

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	-5.7942u	-11.2772u	-12.3173u
V 292.401	1.8426	1.0531	-0.0339u
Zn 206.200	-0.7151u	1.0999	-0.8130u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0012	ppb	0.3406	28406.9	-40.6891	0.00120
Al 308.215	37.3854	ppb	2.8275	7.6	280.288	37.38537
As 188.980	0.9008	ppb	3.2500	360.8	0.9466	0.90076
B 249.678	11.7155	ppb	1.5053	12.8	74.4025	11.71551
Ba 389.178	-0.2618	ppb	0.8644	330.1	-38.2472	-0.26185
Be 313.042	0.0822	ppb	0.0460	56.0	-260.613	0.08216
Ca 370.602	9.418	ppb	5.620	59.7	40.81	9.41756
Cd 226.502	0.1439	ppb	0.2513	174.7	5.8520	0.14390
Co 228.615	-0.0682	ppb	0.8292	1216.3	-12.6423	-0.06817
Cr 267.716	0.3769	ppb	0.4245	112.6	19.8624	0.37686
Cu 324.754	2.8278	ppb	0.3900	13.8	521.760	2.82785
Fe 271.441	16.6965	ppb	18.3896	110.1	26.4678	16.69646
K 766.491	7.1102	ppb	0.3062	4.3	453.422	7.11018
Mg 279.078	20.7694	ppb	6.4258	30.9	49.4556	20.76942
Mn 257.610	0.5783	ppb	0.1972	34.1	74.6129	0.57835
Mo 202.032	1.3881	ppb	0.8177	58.9	6.3461	1.38809
Na 330.237	79.9687	ppb	319.430	399.4	39.7246	79.96871
Ni 231.604	0.0180	ppb	4.0735	22615.0	-1.7510	0.01801
Pb 220.353	-6.2404	ppb	2.9270	46.9	-1.5084	-6.24036Z
Sb 206.834	8.7186	ppb	4.4119	50.6	9.0487	8.71859
Se 196.026	-4.4081	ppb	0.5970	13.5	1.8909	-4.40807
Si 288.158	29.0494	ppb	1.7053	5.9	671.019	29.04940
Sn 189.925	-3.5143	ppb	2.2197	63.2	0.1052	-3.51434
Sr 216.596	0.0874	ppb	2.0976	2400.6	7.4155	0.08738
Ti 334.941	0.7273	ppb	0.0637	8.8	39.2068	0.72727
Tl 190.794	-9.7962	ppb	3.5047	35.8	-3.7664	-9.79624
V 292.401	0.9539	ppb	0.9422	98.8	-3.1376	0.95391
Zn 206.200	-0.1428	ppb	1.0772	754.6	-0.1841	-0.14275

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Rack 3, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4379u	0.1578u	-0.0068u
Al 308.215	85907.7	86137.6	85527.8
As 188.980	34.5812	46.0053	40.1732
B 249.678	18.6950u	17.4657u	17.3936u
Ba 389.178	388.667	390.920	385.332
Be 313.042	3.2396	3.2589	3.2252
Ca 370.602	10112	10091	10003
Cd 226.502	2.1997	2.1388	2.5708
Co 228.615	57.5485	57.4307	55.8909
Cr 267.716	91.1733	90.4103	90.2770
Cu 324.754	230.493	233.282	229.046
Fe 271.441	164299	163998	162762
K 766.491	5540.74	5524.31	5486.48
Mg 279.078	33425.1	33386.4	33170.6
Mn 257.610	7357.21	7366.13	7299.34
Mo 202.032	3.5102	2.5174	4.6944

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Label	Replicates Concentration		
Na 330.237	481.019u	203.982u	376.749u
Ni 231.604	115.690	111.494	109.158
Pb 220.353	81.3300	60.3064	74.2407
Sb 206.834	-2.4391	-11.0931u	4.1152
Se 196.026	7.8741	-5.1655	-11.2529u
Si 288.158	2199.78	2200.86	2183.24
Sn 189.925	14.0819	13.8172	6.2191
Sr 216.596	37.4316	39.3548	40.2004
Ti 334.941	1214.44	1219.85	1208.24
Tl 190.794	2.8229u	-16.9289u	24.1396
V 292.401	172.130	172.877	170.106
Zn 206.200	344.111	328.686	339.641

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0956	ppb	0.3076	321.6	-60.8843
Al 308.215	85857.7	ppb	307.936	0.4	168164
As 188.980	40.2533	ppb	5.7125	14.2	11.0178
B 249.678	17.8514	ppb	0.7314	4.1	-50.5441
Ba 389.178	388.306	ppb	2.8113	0.7	2511.45
Be 313.042	3.2412	ppb	0.0169	0.5	2294.02
Ca 370.602	10069	ppb	57.68	0.6	16723
Cd 226.502	2.3031	ppb	0.2338	10.2	287.622
Co 228.615	56.9567	ppb	0.9249	1.6	218.603
Cr 267.716	90.6202	ppb	0.4836	0.5	1554.83
Cu 324.754	230.940	ppb	2.1531	0.9	7459.61
Fe 271.441	163686	ppb	814.523	0.5	90629.2
K 766.491	5517.18	ppb	27.8212	0.5	113886
Mg 279.078	33327.4	ppb	137.096	0.4	44499.7
Mn 257.610	7340.89	ppb	36.2614	0.5	608813
Mo 202.032	3.5740	ppb	1.0899	30.5	8.0978
Na 330.237	353.917	ppb	139.923	39.5	26.3388
Ni 231.604	112.114	ppb	3.3099	3.0	123.966
Pb 220.353	71.9590	ppb	10.6959	14.9	22.5293
Sb 206.834	-3.1390	ppb	7.6283	243.0	7.5418
Se 196.026	-2.8481	ppb	9.7718	343.1	3.5466
Si 288.158	2194.63	ppb	9.8751	0.4	10836.5
Sn 189.925	11.3727	ppb	4.4651	39.3	3.8676
Sr 216.596	38.9956	ppb	1.4189	3.6	139.356
Ti 334.941	1214.18	ppb	5.8086	0.5	107769
Tl 190.794	3.3445	ppb	20.5392	614.1	-6.3167
V 292.401	171.704	ppb	1.4336	0.8	1748.24
Zn 206.200	337.479	ppb	7.9361	2.4	186.440

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Rack 3, Tube 42

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6006u	-0.1827u	0.0731u
Al 308.215	77070.2	77164.4	77039.3
As 188.980	20.1670	26.5239	24.2782
B 249.678	58.5337	58.6340	57.3344
Ba 389.178	432.775	435.423	434.625
Be 313.042	3.9653	3.9646	3.9535
Ca 370.602	471190	469335	471690

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Label	Replicates Concentration		
Cd 226.502	2.2855	2.1705	2.6601
Co 228.615	62.7178	63.5763	65.1945
Cr 267.716	118.792	119.509	119.569
Cu 324.754	267.682	267.323	267.787
Fe 271.441	154301	154311	153894
K 766.491	12027.2	12080.2	12055.5
Mg 279.078	81302.0	81468.5	81176.2
Mn 257.610	3326.81	3336.13	3326.83
Mo 202.032	6.8362	2.4564	2.0414
Na 330.237	912.396	1129.54	1269.48
Ni 231.604	146.244	142.574	142.848
Pb 220.353	70.2412	75.2429	65.6832
Sb 206.834	1.3429	-7.6761u	7.3103
Se 196.026	6.1419	-7.9533u	12.5385
Si 288.158	3159.96	3159.69	3164.93
Sn 189.925	14.3394	10.9427	4.3985
Sr 216.596	722.234	720.941	721.266
Ti 334.941	1057.66	1060.75	1057.23
Tl 190.794	-1.1803u	-0.0868u	-21.0321u
V 292.401	181.365	181.621	180.652
Zn 206.200	373.813	375.196	378.294

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2367	ppb	0.3401	143.7	-73.2516
Al 308.215	77091.3	ppb	65.1550	0.1	151016
As 188.980	23.6564	ppb	3.2238	13.6	6.6116
B 249.678	58.1674	ppb	0.7231	1.2	235.838
Ba 389.178	434.274	ppb	1.3583	0.3	2848.92
Be 313.042	3.9611	ppb	0.0066	0.2	2944.71
Ca 370.602	470738	ppb	1241	0.3	786870
Cd 226.502	2.3720	ppb	0.2560	10.8	272.753
Co 228.615	63.8295	ppb	1.2576	2.0	244.947
Cr 267.716	119.290	ppb	0.4325	0.4	2027.41
Cu 324.754	267.597	ppb	0.2429	0.1	8568.07
Fe 271.441	154169	ppb	237.966	0.2	85361.1
K 766.491	12054.3	ppb	26.5037	0.2	248487
Mg 279.078	81315.6	ppb	146.630	0.2	108717
Mn 257.610	3329.93	ppb	5.3728	0.2	276488
Mo 202.032	3.7780	ppb	2.6566	70.3	8.5593
Na 330.237	1103.80	ppb	179.926	16.3	47.9162
Ni 231.604	143.889	ppb	2.0442	1.4	159.606
Pb 220.353	70.3891	ppb	4.7816	6.8	22.1283
Sb 206.834	0.3257	ppb	7.5448	2316.5	8.6266
Se 196.026	3.5757	ppb	10.4842	293.2	4.3381
Si 288.158	3161.53	ppb	2.9473	0.1	15341.8
Sn 189.925	9.8935	ppb	5.0528	51.1	3.4938
Sr 216.596	721.480	ppb	0.6727	0.1	2130.29
Ti 334.941	1058.55	ppb	1.9172	0.2	94090.8
Tl 190.794	-7.4331	ppb	11.7898	158.6	-9.2973
V 292.401	181.213	ppb	0.5020	0.3	1843.48
Zn 206.200	375.768	ppb	2.2944	0.6	207.532

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Label	Replicates Concentration		
Ag 328.068	-0.9695u	-0.1177u	-0.3373u
Al 308.215	82795.9	82962.7	83484.3
As 188.980	238.113	238.189	244.165
B 249.678	21.2807u	22.4389	22.1392
Ba 389.178	556.289	555.852	562.538
Be 313.042	3.6562	3.6518	3.6964
Ca 370.602	19632	19704	19782
Cd 226.502	3.3278	3.2243	2.9046
Co 228.615	46.7892	43.4944	45.5440
Cr 267.716	104.545	104.490	106.084
Cu 324.754	236.822	236.550	237.912
Fe 271.441	144779	145396	145351
K 766.491	9731.94	9770.42	9795.74
Mg 279.078	21828.9	21906.1	21965.9
Mn 257.610	6574.11	6597.50	6621.61
Mo 202.032	3.7309	9.4033	8.0936
Na 330.237	689.952u	807.263u	1289.07
Ni 231.604	90.5268	92.1209	91.9136
Pb 220.353	770.390	783.266	797.031
Sb 206.834	-3.2043	-11.5875u	-16.9324u
Se 196.026	0.1264	-27.2038u	7.9646
Si 288.158	3802.73	3824.88	3826.91
Sn 189.925	15.3078	14.5330	22.3782
Sr 216.596	76.6019	77.8245	76.7079
Ti 334.941	1264.24	1272.01	1275.28
Tl 190.794	-0.0207u	-7.6645u	5.3949u
V 292.401	198.983	200.570	199.148
Zn 206.200	478.394	479.820	481.874

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4748	ppb	0.4423	93.1	-70.4548
Al 308.215	83081.0	ppb	359.138	0.4	162733
As 188.980	240.156	ppb	3.4725	1.4	64.4429
B 249.678	21.9529	ppb	0.6011	2.7	-3.1227
Ba 389.178	558.226	ppb	3.7402	0.7	3559.05
Be 313.042	3.6681	ppb	0.0246	0.7	2640.47
Ca 370.602	19706	ppb	74.96	0.4	32857
Cd 226.502	3.1522	ppb	0.2206	7.0	269.296
Co 228.615	45.2759	ppb	1.6637	3.7	173.171
Cr 267.716	105.039	ppb	0.9049	0.9	1793.33
Cu 324.754	237.095	ppb	0.7210	0.3	7642.53
Fe 271.441	145176	ppb	343.809	0.2	80382.2
K 766.491	9766.03	ppb	32.1262	0.3	201356
Mg 279.078	21900.3	ppb	68.7072	0.3	29226.2
Mn 257.610	6597.74	ppb	23.7512	0.4	547155
Mo 202.032	7.0759	ppb	2.9700	42.0	14.2241
Na 330.237	928.761	ppb	317.501	34.2	40.4158
Ni 231.604	91.5204	ppb	0.8667	0.9	100.873
Pb 220.353	783.562	ppb	13.3231	1.7	292.604
Sb 206.834	-10.5747	ppb	6.9198	65.4	4.6696
Se 196.026	-6.3709	ppb	18.4625	289.8	2.7348
Si 288.158	3818.17	ppb	13.4101	0.4	18417.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	17.4063	ppb	4.3232	24.8	5.3925
Sr 216.596	77.0448	ppb	0.6773	0.9	248.287
Ti 334.941	1270.51	ppb	5.6707	0.4	112736
Tl 190.794	-0.7634	ppb	6.5613	859.5	-6.6063
V 292.401	199.567	ppb	0.8727	0.4	2030.42
Zn 206.200	480.029	ppb	1.7492	0.4	265.059

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6961u	-1.2202u	-0.6395u
Al 308.215	108279	107510	108359
As 188.980	208.827	202.061	208.731
B 249.678	22.8155u	21.5714u	19.4446u
Ba 389.178	590.506	586.355	584.408
Be 313.042	4.8503	4.7689	4.8391
Ca 370.602	14695	14591	14719
Cd 226.502	3.3839	3.1854	4.4199
Co 228.615	57.3870	58.6259	58.9668
Cr 267.716	112.666	112.114	112.411
Cu 324.754	315.019	308.168	314.433
Fe 271.441	186803	185593	187804
K 766.491	7686.72	7640.07	7704.25
Mg 279.078	33710.5	33511.4	33762.8
Mn 257.610	8419.36	8344.68	8427.41
Mo 202.032	4.8813	10.0562	6.9471
Na 330.237	890.447u	563.581u	892.689u
Ni 231.604	125.716	121.376	123.160
Pb 220.353	496.967	484.455	484.789
Sb 206.834	-12.0480u	-0.2213	-0.4311
Se 196.026	-13.8140u	5.7759	-7.7409
Si 288.158	3471.10	3448.37	3487.20
Sn 189.925	15.7300	15.4449	10.8380
Sr 216.596	72.6191	72.0446	73.4797
Ti 334.941	1853.94	1842.82	1856.04
Tl 190.794	-21.6670u	6.7736u	8.2116u
V 292.401	243.712	241.836	242.693
Zn 206.200	462.208	460.461	463.093

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8519	ppb	0.3202	37.6	-86.7039
Al 308.215	108049	ppb	468.701	0.4	211576
As 188.980	206.540	ppb	3.8787	1.9	55.3569
B 249.678	21.2772	ppb	1.7046	8.0	-50.2367
Ba 389.178	587.090	ppb	3.1150	0.5	3771.30
Be 313.042	4.8194	ppb	0.0441	0.9	3569.88
Ca 370.602	14669	ppb	68.11	0.5	24405
Cd 226.502	3.6631	ppb	0.6629	18.1	340.568
Co 228.615	58.3265	ppb	0.8314	1.4	228.248
Cr 267.716	112.397	ppb	0.2764	0.2	1922.96
Cu 324.754	312.540	ppb	3.7979	1.2	9934.96
Fe 271.441	186733	ppb	1107.42	0.6	103387
K 766.491	7677.01	ppb	33.1741	0.4	158356

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	33661.6	ppb	132.649	0.4	44931.6
Mn 257.610	8397.15	ppb	45.6163	0.5	696400
Mo 202.032	7.2949	ppb	2.6049	35.7	14.1007
Na 330.237	782.239	ppb	189.366	24.2	29.9859
Ni 231.604	123.417	ppb	2.1811	1.8	136.648
Pb 220.353	488.737	ppb	7.1292	1.5	179.491
Sb 206.834	-4.2335	ppb	6.7684	159.9	7.5379
Se 196.026	-5.2597	ppb	10.0279	190.7	3.2843
Si 288.158	3468.89	ppb	19.5096	0.6	16813.2
Sn 189.925	14.0043	ppb	2.7458	19.6	4.5327
Sr 216.596	72.7144	ppb	0.7223	1.0	240.310
Ti 334.941	1850.93	ppb	7.1043	0.4	164255
Tl 190.794	-2.2273	ppb	16.8507	756.6	-8.4217
V 292.401	242.747	ppb	0.9395	0.4	2474.77
Zn 206.200	461.921	ppb	1.3392	0.3	255.152

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Rack 3, Tube 45

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6693u	-0.2129u	0.2014u
Al 308.215	99428.7	99364.3	99153.7
As 188.980	211.072	195.551	209.540
B 249.678	37.8227	40.0627	38.2847
Ba 389.178	835.558	833.078	826.652
Be 313.042	4.7455	4.7660	4.7317
Ca 370.602	22158	22146	22103
Cd 226.502	5.2400	4.8509	5.3225
Co 228.615	44.8694	42.4967	42.8828
Cr 267.716	118.144	117.989	118.156
Cu 324.754	250.625	248.721	251.275
Fe 271.441	89577.9	89816.1	89723.7
K 766.491	10016.9	10011.6	10012.9
Mg 279.078	24861.0	24841.6	24781.3
Mn 257.610	1796.32	1795.48	1792.28
Mo 202.032	1.8758	2.3604	3.3942
Na 330.237	856.614u	420.397u	586.123u
Ni 231.604	111.193	108.604	111.932
Pb 220.353	784.206	770.411	776.859
Sb 206.834	-10.7057u	-0.1388	-4.1172
Se 196.026	-6.0309u	10.4723	7.0804
Si 288.158	4651.26	4629.29	4619.37
Sn 189.925	5.3728	-7.2580u	4.0848
Sr 216.596	104.611	104.443	105.074
Ti 334.941	748.192	745.695	745.742
Tl 190.794	-2.7675u	3.0446u	-9.2080u
V 292.401	131.905	130.195	129.279
Zn 206.200	1155.50	1146.82	1134.45

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2269	ppb	0.4355	191.9	-61.4307
Al 308.215	99315.6	ppb	143.872	0.1	194486
As 188.980	205.387	ppb	8.5530	4.2	55.3041
B 249.678	38.7233	ppb	1.1827	3.1	167.815

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	831.763	ppb	4.5963	0.6	5258.42
Be 313.042	4.7477	ppb	0.0173	0.4	3512.14
Ca 370.602	22136	ppb	28.45	0.1	36928
Cd 226.502	5.1378	ppb	0.2518	4.9	211.181
Co 228.615	43.4163	ppb	1.2732	2.9	163.221
Cr 267.716	118.096	ppb	0.0933	0.1	1999.80
Cu 324.754	250.207	ppb	1.3275	0.5	8030.17
Fe 271.441	89705.9	ppb	120.059	0.1	49676.4
K 766.491	10013.8	ppb	2.7711	0.0	206422
Mg 279.078	24828.0	ppb	41.5614	0.2	33187.1
Mn 257.610	1794.69	ppb	2.1309	0.1	148964
Mo 202.032	2.5435	ppb	0.7756	30.5	7.2285
Na 330.237	621.045	ppb	220.195	35.5	31.1272
Ni 231.604	110.577	ppb	1.7481	1.6	122.257
Pb 220.353	777.159	ppb	6.9026	0.9	291.818
Sb 206.834	-4.9872	ppb	5.3369	107.0	5.9226
Se 196.026	3.8406	ppb	8.7156	226.9	3.9820
Si 288.158	4633.31	ppb	16.3240	0.4	22195.1
Sn 189.925	0.7332	ppb	6.9505	947.9	1.1787
Sr 216.596	104.709	ppb	0.3268	0.3	322.660
Ti 334.941	746.543	ppb	1.4282	0.2	66265.0
Tl 190.794	-2.9770	ppb	6.1290	205.9	-5.7194
V 292.401	130.460	ppb	1.3328	1.0	1321.36
Zn 206.200	1145.59	ppb	10.5777	0.9	632.225

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Rack 3, Tube 46

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0708u	0.0073u	-0.0835u
Al 308.215	81590.8	81539.7	80999.6
As 188.980	16.1256	22.0560	22.7247
B 249.678	24.4659	24.1923	25.0125
Ba 389.178	342.814	342.176	344.131
Be 313.042	2.8528	2.8742	2.8215
Ca 370.602	16798	16797	16676
Cd 226.502	4.0893	4.2717	4.1996
Co 228.615	64.2726	62.3780	63.5217
Cr 267.716	98.3381	98.7160	98.0107
Cu 324.754	168.054	166.130	165.094
Fe 271.441	115767	115203	114543
K 766.491	7093.43	7063.59	7034.50
Mg 279.078	41189.5	41144.0	40870.7
Mn 257.610	1035.60	1035.06	1028.77
Mo 202.032	2.2165	4.0813	3.4001
Na 330.237	952.781u	1045.07	863.389u
Ni 231.604	127.490	124.224	122.878
Pb 220.353	99.2212	88.5241	79.9234
Sb 206.834	-12.1574u	-10.7423u	-17.2919u
Se 196.026	-5.8163u	0.0163	3.3011
Si 288.158	3244.91	3230.83	3206.75
Sn 189.925	3.5786	-0.2101u	10.3664
Sr 216.596	72.9180	72.4461	72.5707
Ti 334.941	1458.20	1457.87	1445.60

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Replicates Concentration		
Tl 190.794	8.1841u	14.3552u	7.2485u
V 292.401	119.467	120.979	119.837
Zn 206.200	813.800	808.924	795.969

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0490	ppb	0.0492	100.3	-62.8337
Al 308.215	81376.7	ppb	327.605	0.4	159396
As 188.980	20.3021	ppb	3.6324	17.9	5.8190
B 249.678	24.5569	ppb	0.4176	1.7	45.2308
Ba 389.178	343.040	ppb	0.9967	0.3	2214.44
Be 313.042	2.8495	ppb	0.0265	0.9	1978.63
Ca 370.602	16757	ppb	69.82	0.4	27897
Cd 226.502	4.1869	ppb	0.0918	2.2	236.655
Co 228.615	63.3907	ppb	0.9541	1.5	247.040
Cr 267.716	98.3549	ppb	0.3530	0.4	1670.92
Cu 324.754	166.426	ppb	1.5019	0.9	5497.03
Fe 271.441	115171	ppb	612.606	0.5	63773.6
K 766.491	7063.84	ppb	29.4659	0.4	145701
Mg 279.078	41068.1	ppb	172.443	0.4	54916.3
Mn 257.610	1033.14	ppb	3.7933	0.4	85922.1
Mo 202.032	3.2326	ppb	0.9436	29.2	8.1004
Na 330.237	953.746	ppb	90.8438	9.5	36.8305
Ni 231.604	124.864	ppb	2.3718	1.9	138.263
Pb 220.353	89.2229	ppb	9.6679	10.8	30.3813
Sb 206.834	-13.3972	ppb	3.4463	25.7	3.2725
Se 196.026	-0.8330	ppb	4.6176	554.4	3.1321
Si 288.158	3227.49	ppb	19.2959	0.6	15667.4
Sn 189.925	4.5783	ppb	5.3586	117.0	2.1505
Sr 216.596	72.6450	ppb	0.2446	0.3	231.892
Ti 334.941	1453.89	ppb	7.1777	0.5	129054
Tl 190.794	9.9293	ppb	3.8614	38.9	-3.9153
V 292.401	120.094	ppb	0.7879	0.7	1220.61
Zn 206.200	806.231	ppb	9.2156	1.1	445.014

480-151917-a-29-a (Samp)

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Rack 3, Tube 47

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0451u	0.1712u	0.2035u
Al 308.215	70461.8	71026.9	70983.8
As 188.980	64.4348	50.5943	43.7251
B 249.678	41.2680	40.0253	39.9450
Ba 389.178	440.147	443.561	445.552
Be 313.042	3.4534	3.4611	3.4773
Ca 370.602	18324	18451	18482
Cd 226.502	3.4315	4.0936	3.2986
Co 228.615	44.2483	48.5499	46.2927
Cr 267.716	97.2177	97.6142	97.2251
Cu 324.754	192.992	193.422	193.127
Fe 271.441	100003	100866	101504
K 766.491	9416.16	9474.87	9506.69
Mg 279.078	23031.2	23224.5	23307.1
Mn 257.610	1377.76	1387.36	1391.32
Mo 202.032	5.9619	5.9162	7.1627

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Label	Replicates Concentration		
Na 330.237	785.590	1619.63	893.867
Ni 231.604	109.683	108.589	108.634
Pb 220.353	262.326	266.450	276.467
Sb 206.834	0.3886	-1.0645	6.5109
Se 196.026	22.6175	-3.2068u	8.0387
Si 288.158	3266.48	3283.68	3295.03
Sn 189.925	21.3504	21.6756	18.1708
Sr 216.596	78.8875	82.1491	82.7877
Ti 334.941	790.553	796.742	797.511
Tl 190.794	-4.5549u	7.8262u	1.4833u
V 292.401	130.918	133.641	134.309
Zn 206.200	672.525	679.109	676.882

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1399	ppb	0.0837	59.8	-53.0188
Al 308.215	70824.2	ppb	314.536	0.4	138754
As 188.980	52.9181	ppb	10.5486	19.9	14.5654
B 249.678	40.4128	ppb	0.7418	1.8	168.398
Ba 389.178	443.087	ppb	2.7333	0.6	2817.63
Be 313.042	3.4639	ppb	0.0122	0.4	2474.57
Ca 370.602	18419	ppb	83.51	0.5	30691
Cd 226.502	3.6079	ppb	0.4258	11.8	206.915
Co 228.615	46.3637	ppb	2.1517	4.6	174.962
Cr 267.716	97.3523	ppb	0.2268	0.2	1653.00
Cu 324.754	193.180	ppb	0.2196	0.1	6304.81
Fe 271.441	100791	ppb	753.454	0.7	55812.6
K 766.491	9465.91	ppb	45.9268	0.5	195106
Mg 279.078	23187.6	ppb	141.594	0.6	31003.0
Mn 257.610	1385.48	ppb	6.9739	0.5	115043
Mo 202.032	6.3469	ppb	0.7069	11.1	13.5216
Na 330.237	1099.69	ppb	453.518	41.2	48.6471
Ni 231.604	108.969	ppb	0.6187	0.6	120.445
Pb 220.353	268.414	ppb	7.2722	2.7	98.8606
Sb 206.834	1.9450	ppb	4.0204	206.7	8.4971
Se 196.026	9.1498	ppb	12.9480	141.5	4.9884
Si 288.158	3281.73	ppb	14.3737	0.4	15891.6
Sn 189.925	20.3989	ppb	1.9365	9.5	6.1489
Sr 216.596	81.2748	ppb	2.0920	2.6	255.473
Ti 334.941	794.935	ppb	3.8145	0.5	70552.9
Tl 190.794	1.5849	ppb	6.1912	390.6	-5.1974
V 292.401	132.956	ppb	1.7961	1.4	1347.86
Zn 206.200	676.172	ppb	3.3490	0.5	373.209

480-151917-a-16-a (Samp)

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Rack 3, Tube 48

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5821u	0.3337u	-0.3094u
Al 308.215	100836	101204	100740
As 188.980	195.157	207.554	215.488
B 249.678	39.7642	39.9262	41.3778
Ba 389.178	810.121	805.149	803.735
Be 313.042	4.6973	4.6940	4.6985
Ca 370.602	29816	29877	29708

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Label	Replicates Concentration		
Cd 226.502	4.7715	5.4871	5.1501
Co 228.615	39.6563	37.6889	38.4366
Cr 267.716	119.308	118.735	119.492
Cu 324.754	228.195	231.314	232.384
Fe 271.441	82602.6	82795.8	82586.2
K 766.491	13006.1	13056.4	13000.8
Mg 279.078	25735.7	25807.2	25717.9
Mn 257.610	1515.71	1519.19	1513.27
Mo 202.032	3.8943	4.5523	6.1839
Na 330.237	666.029u	1126.25	758.984u
Ni 231.604	101.110	102.917	100.356
Pb 220.353	921.997	902.474	876.266
Sb 206.834	-15.3292u	-7.8783u	17.6619
Se 196.026	-10.3485u	-11.5202u	-13.1508u
Si 288.158	4325.84	4376.51	4394.58
Sn 189.925	0.0063	9.0594	9.0062
Sr 216.596	130.240	129.497	131.975
Ti 334.941	695.112	698.531	696.467
Tl 190.794	-4.8797u	7.6684u	-16.7981u
V 292.401	124.474	123.488	123.097
Zn 206.200	1101.09	1104.82	1099.20

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1859	ppb	0.4702	252.9	-59.4304
Al 308.215	100927	ppb	244.817	0.2	197638
As 188.980	206.067	ppb	10.2469	5.0	55.5043
B 249.678	40.3561	ppb	0.8886	2.2	186.399
Ba 389.178	806.335	ppb	3.3545	0.4	5096.47
Be 313.042	4.6966	ppb	0.0023	0.0	3471.87
Ca 370.602	29800	ppb	85.89	0.3	49749
Cd 226.502	5.1362	ppb	0.3580	7.0	200.113
Co 228.615	38.5939	ppb	0.9931	2.6	143.899
Cr 267.716	119.178	ppb	0.3949	0.3	2016.87
Cu 324.754	230.631	ppb	2.1764	0.9	7436.00
Fe 271.441	82661.5	ppb	116.573	0.1	45776.8
K 766.491	13021.1	ppb	30.6740	0.2	268326
Mg 279.078	25753.6	ppb	47.2910	0.2	34427.5
Mn 257.610	1516.05	ppb	2.9725	0.2	125864
Mo 202.032	4.8768	ppb	1.1788	24.2	11.2522
Na 330.237	850.421	ppb	243.355	28.6	38.5276
Ni 231.604	101.461	ppb	1.3163	1.3	112.035
Pb 220.353	900.245	ppb	22.9464	2.5	338.661
Sb 206.834	-1.8485	ppb	17.3024	936.0	6.9077
Se 196.026	-11.6732	ppb	1.4074	12.1	1.0015
Si 288.158	4365.64	ppb	35.6345	0.8	20944.5
Sn 189.925	6.0240	ppb	5.2115	86.5	2.5158
Sr 216.596	130.570	ppb	1.2717	1.0	397.339
Ti 334.941	696.704	ppb	1.7218	0.2	61846.4
Tl 190.794	-4.6698	ppb	12.2346	262.0	-5.8631
V 292.401	123.686	ppb	0.7093	0.6	1251.61
Zn 206.200	1101.70	ppb	2.8604	0.3	607.992

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480-151917-a-63-a (Samp) **4/20/2019, 7:37:20 PM** **Rack 3, Tube 49****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2644u	-0.6208u	-0.1491u
Al 308.215	72916.2	72539.0	72976.8
As 188.980	153.134	178.444	164.472
B 249.678	22.6266	23.0618	21.0946
Ba 389.178	441.270	445.304	447.001
Be 313.042	2.0818	2.0722	2.0734
Ca 370.602	17433	17370	17476
Cd 226.502	2.5064	2.6892	3.0403
Co 228.615	33.3007	34.5335	32.9110
Cr 267.716	83.2847	84.3274	84.8076
Cu 324.754	113.321	114.593	112.825
Fe 271.441	109550	109225	109872
K 766.491	10181.5	10138.5	10210.4
Mg 279.078	24130.9	24045.2	24165.7
Mn 257.610	2086.58	2076.51	2090.45
Mo 202.032	5.1069	3.7868	3.9077
Na 330.237	918.505	584.611u	718.544
Ni 231.604	81.7059	87.0141	80.7125
Pb 220.353	716.689	696.935	712.079
Sb 206.834	-3.4989	0.7559	-0.2865
Se 196.026	18.2151	6.4648	-2.6345
Si 288.158	4152.66	4173.64	4256.96
Sn 189.925	8.1866	9.2834	2.6646
Sr 216.596	67.6507	67.8343	67.5017
Ti 334.941	1011.33	1005.16	1014.43
Tl 190.794	1.1651u	-6.9842u	-0.8367u
V 292.401	128.065	128.753	128.905
Zn 206.200	454.289	461.914	451.588

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1685	ppb	0.4430	262.9	-62.9137
Al 308.215	72810.7	ppb	237.214	0.3	142640
As 188.980	165.350	ppb	12.6777	7.7	44.5635
B 249.678	22.2610	ppb	1.0333	4.6	35.0747
Ba 389.178	444.525	ppb	2.9439	0.7	2831.49
Be 313.042	2.0758	ppb	0.0052	0.3	1354.37
Ca 370.602	17426	ppb	52.98	0.3	29031
Cd 226.502	2.7453	ppb	0.2714	9.9	209.514
Co 228.615	33.5817	ppb	0.8470	2.5	125.727
Cr 267.716	84.1399	ppb	0.7786	0.9	1433.93
Cu 324.754	113.580	ppb	0.9122	0.8	3895.29
Fe 271.441	109549	ppb	323.344	0.3	60660.3
K 766.491	10176.8	ppb	36.1555	0.4	209796
Mg 279.078	24113.9	ppb	62.0165	0.3	32234.3
Mn 257.610	2084.52	ppb	7.1946	0.3	173004
Mo 202.032	4.2671	ppb	0.7298	17.1	9.9084
Na 330.237	740.553	ppb	168.032	22.7	39.2449
Ni 231.604	83.1442	ppb	3.3881	4.1	91.4850
Pb 220.353	708.568	ppb	10.3344	1.5	265.242
Sb 206.834	-1.0098	ppb	2.2177	219.6	7.4620
Se 196.026	7.3485	ppb	10.4528	142.2	4.7511
Si 288.158	4194.42	ppb	55.1676	1.3	20159.9

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	6.7116	ppb	3.5474	52.9	2.6896
Sr 216.596	67.6622	ppb	0.1666	0.2	216.889
Ti 334.941	1010.31	ppb	4.7195	0.5	89660.4
Tl 190.794	-2.2186	ppb	4.2468	191.4	-6.3624
V 292.401	128.574	ppb	0.4474	0.3	1305.05
Zn 206.200	455.930	ppb	5.3553	1.2	251.694

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0022	-0.2797u	1.0469
Al 308.215	89469.3	89370.4	89046.4
As 188.980	61.4887	77.5092	69.3998
B 249.678	18.8999u	19.5125u	19.5728u
Ba 389.178	408.492	408.085	410.186
Be 313.042	2.0240	2.0498	2.0245
Ca 370.602	8163	8173	8146
Cd 226.502	3.0060	2.7584	1.3647
Co 228.615	48.4687	45.1755	46.5964
Cr 267.716	96.9656	96.9852	96.0530
Cu 324.754	77.4419	76.2787	76.7499
Fe 271.441	161013	161142	159071
K 766.491	6766.52	6775.04	6709.08
Mg 279.078	32510.0	32520.7	32234.4
Mn 257.610	2192.61	2195.45	2179.19
Mo 202.032	3.6092	1.9179	3.0753
Na 330.237	1335.98	410.165u	458.069u
Ni 231.604	111.310	107.011	111.699
Pb 220.353	167.236	163.674	170.165
Sb 206.834	-2.5580	0.4340	-8.0690u
Se 196.026	5.5575	-2.5819	5.1877
Si 288.158	3525.52	3512.51	3485.13
Sn 189.925	11.1514	17.4339	-0.2321u
Sr 216.596	39.3158	39.5507	37.4680
Ti 334.941	1073.18	1071.00	1063.08
Tl 190.794	-9.3335u	-6.0289u	-10.1892u
V 292.401	142.221	143.138	141.486
Zn 206.200	385.278	384.323	380.670

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5898	ppb	0.7534	127.7	-48.7449
Al 308.215	89295.4	ppb	221.197	0.2	174888
As 188.980	69.4659	ppb	8.0104	11.5	18.8280
B 249.678	19.3284	ppb	0.3723	1.9	-36.4212
Ba 389.178	408.921	ppb	1.1142	0.3	2638.37
Be 313.042	2.0327	ppb	0.0147	0.7	1318.89
Ca 370.602	8161	ppb	13.86	0.2	13460
Cd 226.502	2.3764	ppb	0.8849	37.2	282.711
Co 228.615	46.7468	ppb	1.6517	3.5	177.187
Cr 267.716	96.6679	ppb	0.5326	0.6	1647.89
Cu 324.754	76.8235	ppb	0.5851	0.8	2790.86
Fe 271.441	160408	ppb	1160.39	0.7	88814.2
K 766.491	6750.22	ppb	35.8771	0.5	139332

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	32421.7	ppb	162.284	0.5	43340.1
Mn 257.610	2189.08	ppb	8.6879	0.4	181737
Mo 202.032	2.8675	ppb	0.8646	30.2	6.9561
Na 330.237	734.737	ppb	521.240	70.9	37.5014
Ni 231.604	110.007	ppb	2.6016	2.4	121.612
Pb 220.353	167.025	ppb	3.2506	1.9	58.4181
Sb 206.834	-3.3977	ppb	4.3133	126.9	7.3189
Se 196.026	2.7211	ppb	4.5963	168.9	4.0950
Si 288.158	3507.72	ppb	20.6131	0.6	16957.3
Sn 189.925	9.4511	ppb	8.9549	94.8	3.3819
Sr 216.596	38.7782	ppb	1.1407	2.9	138.283
Ti 334.941	1069.09	ppb	5.3137	0.5	94896.6
Tl 190.794	-8.5172	ppb	2.1970	25.8	-10.1024
V 292.401	142.282	ppb	0.8277	0.6	1447.79
Zn 206.200	383.424	ppb	2.4319	0.6	211.783

Cont Calib Verif (CCV)

4/20/2019, 7:45:48 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	517.986	507.406	513.150
Al 308.215	10549.2	10367.6	10462.2
As 188.980	516.893	516.113	525.424
B 249.678	568.172	558.201	567.841
Ba 389.178	455.633	448.907	450.450
Be 313.042	585.104	575.007	579.278
Ca 370.602	10159	10009	10072
Cd 226.502	516.957	508.234	511.179
Co 228.615	517.656	510.301	514.355
Cr 267.716	515.082	506.716	509.093
Cu 324.754	526.311	513.585	522.826
Fe 271.441	10604.8	10453.5	10535.0
K 766.491	10466.9	10304.0	10407.4
Mg 279.078	10928.8	10769.7	10838.3
Mn 257.610	510.305	500.931	505.919
Mo 202.032	493.129	483.059	488.876
Na 330.237	11208.2	10845.9	11112.4
Ni 231.604	521.729	515.281	511.493
Pb 220.353	504.893	496.680	505.363
Sb 206.834	494.955	478.530	495.663
Se 196.026	568.753	563.639	566.406
Si 288.158	5489.29	5382.38	5429.39
Sn 189.925	525.906	494.107	490.654
Sr 216.596	497.715	483.972	491.299
Ti 334.941	512.250	504.643	507.034
Tl 190.794	513.022	497.541	482.744
V 292.401	507.591	499.871	505.185
Zn 206.200	1102.28	1080.12	1086.30

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	512.848	ppb	5.2965	1.0	15534.8	102.56952
Al 308.215	10459.7	ppb	90.8581	0.9	20685.9	104.59653
As 188.980	519.477	ppb	5.1658	1.0	139.305	103.89532
B 249.678	564.738	ppb	5.6638	1.0	3849.07	112.94763Q

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	451.663	ppb	3.5234	0.8	2820.35	90.33268
Be 313.042	579.796	ppb	5.0682	0.9	467411	115.95924Q
Ca 370.602	10080	ppb	75.16	0.7	16881	100.80135
Cd 226.502	512.123	ppb	4.4375	0.9	6594.16	102.42464
Co 228.615	514.104	ppb	3.6843	0.7	2024.08	102.82082
Cr 267.716	510.297	ppb	4.3111	0.8	8551.08	102.05943
Cu 324.754	520.908	ppb	6.5767	1.3	16221.4	104.18152
Fe 271.441	10531.1	ppb	75.7295	0.7	5867.57	105.25865
K 766.491	10392.7	ppb	82.4576	0.8	211665	103.92744
Mg 279.078	10845.6	ppb	79.8076	0.7	14518.5	108.45610
Mn 257.610	505.718	ppb	4.6902	0.9	42004.4	101.14362
Mo 202.032	488.355	ppb	5.0552	1.0	827.981	97.67093
Na 330.237	11055.5	ppb	187.756	1.7	318.838	110.55527Q
Ni 231.604	516.168	ppb	5.1754	1.0	576.839	103.23352
Pb 220.353	502.312	ppb	4.8830	1.0	190.478	100.46234
Sb 206.834	489.716	ppb	9.6937	2.0	183.622	97.94318
Se 196.026	566.266	ppb	2.5598	0.5	109.560	113.25328Q
Si 288.158	5433.69	ppb	53.5869	1.0	26028.6	108.67373
Sn 189.925	503.555	ppb	19.4327	3.9	128.260	100.71110
Sr 216.596	490.995	ppb	6.8767	1.4	1434.40	98.19910
Ti 334.941	507.976	ppb	3.8897	0.8	45063.9	101.59517
Tl 190.794	497.769	ppb	15.1402	3.0	117.639	99.55383
V 292.401	504.216	ppb	3.9501	0.8	5079.40	100.84312
Zn 206.200	1089.56	ppb	11.4339	1.0	600.914	108.95640

Cont Calib Blank (CCB)

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Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.3861	0.8243	-0.6389u
Al 308.215	34.8135	42.1069	32.9095
As 188.980	5.3600	5.4458	-0.8208u
B 249.678	14.6427	11.7258	11.4263
Ba 389.178	0.6201	-0.5261u	1.2764
Be 313.042	0.0798	0.0549	-0.0004u
Ca 370.602	-1.319u	10.20	1.028
Cd 226.502	0.0927	0.3676	0.4081
Co 228.615	0.0699	-0.4296u	-1.5185u
Cr 267.716	0.0940	0.8486	-0.5411u
Cu 324.754	3.1657	1.6399	2.2383
Fe 271.441	35.4593	44.9022	22.6562
K 766.491	8.8372	7.2052	6.3970
Mg 279.078	12.8732	19.8068	17.9262
Mn 257.610	0.7899	0.5336	0.5628
Mo 202.032	1.6291	2.5779	1.1173
Na 330.237	2.5878	737.538	290.718
Ni 231.604	2.9598	0.0709	-3.6138u
Pb 220.353	8.1807	8.9781	-6.3142u
Sb 206.834	-7.1730u	-8.8508u	10.5490
Se 196.026	-12.3579u	-4.8866u	-11.2378u
Si 288.158	35.5180	31.9500	33.9586
Sn 189.925	-3.8029u	-6.7929u	-6.4681u
Sr 216.596	-0.5737u	-0.4181u	1.2092
Ti 334.941	0.8089	0.5302	0.1969

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Label	Replicates Concentration		
Tl 190.794	1.5808	2.3763	-19.0179u
V 292.401	0.9115	-0.1337u	-0.6738u
Zn 206.200	6.5739	1.3968	-5.6358u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.5238	ppb	1.0454	199.6	-24.8175	0.52382
Al 308.215	36.6100	ppb	4.8547	13.3	278.760	36.60998
As 188.980	3.3283	ppb	3.5935	108.0	1.5947	3.32833
B 249.678	12.5983	ppb	1.7768	14.1	80.4424	12.59827
Ba 389.178	0.4568	ppb	0.9123	199.7	-33.7365	0.45680
Be 313.042	0.0448	ppb	0.0410	91.6	-290.838	0.04476
Ca 370.602	3.303	ppb	6.087	184.3	30.57	3.30333
Cd 226.502	0.2894	ppb	0.1716	59.3	7.7238	0.28945
Co 228.615	-0.6261	ppb	0.8122	129.7	-14.8583	-0.62608
Cr 267.716	0.1338	ppb	0.6957	519.9	15.7990	0.13381
Cu 324.754	2.3480	ppb	0.7688	32.7	507.234	2.34796
Fe 271.441	34.3392	ppb	11.1652	32.5	36.2267	34.33924Z
K 766.491	7.4798	ppb	1.2431	16.6	430.001	7.47977
Mg 279.078	16.8687	ppb	3.5857	21.3	44.2388	16.86874
Mn 257.610	0.6287	ppb	0.1403	22.3	78.7591	0.62875
Mo 202.032	1.7748	ppb	0.7411	41.8	6.9988	1.77475
Na 330.237	343.614	ppb	370.320	107.8	46.8476	343.61447
Ni 231.604	-0.1944	ppb	3.2948	1695.0	-1.9892	-0.19438
Pb 220.353	3.6149	ppb	8.6081	238.1	2.2236	3.61489
Sb 206.834	-1.8249	ppb	10.7489	589.0	5.3860	-1.82494
Se 196.026	-9.4941	ppb	4.0293	42.4	0.9321	-9.49408
Si 288.158	33.8088	ppb	1.7887	5.3	693.302	33.80885
Sn 189.925	-5.6879	ppb	1.6406	28.8	-0.4442	-5.68793
Sr 216.596	0.0725	ppb	0.9875	1362.6	7.3693	0.07247
Ti 334.941	0.5120	ppb	0.3064	59.9	20.0845	0.51199
Tl 190.794	-5.0203	ppb	12.1288	241.6	-2.6230	-5.02028
V 292.401	0.0346	ppb	0.8059	2326.3	-12.5251	0.03464
Zn 206.200	0.7783	ppb	6.1283	787.4	0.3242	0.77831

X (Samp) 4/20/2019, 7:54:13 PM Rack 3, Tube 51
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	10.2826	11.1560	9.1181
Al 308.215	238.103	232.882	242.539
As 188.980	28.5463	20.4986	22.7248
B 249.678	121.372	120.766	120.128
Ba 389.178	10.6319	7.0101	8.6932
Be 313.042	4.8305	4.7981	4.8137
Ca 370.602	530.7	516.9	526.1
Cd 226.502	5.6938	5.4722	5.6481
Co 228.615	9.0423	10.4146	12.1003
Cr 267.716	11.0448	10.8670	11.1711
Cu 324.754	25.8593	24.3454	24.3313
Fe 271.441	69.7279	81.8065	59.1533
K 766.491	1017.05	1015.26	1015.78
Mg 279.078	582.868	582.358	578.230
Mn 257.610	10.8361	10.5579	10.7648
Mo 202.032	12.6557	11.2937	11.2347

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Label	Replicates Concentration		
Na 330.237	1479.16	1489.23	1078.79
Ni 231.604	42.5750	41.5407	44.0787
Pb 220.353	7.6530	20.3848	16.2337
Sb 206.834	9.9210	25.9244	22.6501
Se 196.026	19.5718	25.0139	23.1571
Si 288.158	39.2573	39.8484	37.2119
Sn 189.925	46.0670	40.5943	51.1399
Sr 216.596	10.5920	10.8885	11.3017
Ti 334.941	10.9262	10.6906	10.7744
Tl 190.794	12.1651	19.3067	19.0637
V 292.401	10.4036	10.8806	10.5451
Zn 206.200	25.3372	22.9299	24.0473

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.1856	ppb	1.0224	10.0	268.646
Al 308.215	237.841	ppb	4.8338	2.0	672.771
As 188.980	23.9232	ppb	4.1556	17.4	7.0921
B 249.678	120.755	ppb	0.6224	0.5	820.733
Ba 389.178	8.7784	ppb	1.8124	20.6	19.2364
Be 313.042	4.8141	ppb	0.0162	0.3	3556.48
Ca 370.602	524.5	ppb	7.007	1.3	902.4
Cd 226.502	5.6047	ppb	0.1170	2.1	75.9958
Co 228.615	10.5191	ppb	1.5317	14.6	29.2817
Cr 267.716	11.0276	ppb	0.1527	1.4	198.046
Cu 324.754	24.8453	ppb	0.8782	3.5	1188.79
Fe 271.441	70.2292	ppb	11.3349	16.1	56.5223
K 766.491	1016.03	ppb	0.9246	0.1	21101.4
Mg 279.078	581.152	ppb	2.5435	0.4	798.718
Mn 257.610	10.7196	ppb	0.1445	1.3	917.549
Mo 202.032	11.7280	ppb	0.8039	6.9	23.7946
Na 330.237	1349.06	ppb	234.116	17.4	73.6687
Ni 231.604	42.7315	ppb	1.2762	3.0	46.1583
Pb 220.353	14.7571	ppb	6.4930	44.0	6.4372
Sb 206.834	19.4985	ppb	8.4544	43.4	13.0384
Se 196.026	22.5809	ppb	2.7664	12.3	6.9796
Si 288.158	38.7725	ppb	1.3835	3.6	723.165
Sn 189.925	45.9338	ppb	5.2740	11.5	12.6026
Sr 216.596	10.9274	ppb	0.3564	3.3	38.7664
Ti 334.941	10.7971	ppb	0.1194	1.1	933.915
Tl 190.794	16.8452	ppb	4.0549	24.1	2.6189
V 292.401	10.6098	ppb	0.2450	2.3	94.2687
Zn 206.200	24.1048	ppb	1.2047	5.0	13.1911

X (Samp) 4/20/2019, 7:58:27 PM Rack 3, Tube 52
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	9.3555	9.5641	9.8599
Al 308.215	241.887	228.095	251.858
As 188.980	20.3473	28.9167	22.2688
B 249.678	119.570	117.823	122.602
Ba 389.178	11.1641	7.0491	10.4531
Be 313.042	4.8198	4.6691	4.8551
Ca 370.602	515.5	517.0	536.5

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Label	Replicates Concentration		
Cd 226.502	5.3442	5.2998	5.8359
Co 228.615	9.5627	9.4186	7.9826
Cr 267.716	11.3968	9.8239	11.2726
Cu 324.754	25.1926	24.6557	24.1376
Fe 271.441	35.1008	31.5453	57.3918
K 766.491	1022.32	994.374	1026.21
Mg 279.078	583.475	561.390	590.953
Mn 257.610	10.7814	10.3547	10.7683
Mo 202.032	10.3618	12.4571	11.7949
Na 330.237	1202.53	1473.13	1634.06
Ni 231.604	47.9334	43.1002	41.3257
Pb 220.353	10.5988	10.3862	10.7970
Sb 206.834	17.8023	6.0047	15.4583
Se 196.026	17.6051	24.5233	29.9488
Si 288.158	37.4378	31.4077	37.6148
Sn 189.925	50.2400	49.2955	40.9476
Sr 216.596	9.5487	9.5167	10.6939
Ti 334.941	10.6113	10.6167	10.8229
Tl 190.794	6.0058	25.1717	29.1418
V 292.401	11.4969	11.3469	11.5229
Zn 206.200	21.5998	21.8599	23.4699

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	9.5932	ppb	0.2535	2.6	250.651
Al 308.215	240.613	ppb	11.9325	5.0	678.212
As 188.980	23.8443	ppb	4.4967	18.9	7.0710
B 249.678	119.998	ppb	2.4182	2.0	815.545
Ba 389.178	9.5554	ppb	2.1994	23.0	24.1244
Be 313.042	4.7813	ppb	0.0988	2.1	3530.06
Ca 370.602	523.0	ppb	11.74	2.2	899.8
Cd 226.502	5.4933	ppb	0.2976	5.4	74.5800
Co 228.615	8.9880	ppb	0.8737	9.7	23.2169
Cr 267.716	10.8311	ppb	0.8744	8.1	194.756
Cu 324.754	24.6620	ppb	0.5275	2.1	1183.23
Fe 271.441	41.3459	ppb	14.0093	33.9	40.5012
K 766.491	1014.30	ppb	17.3666	1.7	21055.7
Mg 279.078	578.606	ppb	15.3711	2.7	795.314
Mn 257.610	10.6348	ppb	0.2427	2.3	910.519
Mo 202.032	11.5379	ppb	1.0710	9.3	23.4736
Na 330.237	1436.57	ppb	218.076	15.2	76.0579
Ni 231.604	44.1198	ppb	3.4198	7.8	47.7167
Pb 220.353	10.5940	ppb	0.2054	1.9	4.8606
Sb 206.834	13.0884	ppb	6.2456	47.7	10.7987
Se 196.026	24.0258	ppb	6.1869	25.8	7.2520
Si 288.158	35.4868	ppb	3.5337	10.0	707.673
Sn 189.925	46.8277	ppb	5.1142	10.9	12.8285
Sr 216.596	9.9198	ppb	0.6706	6.8	35.8186
Ti 334.941	10.6836	ppb	0.1207	1.1	923.855
Tl 190.794	20.1065	ppb	12.3718	61.5	3.3994
V 292.401	11.4556	ppb	0.0950	0.8	102.911
Zn 206.200	22.3099	ppb	1.0130	4.5	12.2008

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X (Samp) 4/20/2019, 8:02:41 PM **Rack 3, Tube 53****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	10.4429	11.2319	10.3804
Al 308.215	248.172	243.257	242.486
As 188.980	30.5501	19.9948	22.8007
B 249.678	120.555	120.483	120.386
Ba 389.178	9.7395	8.8754	12.6526
Be 313.042	4.8628	4.8004	4.8150
Ca 370.602	533.5	530.8	531.2
Cd 226.502	5.9096	4.8496	5.2246
Co 228.615	10.0896	10.4774	10.1179
Cr 267.716	10.8353	10.7369	11.3235
Cu 324.754	25.4720	24.5402	24.8489
Fe 271.441	42.7757	56.9946	56.5208
K 766.491	1026.91	1021.55	1024.17
Mg 279.078	582.286	579.134	578.732
Mn 257.610	10.7049	10.7951	10.8085
Mo 202.032	10.0122	11.4890	11.9588
Na 330.237	1481.37	1436.15	1181.57
Ni 231.604	41.7219	44.2269	42.8095
Pb 220.353	7.7789	18.9677	15.1945
Sb 206.834	23.6800	20.7032	12.8366
Se 196.026	34.8260	26.9771	42.8437
Si 288.158	38.0909	38.7861	40.1541
Sn 189.925	55.1435	49.2648	57.9515
Sr 216.596	8.4695	9.6248	9.5403
Ti 334.941	10.6443	10.6306	10.6793
Tl 190.794	37.1133	24.7987	27.7539
V 292.401	11.2311	10.9503	9.6887
Zn 206.200	17.9643	22.8343	24.1804

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.6851	ppb	0.4746	4.4	283.821
Al 308.215	244.638	ppb	3.0843	1.3	686.051
As 188.980	24.4485	ppb	5.4672	22.4	7.2324
B 249.678	120.475	ppb	0.0850	0.1	818.810
Ba 389.178	10.4225	ppb	1.9791	19.0	29.5777
Be 313.042	4.8261	ppb	0.0326	0.7	3566.19
Ca 370.602	531.9	ppb	1.465	0.3	914.6
Cd 226.502	5.3279	ppb	0.5375	10.1	72.4501
Co 228.615	10.2283	ppb	0.2162	2.1	28.1395
Cr 267.716	10.9652	ppb	0.3141	2.9	197.002
Cu 324.754	24.9537	ppb	0.4746	1.9	1192.06
Fe 271.441	52.0970	ppb	8.0760	15.5	46.4714
K 766.491	1024.21	ppb	2.6817	0.3	21198.4
Mg 279.078	580.051	ppb	1.9465	0.3	797.244
Mn 257.610	10.7695	ppb	0.0564	0.5	921.704
Mo 202.032	11.1533	ppb	1.0158	9.1	22.8247
Na 330.237	1366.36	ppb	161.624	11.8	74.1628
Ni 231.604	42.9194	ppb	1.2561	2.9	46.3695
Pb 220.353	13.9804	ppb	5.6924	40.7	6.1431
Sb 206.834	19.0733	ppb	5.6024	29.4	12.9864
Se 196.026	34.8823	ppb	7.9334	22.7	9.2986
Si 288.158	39.0104	ppb	1.0498	2.7	723.569

E04192019A.wvq. All Data Report 4/22/2019, 10:38:22 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	54.1199	ppb	4.4329	8.2	14.6715
Sr 216.596	9.2115	ppb	0.6440	7.0	33.7695
Ti 334.941	10.6514	ppb	0.0251	0.2	921.006
Tl 190.794	29.8887	ppb	6.4288	21.5	5.7425
V 292.401	10.6234	ppb	0.8216	7.7	94.4781
Zn 206.200	21.6597	ppb	3.2703	15.1	11.8417

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Batch Number: 567050 Batch Start Date: 04/19/19 07:43 Batch Analyst: Dixon, Charles D

Batch Method: 3050B Batch End Date: 04/19/19 17:56

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MS_Ag_LCS_SPK 00081	MS_LCS1_WK 00082	MS_LCS2_wk 00249	
MB 680-567050/1		3050B, 6010C		1.06 g	100 mL				
LCS 680-567050/2		3050B, 6010C		1.05 g	100 mL	1 mL	1 mL	1 mL	
680-167652-A-10	FIB-BASE-10	3050B, 6010C	T	1.16 g	100 mL				
680-167652-A-10 MS	FIB-BASE-10	3050B, 6010C	T	1.19 g	100 mL	1 mL	1 mL	1 mL	
680-167652-A-10 MSD	FIB-BASE-10	3050B, 6010C	T	1.19 g	100 mL	1 mL	1 mL	1 mL	
680-167652-B-3	FIB-BASE-03	3050B, 6010C	T	1.11 g	100 mL				
680-167652-B-4	FIB-BASE-04	3050B, 6010C	T	1.13 g	100 mL				
680-167652-A-5	FIB-BASE-05	3050B, 6010C	T	1.14 g	100 mL				
680-167652-B-6	FIB-BASE-06	3050B, 6010C	T	1.14 g	100 mL				
680-167652-B-7	FIB-BASE-07	3050B, 6010C	T	1.19 g	100 mL				
680-167652-B-8	FIB-BASE-08	3050B, 6010C	T	1.17 g	100 mL				
680-167652-B-9	FIB-BASE-09	3050B, 6010C	T	1.16 g	100 mL				
680-167652-A-11	STOCKPILE 01	3050B, 6010C	T	1.15 g	100 mL				
680-167652-B-12	STOCKPILE 02	3050B, 6010C	T	1.14 g	100 mL				
680-167652-B-13	FIB-DUP-01	3050B, 6010C	T	1.19 g	100 mL				
680-167652-B-1	FIB-BASE-01	3050B, 6010C	T	1.18 g	100 mL				
680-167652-B-2	FIB-BASE-02	3050B, 6010C	T	1.15 g	100 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: Eurofins TestAmerica, Savannah Job No.: 680-167652-1

SDG No.: _____

Batch Number: 567050 Batch Start Date: 04/19/19 07:43 Batch Analyst: Dixon, Charles D

Batch Method: 3050B Batch End Date: 04/19/19 17:56

Batch Notes	
Balance ID	27
Blank Soil Lot Number	5926224
Temperature - Corrected - End	95 Degrees C
Temperature - Corrected - Start	95 Degrees C
Digestion End Time	04/19/2019 16:05
Digestion Start Time	04/19/2019 13:15
Digestion Unit ID	HB12
Digestion Tube/Cup ID	6041443
Hydrogen Peroxide ID	6009542
Hydrochloric Acid ID	6034248
Nitric Acid ID	6034247
Pipette/Syringe/Dispenser ID	ME16/ME22
Sufficient Volume for Batch QC	YES
Thermometer ID	MEPREP19
Temperature - Uncorrected - End	94 Degrees C
Temperature - Uncorrected - Start	94 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.



Chain of Custody Record

680-167652 Chain of Custody

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Signature on Receipt _____
 Testing Water? Yes No

TAL-4124 (1007)

Client: **EA SCIENCE & TECHNOLOGY** Project Manager: **JOE VON UBERITZ** Date: **4/12/19** Chain of Custody Number: **275177**

Address: **269 W JEFFERSON ST SYRACUSE, NY 13202** Telephone Number (Area Code)/Fax Number: **315 565 6567** Lab Number: **SAVANNAH** Page **1** of **2**

City: **SYRACUSE** State: **NY** Zip Code: **13202** Site Contact: **JERRY LANIER** Analysis (Attach list if more space is needed): _____

Project Name and Location (State): **HANCOCK ALLEG MUNITIONS RESPONSE NEW YORK** Project Number: **6273502** Special Instructions/Conditions of Receipt: _____

Contract/Purchase Order/Quote No.: **68021630**

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)	Special Instructions/Conditions of Receipt		
			Air	Aqueous	Sed	Soil	Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH				
FIB-BASE-01	4/15/19	1010			X					X				X	GRAV COMPOSITE	NOTE: 48 HOUR TAT IS FOR TOTAL METALS ONLY; TCLP IS STANDARD
FIB-BASE-02		1013														
FIB-BASE-03		1016														
FIB-BASE-04		1019														
FIB-BASE-05		1022														
FIB-BASE-06		1025														
FIB-BASE-07		1028														
FIB-BASE-08		1031														
FIB-BASE-09		1034														
FIB-BASE-10		1037														
STOCKPILE 01	4/12/19	1145														*ONLY LEAD/ COPPER
STOCKPILE 02	4/12/19	1150														

Sample Disposal: Disposal By Lab Archive For _____ Months Return To Client Unknown Poison B Skin Irritant Flammable Non-Hazard Non-Hazard

QC Requirements (Specify): **Syracuse #225**

Turn Around Time Required: 24 Hours 48 Hours 7 Days 14 Days 21 Days Other: **SEE NOTE**

1. Relinquished By: **STEPHEN SOMNER** Date: **4/15/19** Time: **13:20** Received By: **REYNOLDS** Date: **4/15/19** Time: **19:00**

2. Relinquished By: **REYNOLDS** Date: **4/15/19** Time: **19:00** Received By: **REYNOLDS** Date: **4/15/19** Time: **19:00**

3. Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____

Comments: **2.1 | 2.1**

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____
 Drinking Water? Yes No

Chain of Custody Record

TAL-4124 (1007)
 Client: EA
 Address: SAME AS
 City: _____ State: _____ Zip Code: _____
 Project Name and Location (State): HANCOCK
 Contract/Purchase Order/Quote No.: _____
 Project Manager: _____
 Telephone Number (Area Code)/Fax Number: _____
 Site Contact: _____ Lab Contact: _____
 Carrier/Maybill Number: _____
 Date: 4-10-19
 Lab Number: SAVANNAH
 Page: 2 of 2
 Chain of Custody Number: 275178

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives					Special Instructions/ Conditions of Receipt	
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl		NaOH
FIB-DUP-01	4/12/19	---	X	X	X	X	X	X	X	X	X	GRAB
STOCHASTIC DUP-01	4/12/19	---	X	X	X	X	X	X	X	X	X	GRAB
4-15-19 RE	---	---	X	X	X	X	X	X	X	X	X	SEE PAGE 1
												NOTE ABOUT TAT
												* ONLY LEAD & COPPER

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Disposal By Lab Archive For _____ Months Return To Client

Turn Around Time Required
 24 Hours 48 Hours 7 Days 14 Days 21 Days Other: SEE NOTE P.1

1. Relinquished By: STEPHEN SOLDER Date: 4/15/19 Time: 13:20
 2. Relinquished By: RE FLY 1114 Date: 4-15-19 Time: 19:00
 3. Relinquished By: _____ Date: _____ Time: _____

QC Requirements (Specify): Syracuse #225

1. Received By: RE FLY 1114 Date: 4/15/19 Time: 13:20
 2. Received By: RE FLY 1114 Date: 4/16/19 Time: 19:05
 3. Received By: _____ Date: _____ Time: _____

Comments: 2.1 | 2.1

ANALYTICAL REPORT

Job Number: 680-167652-1

Job Description: Hancock ANGB Munitions Response

Contract Number: W9128F-13-D-0006

For:

EA Engineering, Science, and Technology
6712 Brooklawn Parkway
Suite 104
Syracuse, NY 13211

Attention: Joe Von Uderitz



Approved for release.
Jerry A Lanier
Project Manager I
4/22/2019 6:01 PM

Jerry A Lanier, Project Manager I
5102 LaRoche Avenue, Savannah, GA, 31404
(912)250-0281
jerry.lanier@testamericainc.com
04/22/2019

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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Eurofins TestAmerica, Savannah

5102 LaRoche Avenue, Savannah, GA 31404

Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com



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CASE NARRATIVE

Client: EA Engineering, Science, and Technology

Project: Hancock ANGB Munitions Response

Report Number: 680-167652-1

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 04/16/2019; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.1 C.

METALS (ICP)

Samples FIB-BASE-01 (680-167652-1), FIB-BASE-02 (680-167652-2), FIB-BASE-03 (680-167652-3), FIB-BASE-04 (680-167652-4), FIB-BASE-05 (680-167652-5), FIB-BASE-06 (680-167652-6), FIB-BASE-07 (680-167652-7), FIB-BASE-08 (680-167652-8), FIB-BASE-09 (680-167652-9), FIB-BASE-10 (680-167652-10), STOCKPILE 01 (680-167652-11), STOCKPILE 02 (680-167652-12) and FIB-DUP-01 (680-167652-13) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/19/2019 and analyzed on 04/20/2019.

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

PERCENT SOLIDS/MOISTURE

Samples FIB-BASE-01 (680-167652-1), FIB-BASE-02 (680-167652-2), FIB-BASE-03 (680-167652-3), FIB-BASE-04 (680-167652-4), FIB-BASE-05 (680-167652-5), FIB-BASE-06 (680-167652-6), FIB-BASE-07 (680-167652-7), FIB-BASE-08 (680-167652-8), FIB-BASE-09 (680-167652-9), FIB-BASE-10 (680-167652-10), STOCKPILE 01 (680-167652-11), STOCKPILE 02 (680-167652-12) and FIB-DUP-01 (680-167652-13) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 04/17/2019.

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

METALS

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job Number: 680-167652-1

SDG No.: _____

Project: Hancock ANGB Munitions Response

Client Sample ID	Lab Sample ID
FIB-BASE-01	680-167652-1
FIB-BASE-02	680-167652-2
FIB-BASE-03	680-167652-3
FIB-BASE-04	680-167652-4
FIB-BASE-05	680-167652-5
FIB-BASE-06	680-167652-6
FIB-BASE-07	680-167652-7
FIB-BASE-08	680-167652-8
FIB-BASE-09	680-167652-9
FIB-BASE-10	680-167652-10
STOCKPILE 01	680-167652-11
STOCKPILE 02	680-167652-12
FIB-DUP-01	680-167652-13

Comments:

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-01

Lab Sample ID: 680-167652-1

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:10

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 90.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	21	2.3	0.47	0.16	mg/Kg			1	6010C
Lead	8.5	0.93	0.93	0.32	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-02

Lab Sample ID: 680-167652-2

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:13

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 89.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	20	2.4	0.48	0.16	mg/Kg			1	6010C
Lead	6.5	0.97	0.97	0.33	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-03

Lab Sample ID: 680-167652-3

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:16

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 88.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.6	0.51	0.17	mg/Kg			1	6010C
Lead	6.1	1.0	1.0	0.35	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-04

Lab Sample ID: 680-167652-4

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:19

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 88.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	18	2.5	0.50	0.17	mg/Kg			1	6010C
Lead	5.4	1.0	1.0	0.34	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-05

Lab Sample ID: 680-167652-5

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:22

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 86.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.5	0.51	0.17	mg/Kg			1	6010C
Lead	6.9	1.0	1.0	0.35	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-06

Lab Sample ID: 680-167652-6

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:25

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 94.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	22	2.3	0.47	0.16	mg/Kg			1	6010C
Lead	15	0.93	0.93	0.32	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-07

Lab Sample ID: 680-167652-7

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:28

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 94.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	21	2.2	0.44	0.15	mg/Kg			1	6010C
Lead	13	0.89	0.89	0.30	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-08

Lab Sample ID: 680-167652-8

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:31

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 89.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	22	2.4	0.48	0.16	mg/Kg			1	6010C
Lead	18	0.95	0.95	0.32	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-09

Lab Sample ID: 680-167652-9

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:34

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 92.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.3	0.46	0.16	mg/Kg			1	6010C
Lead	6.2	0.93	0.93	0.32	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-BASE-10

Lab Sample ID: 680-167652-10

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/15/2019 10:37

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 86.3

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	22	2.5	0.50	0.17	mg/Kg			1	6010C
Lead	6.4	1.0	1.0	0.34	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: STOCKPILE 01

Lab Sample ID: 680-167652-11

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/12/2019 11:45

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 89.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.4	0.49	0.17	mg/Kg			1	6010C
Lead	10	0.97	0.97	0.33	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: STOCKPILE 02

Lab Sample ID: 680-167652-12

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/12/2019 11:50

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 89.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	21	2.4	0.49	0.17	mg/Kg			1	6010C
Lead	10	0.98	0.98	0.33	mg/Kg			1	6010C

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: FIB-DUP-01

Lab Sample ID: 680-167652-13

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 680-167652-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/12/2019 00:00

Reporting Basis: DRY

Date Received: 04/16/2019 09:05

% Solids: 90.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	19	2.3	0.47	0.16	mg/Kg			1	6010C
Lead	6.5	0.93	0.93	0.32	mg/Kg			1	6010C

ANALYTICAL REPORT

Job Number: 480-151367-1

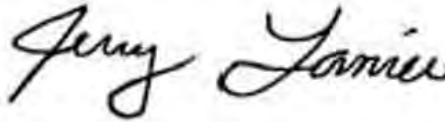
Job Description: Hancock Field

Contract Number: W9128F-13-D-0006

For:

EA Engineering, Science, and Technology
6712 Brooklawn Parkway
Suite 104
Syracuse, NY 13211

Attention: Joe Von Uderitz



Approved for release.
Jerry A Lanier
Project Manager I
4/9/2019 6:36 PM

Jerry A Lanier, Project Manager I
5102 LaRoche Avenue, Savannah, GA, 31404
(912)250-0281
jerry.lanier@testamericainc.com
04/09/2019

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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Eurofins TestAmerica, Buffalo

10 Hazelwood Drive, Amherst, NY 14228-2298

Tel (716) 691-2600 Fax (716) 691-7991 www.testamericainc.com



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CASE NARRATIVE

Client: EA Engineering, Science, and Technology

Project: Hancock Field

Report Number: 480-151367-1

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 04/05/2019; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

METALS (ICP)

Sample Rail Road Timber (480-151367-1) was analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared and analyzed on 04/08/2019.

Copper was detected in method blank MB 680-565367/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. 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.

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

PERCENT SOLIDS/MOISTURE

Sample Rail Road Timber (480-151367-1) was analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP. The samples were analyzed on 04/09/2019.

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

Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: Hancock Field

Job ID: 480-151367-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-151367-1	Rail Road Timber	Solid	04/04/19 15:00	04/05/19 01:00

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Hancock Field

Job ID: 480-151367-1

Client Sample ID: Rail Road Timber

Lab Sample ID: 480-151367-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Copper	29		4.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Lead	330		1.7	0.57	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Buffalo

Method Summary

Client: EA Engineering, Science, and Technology
Project/Site: Hancock Field

Job ID: 480-151367-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV
3050B	Preparation, Metals	SW846	TAL SAV

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Hancock Field

Job ID: 480-151367-1

Client Sample ID: Rail Road Timber

Lab Sample ID: 480-151367-1

Date Collected: 04/04/19 15:00

Matrix: Solid

Date Received: 04/05/19 01:00

Percent Solids: 51.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	29		4.2	0.28	mg/Kg	☼	04/08/19 06:35	04/08/19 20:55	1
Lead	330		1.7	0.57	mg/Kg	☼	04/08/19 06:35	04/08/19 20:55	1

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Hancock Field

Job ID: 480-151367-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-565367/1-A
Matrix: Solid
Analysis Batch: 565576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 565367

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.177	J	2.4	0.16	mg/Kg		04/08/19 06:35	04/08/19 20:02	1
Lead	0.96	U	0.96	0.33	mg/Kg		04/08/19 06:35	04/08/19 20:02	1

Lab Sample ID: LCS 680-565367/2-A
Matrix: Solid
Analysis Batch: 565576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 565367
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Copper	9.90	9.56		mg/Kg		97	81 - 117
Lead	49.5	46.0		mg/Kg		93	81 - 112

Definitions/Glossary

Client: EA Engineering, Science, and Technology
Project/Site: Hancock Field

Job ID: 480-151367-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
U	Undetected at the Limit of Detection.

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
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: Hancock Field

Job ID: 480-151367-1

Metals

Prep Batch: 565367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151367-1	Rail Road Timber	Total/NA	Solid	3050B	
MB 680-565367/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 680-565367/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 565576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151367-1	Rail Road Timber	Total/NA	Solid	6010C	565367
MB 680-565367/1-A	Method Blank	Total/NA	Solid	6010C	565367
LCS 680-565367/2-A	Lab Control Sample	Total/NA	Solid	6010C	565367

General Chemistry

Analysis Batch: 565555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-151367-1	Rail Road Timber	Total/NA	Solid	Moisture	

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Hancock Field

Job ID: 480-151367-1

Client Sample ID: Rail Road Timber

Lab Sample ID: 480-151367-1

Date Collected: 04/04/19 15:00

Matrix: Solid

Date Received: 04/05/19 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	565555	04/09/19 10:49	EHS	TAL SAV

Client Sample ID: Rail Road Timber

Lab Sample ID: 480-151367-1

Date Collected: 04/04/19 15:00

Matrix: Solid

Date Received: 04/05/19 01:00

Percent Solids: 51.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			565367	04/08/19 06:35	CDD	TAL SAV
Total/NA	Analysis	6010C		1	565576	04/08/19 20:55	BCB	TAL SAV

Laboratory References:

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

Accreditation/Certification Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Hancock Field

Job ID: 480-151367-1

Laboratory: Eurofins 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)	03-31-20
Illinois	NELAP	5	200003	09-30-19
Iowa	State Program	7	374	02-28-19 *
Kansas	NELAP	7	E-10187	01-31-20
Kentucky (DW)	State Program	4	90029	12-31-19
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	03-31-20
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 Jersey	NELAP	2	NY455	06-30-19
New York	NELAP	2	10026	03-31-20
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	12-30-19
Tennessee	State Program	4	TN02970	03-31-20
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	02-10-20
Wisconsin	State Program	5	998310390	08-31-19

Laboratory: Eurofins 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
ANAB	DoD / DOE		L2463	09-22-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Virginia	NELAP	3	460161	06-14-19
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

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

METALS

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, Savannah Job Number: 480-151367-1

SDG No.: _____

Project: Hancock Field

Client Sample ID
Rail Road Timber

Lab Sample ID
480-151367-1

Comments:

1A-IN
 INORGANIC ANALYSIS DATA SHEET
 METALS

Client Sample ID: Rail Road Timber

Lab Sample ID: 480-151367-1

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 480-151367-1

SDG ID.: _____

Matrix: Solid

Date Sampled: 04/04/2019 15:00

Reporting Basis: DRY

Date Received: 04/05/2019 01:00

% Solids: 51.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Copper	29	4.2	0.83	0.28	mg/Kg			1	6010C
Lead	330	1.7	1.7	0.57	mg/Kg			1	6010C

2A-IN
 CALIBRATION VERIFICATIONS
 METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

ICV Source: P_ICV_wk_00352 Concentration Units: ug/L

CCV Source: ME ICP CCV_00003

Analyte	ICV 680-565576/4 04/08/2019 11:34				CCV 680-565576/107 04/08/2019 19:40				CCV 680-565576/119 04/08/2019 20:33			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Copper	987		1000	99	516		500	103	514		500	103
Lead	1030		1000	103	498		500	100	507		500	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: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

ICV Source: P_ICV_wk_00352 Concentration Units: ug/L

CCV Source: ME ICP CCV_00003

Analyte	CCV 680-565576/131 04/08/2019 21:26											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Copper	510		500	102								
Lead	506		500	101								

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: Eurofins TestAmerica, Savannah Job No.: 480-151367-1
 SDG No.: _____
 Method: 6010C Instrument ID: ICPE
 Lab Sample ID: CRI 680-565576/6 Concentration Units: ug/L
 CRQL Check Standard Source: P_RL_Int_00071

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Copper	20.0	18.7	J	94	80-120
Lead	10.0	10.9		109	80-120

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

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Concentration Units: ug/L

Analyte	RL	ICBIS 680-565576/5 04/08/2019 11:38		CCB 680-565576/108 04/08/2019 19:45		CCB 680-565576/120 04/08/2019 20:37		CCB 680-565576/132 04/08/2019 21:30	
		Found	C	Found	C	Found	C	Found	C
Copper	20	5.0	U	5.0	U	2.26	J	5.0	U
Lead	10	10	U	10	U	10	U	10	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1
SDG No.: _____
Concentration Units: mg/Kg Lab Sample ID: MB 680-565367/1-A
Instrument Code: ICPE Batch No.: 565576

CAS No.	Analyte	Concentration	C	Q	Method
7440-50-8	Copper	0.177	J		6010C_DOD5
7439-92-1	Lead	0.96	U		6010C_DOD5

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1
 SDG No.: _____
 Lab Sample ID: ICSA 680-565576/7 Instrument ID: ICPE
 Lab File ID: E04082019p.csv ICS Source: P_ICSA_wk_00072
 Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Copper		-0.468	
Lead		5.26	
<i>Aluminum</i>	<i>500000</i>	<i>521687</i>	<i>104</i>
<i>Antimony</i>		<i>4.60</i>	
<i>Arsenic</i>		<i>10.9</i>	
<i>Barium</i>		<i>-3.99</i>	
<i>Beryllium</i>		<i>-0.146</i>	
<i>Boron</i>		<i>12.5</i>	
<i>Cadmium</i>		<i>1.43</i>	
<i>Calcium</i>	<i>500000</i>	<i>505344</i>	<i>101</i>
<i>Chromium</i>		<i>1.11</i>	
<i>Cobalt</i>		<i>0.494</i>	
<i>Iron</i>	<i>200000</i>	<i>198233</i>	<i>99</i>
<i>Magnesium</i>	<i>500000</i>	<i>522444</i>	<i>104</i>
<i>Manganese</i>		<i>-2.09</i>	
<i>Molybdenum</i>		<i>2.54</i>	
<i>Potassium</i>		<i>3.20</i>	
<i>Selenium</i>		<i>-5.14</i>	
<i>Silver</i>		<i>1.49</i>	
<i>Sodium</i>		<i>100</i>	
<i>Tin</i>		<i>-9.59</i>	
<i>Vanadium</i>		<i>1.09</i>	
<i>Zinc</i>		<i>5.04</i>	

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

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 480-151367-1

SDG No.: _____

Lab Sample ID: ICSAB 680-565576/8

Instrument ID: ICPE

Lab File ID: E04082019p.csv

ICS Source: P_ICSAB_wk_00090

Concentration Units: ug/L

Analyte	True	Found	Percent Recovery
	Solution AB	Solution AB	
Copper	500	527	105
Lead	50.0	43.2	86
<i>Aluminum</i>	<i>500000</i>	<i>511604</i>	<i>102</i>
<i>Antimony</i>	<i>600</i>	<i>640</i>	<i>107</i>
<i>Arsenic</i>	<i>100</i>	<i>106</i>	<i>106</i>
<i>Barium</i>	<i>500</i>	<i>524</i>	<i>105</i>
<i>Beryllium</i>	<i>500</i>	<i>496</i>	<i>99</i>
<i>Boron</i>		<i>11.4</i>	
<i>Cadmium</i>	<i>1000</i>	<i>975</i>	<i>98</i>
<i>Calcium</i>	<i>500000</i>	<i>495794</i>	<i>99</i>
<i>Chromium</i>	<i>500</i>	<i>496</i>	<i>99</i>
<i>Cobalt</i>	<i>500</i>	<i>492</i>	<i>98</i>
<i>Iron</i>	<i>200000</i>	<i>194292</i>	<i>97</i>
<i>Magnesium</i>	<i>500000</i>	<i>512288</i>	<i>102</i>
<i>Manganese</i>	<i>500</i>	<i>495</i>	<i>99</i>
<i>Molybdenum</i>	<i>1000</i>	<i>1028</i>	<i>103</i>
<i>Nickel</i>	<i>1000</i>	<i>978</i>	<i>98</i>
<i>Potassium</i>		<i>1.96</i>	
<i>Selenium</i>	<i>50.0</i>	<i>44.8</i>	<i>90</i>
<i>Silver</i>	<i>200</i>	<i>216</i>	<i>108</i>
<i>Sodium</i>		<i>-112</i>	
<i>Strontium</i>		<i>9.41</i>	
<i>Thallium</i>	<i>100</i>	<i>87.1</i>	<i>87</i>
<i>Tin</i>	<i>1000</i>	<i>988</i>	<i>99</i>
<i>Titanium</i>		<i>3.43</i>	
<i>Vanadium</i>	<i>500</i>	<i>511</i>	<i>102</i>
<i>Zinc</i>	<i>1000</i>	<i>936</i>	<i>94</i>

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

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 680-565367/2-A

Lab Name: Eurofins TestAmerica, Savannah

Job No.: 480-151367-1

Sample Matrix: Solid

LCS Source: MS_LCS1_WK_00081

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Copper	9.90	9.56		97	81	117		6010C
Lead	49.5	46.0		93	81	112		6010C

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

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job Number: 480-151367-1

SDG Number: _____

Matrix: Solid

Instrument ID: ICPE

Method: 6010C

DL Date: 06/05/2015 09:48

Prep Method: 3050B

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Copper		2.5	0.17
Lead		1	0.34

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Savannah Job Number: 480-151367-1
SDG Number: _____
Matrix: Solid Instrument ID: ICPE
Method: 6010C XMDL Date: 06/12/2015 11:39

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Copper		20	1.8
Lead		10	3.9

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Savannah Job Number: 480-151367-1

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		

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Savannah Job Number: 480-151367-1

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														

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins TestAmerica, Savannah

Job No: 480-151367-1

SDG No.: _____

Instrument ID: ICPE

Date: 02/27/2012 11:40

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Copper		45000	6010C
Lead		18000	6010C

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 680-565367/1-A	04/08/2019 06:35	565367	1.04		100
LCS 680-565367/2-A	04/08/2019 06:35	565367	1.01		100
480-151367-1	04/08/2019 06:35	565367	1.17		100

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/08/2019 11:22 End Date: 04/09/2019 09:43

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			11:22																
ZZZZZZ			11:26																
ZZZZZZ			11:30																
ICV 680-565576/4	1		11:34	X	X														
ICBIS 680-565576/5	1		11:38	X	X														
CRI 680-565576/6	1		11:43	X	X														
ICSA 680-565576/7	1		11:51	X	X														
ICSAB 680-565576/8	1		11:56	X	X														
ZZZZZZ			12:00																
RINSE 680-565576/10			12:04																
CCV 680-565576/11			12:08																
CCB 680-565576/12			12:15																
ZZZZZZ			12:20																
ZZZZZZ			12:25																
ZZZZZZ			12:31																
ZZZZZZ			12:36																
ZZZZZZ			12:41																
ZZZZZZ			12:46																
ZZZZZZ			12:51																
ZZZZZZ			12:57																
ZZZZZZ			13:02																
ZZZZZZ			13:07																
CCV 680-565576/23			13:12																
CCB 680-565576/24			13:17																
ZZZZZZ			13:23																
ZZZZZZ			13:28																
ZZZZZZ			13:33																
ZZZZZZ			13:38																
ZZZZZZ			13:43																
ZZZZZZ			13:48																
ZZZZZZ			13:54																
ZZZZZZ			13:59																
ZZZZZZ			14:04																
ZZZZZZ			14:09																
CCV 680-565576/35			14:14																
CCB 680-565576/36			14:20																
ZZZZZZ			14:25																
ZZZZZZ			14:30																
ZZZZZZ			14:35																
ZZZZZZ			14:40																
ZZZZZZ			14:46																
ZZZZZZ			14:51																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/08/2019 11:22 End Date: 04/09/2019 09:43

Lab Sample ID	D / F	T y p e	Time	Analytes															
				C u	P b														
ZZZZZZ			14:56																
ZZZZZZ			15:01																
ZZZZZZ			15:06																
ZZZZZZ			15:11																
CCV 680-565576/47			15:17																
CCB 680-565576/48			15:22																
ZZZZZZ			15:27																
ZZZZZZ			15:32																
ZZZZZZ			15:37																
ZZZZZZ			15:43																
ZZZZZZ			15:47																
ZZZZZZ			15:51																
ZZZZZZ			15:56																
ZZZZZZ			16:00																
ZZZZZZ			16:04																
ZZZZZZ			16:08																
CCV 680-565576/59			16:12																
CCB 680-565576/60			16:17																
ZZZZZZ			16:21																
ZZZZZZ			16:25																
ZZZZZZ			16:29																
ZZZZZZ			16:33																
ZZZZZZ			16:37																
ZZZZZZ			16:42																
ZZZZZZ			16:46																
ZZZZZZ			16:50																
ZZZZZZ			16:54																
ZZZZZZ			16:58																
CCV 680-565576/71			17:03																
CCB 680-565576/72			17:07																
ZZZZZZ			17:11																
ZZZZZZ			17:15																
ZZZZZZ			17:19																
ZZZZZZ			17:24																
ZZZZZZ			17:28																
ZZZZZZ			17:32																
ZZZZZZ			17:36																
ZZZZZZ			17:40																
ZZZZZZ			17:46																
ZZZZZZ			17:50																
CCV 680-565576/83			17:55																
CCB 680-565576/84			17:59																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/08/2019 11:22 End Date: 04/09/2019 09:43

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			18:04																
ZZZZZZ			18:08																
ZZZZZZ			18:12																
ZZZZZZ			18:17																
ZZZZZZ			18:21																
ZZZZZZ			18:26																
ZZZZZZ			18:30																
ZZZZZZ			18:34																
ZZZZZZ			18:39																
ZZZZZZ			18:43																
CCV 680-565576/95			18:48																
CCB 680-565576/96			18:52																
ZZZZZZ			18:56																
ZZZZZZ			19:01																
ZZZZZZ			19:05																
ZZZZZZ			19:10																
ZZZZZZ			19:14																
ZZZZZZ			19:18																
ZZZZZZ			19:23																
ZZZZZZ			19:27																
ZZZZZZ			19:31																
ZZZZZZ			19:36																
CCV 680-565576/107	1		19:40	X	X														
CCB 680-565576/108	1		19:45	X	X														
ZZZZZZ			19:49																
ZZZZZZ			19:53																
ZZZZZZ			19:58																
MB 680-565367/1-A	1	T	20:02	X	X														
LCS 680-565367/2-A	1	T	20:07	X	X														
ZZZZZZ			20:11																
ZZZZZZ			20:15																
ZZZZZZ			20:20																
ZZZZZZ			20:24																
ZZZZZZ			20:29																
CCV 680-565576/119	1		20:33	X	X														
CCB 680-565576/120	1		20:37	X	X														
ZZZZZZ			20:42																
ZZZZZZ			20:46																
ZZZZZZ			20:51																
480-151367-1	1	T	20:55	X	X														
ZZZZZZ			20:59																
ZZZZZZ			21:04																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/08/2019 11:22 End Date: 04/09/2019 09:43

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			21:08																
ZZZZZZ			21:13																
ZZZZZZ			21:17																
ZZZZZZ			21:21																
CCV 680-565576/131	1		21:26	X	X														
CCB 680-565576/132	1		21:30	X	X														
ZZZZZZ			21:35																
ZZZZZZ			21:39																
ZZZZZZ			21:43																
ZZZZZZ			21:48																
ZZZZZZ			21:52																
ZZZZZZ			21:57																
ZZZZZZ			22:01																
ZZZZZZ			22:05																
ZZZZZZ			22:10																
ZZZZZZ			22:14																
CCV 680-565576/143			22:19																
CCB 680-565576/144			22:23																
ZZZZZZ			22:27																
ZZZZZZ			22:32																
ZZZZZZ			22:36																
ZZZZZZ			22:41																
ZZZZZZ			22:45																
ZZZZZZ			22:49																
ZZZZZZ			22:54																
CCV 680-565576/152			22:58																
CCB 680-565576/153			23:03																
ZZZZZZ			23:07																
ZZZZZZ			23:11																
ZZZZZZ			23:16																
ZZZZZZ			23:20																
ZZZZZZ			23:25																
ZZZZZZ			23:29																
ZZZZZZ			23:33																
ZZZZZZ			23:38																
ZZZZZZ			23:42																
ZZZZZZ			23:47																
CCV 680-565576/164			23:51																
CCB 680-565576/165			23:55																
ZZZZZZ			00:00																
ZZZZZZ			00:04																
ZZZZZZ			00:09																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/08/2019 11:22 End Date: 04/09/2019 09:43

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			00:13																
ZZZZZZ			00:17																
ZZZZZZ			00:22																
ZZZZZZ			00:26																
ZZZZZZ			00:31																
ZZZZZZ			00:35																
ZZZZZZ			00:40																
CCV 680-565576/176			00:44																
CCB 680-565576/177			00:48																
ZZZZZZ			00:53																
ZZZZZZ			00:57																
ZZZZZZ			01:02																
ZZZZZZ			01:06																
ZZZZZZ			01:10																
ZZZZZZ			01:15																
ZZZZZZ			01:19																
ZZZZZZ			01:24																
ZZZZZZ			01:28																
ZZZZZZ			01:32																
CCV 680-565576/188			01:37																
CCB 680-565576/189			01:41																
ZZZZZZ			01:46																
ZZZZZZ			01:50																
ZZZZZZ			01:55																
ZZZZZZ			01:59																
ZZZZZZ			02:03																
ZZZZZZ			02:08																
ZZZZZZ			02:12																
ZZZZZZ			02:17																
ZZZZZZ			02:21																
ZZZZZZ			02:25																
CCV 680-565576/200			02:30																
CCB 680-565576/201			02:34																
ZZZZZZ			02:39																
ZZZZZZ			02:43																
ZZZZZZ			02:48																
ZZZZZZ			02:52																
ZZZZZZ			02:56																
ZZZZZZ			03:01																
ZZZZZZ			03:05																
ZZZZZZ			03:10																
ZZZZZZ			03:14																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/08/2019 11:22 End Date: 04/09/2019 09:43

Lab Sample ID	D / F	T y p e	Time	Analytes																			
				C u	P b																		
ZZZZZZ			03:19																				
CCV 680-565576/212			03:23																				
CCB 680-565576/213			03:27																				
ZZZZZZ			03:32																				
ZZZZZZ			03:36																				
ZZZZZZ			03:41																				
ZZZZZZ			03:45																				
ZZZZZZ			03:49																				
ZZZZZZ			03:54																				
CCV 680-565576/220			03:58																				
CCB 680-565576/221			04:03																				
ZZZZZZ			04:07																				
ZZZZZZ			04:12																				
ZZZZZZ			04:16																				
ZZZZZZ			04:20																				
ZZZZZZ			04:25																				
ZZZZZZ			04:29																				
ZZZZZZ			04:34																				
ZZZZZZ			04:38																				
ZZZZZZ			04:43																				
ZZZZZZ			04:47																				
CCV 680-565576/232			04:52																				
CCB 680-565576/233			04:56																				
ZZZZZZ			05:00																				
ZZZZZZ			05:05																				
ZZZZZZ			05:09																				
ZZZZZZ			05:14																				
ZZZZZZ			05:18																				
ZZZZZZ			05:23																				
ZZZZZZ			05:27																				
ZZZZZZ			05:31																				
ZZZZZZ			05:36																				
ZZZZZZ			05:40																				
CCV 680-565576/244			05:45																				
CCB 680-565576/245			05:49																				
ZZZZZZ			05:54																				
ZZZZZZ			05:58																				
ZZZZZZ			06:02																				
ZZZZZZ			06:07																				
ZZZZZZ			06:11																				
ZZZZZZ			06:16																				
ZZZZZZ			06:20																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/08/2019 11:22 End Date: 04/09/2019 09:43

Lab Sample ID	D / F	Type	Time	Analytes															
				Cu	Pb														
ZZZZZZ			06:25																
ZZZZZZ			06:29																
ZZZZZZ			06:33																
CCV 680-565576/256			06:38																
CCB 680-565576/257			06:42																
ZZZZZZ			06:47																
ZZZZZZ			06:51																
ZZZZZZ			06:56																
ZZZZZZ			07:00																
ZZZZZZ			07:04																
ZZZZZZ			07:09																
ZZZZZZ			07:13																
ZZZZZZ			07:18																
ZZZZZZ			07:22																
ZZZZZZ			07:27																
CCV 680-565576/268			07:31																
CCB 680-565576/269			07:36																
ZZZZZZ			07:40																
ZZZZZZ			07:44																
ZZZZZZ			07:49																
ZZZZZZ			07:53																
ZZZZZZ			07:58																
ZZZZZZ			08:02																
ZZZZZZ			08:07																
ZZZZZZ			08:11																
ZZZZZZ			08:16																
ZZZZZZ			08:20																
CCV 680-565576/280			08:24																
CCB 680-565576/281			08:29																
ZZZZZZ			08:33																
ZZZZZZ			08:38																
ZZZZZZ			08:42																
ZZZZZZ			08:46																
ZZZZZZ			08:51																
ZZZZZZ			08:55																
ZZZZZZ			09:00																
ZZZZZZ			09:04																
ZZZZZZ			09:08																
ZZZZZZ			09:13																
ZZZZZZ			09:17																
ZZZZZZ			09:22																
ZZZZZZ			09:26																

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: ICPE Method: 6010C

Start Date: 04/08/2019 11:22 End Date: 04/09/2019 09:43

Lab Sample ID	D / F	T y p e	Time	Analytes																
				C u	P b															
ZZZZZZ			09:30																	
ZZZZZZ			09:35																	
ZZZZZZ			09:39																	
ZZZZZZ			09:43																	

Prep Types
T = Total/NA

15-IN
 ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
 METALS

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

ICP Instrument ID: ICPE Start Date: 04/08/2019 End Date: 04/08/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICV 680-565576/4	11:34										
ICBIS 680-565576/5	11:38										
CRI 680-565576/6	11:43	101									
ICSA 680-565576/7	11:51	96									
ICSAB 680-565576/8	11:56	96									
CCV 680-565576/107	19:40	91									
CCB 680-565576/108	19:45	92									
MB 680-565367/1-A	20:02	91									
LCS 680-565367/2-A	20:07	89									
CCV 680-565576/119	20:33	89									
CCB 680-565576/120	20:37	90									
480-151367-1	20:55	91									
CCV 680-565576/131	21:26	93									
CCB 680-565576/132	21:30	93									

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Blank (Blk)	4/8/2019, 11:22:14 AM		Rack S, Tube 1
Label	Replicates	Concentration	
Ag 328.068	0.0480	0.7057	-0.7537
Al 308.215	1.8960	-6.0378	4.1418
As 188.980	-4.1279	8.1321	-4.0041
B 249.678	0.2246	-0.2373	0.0127
Ba 389.178	2.7903	-1.2519	-1.5385
Be 313.042	0.0004	-0.0081	0.0076
Ca 370.602	-8.725	8.720	0.0045
Cd 226.502	0.2579	0.2672	-0.5251
Co 228.615	0.3611	0.0903	-0.4515
Cr 267.716	-0.6216	-0.0476	0.6692
Cu 324.754	0.1711	0.3377	-0.5088
Fe 271.441	14.3240	-1.2059	-13.1181
K 766.491	0.4930	-0.5385	0.0455
Mg 279.078	-0.0432	2.3489	-2.3057
Mn 257.610	0.0695	-0.1273	0.0578
Mo 202.032	-0.9328	0.7708	0.1620
Na 330.237	-49.5024	-43.9909	93.4934
Ni 231.604	0.4093	-1.4630	1.0537
Pb 220.353	7.5174	0.1532	-7.6706
Sb 206.834	-3.8527	2.6223	1.2304
Se 196.026	4.8455	-1.5526	-3.2929
Si 288.158	0.0894	1.1787	-1.2680
Sn 189.925	-0.3371	-2.5556	2.8926
Sr 216.596	-1.0430	0.4769	0.5661
Ti 334.941	-0.0579	0.0203	0.0376
Tl 190.794	-1.5281	-6.8728	8.4009
V 292.401	0.2228	-0.1232	-0.0996
Zn 206.200	-0.6281	-1.0510	1.6791

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Ag 328.068	0.0000	ppb	19.649	34.9	-56.3347
Al 308.215	0.0000	ppb	9.038	3.7	243.488
As 188.980	0.0000	ppb	1.727	144.3	1.1968
B 249.678	0.0000	ppb	1.483	8.1	-18.3488
Ba 389.178	0.0000	ppb	12.310	39.6	-31.0736
Be 313.042	0.0000	ppb	6.068	1.4	-424.778
Ca 370.602	0.0000	ppb	12.388	134.8	9.190
Cd 226.502	0.0000	ppb	5.206	215.8	2.4118
Co 228.615	0.0000	ppb	1.381	16.5	-8.3717
Cr 267.716	0.0000	ppb	9.383	90.8	10.3322
Cu 324.754	0.0000	ppb	11.692	2.5	474.446
Fe 271.441	0.0000	ppb	7.445	16.2	45.8210
K 766.491	0.0000	ppb	8.793	3.7	234.715
Mg 279.078	0.0000	ppb	2.834	10.0	28.2696
Mn 257.610	0.0000	ppb	7.570	33.8	22.4055
Mo 202.032	0.0000	ppb	1.199	45.2	2.6555
Na 330.237	0.0000	ppb	1.983	6.1	32.4840
Ni 231.604	0.0000	ppb	1.284	47.0	-2.7338
Pb 220.353	0.0000	ppb	2.806	168.7	1.6635
Sb 206.834	0.0000	ppb	1.073	18.4	5.8431
Se 196.026	0.0000	ppb	0.783	17.9	4.3773
Si 288.158	0.0000	ppb	5.205	0.9	575.692
Sn 189.925	0.0000	ppb	0.616	60.7	-1.0143

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Sr 216.596	0.0000	ppb	2.211	65.8	3.3602
Ti 334.941	0.0000	ppb	3.842	15.3	-25.1558
Tl 190.794	0.0000	ppb	1.803	71.2	-2.5302
V 292.401	0.0000	ppb	1.584	13.5	-11.7763
Zn 206.200	0.0000	ppb	0.776	59.1	-1.3133

HIGH STD (Std)

4/8/2019, 11:26:26 AM

Rack S, Tube 2

Label	Replicates Concentration		
Ag 328.068	1002.65	997.244	1000.11
Al 308.215	19973.8	20019.0	20007.2
As 188.980	989.845	1014.57	995.586
B 249.678	990.025	1003.76	1006.21
Ba 389.178	998.536	999.620	1001.84
Be 313.042	998.243	1002.19	999.569
Ca 370.602	19991	20008	20001
Cd 226.502	1000.59	1000.15	999.262
Co 228.615	994.627	1007.14	998.238
Cr 267.716	997.941	1001.82	1000.24
Cu 324.754	1005.49	994.733	999.780
Fe 271.441	19958.9	20050.5	20020.6
K 766.491	20001.0	20007.3	19991.7
Mg 279.078	19959.6	20012.8	20027.6
Mn 257.610	998.642	1001.20	1000.15
Mo 202.032	997.090	1001.25	1001.66
Na 330.237	20199.5	19986.6	19814.0
Ni 231.604	996.371	1001.09	1002.54
Pb 220.353	1007.04	997.653	995.312
Sb 206.834	996.385	1003.55	1000.06
Se 196.026	1009.66	986.117	1004.22
Si 288.158	10002.3	10015.0	9982.71
Sn 189.925	1002.52	1001.93	995.542
Sr 216.596	999.708	998.108	1002.18
Ti 334.941	998.350	1000.52	1001.13
Tl 190.794	987.355	1008.28	1004.36
V 292.401	998.039	1003.00	998.957
Zn 206.200	2006.67	2001.09	1992.24

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Ag 328.068	1000.00	ppb	72.638	0.3	26827.2
Al 308.215	20000.0	ppb	39.630	0.1	34044.0
As 188.980	1000.00	ppb	3.173	1.3	246.442
B 249.678	1000.00	ppb	55.965	0.9	6395.95
Ba 389.178	1000.00	ppb	8.575	0.2	5054.09
Be 313.042	1000.00	ppb	1552.676	0.2	772986
Ca 370.602	20000	ppb	12.133	0.0	28414
Cd 226.502	1000.00	ppb	7.729	0.1	11449.5
Co 228.615	1000.00	ppb	21.484	0.6	3328.85
Cr 267.716	1000.00	ppb	28.320	0.2	14520.0
Cu 324.754	1000.00	ppb	140.290	0.5	26546.3
Fe 271.441	20010.0	ppb	25.294	0.2	10872.2
K 766.491	20000.0	ppb	134.076	0.0	340217
Mg 279.078	20000.0	ppb	43.570	0.2	24377.4
Mn 257.610	1000.00	ppb	88.274	0.1	68568.7

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD(Int)	%RSD(Int)	Int. (c/s)
Mo 202.032	1000.00	ppb	3.512	0.3	1391.58
Na 330.237	20000.0	ppb	4.726	0.9	521.957
Ni 231.604	1000.00	ppb	3.168	0.3	979.522
Pb 220.353	1000.00	ppb	2.292	0.6	371.116
Sb 206.834	1000.00	ppb	1.129	0.4	320.758
Se 196.026	1000.00	ppb	2.252	1.2	187.044
Si 288.158	10000.0	ppb	69.004	0.2	43039.4
Sn 189.925	1000.00	ppb	0.870	0.4	223.671
Sr 216.596	1000.00	ppb	5.019	0.2	2447.79
Ti 334.941	1000.00	ppb	110.243	0.1	75447.7
Tl 190.794	1000.00	ppb	2.587	1.1	230.057
V 292.401	1000.00	ppb	21.645	0.3	8182.43
Zn 206.200	2000.00	ppb	3.844	0.4	1055.04

Ag 328.068 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-56.3347	0.0000	0.0000	-	-
HIGH STD		26827.2	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 26.9 x + -56.3$

Al 308.215 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		243.488	0.0000	0.0000	-	-
HIGH STD		34044.0	20000.0	20000.0	0.0000	0.0

Curve Type: Linear Equation: $y = 1.7 x + 243.5$

As 188.980 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		1.1968	0.0000	0.0000	-	-
HIGH STD		246.442	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.2 x + 1.2$

B 249.678 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-18.3488	0.0000	0.0000	-	-
HIGH STD		6395.95	1000.00	1000.00	0.0002	0.0

Curve Type: Linear Equation: $y = 6.4 x + -18.3$

Ba 389.178 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-31.0736	0.0000	0.0000	-	-
HIGH STD		5054.09	1000.00	1000.00	0.0001	0.0

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Curve Type: Linear Equation: $y = 5.1 x + -31.1$ **Be 313.042 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-424.778	0.0000	0.0000	-	-
HIGH STD		772986	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 773.4 x + -424.8$ **Ca 370.602 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		9.190	0.0000	0.0000	-	-
HIGH STD		28414	20000	20000	0.0000	0.0

Curve Type: Linear Equation: $y = 1.4 x + 9.2$ **Cd 226.502 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		2.4118	0.0000	0.0000	-	-
HIGH STD		11449.5	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 11.4 x + 2.4$ **Co 228.615 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-8.3717	0.0000	0.0000	-	-
HIGH STD		3328.85	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: $y = 3.3 x + -8.4$ **Cr 267.716 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		10.3322	0.0000	0.0000	-	-
HIGH STD		14520.0	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 14.5 x + 10.3$ **Cu 324.754 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		474.446	0.0000	0.0000	-	-
HIGH STD		26546.3	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: $y = 26.1 x + 474.4$

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Fe 271.441 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		45.8210	0.0000	0.0000	-	-
HIGH STD		10872.2	20010.0	20010.0	0.0000	0.0

Curve Type: Linear Equation: $y = 0.5 x + 45.8$ **K 766.491 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		234.715	0.0000	0.0000	-	-
HIGH STD		340217	20000.0	20000.0	-0.0020	0.0

Curve Type: Linear Equation: $y = 17.0 x + 234.7$ **Mg 279.078 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		28.2696	0.0000	0.0000	-	-
HIGH STD		24377.4	20000.0	20000.0	0.0020	0.0

Curve Type: Linear Equation: $y = 1.2 x + 28.3$ **Mn 257.610 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		22.4055	0.0000	0.0000	-	-
HIGH STD		68568.7	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: $y = 68.5 x + 22.4$ **Mo 202.032 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		2.6555	0.0000	0.0000	-	-
HIGH STD		1391.58	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 1.4 x + 2.7$ **Na 330.237 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		32.4840	0.0000	0.0000	-	-
HIGH STD		521.957	20000.0	20000.0	0.0000	0.0

Curve Type: Linear Equation: $y = 0.0 x + 32.5$ **Ni 231.604 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-2.7338	0.0000	0.0000	-	-
HIGH STD		979.522	1000.00	1000.00	0.0000	0.0

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Curve Type: Linear Equation: $y = 1.0 x + -2.7$ **Pb 220.353 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		1.6635	0.0000	0.0000	-	-
HIGH STD		371.116	1000.00	1000.00	0.0001	0.0

Curve Type: Linear Equation: $y = 0.4 x + 1.7$ **Sb 206.834 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		5.8431	0.0000	0.0000	-	-
HIGH STD		320.758	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.3 x + 5.8$ **Se 196.026 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		4.3773	0.0000	0.0000	-	-
HIGH STD		187.044	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 0.2 x + 4.4$ **Si 288.158 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		575.692	0.0000	0.0000	-	-
HIGH STD		43039.4	10000.0	10000.00	-0.0010	0.0

Curve Type: Linear Equation: $y = 4.2 x + 575.7$ **Sn 189.925 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-1.0143	0.0000	0.0000	-	-
HIGH STD		223.671	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.2 x + -1.0$ **Sr 216.596 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		3.3602	0.0000	0.0000	-	-
HIGH STD		2447.79	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 2.4 x + 3.4$

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Ti 334.941 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-25.1558	0.0000	0.0000	-	-
HIGH STD		75447.7	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 75.5 x + -25.2$ **Tl 190.794 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-2.5302	0.0000	0.0000	-	-
HIGH STD		230.057	1000.00	1000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.2 x + -2.5$ **V 292.401 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-11.7763	0.0000	0.0000	-	-
HIGH STD		8182.43	1000.00	1000.000	-0.0001	0.0

Curve Type: Linear Equation: $y = 8.2 x + -11.8$ **Zn 206.200 Calibration (ppb) 4/8/2019, 11:26:26 AM Correlation Coefficient: 1.000000**

Label	Flags	Int. (c/s)	Std Conc.	Calc Conc.	Error	%Error
Blank		-1.3133	0.0000	0.0000	-	-
HIGH STD		1055.04	2000.00	2000.00	0.0000	0.0

Curve Type: Linear Equation: $y = 0.5 x + -1.3$ **Lab Control Sample (LCS) 4/8/2019, 11:30:36 AM Rack S, Tube 2****Weight: 1 Volume: 1 Dilution: 1**

Label	Replicates	Concentration
Ag 328.068	1007.62x	1001.76x 1002.89x
Al 308.215	19950.5	19941.0 19979.6
As 188.980	1018.60	1040.81 1008.19
B 249.678	1027.01	1027.84 1033.11
Ba 389.178	999.192	1000.43 999.221
Be 313.042	998.235	998.017 996.522
Ca 370.602	20014	20000 20032
Cd 226.502	997.685	996.495 997.761
Co 228.615	1010.16	1002.80 989.996
Cr 267.716	999.104	997.940 998.490
Cu 324.754	1006.73	1001.85 1002.38
Fe 271.441	19885.9	19881.7 19907.3
K 766.491	19975.4	19993.3 19919.1
Mg 279.078	20002.0	19969.7 20002.9
Mn 257.610	1000.28	998.509 997.395
Mo 202.032	1005.32x	999.876 1007.81x
Na 330.237	20373.1	20670.9 20477.5
Ni 231.604	995.210	996.663 998.548

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Label	Replicates Concentration		
Pb 220.353	996.264	999.037	1004.93
Sb 206.834	995.290	988.668	995.256
Se 196.026	1003.92	1002.69	995.875
Si 288.158	9859.45	9854.09	9836.79
Sn 189.925	985.568	987.252	983.738
Sr 216.596	1004.41	1005.12	1002.81
Ti 334.941	1000.48	999.548	1001.98
Tl 190.794	1036.00	1023.04	1026.83
V 292.401	1008.67	1005.61	1009.03
Zn 206.200	1994.97	2004.32	2002.15

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	1004.09xb	ppb	3.1086	0.3	26932.7	100.40877
Al 308.215	19957.0b	ppb	20.1359	0.1	34003.5	99.78511
As 188.980	1022.53b	ppb	16.6638	1.6	246.684	102.25337
B 249.678	1029.32b	ppb	3.3084	0.3	6564.69	102.93205
Ba 389.178	999.614b	ppb	0.7070	0.1	5072.43	99.96143
Be 313.042	997.591b	ppb	0.9324	0.1	771084	99.75911
Ca 370.602	20015b	ppb	15.61	0.1	28441	100.07709
Cd 226.502	997.314b	ppb	0.7100	0.1	11443.7	99.73140
Co 228.615	1000.99b	ppb	10.2032	1.0	3330.85	100.09854
Cr 267.716	998.512b	ppb	0.5824	0.1	14500.4	99.85115
Cu 324.754	1003.65b	ppb	2.6809	0.3	26653.9	100.36535
Fe 271.441	19891.6b	ppb	13.7113	0.1	10858.5	99.40842
K 766.491	19962.6b	ppb	38.7343	0.2	339581	99.81289
Mg 279.078	19991.5b	ppb	18.9323	0.1	24354.4	99.95763
Mn 257.610	998.728b	ppb	1.4552	0.1	68567.9	99.87282
Mo 202.032	1004.34xb	ppb	4.0594	0.4	1397.27	100.43375
Na 330.237	20507.2b	ppb	151.145	0.7	504.472	102.53582
Ni 231.604	996.807b	ppb	1.6736	0.2	975.604	99.68069
Pb 220.353	1000.08b	ppb	4.4276	0.4	370.676	100.00783
Sb 206.834	993.071b	ppb	3.8135	0.4	321.115	99.30714
Se 196.026	1000.83b	ppb	4.3323	0.4	187.224	100.08269
Si 288.158	9850.11b	ppb	11.8410	0.1	42645.8	98.50111
Sn 189.925	985.519b	ppb	1.7573	0.2	220.419	98.55193
Sr 216.596	1004.11b	ppb	1.1859	0.1	2446.32	100.41120
Ti 334.941	1000.67b	ppb	1.2273	0.1	75543.3	100.06689
Tl 190.794	1028.63b	ppb	6.6647	0.6	236.900	102.86259
V 292.401	1007.77b	ppb	1.8823	0.2	8178.79	100.77724
Zn 206.200	2000.48b	ppb	4.8892	0.2	1054.81	100.02400

Initial Calib Verif (ICV)

4/8/2019, 11:34:46 AM

Rack S, Tube 3

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	996.146	991.237	1001.19x
Al 308.215	1005.03	999.326	998.689
As 188.980	951.336	951.005	952.966
B 249.678	1035.40	1038.44	1040.06
Ba 389.178	1035.08	1032.03	1034.27
Be 313.042	1004.72x	1003.64x	1008.57x
Ca 370.602	1014	1009	1013
Cd 226.502	1022.06x	1022.26x	1023.19x
Co 228.615	995.138	983.740	985.311

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cr 267.716	1005.48	1002.55	1006.19
Cu 324.754	984.069	983.818	991.896
Fe 271.441	1038.13	1037.89	1046.79
K 766.491	9448.36	9468.86	9465.72
Mg 279.078	1004.43	1004.38	1005.66
Mn 257.610	999.812	998.997	1001.21
Mo 202.032	1006.61x	1000.08	1003.80x
Na 330.237	10123.9	9824.25	9627.47
Ni 231.604	993.181	1000.64	996.068
Pb 220.353	1037.09	1024.72	1013.95
Sb 206.834	1032.28	1026.29	1041.49
Se 196.026	988.155	971.163	991.765
Si 288.158	587.106	583.815	588.062
Sn 189.925	4848.14	4877.43	4845.41
Sr 216.596	4907.54	4913.17	4903.34
Ti 334.941	1000.13	1000.40	1000.24
Tl 190.794	963.719	988.710	998.830
V 292.401	1022.89	1023.33	1024.39
Zn 206.200	1017.19	1018.22	1026.11

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	996.192xb	ppb	4.9779	0.5	26713.1	99.61916
Al 308.215	1001.02b	ppb	3.4918	0.3	1967.13	100.10152
As 188.980	951.769b	ppb	1.0497	0.1	229.606	95.17688
B 249.678	1037.97b	ppb	2.3698	0.2	6638.40	103.79671
Ba 389.178	1033.79b	ppb	1.5766	0.2	5228.49	103.37915
Be 313.042	1005.64xb	ppb	2.5926	0.3	777310	100.56438
Ca 370.602	1012b	ppb	2.463	0.2	1479	101.21725
Cd 226.502	1022.50xb	ppb	0.6076	0.1	11708.3	102.25032
Co 228.615	988.063b	ppb	6.1778	0.6	3287.32	98.80629
Cr 267.716	1004.74b	ppb	1.9293	0.2	14589.3	100.47417
Cu 324.754	986.595b	ppb	4.5930	0.5	26206.1	98.65947
Fe 271.441	1040.93b	ppb	5.0712	0.5	658.761	104.09338
K 766.491	9460.98b	ppb	11.0426	0.1	161063	94.60979
Mg 279.078	1004.82b	ppb	0.7259	0.1	1242.17	100.48219
Mn 257.610	1000.01b	ppb	1.1174	0.1	68586.6	100.00050
Mo 202.032	1003.50xb	ppb	3.2774	0.3	1396.28	100.34995
Na 330.237	9858.53b	ppb	249.969	2.5	254.928	98.58528
Ni 231.604	996.628b	ppb	3.7589	0.4	975.435	99.66283
Pb 220.353	1025.25b	ppb	11.5808	1.1	379.966	102.52541
Sb 206.834	1033.35b	ppb	7.6559	0.7	333.770	103.33517
Se 196.026	983.694b	ppb	11.0014	1.1	184.153	98.36939
Si 288.158	586.328b	ppb	2.2279	0.4	3605.11	117.26553Q
Sn 189.925	4856.99b	ppb	17.7544	0.4	1090.28	97.13985
Sr 216.596	4908.01b	ppb	4.9316	0.1	11987.3	98.16027
Ti 334.941	1000.25b	ppb	0.1339	0.0	75468.9	100.02540
Tl 190.794	983.753b	ppb	18.0729	1.8	226.858	98.37529
V 292.401	1023.54b	ppb	0.7710	0.1	8306.99	102.35371
Zn 206.200	1020.51b	ppb	4.8797	0.5	537.167	102.05059

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Initial Calib Blank (ICB) 4/8/2019, 11:38:57 AM Rack S, Tube 1

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5735	1.2668	0.6970
Al 308.215	-12.6111u	-14.8473u	-6.2869u
As 188.980	10.5359	11.8722	6.3887
B 249.678	42.6660	38.4891	32.6564
Ba 389.178	1.6880	1.2855	-0.8117u
Be 313.042	0.0395	0.0256	0.0383
Ca 370.602	0.0697	4.962	1.442
Cd 226.502	0.2341	0.2973	0.4516
Co 228.615	0.0666	0.0794	0.2246
Cr 267.716	-0.1726u	-0.1137u	0.4890
Cu 324.754	-0.6732u	-1.4498u	0.2175
Fe 271.441	-2.7841u	0.5370	0.5231
K 766.491	-0.4920u	-1.6776u	-1.3765u
Mg 279.078	0.9880	-3.4081u	0.7939
Mn 257.610	-0.1321u	-0.0366u	0.0077
Mo 202.032	2.0165	1.8654	2.2239
Na 330.237	193.614	-293.661u	-32.8680u
Ni 231.604	0.2635	3.8614	-0.2122u
Pb 220.353	1.7277	-4.9287u	-1.3886u
Sb 206.834	-0.5527u	1.0601	6.8412
Se 196.026	2.5311	-0.3617u	-0.9764u
Si 288.158	-2.7115u	-1.7883u	-3.2585u
Sn 189.925	-7.1097u	5.1536	10.0790
Sr 216.596	-0.2773u	0.5433	1.2791
Ti 334.941	0.2677	0.2630	0.1613
Tl 190.794	-6.9802u	-13.1276u	-8.2239u
V 292.401	0.5357	-0.0183u	0.1831
Zn 206.200	3.9736	-0.1694u	1.6186

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.8458	ppb	0.3698	43.7	-33.5996	0.84578
Al 308.215	-11.2484	ppb	4.4399	39.5	224.508	-11.24843
As 188.980	9.5989	ppb	2.8593	29.8	3.6099	9.59893
B 249.678	37.9372	ppb	5.0275	13.3	224.983	37.93717
Ba 389.178	0.7206	ppb	1.3422	186.3	-27.4037	0.72061
Be 313.042	0.0344	ppb	0.0077	22.4	-398.263	0.03444
Ca 370.602	2.158	ppb	2.523	116.9	12.24	2.15773
Cd 226.502	0.3277	ppb	0.1119	34.1	6.1733	0.32767
Co 228.615	0.1235	ppb	0.0878	71.1	-7.9746	0.12353
Cr 267.716	0.0676	ppb	0.3661	542.0	11.3128	0.06755
Cu 324.754	-0.6352	ppb	0.8343	131.4	457.914	-0.63516
Fe 271.441	-0.5747	ppb	1.9134	333.0	45.5239	-0.57466
K 766.491	-1.1820	ppb	0.6163	52.1	214.622	-1.18202
Mg 279.078	-0.5420	ppb	2.4840	458.3	27.6131	-0.54203
Mn 257.610	-0.0537	ppb	0.0715	133.1	18.7397	-0.05367
Mo 202.032	2.0353	ppb	0.1800	8.8	5.4821	2.03525
Na 330.237	-44.3048	ppb	243.839	550.4	31.3910	-44.30483
Ni 231.604	1.3042	ppb	2.2273	170.8	-1.4529	1.30422
Pb 220.353	-1.5299	ppb	3.3304	217.7	1.0978	-1.52986
Sb 206.834	2.4495	ppb	3.8879	158.7	6.6141	2.44954
Se 196.026	0.3977	ppb	1.8730	471.0	4.4499	0.39767
Si 288.158	-2.5861uv	ppb	0.7431	28.7	565.063	-2.58610

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	2.7076	ppb	8.8515	326.9	-0.4059	2.70764
Sr 216.596	0.5151	ppb	0.7786	151.2	4.5982	0.51505
Ti 334.941	0.2307	ppb	0.0601	26.1	-7.7441	0.23066
Tl 190.794	-9.4439	ppb	3.2502	34.4	-4.7272	-9.44392
V 292.401	0.2335	ppb	0.2804	120.1	-9.9670	0.23351
Zn 206.200	1.8076	ppb	2.0780	115.0	-0.3584	1.80760

CRI (CRI) **4/8/2019, 11:43:08 AM** **Rack S, Tube 4**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates	Concentration	
Ag 328.068	10.9981	10.1466	9.8894
Al 308.215	182.468	183.195	182.458
As 188.980	20.0888	24.6715	18.7789
B 249.678	109.920	108.427	108.238
Ba 389.178	10.1473	4.9701	11.8248
Be 313.042	3.9802	3.9545	3.9922
Ca 370.602	497.9	498.3	494.6
Cd 226.502	5.3181	5.1942	5.0081
Co 228.615	8.8148	9.2565	10.6789
Cr 267.716	10.4533	10.4336	10.6917
Cu 324.754	18.8610	18.4202	18.8338
Fe 271.441	47.8176	37.6174	35.3078
K 766.491	916.188	916.339	918.833
Mg 279.078	487.182	489.456	484.979
Mn 257.610	10.6994	10.7412	10.8361
Mo 202.032	13.0045	11.1652	11.1461
Na 330.237	854.393	1044.20	1234.70
Ni 231.604	41.2051	38.3247	41.4126
Pb 220.353	1.4568	7.0319	24.1065
Sb 206.834	13.6869	24.9404	21.0564
Se 196.026	18.4844	19.0270	20.0771
Si 288.158	7.8950	6.7403	3.8003
Sn 189.925	54.2627	51.5217	51.0424
Sr 216.596	10.8376	7.9326	9.2414
Ti 334.941	9.8550	9.8278	10.0249
Tl 190.794	20.5833	22.4584	18.6850
V 292.401	11.2354	9.7743	10.3552
Zn 206.200	21.2115	20.4505	23.4492

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	10.3447	ppb	0.5803	5.6	221.748	103.44685
Al 308.215	182.707	ppb	0.4227	0.2	552.604	91.35358
As 188.980	21.1797	ppb	3.0941	14.6	6.2829	105.89863
B 249.678	108.862	ppb	0.9216	0.8	679.876	108.86172
Ba 389.178	8.9807	ppb	3.5731	39.8	15.0052	89.80743
Be 313.042	3.9756	ppb	0.0193	0.5	2649.53	99.39069
Ca 370.602	496.9	ppb	2.013	0.4	715.2	99.38273
Cd 226.502	5.1735	ppb	0.1560	3.0	61.6972	103.46935
Co 228.615	9.5834	ppb	0.9741	10.2	23.5809	95.83385
Cr 267.716	10.5262	ppb	0.1436	1.4	163.078	105.26202
Cu 324.754	18.7050	ppb	0.2470	1.3	962.236	93.52492
Fe 271.441	40.2476	ppb	6.6567	16.5	68.0841	80.49520
K 766.491	917.120	ppb	1.4857	0.2	15824.9	91.71201

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	487.206	ppb	2.2386	0.5	621.291	97.44118
Mn 257.610	10.7589	ppb	0.0700	0.7	761.558	107.58881
Mo 202.032	11.7719	ppb	1.0675	9.1	19.0038	117.71935
Na 330.237	1044.43	ppb	190.155	18.2	57.7454	104.44310
Ni 231.604	40.3141	ppb	1.7260	4.3	36.8575	100.78533
Pb 220.353	10.8650	ppb	11.8014	108.6	5.6723	108.65044
Sb 206.834	19.8946	ppb	5.7160	28.7	12.1325	99.47292
Se 196.026	19.1962	ppb	0.8097	4.2	7.8846	95.98088
Si 288.158	6.1452	ppb	2.1112	34.4	607.583	6.14522R
Sn 189.925	52.2756	ppb	1.7375	3.3	10.7313	104.55119
Sr 216.596	9.3372	ppb	1.4549	15.6	25.9346	93.37167
Ti 334.941	9.9025	ppb	0.1068	1.1	723.305	99.02538
Tl 190.794	20.5756	ppb	1.8867	9.2	2.2603	82.30225
V 292.401	10.4549	ppb	0.7356	7.0	73.1398	104.54942
Zn 206.200	21.7037	ppb	1.5588	7.2	10.1449	108.51856

Interf Check A (ICSA)

4/8/2019, 11:51:54 AM

Rack S, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2231u	2.4885	1.7521
Al 308.215	521167	522580	521315
As 188.980	8.1602	0.5397u	24.1255
B 249.678	11.9197u	13.7667u	11.7681u
Ba 389.178	-5.1922	-4.3616	-2.4070
Be 313.042	-0.1470u	-0.1538u	-0.1382u
Ca 370.602	506805	505074	504154
Cd 226.502	1.1963	1.8591	1.2416
Co 228.615	0.4309u	0.9693u	0.0808u
Cr 267.716	1.2064	0.8732	1.2415
Cu 324.754	-0.5823	-1.0907	0.2678
Fe 271.441	198253	198466	197980
K 766.491	2.9308	2.4044	4.2769
Mg 279.078	522312	523118	521901
Mn 257.610	-1.9792	-2.2930	-2.0021
Mo 202.032	1.8862	3.5514	2.1713
Na 330.237	-358.534u	371.768	288.173u
Ni 231.604	2.6477	9.4461	3.2861
Pb 220.353	4.1233	6.5523	5.0935
Sb 206.834	7.2988	8.2203	-1.7251
Se 196.026	-12.2496u	4.0895	-7.2508u
Si 288.158	16.0070	15.7919	14.4022
Sn 189.925	-16.3657u	-12.7994u	0.3953
Sr 216.596	6.7921	8.7435	8.1237
Ti 334.941	3.7177	3.6363	3.8842
Tl 190.794	-21.3912u	-26.2346u	-28.5859u
V 292.401	-0.0700	1.8010	1.5533
Zn 206.200	0.8837	9.2897	4.9470

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	1.4879	ppb	1.1556	77.7	-50.6930	1.48789
Al 308.215	521687	ppb	776.401	0.1	881915	-
As 188.980	10.9418	ppb	12.0364	110.0	3.1520	10.94181
B 249.678	12.4848	ppb	1.1127	8.9	130.798	12.48484

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ba 389.178	-3.9869	ppb	1.4299	35.9	389.383	-3.98693
Be 313.042	-0.1463	ppb	0.0078	5.4	-454.669	-0.14634
Ca 370.602	505344	ppb	1346	0.3	717433	-
Cd 226.502	1.4323	ppb	0.3703	25.9	282.133	1.43231
Co 228.615	0.4937	ppb	0.4475	90.7	-10.5942	0.49366
Cr 267.716	1.1070	ppb	0.2033	18.4	42.3984	1.10704
Cu 324.754	-0.4684	ppb	0.6864	146.5	493.335	-0.46842
Fe 271.441	198233	ppb	243.483	0.1	107300	-
K 766.491	3.2040	ppb	0.9657	30.1	289.181	3.20404
Mg 279.078	522444	ppb	619.451	0.1	635991	-
Mn 257.610	-2.0914	ppb	0.1749	8.4	1600.30	-2.09140
Mo 202.032	2.5363	ppb	0.8906	35.1	4.2450	2.53630
Na 330.237	100.469	ppb	399.700	397.8	26.9146	100.46929
Ni 231.604	5.1266	ppb	3.7544	73.2	2.3745	5.12663
Pb 220.353	5.2564	ppb	1.2227	23.3	2.8013	5.25637
Sb 206.834	4.5980	ppb	5.4953	119.5	10.2983	4.59800
Se 196.026	-5.1370	ppb	8.3721	163.0	2.8237	-5.13695
Si 288.158	15.4004	ppb	0.8711	5.7	641.447	15.40038
Sn 189.925	-9.5899	ppb	8.8294	92.1	-3.1692	-9.58993
Sr 216.596	7.8865	ppb	0.9971	12.6	42.0437	7.88646
Ti 334.941	3.7461	ppb	0.1264	3.4	1446.41	3.74608
Tl 190.794	-25.4039	ppb	3.6686	14.4	-12.5943	-25.40388K
V 292.401	1.0948	ppb	1.0163	92.8	7.6654	1.09477
Zn 206.200	5.0401	ppb	4.2037	83.4	1.7679	5.04013

Interf Check AB (ICSAB)

4/8/2019, 11:56:06 AM

Rack S, Tube 6

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	214.819	216.735	215.064
Al 308.215	510802	510787	513222
As 188.980	104.393	113.023	101.659
B 249.678	12.3094u	10.9111u	11.0306u
Ba 389.178	523.286	524.361	525.068
Be 313.042	495.179	494.927	497.466
Ca 370.602	495769	494783	496830
Cd 226.502	973.666	973.918	977.495
Co 228.615	492.155	489.610	493.025
Cr 267.716	494.912	494.940	497.547
Cu 324.754	526.988	528.455	526.763
Fe 271.441	193944	193816	195115
K 766.491	1.4085	1.7147	2.7666
Mg 279.078	512434	511254	513175
Mn 257.610	495.418	494.358	496.504
Mo 202.032	1028.23	1021.66	1034.73
Na 330.237	14.3266u	-186.436u	-162.745u
Ni 231.604	980.935	972.302	981.535
Pb 220.353	46.8611	41.4957	41.3185
Sb 206.834	634.903	641.539	643.285
Se 196.026	50.8055	40.5279	42.9952
Si 288.158	-32.6146	-26.0232	-27.2928
Sn 189.925	991.935	994.820	977.341
Sr 216.596	9.9805	8.4259	9.8155
Ti 334.941	3.4719	3.3955	3.4088

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	79.6291	103.584	78.1825
V 292.401	510.486	510.572	513.123
Zn 206.200	926.653	937.064	943.483

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	215.539	ppb	1.0428	0.5	5705.80	107.76972
Al 308.215	511604	ppb	1401.49	0.3	864895	102.32071
As 188.980	106.358	ppb	5.9318	5.6	25.8653	106.35828
B 249.678	11.4170	ppb	0.7751	6.8	-133.682	-
Ba 389.178	524.238	ppb	0.8972	0.2	3068.39	104.84766
Be 313.042	495.857	ppb	1.3989	0.3	383105	99.17143
Ca 370.602	495794	ppb	1024	0.2	703885	99.15879
Cd 226.502	975.027	ppb	2.1416	0.2	11421.5	97.50267
Co 228.615	491.597	ppb	1.7747	0.4	1620.70	98.31931
Cr 267.716	495.800	ppb	1.5133	0.3	7219.80	99.15994
Cu 324.754	527.402	ppb	0.9185	0.2	14267.3	105.48038
Fe 271.441	194292	ppb	715.743	0.4	105192	97.14575
K 766.491	1.9633	ppb	0.7124	36.3	268.088	-
Mg 279.078	512288	ppb	968.496	0.2	623623	102.45753
Mn 257.610	495.427	ppb	1.0732	0.2	35670.2	99.08537
Mo 202.032	1028.21	ppb	6.5390	0.6	1428.79	102.82057
Na 330.237	-111.618	ppb	109.713	98.3	12.1028	-
Ni 231.604	978.257	ppb	5.1658	0.5	957.853	97.82573
Pb 220.353	43.2251	ppb	3.1501	7.3	16.5359	86.45022
Sb 206.834	639.909	ppb	4.4226	0.7	211.412	106.65148
Se 196.026	44.7762	ppb	5.3653	12.0	11.9993	89.55238
Si 288.158	-28.6436	ppb	3.4971	12.2	656.826	-
Sn 189.925	988.032	ppb	9.3702	0.9	220.982	98.80323
Sr 216.596	9.4073	ppb	0.8539	9.1	31.8143	-
Ti 334.941	3.4254	ppb	0.0408	1.2	1399.44	-
Tl 190.794	87.1319	ppb	14.2665	16.4	13.8432	87.13194
V 292.401	511.394	ppb	1.4983	0.3	4124.35	102.27873
Zn 206.200	935.733	ppb	8.4935	0.9	493.069	93.57333

LRA1 (CCV)

4/8/2019, 12:00:19 PM

Rack S, Tube 7

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	4984.77x	5033.92x	5038.85x
Al 308.215	27.9042	23.8507	22.6122
As 188.980	104.481	105.208	112.506
B 249.678	4810.63	4865.63	4884.48
Ba 389.178	-3.2971u	1.8520	0.9072
Be 313.042	0.0514	0.0613	0.0459
Ca 370.602	54.38	40.47	36.45
Cd 226.502	0.2236	0.4530	0.6965
Co 228.615	4.6872	4.5322	4.7916
Cr 267.716	0.6611	-0.0912u	0.5951
Cu 324.754	0.2214	-0.9136u	-0.1676u
Fe 271.441	21.1776	1.9663	29.6595
K 766.491	39982.1x	39953.0x	39972.1x
Mg 279.078	40.7846	39.2636	37.6153
Mn 257.610	16.8320	17.0072	16.8956
Mo 202.032	1.2524	2.7803	2.2288

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	105015x	102812x	103926x
Ni 231.604	5.0325	4.5257	4.3729
Pb 220.353	19614.9x	19616.5x	19656.4x
Sb 206.834	4.1762	0.3750	8.0582
Se 196.026	6.5751	17.8173	-5.1130u
Si 288.158	-3.5077u	-3.0369u	-3.8567u
Sn 189.925	3.8856	11.8880	-0.9043u
Sr 216.596	0.9811	1.8550	2.2672
Ti 334.941	4.4271	4.4847	4.4122
Tl 190.794	-16.4830u	-8.5776u	-1.2149u
V 292.401	0.3899	0.0373u	0.3818
Zn 206.200	0.4331	1.9307	-1.1107u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	5019.18xb	ppb	29.9012	0.6	134877	-
Al 308.215	24.7890b	ppb	2.7680	11.2	285.400	-
As 188.980	107.398b	ppb	4.4386	4.1	27.5917	1.07398Q
B 249.678	4853.58b	ppb	38.3738	0.8	31114.0	97.07168
Ba 389.178	-0.1793b	ppb	2.7411	1528.7	-31.9455	-
Be 313.042	0.0529b	ppb	0.0078	14.8	-391.395	-
Ca 370.602	43.77b	ppb	9.404	21.5	71.60	-
Cd 226.502	0.4577b	ppb	0.2365	51.7	7.6148	-
Co 228.615	4.6703b	ppb	0.1305	2.8	7.2321	-
Cr 267.716	0.3883b	ppb	0.4166	107.3	16.5001	-
Cu 324.754	-0.2866b	ppb	0.5768	201.3	467.007	-
Fe 271.441	17.6012b	ppb	14.1888	80.6	55.5854	-
K 766.491	39969.1xb	ppb	14.7543	0.0	679673	99.92265
Mg 279.078	39.2212b	ppb	1.5851	4.0	75.8599	-
Mn 257.610	16.9116b	ppb	0.0887	0.5	1181.69	-
Mo 202.032	2.0872b	ppb	0.7738	37.1	5.5541	-
Na 330.237	103918xb	ppb	1101.67	1.1	2575.70	103.91779
Ni 231.604	4.6437b	ppb	0.3453	7.4	1.8234	-
Pb 220.353	19629.3xb	ppb	23.5144	0.1	7253.74	98.14638
Sb 206.834	4.2031b	ppb	3.8416	91.4	7.1667	-
Se 196.026	6.4264b	ppb	11.4659	178.4	5.5526	-
Si 288.158	-3.4671uvb	ppb	0.4114	11.9	561.800	-
Sn 189.925	4.9565b	ppb	6.4630	130.4	0.1084	-
Sr 216.596	1.7011b	ppb	0.6567	38.6	7.4844	-
Ti 334.941	4.4413b	ppb	0.0383	0.9	308.160	-
Tl 190.794	-8.7585b	ppb	7.6357	87.2	-4.5629	-
V 292.401	0.2697b	ppb	0.2013	74.6	-9.8848	-
Zn 206.200	0.4177b	ppb	1.5208	364.1	-1.0924	-

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4/8/2019, 12:04:33 PM

Rack S, Tube 9

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7567	-0.3775u	1.5518
Al 308.215	-5.4620u	-4.9663u	0.6691
As 188.980	-1.8183u	-0.1919u	-1.5886u
B 249.678	156.457	138.943	121.678
Ba 389.178	-5.5760u	-3.1504u	-1.0548u
Be 313.042	0.0108	0.0329	0.0033
Ca 370.602	20.76	9.106	13.63

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	-0.0310u	0.3925	0.0272
Co 228.615	-0.6466u	-0.6726u	0.3256
Cr 267.716	0.1768	-0.0806u	0.1699
Cu 324.754	-0.2915u	-1.2925u	-1.4435u
Fe 271.441	-5.7550u	-4.4387u	8.5982
K 766.491	3.3514	2.0171	2.2274
Mg 279.078	1.9739	8.6196	6.7802
Mn 257.610	0.0713	0.1030	0.0347
Mo 202.032	2.1218	3.4337	2.1965
Na 330.237	230.677	43.1832	-289.969u
Ni 231.604	0.9700	1.9468	0.6916
Pb 220.353	-9.7334u	-1.2466u	7.3919
Sb 206.834	-12.5154u	3.8259	-2.1209u
Se 196.026	-8.2706u	-4.1399u	-4.1214u
Si 288.158	-1.6743u	-0.8599u	0.4794
Sn 189.925	1.6866	8.8172	6.6957
Sr 216.596	-1.5122u	-1.1092u	0.1806
Ti 334.941	0.2198	0.0530	0.0176
Tl 190.794	-4.7548u	1.5468	-10.2905u
V 292.401	-0.7257u	1.0122	0.6736
Zn 206.200	1.1397	5.4633	0.4690

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6437	ppb	0.9696	150.6	-39.0309
Al 308.215	-3.2531	ppb	3.4057	104.7	238.023
As 188.980	-1.1996	ppb	0.8802	73.4	0.9220
B 249.678	139.026	ppb	17.3896	12.5	873.399
Ba 389.178	-3.2604	ppb	2.2626	69.4	-47.6445
Be 313.042	0.0157	ppb	0.0154	98.1	-412.778
Ca 370.602	14.50	ppb	5.878	40.5	29.77
Cd 226.502	0.1296	ppb	0.2296	177.2	3.9044
Co 228.615	-0.3312	ppb	0.5689	171.8	-9.4953
Cr 267.716	0.0887	ppb	0.1467	165.4	11.6189
Cu 324.754	-1.0092	ppb	0.6261	62.0	448.167
Fe 271.441	-0.5318	ppb	7.9342	1491.9	45.5303
K 766.491	2.5320	ppb	0.7174	28.3	277.756
Mg 279.078	5.7913	ppb	3.4315	59.3	35.3211
Mn 257.610	0.0697	ppb	0.0342	49.1	27.2055
Mo 202.032	2.5840	ppb	0.7368	28.5	6.2443
Na 330.237	-5.3695	ppb	263.697	4911.0	32.3320
Ni 231.604	1.2028	ppb	0.6592	54.8	-1.5523
Pb 220.353	-1.1960	ppb	8.5628	715.9	1.2212
Sb 206.834	-3.6035	ppb	8.2709	229.5	4.7091
Se 196.026	-5.5106	ppb	2.3902	43.4	3.3706
Si 288.158	-0.6849uv	ppb	1.0874	158.8	573.305
Sn 189.925	5.7332	ppb	3.6614	63.9	0.2738
Sr 216.596	-0.8136	ppb	0.8842	108.7	1.3483
Ti 334.941	0.0968	ppb	0.1080	111.5	-17.8337
Tl 190.794	-4.4995	ppb	5.9228	131.6	-3.5773
V 292.401	0.3201	ppb	0.9213	287.8	-9.2835
Zn 206.200	2.3573	ppb	2.7107	115.0	-0.0683

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 12:08:47 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	512.678	507.668	511.522
Al 308.215	10266.1	10265.2	10277.3
As 188.980	533.807	526.687	528.757
B 249.678	550.582	550.990	550.184
Ba 389.178	516.198	513.880	510.061
Be 313.042	524.501	524.529	523.782
Ca 370.602	10304	10311	10291
Cd 226.502	516.830	516.578	518.916
Co 228.615	515.802	513.630	516.021
Cr 267.716	515.629	514.918	516.191
Cu 324.754	512.783	507.886	511.910
Fe 271.441	10315.9	10294.2	10320.3
K 766.491	9784.31	9794.67	9777.32
Mg 279.078	10241.6	10229.2	10238.5
Mn 257.610	513.527	513.079	512.824
Mo 202.032	513.742	512.695	509.525
Na 330.237	10423.5	10580.0	10226.0
Ni 231.604	517.812	514.252	517.085
Pb 220.353	512.915	514.705	509.337
Sb 206.834	504.399	521.097	514.264
Se 196.026	524.183	511.785	505.213
Si 288.158	5104.42	5079.64	5068.15
Sn 189.925	511.394	506.424	523.113
Sr 216.596	516.265	515.287	515.193
Ti 334.941	514.905	513.914	514.121
Tl 190.794	533.072	518.913	517.121
V 292.401	522.411	522.334	521.242
Zn 206.200	1030.50	1030.12	1025.69

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	510.623	ppb	2.6235	0.5	13668.7	102.12451
Al 308.215	10269.5	ppb	6.7748	0.1	17615.8	102.69528
As 188.980	529.750	ppb	3.6624	0.7	128.410	105.95009
B 249.678	550.585	ppb	0.4029	0.1	3503.24	110.11708Q
Ba 389.178	513.379	ppb	3.0988	0.6	2589.95	102.67587
Be 313.042	524.271	ppb	0.4237	0.1	405032	104.85410
Ca 370.602	10302	ppb	10.05	0.1	14643	103.01859
Cd 226.502	517.441	ppb	1.2830	0.2	5938.56	103.48826
Co 228.615	515.151	ppb	1.3220	0.3	1710.17	103.03019
Cr 267.716	515.579	ppb	0.6380	0.1	7492.25	103.11583
Cu 324.754	510.860	ppb	2.6117	0.5	13799.8	102.17196
Fe 271.441	10310.1	ppb	13.9710	0.1	5650.00	103.04968
K 766.491	9785.43	ppb	8.7298	0.1	166578	97.85434
Mg 279.078	10236.5	ppb	6.4409	0.1	12484.2	102.36454
Mn 257.610	513.143	ppb	0.3561	0.1	35240.8	102.62866
Mo 202.032	511.987	ppb	2.1960	0.4	713.592	102.39742
Na 330.237	10409.8	ppb	177.405	1.7	271.874	104.09830
Ni 231.604	516.383	ppb	1.8812	0.4	504.084	103.27660
Pb 220.353	512.319	ppb	2.7334	0.5	190.702	102.46383
Sb 206.834	513.253	ppb	8.3948	1.6	168.785	102.65065
Se 196.026	513.727	ppb	9.6330	1.9	98.2327	102.74540
Si 288.158	5084.07	ppb	18.5385	0.4	22288.7	101.68133

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	513.644	ppb	8.5690	1.7	114.395	102.72876
Sr 216.596	515.581	ppb	0.5938	0.1	1257.79	103.11629
Ti 334.941	514.313	ppb	0.5225	0.1	38814.6	102.86263
Tl 190.794	523.035	ppb	8.7383	1.7	119.217	104.60709
V 292.401	521.996	ppb	0.6540	0.1	4231.24	104.39915
Zn 206.200	1028.77	ppb	2.6773	0.3	541.810	102.87697

Cont Calib Blank (CCB) 4/8/2019, 12:15:39 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1134	0.8512	0.4459
Al 308.215	-14.0314u	-8.9128u	-21.0690u
As 188.980	2.0871	0.4344	1.3303
B 249.678	13.9530	12.8001	12.4364
Ba 389.178	-0.3427u	3.0092	-1.3806u
Be 313.042	-0.0043u	0.0125	0.0138
Ca 370.602	7.417	-4.271u	12.65
Cd 226.502	0.2185	0.6040	0.1434
Co 228.615	0.1325	-0.0395u	0.4431
Cr 267.716	0.1480	0.1525	-0.5086u
Cu 324.754	0.6687	-0.8858u	-0.6780u
Fe 271.441	-4.5748u	-3.1088u	-12.1742u
K 766.491	-1.3448u	-2.9128u	0.3187
Mg 279.078	0.6982	3.5254	-7.1780u
Mn 257.610	0.0335	-0.0825u	0.0015
Mo 202.032	1.3253	-0.4006u	2.0447
Na 330.237	136.930	215.796	-251.034u
Ni 231.604	2.9992	1.1138	0.9729
Pb 220.353	5.3326	9.4304	-4.4606u
Sb 206.834	1.6762	3.2239	-4.9176u
Se 196.026	0.9557	4.6469	-5.7012u
Si 288.158	-3.8814u	-0.2355u	-2.8301u
Sn 189.925	17.6674	11.1545	-2.4357u
Sr 216.596	-0.7235u	1.6164	0.7406
Ti 334.941	0.0621	-0.0282u	0.2019
Tl 190.794	-8.4647u	1.5923	1.0227
V 292.401	0.6936	-0.3278u	0.0116
Zn 206.200	0.3584	0.5568	-0.5618u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.8035	ppb	0.3363	41.9	-34.7376	0.80347
Al 308.215	-14.6711	ppb	6.1033	41.6	218.708	-14.67105
As 188.980	1.2839	ppb	0.8273	64.4	1.5216	1.28393
B 249.678	13.0632	ppb	0.7918	6.1	65.4415	13.06319
Ba 389.178	0.4286	ppb	2.2943	535.2	-28.8903	0.42864
Be 313.042	0.0073	ppb	0.0101	137.8	-419.176	0.00731
Ca 370.602	5.266	ppb	8.664	164.5	16.67	5.26576
Cd 226.502	0.3220	ppb	0.2471	76.7	6.0978	0.32198
Co 228.615	0.1787	ppb	0.2446	136.9	-7.7823	0.17871
Cr 267.716	-0.0694	ppb	0.3804	548.4	9.3258	-0.06937
Cu 324.754	-0.2983	ppb	0.8439	282.9	466.678	-0.29835
Fe 271.441	-6.6192	ppb	4.8662	73.5	42.2618	-6.61925
K 766.491	-1.3130	ppb	1.6160	123.1	212.395	-1.31298

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-0.9848	ppb	5.5466	563.2	27.0742	-0.98478
Mn 257.610	-0.0158	ppb	0.0600	378.8	21.3297	-0.01583
Mo 202.032	0.9898	ppb	1.2567	127.0	4.0301	0.98978
Na 330.237	33.8975	ppb	249.889	737.2	33.3121	33.89754
Ni 231.604	1.6953	ppb	1.1314	66.7	-1.0689	1.69531
Pb 220.353	3.4341	ppb	7.1374	207.8	2.9320	3.43414
Sb 206.834	-0.0058	ppb	4.3235	74468.9	5.8410	-0.00581
Se 196.026	-0.0329	ppb	5.2444	15947.0	4.3713	-0.03289
Si 288.158	-2.3157 ^{uv}	ppb	1.8766	81.0	566.046	-2.31566
Sn 189.925	8.7954	ppb	10.2571	116.6	0.9619	8.79539
Sr 216.596	0.5445	ppb	1.1822	217.1	4.6789	0.54449
Ti 334.941	0.0786	ppb	0.1159	147.5	-19.2189	0.07860
Tl 190.794	-1.9499	ppb	5.6492	289.7	-2.9837	-1.94990
V 292.401	0.1258	ppb	0.5202	413.6	-10.7885	0.12578
Zn 206.200	0.1178	ppb	0.5968	506.6	-1.2510	0.11781

fe (Samp) 4/8/2019, 12:20:48 PM Rack 1, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	4.1805u	6.5983	4.5033u
Al 308.215	-28.4604u	-22.2332u	-28.4836u
As 188.980	21.8252	20.2155	18.7124
B 249.678	52.0993u	48.6613u	47.9323u
Ba 389.178	-0.4262	2.2142	6.8116
Be 313.042	0.0361	0.0374	0.0275
Ca 370.602	124.8u	123.6u	128.9u
Cd 226.502	3.4673	4.9644	4.4094
Co 228.615	5.3862u	5.8294u	6.4028
Cr 267.716	-1.5501	-1.9930	-1.6176
Cu 324.754	-3.9316	-4.1978	-2.8742
Fe 271.441	1014909x	1011290x	1013180x
K 766.491	0.4825	1.3132	1.8887
Mg 279.078	47.1565	47.7306	47.0082
Mn 257.610	-6.2767	-6.1584	-5.9759
Mo 202.032	1.8392u	2.0204u	0.2523u
Na 330.237	783.528u	997.410u	905.958u
Ni 231.604	2.4072	-2.7804u	-0.8615u
Pb 220.353	-9.1614	-2.3789	-17.1921u
Sb 206.834	-18.9992	-4.9583	-11.6674
Se 196.026	13.4468u	-7.4832u	-3.6829u
Si 288.158	-4.7912u	-4.9923u	-2.9565u
Sn 189.925	7.6466	2.1523	11.6447
Sr 216.596	2.6031	2.1989	1.4982
Ti 334.941	0.2871	0.2780	-0.0911u
Tl 190.794	10.1994u	5.9586u	5.6875u
V 292.401	-0.2417	-0.2689	-0.6040
Zn 206.200	-10.4520u	-9.2524u	-11.3624u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	5.0940b	ppb	1.3127	25.8	-83.1008
Al 308.215	-26.3924b	ppb	3.6020	13.6	226.412
As 188.980	20.2511b	ppb	1.5567	7.7	1.6663
B 249.678	49.5643b	ppb	2.2255	4.5	680.934

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	2.8665b	ppb	3.6627	127.8	132.882
Be 313.042	0.0337b	ppb	0.0054	16.0	-408.750
Ca 370.602	125.7b	ppb	2.773	2.2	-1250
Cd 226.502	4.2804b	ppb	0.7569	17.7	1291.36
Co 228.615	5.8728b	ppb	0.5097	8.7	-8.9979
Cr 267.716	-1.7202b	ppb	0.2387	13.9	58.7772
Cu 324.754	-3.6679b	ppb	0.7001	19.1	537.042
Fe 271.441	1013126xb	ppb	1810.15	0.2	548199
K 766.491	1.2282b	ppb	0.7069	57.6	255.593
Mg 279.078	47.2984b	ppb	0.3816	0.8	85.8377
Mn 257.610	-6.1370b	ppb	0.1515	2.5	156.967
Mo 202.032	1.3706b	ppb	0.9728	71.0	-5.2846
Na 330.237	895.632b	ppb	107.314	12.0	14.7213
Ni 231.604	-0.4116b	ppb	2.6229	637.3	-3.1410
Pb 220.353	-9.5774b	ppb	7.4153	77.4	1.8663
Sb 206.834	-11.8750b	ppb	7.0227	59.1	17.4126
Se 196.026	0.7602b	ppb	11.1500	1466.6	1.3727
Si 288.158	-4.2467uvb	ppb	1.1218	26.4	557.483
Sn 189.925	7.1479b	ppb	4.7658	66.7	0.5912
Sr 216.596	2.1001b	ppb	0.5590	26.6	107.537
Ti 334.941	0.1580b	ppb	0.2158	136.6	-12.8683
Tl 190.794	7.2819b	ppb	2.5303	34.7	-22.0216
V 292.401	-0.3716b	ppb	0.2018	54.3	35.2373
Zn 206.200	-10.3556b	ppb	1.0583	10.2	-4.6457

mg (Samp) 4/8/2019, 12:25:58 PM Rack 1, Tube 2
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0810	-0.0535u	-0.1529u
Al 308.215	20.2051	24.7883	27.5238
As 188.980	-0.4513u	2.7397	1.2345
B 249.678	5.3549	2.8667	3.2367
Ba 389.178	5.4068	5.1694	7.4522
Be 313.042	0.0135u	0.0019u	-0.0074u
Ca 370.602	5.519	2.025	0.7142
Cd 226.502	0.3450	0.1829	0.3432
Co 228.615	0.5315	-1.5863u	0.8389
Cr 267.716	1.4195	1.8703	1.2947
Cu 324.754	1.2051	1.2165	1.0015
Fe 271.441	114.598	123.337	112.395
K 766.491	0.0292	0.7492	0.5257
Mg 279.078	827519x	828565x	827098x
Mn 257.610	-5.5354	-5.6991	-5.8529
Mo 202.032	1.2756	-0.6632u	1.4440
Na 330.237	-308.574u	-215.400u	-302.435u
Ni 231.604	3.0662	5.4496	4.2324
Pb 220.353	4.8807	3.4405	-1.6663u
Sb 206.834	-6.7911u	-0.0383u	-2.2282u
Se 196.026	-4.6112u	-0.1353u	4.3426
Si 288.158	-3.8028u	1.1273	-4.1098u
Sn 189.925	2.3822	3.6017	1.9275
Sr 216.596	-0.7334u	0.2380	-0.7125u
Ti 334.941	2.1888	2.2591	1.8898

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Label	Replicates Concentration		
Tl 190.794	-5.9665u	-11.7599u	5.2931
V 292.401	1.1529	0.9059	2.0722
Zn 206.200	7.7305	8.8455	4.7815

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2915b	ppb	0.6855	235.1	-53.0255
Al 308.215	24.1724b	ppb	3.6981	15.3	284.392
As 188.980	1.1743b	ppb	1.5963	135.9	1.5025
B 249.678	3.8194b	ppb	1.3426	35.2	6.0177
Ba 389.178	6.0095b	ppb	1.2551	20.9	651.665
Be 313.042	0.0027b	ppb	0.0104	393.5	-435.483
Ca 370.602	2.753b	ppb	2.484	90.2	13.77
Cd 226.502	0.2904b	ppb	0.0931	32.0	9.0670
Co 228.615	-0.0720b	ppb	1.3205	1835.0	-8.4503
Cr 267.716	1.5282b	ppb	0.3028	19.8	32.5664
Cu 324.754	1.1410b	ppb	0.1210	10.6	504.218
Fe 271.441	116.776b	ppb	5.7870	5.0	109.018
K 766.491	0.4347b	ppb	0.3685	84.8	242.105
Mg 279.078	827727xb	ppb	755.685	0.1	1007750
Mn 257.610	-5.6958b	ppb	0.1588	2.8	2184.60
Mo 202.032	0.6855b	ppb	1.1710	170.8	3.6060
Na 330.237	-275.470b	ppb	52.1122	18.9	25.4585
Ni 231.604	4.2494b	ppb	1.1918	28.0	1.4401
Pb 220.353	2.2183b	ppb	3.4403	155.1	2.4813
Sb 206.834	-3.0192b	ppb	3.4452	114.1	4.8972
Se 196.026	-0.1346b	ppb	4.4769	3325.2	4.3551
Si 288.158	-2.2618uvb	ppb	2.9390	129.9	567.435
Sn 189.925	2.6371b	ppb	0.8658	32.8	-0.4218
Sr 216.596	-0.4026b	ppb	0.5549	137.8	2.3650
Ti 334.941	2.1126b	ppb	0.1961	9.3	2007.69
Tl 190.794	-4.1444b	ppb	8.6713	209.2	-3.4900
V 292.401	1.3770b	ppb	0.6146	44.6	2.4973
Zn 206.200	7.1192b	ppb	2.0998	29.5	2.4464

al (Samp) 4/8/2019, 12:31:08 PM Rack 1, Tube 3

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.2741	0.4022	0.8545
Al 308.215	787651x	789121x	787779x
As 188.980	12.4580	7.4115	9.9656
B 249.678	3.8277	2.1851	3.1947
Ba 389.178	-0.0397u	0.6276	2.1272
Be 313.042	-0.0981u	-0.1026u	-0.0889u
Ca 370.602	5.067	13.48	10.38
Cd 226.502	-0.5659	-0.1363	0.0835
Co 228.615	-1.0987u	-1.2210u	0.0642
Cr 267.716	0.1556	0.4755	0.0990
Cu 324.754	0.2885	0.2003	1.2134
Fe 271.441	28.9245	2.5844	16.1961
K 766.491	-0.7041u	-0.4429u	0.0445
Mg 279.078	90.5678u	88.5670u	90.9858u
Mn 257.610	1.0739	0.9621	1.1166
Mo 202.032	6.4115	2.5025	2.0861

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Label	Replicates Concentration		
Na 330.237	-59.4842u	138.476	-309.666u
Ni 231.604	-2.7180u	-1.0674u	-1.0549u
Pb 220.353	-11.8289u	-4.6078u	-0.2547u
Sb 206.834	2.7753	0.7622	-2.6162u
Se 196.026	4.9269	18.2436	3.5635
Si 288.158	0.0108	0.8696	1.9841
Sn 189.925	-1.1142u	3.4742	3.3928
Sr 216.596	3.8507	2.9845	4.6855
Ti 334.941	0.0230	0.1517	0.0189
Tl 190.794	-12.8447u	-6.1869u	-33.3945u
V 292.401	1.0675	-0.8455u	1.2563
Zn 206.200	-2.0537u	1.0964	0.2660

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.8436b	ppb	0.4360	51.7	-32.2121
Al 308.215	788184xb	ppb	814.568	0.1	1332296
As 188.980	9.9450b	ppb	2.5233	25.4	3.7184
B 249.678	3.0692b	ppb	0.8285	27.0	1.3165
Ba 389.178	0.9050b	ppb	1.1098	122.6	-26.4785
Be 313.042	-0.0965b	ppb	0.0070	7.2	-468.204
Ca 370.602	9.643b	ppb	4.255	44.1	22.87
Cd 226.502	-0.2062b	ppb	0.3303	160.1	27.0870
Co 228.615	-0.7518b	ppb	0.7093	94.3	-10.9013
Cr 267.716	0.2434b	ppb	0.2030	83.4	16.2161
Cu 324.754	0.5674b	ppb	0.5612	98.9	489.279
Fe 271.441	15.9017b	ppb	13.1725	82.8	54.4006
K 766.491	-0.3675b	ppb	0.3799	103.4	228.468
Mg 279.078	90.0402b	ppb	1.2928	1.4	1.9118
Mn 257.610	1.0509b	ppb	0.0798	7.6	94.4002
Mo 202.032	3.6667b	ppb	2.3862	65.1	7.7480
Na 330.237	-76.8913b	ppb	224.578	292.1	30.6058
Ni 231.604	-1.6134b	ppb	0.9566	59.3	-4.2081
Pb 220.353	-5.5638b	ppb	5.8460	105.1	-2.7171
Sb 206.834	0.3071b	ppb	2.7244	887.1	5.9401
Se 196.026	8.9113b	ppb	8.1107	91.0	6.0051
Si 288.158	0.9548b	ppb	0.9894	103.6	580.057
Sn 189.925	1.9176b	ppb	2.6259	136.9	-0.5835
Sr 216.596	3.8402b	ppb	0.8506	22.1	12.7265
Ti 334.941	0.0645b	ppb	0.0755	117.0	-9.7448
Tl 190.794	-17.4754b	ppb	14.1826	81.2	-6.5957
V 292.401	0.4928b	ppb	1.1628	236.0	-9.5588
Zn 206.200	-0.2304b	ppb	1.6327	708.5	-1.4350

mn (Samp) 4/8/2019, 12:36:18 PM Rack 1, Tube 4
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7841	-0.9303	-1.3857
Al 308.215	45.6614	43.5477	37.3916
As 188.980	-0.3278u	11.7693	4.4935
B 249.678	2.2206	1.6596	1.0874
Ba 389.178	-3.4333u	-2.6786u	-2.2675u
Be 313.042	0.0066	0.0031u	0.0116
Ca 370.602	15.73	15.91	11.93

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	-0.1186u	-0.1445u	0.0517
Co 228.615	0.2888	1.5000	-0.3625u
Cr 267.716	-0.1096	-0.2326	-0.4538
Cu 324.754	-0.0895u	-0.5388u	-1.2782u
Fe 271.441	-3.2690u	-6.3908u	-4.1777u
K 766.491	-1.1571u	-0.2838u	-0.5951u
Mg 279.078	81.1166u	79.0180u	80.1391u
Mn 257.610	28333.8x	28320.8x	28336.2x
Mo 202.032	0.5234	0.8561	0.2352
Na 330.237	-423.602u	-154.433u	-113.849u
Ni 231.604	-2.2660u	-0.5161u	-1.6166u
Pb 220.353	-2.1236	-10.2395u	3.4759
Sb 206.834	-10.6453u	8.0759	2.4604
Se 196.026	7.4792	-7.9663	4.3081
Si 288.158	2.2104	4.9935	5.3719
Sn 189.925	5.9945	14.2743	-1.5005u
Sr 216.596	-0.0824u	-1.8746u	-0.1588u
Ti 334.941	0.1536	-0.1031u	-0.0522u
Tl 190.794	-17.2297	3.4016	-13.9986
V 292.401	-0.5344u	-1.3081u	-0.3558u
Zn 206.200	-1.8974u	0.6119	3.6626

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-1.0334b	ppb	0.3138	30.4	-37.6822
Al 308.215	42.2003b	ppb	4.2964	10.2	314.789
As 188.980	5.3116b	ppb	6.0899	114.7	2.3631
B 249.678	1.6559b	ppb	0.5666	34.2	-7.7303
Ba 389.178	-2.7931b	ppb	0.5913	21.2	-45.3821
Be 313.042	0.0071b	ppb	0.0042	59.5	-422.485
Ca 370.602	14.52b	ppb	2.250	15.5	387.7
Cd 226.502	-0.0704b	ppb	0.1066	151.3	1.6098
Co 228.615	0.4754b	ppb	0.9452	198.8	-6.7838
Cr 267.716	-0.2654b	ppb	0.1744	65.7	43.4592
Cu 324.754	-0.6355b	ppb	0.6002	94.4	457.875
Fe 271.441	-4.6125b	ppb	1.6057	34.8	43.3467
K 766.491	-0.6786b	ppb	0.4426	65.2	223.178
Mg 279.078	80.0912b	ppb	1.0501	1.3	-136.226
Mn 257.610	28330.3xb	ppb	8.2693	0.0	1941958
Mo 202.032	0.5383b	ppb	0.3107	57.7	3.4031
Na 330.237	-230.628b	ppb	168.348	73.0	26.8315
Ni 231.604	-1.4662b	ppb	0.8846	60.3	-4.1744
Pb 220.353	-2.9624b	ppb	6.8961	232.8	1.9290
Sb 206.834	-0.0364b	ppb	9.6071	26426.3	5.8336
Se 196.026	1.2737b	ppb	8.1576	640.5	7.1961
Si 288.158	4.1919b	ppb	1.7265	41.2	593.880
Sn 189.925	6.2561b	ppb	7.8906	126.1	0.3913
Sr 216.596	-0.7053b	ppb	1.0134	143.7	1.6402
Ti 334.941	-0.0006b	ppb	0.1359	23667.5	-25.4973
Tl 190.794	-9.2756b	ppb	11.0970	119.6	1.2398
V 292.401	-0.7328b	ppb	0.5062	69.1	-17.7729
Zn 206.200	0.7923b	ppb	2.7844	351.4	-0.8952

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co (Samp)	4/8/2019, 12:41:29 PM		Rack 1, Tube 5
Weight: 1	Volume: 1		Dilution: 1
Label	Replicates Concentration		
Ag 328.068	-0.0059u	0.1446	1.1826
Al 308.215	20.1549u	19.7896u	16.7115u
As 188.980	1.8959	2.3997	-1.4695u
B 249.678	18.9926	19.4892	19.8366
Ba 389.178	-2.7298u	-4.2067u	-2.6307u
Be 313.042	-0.0266u	-0.0170u	0.0076
Ca 370.602	7.553	3.671	2.103
Cd 226.502	0.3343	-0.3481u	-0.7823u
Co 228.615	24818.7x	24397.7x	24546.5x
Cr 267.716	0.6450	0.1106	0.3845
Cu 324.754	-0.5880u	0.2677	-0.6160u
Fe 271.441	-28.0100	-39.8937	-4.1382
K 766.491	-1.8702u	-0.8070u	-1.5306u
Mg 279.078	-1.3482u	-6.9945u	-5.9021u
Mn 257.610	1.6771	1.5750	1.3785
Mo 202.032	0.7950	-0.1127u	2.1309
Na 330.237	-150.064u	258.890	287.954
Ni 231.604	-4.9199u	-5.4586u	-8.5018u
Pb 220.353	-2.6417u	-7.2061u	2.5673u
Sb 206.834	-2.5514u	3.2968	-2.6678u
Se 196.026	-6.8962u	0.6354	12.6418
Si 288.158	-3.7953u	-5.0790u	-0.1852u
Sn 189.925	12.1242	2.8705	-4.5418u
Sr 216.596	1.7555	0.9872	-0.3590u
Ti 334.941	-0.1642u	-0.2491u	-0.1324u
Tl 190.794	-1.1425	-5.2027	4.2770
V 292.401	0.6443	-0.7356u	-0.1935u
Zn 206.200	4.6244	1.2127	2.6347

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4404b	ppb	0.6471	146.9	-44.7945
Al 308.215	18.8853b	ppb	1.8914	10.0	233.973
As 188.980	0.9420b	ppb	2.1036	223.3	0.9858
B 249.678	19.4395b	ppb	0.4242	2.2	104.543
Ba 389.178	-3.1891b	ppb	0.8827	27.7	-47.0120
Be 313.042	-0.0120b	ppb	0.0176	146.7	-435.286
Ca 370.602	4.442b	ppb	2.806	63.2	12.88
Cd 226.502	-0.2654b	ppb	0.5629	212.1	1.6487
Co 228.615	24587.6xb	ppb	213.452	0.9	82046.0
Cr 267.716	0.3800b	ppb	0.2673	70.3	15.9834
Cu 324.754	-0.3121b	ppb	0.5023	160.9	466.415
Fe 271.441	-24.0140b	ppb	18.2096	75.8	1161.81
K 766.491	-1.4026b	ppb	0.5430	38.7	210.871
Mg 279.078	-4.7482b	ppb	2.9948	63.1	22.4761
Mn 257.610	1.5435b	ppb	0.1517	9.8	129.238
Mo 202.032	0.9378b	ppb	1.1286	120.4	3.9399
Na 330.237	132.260b	ppb	244.932	185.2	35.6346
Ni 231.604	-6.2934b	ppb	1.9314	30.7	-28.2061
Pb 220.353	-2.4269b	ppb	4.8903	201.5	-3.7611
Sb 206.834	-0.6408b	ppb	3.4106	532.3	5.6692
Se 196.026	2.1270b	ppb	9.8540	463.3	4.7602
Si 288.158	-3.0199uvb	ppb	2.5374	84.0	563.055

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	3.4843b	ppb	8.3499	239.6	-0.2314
Sr 216.596	0.7946b	ppb	1.0703	134.7	5.4872
Ti 334.941	-0.1819b	ppb	0.0603	33.2	-38.8730
Tl 190.794	-0.6894b	ppb	4.7561	689.9	5.8353
V 292.401	-0.0949b	ppb	0.6952	732.5	-12.5096
Zn 206.200	2.8239b	ppb	1.7137	60.7	0.1822

cr (Samp) 4/8/2019, 12:46:39 PM Rack 1, Tube 6
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7843	0.1074	0.8982
Al 308.215	-8.3337u	-9.6069u	-4.4012u
As 188.980	1.1896u	11.2880	6.6928
B 249.678	10.1841	10.0118	8.4602
Ba 389.178	-0.0780u	0.0714	-0.2456u
Be 313.042	-0.0012u	0.0195	-0.0160u
Ca 370.602	14.82	12.06	2.086
Cd 226.502	-1.0384u	-0.3424u	-0.0673u
Co 228.615	-0.7415	-1.3992	-2.7621
Cr 267.716	24771.5x	24837.9x	24843.7x
Cu 324.754	-0.1413u	-0.0063	0.0142
Fe 271.441	13.6881	-4.7147	-4.9202
K 766.491	-1.3140u	-1.4577u	0.2067
Mg 279.078	3.5202	1.1368	-0.2099u
Mn 257.610	0.3141	0.3568	0.2249
Mo 202.032	1.6051	1.8752	-0.8349u
Na 330.237	417.642	-293.971u	156.095
Ni 231.604	4.5984	0.6942	-0.4992u
Pb 220.353	-2.1023	-7.7701u	-2.0243
Sb 206.834	18.4027	11.8115	5.7268
Se 196.026	-2.1114u	4.3339	10.2620
Si 288.158	-11.4611u	-8.9191u	-13.8409u
Sn 189.925	-0.6720u	0.8927	-0.3147u
Sr 216.596	0.9263	0.2782	0.2093
Ti 334.941	3.1569	2.8595	2.9007
Tl 190.794	-2.0606u	1.4091	0.7532
V 292.401	-8.8827u	-9.2969u	-9.2035u
Zn 206.200	10.3857u	6.9029u	4.4660u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5966b	ppb	0.4275	71.7	-40.3591
Al 308.215	-7.4473b	ppb	2.7137	36.4	229.729
As 188.980	6.3901b	ppb	5.0560	79.1	1.5279
B 249.678	9.5520b	ppb	0.9495	9.9	42.8896
Ba 389.178	-0.0841b	ppb	0.1586	188.6	-31.5176
Be 313.042	0.0008b	ppb	0.0179	2275.1	-425.476
Ca 370.602	9.653b	ppb	6.697	69.4	22.70
Cd 226.502	-0.4827b	ppb	0.5005	103.7	-3.0764
Co 228.615	-1.6343b	ppb	1.0306	63.1	2.7175
Cr 267.716	24817.7xb	ppb	40.0996	0.2	360107
Cu 324.754	-0.0445b	ppb	0.0845	190.0	473.583
Fe 271.441	1.3511b	ppb	10.6847	790.8	62.0622
K 766.491	-0.8550b	ppb	0.9223	107.9	220.181

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1.4824b	ppb	1.8889	127.4	30.0737
Mn 257.610	0.2986b	ppb	0.0673	22.5	42.9618
Mo 202.032	0.8818b	ppb	1.4929	169.3	3.8873
Na 330.237	93.2554b	ppb	359.944	386.0	35.0289
Ni 231.604	1.5978b	ppb	2.6663	166.9	-1.1600
Pb 220.353	-3.9656b	ppb	3.2950	83.1	1.2948
Sb 206.834	11.9803b	ppb	6.3396	52.9	57.9542
Se 196.026	4.1615b	ppb	6.1885	148.7	5.1374
Si 288.158	-11.4070uvb	ppb	2.4614	21.6	527.774
Sn 189.925	-0.0313b	ppb	0.8200	2618.2	-1.0213
Sr 216.596	0.4713b	ppb	0.3956	83.9	4.5041
Ti 334.941	2.9723b	ppb	0.1611	5.4	199.184
Tl 190.794	0.0339b	ppb	1.8433	5436.1	-2.5369
V 292.401	-9.1277b	ppb	0.2173	2.4	-472.045
Zn 206.200	7.2516b	ppb	2.9752	41.0	-10.5593

mo (Samp) 4/8/2019, 12:51:50 PM Rack 1, Tube 7
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2848	1.1109	1.8430
Al 308.215	33.7443	37.8325	33.3577
As 188.980	14.4753	9.5404u	7.5511u
B 249.678	-1.4854u	0.0250	-0.9927u
Ba 389.178	0.4718	1.0262	-0.4360
Be 313.042	1.3510u	1.3492u	1.3463u
Ca 370.602	-1.689u	-2.825u	5.889
Cd 226.502	0.0544	0.0957	-0.0047
Co 228.615	4.8909u	6.2505u	5.2757u
Cr 267.716	1.9865	1.7982	1.6825
Cu 324.754	-5.1056	-5.2058	-3.6703
Fe 271.441	-21.6125u	-21.2221u	-38.1148u
K 766.491	1.6723	0.2698	0.7513
Mg 279.078	-0.0501u	-2.5713u	-2.2734u
Mn 257.610	0.1913	0.1932	0.0904
Mo 202.032	29361.7x	29439.0x	29459.3x
Na 330.237	-66.9483u	-453.386u	-329.608u
Ni 231.604	-1.4783u	0.3122	2.4008
Pb 220.353	9.1957u	14.1151u	0.0225u
Sb 206.834	6.5790	9.3378	6.5559
Se 196.026	-0.7989u	-2.5719u	-14.4904u
Si 288.158	5628.61	5781.71	5903.61
Sn 189.925	12.7136	-1.9646u	4.1632
Sr 216.596	5.7743u	5.2595u	7.3372u
Ti 334.941	-0.5590u	-0.3128u	-0.4179u
Tl 190.794	-4.5028u	-8.2455u	2.3775u
V 292.401	-5.1269u	-4.9431u	-5.8684u
Zn 206.200	4.1450	8.2898	6.0102

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.0796b	ppb	0.7796	72.2	-27.4803
Al 308.215	34.9781b	ppb	2.4795	7.1	626.828
As 188.980	10.5223b	ppb	3.5650	33.9	1.1040
B 249.678	-0.8177b	ppb	0.7703	94.2	23.6218

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	0.3540b	ppb	0.7382	208.5	3.2642
Be 313.042	1.3488b	ppb	0.0024	0.2	-1252.31
Ca 370.602	0.4582b	ppb	4.737	1033.8	8.979
Cd 226.502	0.0485b	ppb	0.0505	104.2	3.0453
Co 228.615	5.4724b	ppb	0.7008	12.8	-216.002
Cr 267.716	1.8224b	ppb	0.1534	8.4	37.0495
Cu 324.754	-4.6605b	ppb	0.8591	18.4	775.923
Fe 271.441	-26.9832b	ppb	9.6423	35.7	40.1990
K 766.491	0.8978b	ppb	0.7126	79.4	249.976
Mg 279.078	-1.6316b	ppb	1.3777	84.4	26.2578
Mn 257.610	0.1583b	ppb	0.0588	37.2	33.2611
Mo 202.032	29420.0xb	ppb	51.5230	0.2	40864.7
Na 330.237	-283.314b	ppb	197.334	69.7	25.4904
Ni 231.604	0.4116b	ppb	1.9415	471.7	-2.2865
Pb 220.353	7.7778b	ppb	7.1525	92.0	-3.0639
Sb 206.834	7.4909b	ppb	1.5995	21.4	6.3522
Se 196.026	-5.9537b	ppb	7.4459	125.1	3.2896
Si 288.158	5771.31b	ppb	137.795	2.4	28707.3
Sn 189.925	4.9707b	ppb	7.3724	148.3	0.1025
Sr 216.596	6.1236b	ppb	1.0820	17.7	-269.417
Ti 334.941	-0.4299b	ppb	0.1235	28.7	-57.6009
Tl 190.794	-3.4569b	ppb	5.3882	155.9	-10.2511
V 292.401	-5.3128b	ppb	0.4899	9.2	-1695.15
Zn 206.200	6.1483b	ppb	2.0758	33.8	1.9334

ti (Samp) 4/8/2019, 12:57:01 PM Rack 1, Tube 8
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.8725	0.4628u	0.6670u
Al 308.215	9.8008	7.8486	6.0290
As 188.980	0.7834	-1.9347u	-3.5212u
B 249.678	1.1437	1.8446	1.1443
Ba 389.178	-3.0173u	-3.1620u	-6.5087u
Be 313.042	0.0872	0.0969	0.0752
Ca 370.602	-310.2	-306.3	-305.8
Cd 226.502	1.7569	1.2873	1.9741
Co 228.615	-3.7106	-5.0313	-5.1995
Cr 267.716	-0.6469	-0.2717	-0.5268
Cu 324.754	-5.8451u	-4.5857u	-4.5936u
Fe 271.441	-16.4177u	-12.4881u	-6.8947u
K 766.491	-2.2387u	-1.0577u	-0.5977u
Mg 279.078	4.4212	-3.1430u	-0.1199u
Mn 257.610	-7.9470	-8.0828	-8.0966u
Mo 202.032	28.9026	23.7020	22.1983
Na 330.237	1142.97u	720.163u	1130.30u
Ni 231.604	-1.1631u	-1.1445u	2.5437
Pb 220.353	-11.8895u	-5.5511u	-3.3417u
Sb 206.834	-6.5125u	-3.0675u	-7.4072u
Se 196.026	-3.4653u	-12.2349u	-7.5036u
Si 288.158	2720.81	2770.81	2789.84
Sn 189.925	7.6328	3.0008	12.8247
Sr 216.596	0.8469	0.5938	0.6528
Ti 334.941	40564.9x	40545.0x	40448.8x

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Label	Replicates Concentration		
Tl 190.794	2.0597	-4.7135u	-1.0785u
V 292.401	-0.2441	0.3316	0.0507
Zn 206.200	5.2205	-0.1426u	2.4937

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.0007b	ppb	0.7618	76.1	-70.7332
Al 308.215	7.8928b	ppb	1.8863	23.9	257.415
As 188.980	-1.5575b	ppb	2.1769	139.8	0.8194
B 249.678	1.3775b	ppb	0.4045	29.4	-9.5115
Ba 389.178	-4.2293b	ppb	1.9753	46.7	-52.5418
Be 313.042	0.0864b	ppb	0.0108	12.5	-359.001
Ca 370.602	-307.5b	ppb	2.419	0.8	262.0
Cd 226.502	1.6728b	ppb	0.3511	21.0	12.2989
Co 228.615	-4.6471b	ppb	0.8154	17.5	232.407
Cr 267.716	-0.4818b	ppb	0.1916	39.8	26.7858
Cu 324.754	-5.0081b	ppb	0.7248	14.5	344.127
Fe 271.441	-11.9335b	ppb	4.7857	40.1	42.7195
K 766.491	-1.2980b	ppb	0.8465	65.2	212.650
Mg 279.078	0.3861b	ppb	3.8074	986.2	28.7384
Mn 257.610	-8.0422b	ppb	0.0827	1.0	25.6809
Mo 202.032	24.9343b	ppb	3.5179	14.1	37.2845
Na 330.237	997.812b	ppb	240.535	24.1	-269.806
Ni 231.604	0.0787b	ppb	2.1348	2711.5	-2.7125
Pb 220.353	-6.9274b	ppb	4.4370	64.0	-6.2205
Sb 206.834	-5.6624b	ppb	2.2914	40.5	4.0608
Se 196.026	-7.7346b	ppb	4.3894	56.7	2.9644
Si 288.158	2760.49b	ppb	35.6496	1.3	14018.6
Sn 189.925	7.8194b	ppb	4.9146	62.9	0.7425
Sr 216.596	0.6978b	ppb	0.1324	19.0	4.8206
Ti 334.941	40519.6xb	ppb	62.0913	0.2	3058104
Tl 190.794	-1.2441b	ppb	3.3896	272.5	-2.7949
V 292.401	0.0461b	ppb	0.2879	624.7	118.123
Zn 206.200	2.5239b	ppb	2.6817	106.3	0.0191

v (Samp) 4/8/2019, 1:02:13 PM Rack 1, Tube 9

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4360	2.1121	3.0201
Al 308.215	-43.6385	-39.9791	-46.5975
As 188.980	6.9864	-1.5423u	3.7897
B 249.678	-1.9144u	-2.4193u	-1.7723u
Ba 389.178	7.9691	6.4634	4.1620
Be 313.042	-2.0650u	-2.0287u	-2.0511u
Ca 370.602	48.45	37.61	54.40
Cd 226.502	0.4962	-0.2570u	-0.0800u
Co 228.615	1.7304	-0.7315u	-0.4034u
Cr 267.716	4.4676u	5.0343	4.9512u
Cu 324.754	-1.6756u	-1.3659u	-0.6522u
Fe 271.441	-141.074	-117.750	-130.733
K 766.491	-0.3191u	0.4927	-0.0539u
Mg 279.078	9.3753	12.0372	10.5768
Mn 257.610	-0.0839u	-0.0598u	0.0012
Mo 202.032	7.8312	5.5291	7.0208

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	2.2833u	155.069	-233.960u
Ni 231.604	3.2310	1.1438	2.5600
Pb 220.353	-12.2648u	-16.9316u	-13.3046u
Sb 206.834	4.7422	-4.6327u	5.0266
Se 196.026	-8.9364u	0.9078	-2.5765u
Si 288.158	44.6037	40.1092	37.2192
Sn 189.925	-1.5139u	7.3448	10.2621
Sr 216.596	-1.1459u	-0.7410u	-0.7324u
Ti 334.941	10.4137	9.4827	8.7673
Tl 190.794	-16.6905	-8.7015	-7.1971
V 292.401	49692.1x	49777.9x	49731.2x
Zn 206.200	2.5811	-0.4701u	2.8804

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.8561b	ppb	1.3109	70.6	44.3510
Al 308.215	-43.4050b	ppb	3.3153	7.6	1263.45
As 188.980	3.0779b	ppb	4.3087	140.0	1.4172
B 249.678	-2.0353b	ppb	0.3400	16.7	-31.6514
Ba 389.178	6.1982b	ppb	1.9174	30.9	24.5334
Be 313.042	-2.0483b	ppb	0.0183	0.9	-854.172
Ca 370.602	46.82b	ppb	8.515	18.2	290.3
Cd 226.502	0.0530b	ppb	0.3938	742.5	3.3583
Co 228.615	0.1985b	ppb	1.3367	673.4	-7.6522
Cr 267.716	4.8177b	ppb	0.3060	6.4	8.0565
Cu 324.754	-1.2312b	ppb	0.5248	42.6	182.888
Fe 271.441	-129.852b	ppb	11.6867	9.0	137.138
K 766.491	0.0399b	ppb	0.4140	1037.7	235.393
Mg 279.078	10.6631b	ppb	1.3331	12.5	41.1082
Mn 257.610	-0.0475b	ppb	0.0439	92.4	19.4657
Mo 202.032	6.7937b	ppb	1.1677	17.2	5.1772
Na 330.237	-25.5360b	ppb	196.001	767.5	31.7581
Ni 231.604	2.3116b	ppb	1.0655	46.1	-0.4636
Pb 220.353	-14.1670b	ppb	2.4500	17.3	-3.5735
Sb 206.834	1.7120b	ppb	5.4966	321.1	6.3726
Se 196.026	-3.5351b	ppb	4.9916	141.2	3.7307
Si 288.158	40.6440b	ppb	3.7212	9.2	748.607
Sn 189.925	5.3643b	ppb	6.1327	114.3	0.1910
Sr 216.596	-0.8731b	ppb	0.2363	27.1	1.2574
Ti 334.941	9.5546b	ppb	0.8255	8.6	696.000
Tl 190.794	-10.8631b	ppb	5.1025	47.0	8.8275
V 292.401	49733.8xb	ppb	42.9496	0.1	407517
Zn 206.200	1.6638b	ppb	1.8541	111.4	-0.4301

zn (Samp) 4/8/2019, 1:07:25 PM Rack 1, Tube 10
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1194	0.1721	0.0997
Al 308.215	-9.9143u	-11.6053u	-7.9469u
As 188.980	-2.3749u	3.1268	-6.1086u
B 249.678	0.6314	0.3592	1.0074
Ba 389.178	-0.0036u	-1.9534u	-2.7052u
Be 313.042	0.0100	0.0227	0.0057
Ca 370.602	4.101	9.708	3.939

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Label	Replicates Concentration		
Cd 226.502	-0.4814u	-0.4880u	0.0720
Co 228.615	0.1373	0.0228	1.3230
Cr 267.716	0.0046u	0.2086	0.2604
Cu 324.754	0.2005	-0.7256u	-0.2329u
Fe 271.441	0.8293	-2.9048u	2.9156
K 766.491	-2.9481u	-2.2283u	-2.1670u
Mg 279.078	3.4633	-1.0647u	-3.6123u
Mn 257.610	0.1080	0.0627	0.0927
Mo 202.032	5.1368	2.8083	3.0270
Na 330.237	-172.800u	377.557u	228.432u
Ni 231.604	1.6503	1.4885	-1.3079u
Pb 220.353	-8.2079u	4.4382	0.8474
Sb 206.834	-4.7448u	-4.7856u	-5.0053u
Se 196.026	5.8899	3.7235	5.0692
Si 288.158	11.0774	10.9537	9.0077
Sn 189.925	6.8955	-0.2782u	2.9740
Sr 216.596	2.3897	-0.7482u	-1.0267u
Ti 334.941	2.7518	2.5629	2.3983
Tl 190.794	0.1683	-14.6864u	-6.6648u
V 292.401	3.2136	2.8955	4.5386
Zn 206.200	29149.7x	29173.7x	29126.8x

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4637b	ppb	0.5690	122.7	-43.8690
Al 308.215	-9.8222b	ppb	1.8309	18.6	227.012
As 188.980	-1.7856b	ppb	4.6458	260.2	0.8168
B 249.678	0.6660b	ppb	0.3255	48.9	-14.0869
Ba 389.178	-1.5541b	ppb	1.3943	89.7	-38.9673
Be 313.042	0.0128b	ppb	0.0088	69.2	-414.181
Ca 370.602	5.916b	ppb	3.285	55.5	17.64
Cd 226.502	-0.2991b	ppb	0.3214	107.5	-0.9977
Co 228.615	0.4944b	ppb	0.7199	145.6	-6.7358
Cr 267.716	0.1579b	ppb	0.1352	85.7	12.4585
Cu 324.754	-0.2527b	ppb	0.4634	183.4	467.893
Fe 271.441	0.2801b	ppb	2.9488	1053.0	46.0194
K 766.491	-2.4478b	ppb	0.4344	17.7	193.105
Mg 279.078	-0.4046b	ppb	3.5837	885.8	27.7790
Mn 257.610	0.0878b	ppb	0.0231	26.3	28.4701
Mo 202.032	3.6573b	ppb	1.2859	35.2	7.7346
Na 330.237	144.397b	ppb	284.639	197.1	-270.496
Ni 231.604	0.6103b	ppb	1.6632	272.5	-2.1246
Pb 220.353	-0.9741b	ppb	6.5168	669.0	1.3023
Sb 206.834	-4.8452b	ppb	0.1401	2.9	4.3178
Se 196.026	4.8942b	ppb	1.0938	22.3	5.2713
Si 288.158	10.3463b	ppb	1.1609	11.2	620.434
Sn 189.925	3.1971b	ppb	3.5921	112.4	-0.2961
Sr 216.596	0.2049b	ppb	1.8972	925.8	3.8243
Ti 334.941	2.5710b	ppb	0.1769	6.9	168.924
Tl 190.794	-7.0610b	ppb	7.4353	105.3	-4.1722
V 292.401	3.5492b	ppb	0.8715	24.6	17.1104
Zn 206.200	29150.1xb	ppb	23.4241	0.1	15395.1

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 1:12:38 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	512.747	510.987	508.491
Al 308.215	10316.3	10299.4	10293.7
As 188.980	530.575	524.359	533.892
B 249.678	516.938	520.706	521.721
Ba 389.178	515.113	514.088	515.810
Be 313.042	530.410	529.150	529.984
Ca 370.602	10321	10307	10309
Cd 226.502	519.863	520.016	519.582
Co 228.615	519.187	520.091	520.464
Cr 267.716	516.803	515.342	515.236
Cu 324.754	518.968	523.448	518.116
Fe 271.441	10384.1	10393.6	10403.4
K 766.491	9928.45	9917.18	9915.58
Mg 279.078	10309.8	10276.5	10298.1
Mn 257.610	516.515	515.978	515.752
Mo 202.032	522.712	518.620	520.104
Na 330.237	10426.3	10669.3	10655.8
Ni 231.604	520.379	520.049	517.650
Pb 220.353	511.614	521.966	512.651
Sb 206.834	494.826	506.884	519.770
Se 196.026	497.670	524.923	520.408
Si 288.158	5047.40	5040.09	5041.82
Sn 189.925	516.076	506.260	527.476
Sr 216.596	512.865	518.170	517.914
Ti 334.941	521.178	519.742	520.000
Tl 190.794	507.604	515.463	519.096
V 292.401	525.628	525.142	525.080
Zn 206.200	1029.22	1036.50	1042.64

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	510.742	ppb	2.1387	0.4	13671.9	102.14835
Al 308.215	10303.1	ppb	11.7236	0.1	17672.7	103.03142
As 188.980	529.609	ppb	4.8395	0.9	128.460	105.92175
B 249.678	519.788	ppb	2.5201	0.5	3305.64	103.95766
Ba 389.178	515.004	ppb	0.8665	0.2	2598.29	103.00073
Be 313.042	529.848	ppb	0.6410	0.1	409345	105.96962
Ca 370.602	10312	ppb	7.627	0.1	14658	103.12202
Cd 226.502	519.820	ppb	0.2202	0.0	5965.86	103.96404
Co 228.615	519.914	ppb	0.6563	0.1	1726.03	103.98280
Cr 267.716	515.794	ppb	0.8757	0.2	7495.37	103.15874
Cu 324.754	520.177	ppb	2.8648	0.6	14042.8	104.03546
Fe 271.441	10393.7	ppb	9.6650	0.1	5695.45	103.88517
K 766.491	9920.40	ppb	7.0124	0.1	168873	99.20401
Mg 279.078	10294.8	ppb	16.9137	0.2	12555.2	102.94778
Mn 257.610	516.082	ppb	0.3923	0.1	35442.5	103.21631
Mo 202.032	520.479	ppb	2.0718	0.4	725.385	104.09576
Na 330.237	10583.8	ppb	136.552	1.3	276.020	105.83807
Ni 231.604	519.359	ppb	1.4896	0.3	507.004	103.87183
Pb 220.353	515.410	ppb	5.7010	1.1	191.840	103.08208
Sb 206.834	507.160	ppb	12.4747	2.5	166.868	101.43200
Se 196.026	514.334	ppb	14.6069	2.8	98.3436	102.86671
Si 288.158	5043.10	ppb	3.8159	0.1	22116.1	100.86209

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	516.604	ppb	10.6178	2.1	115.060	103.32079
Sr 216.596	516.316	ppb	2.9917	0.6	1259.49	103.26322
Ti 334.941	520.306	ppb	0.7653	0.1	39267.1	104.06129
Tl 190.794	514.054	ppb	5.8737	1.1	117.128	102.81085
V 292.401	525.283	ppb	0.3000	0.1	4257.71	105.05668
Zn 206.200	1036.12	ppb	6.7188	0.6	545.691	103.61168

Cont Calib Blank (CCB) 4/8/2019, 1:17:51 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5923	1.5774	0.7810
Al 308.215	-13.6447u	-20.1496u	-12.4080u
As 188.980	-6.5950u	8.9588	-5.9172u
B 249.678	11.0720	10.8212	8.4147
Ba 389.178	-1.7357u	-1.7844u	-1.6775u
Be 313.042	0.0059	0.0060	0.0060
Ca 370.602	2.253	-3.098u	-7.654u
Cd 226.502	-0.3255u	-0.3370u	0.1783
Co 228.615	-1.1419u	-0.2209u	1.8708
Cr 267.716	-0.0957u	0.5799	0.1708
Cu 324.754	0.4524	0.6797	0.6496
Fe 271.441	7.3731	-5.5605u	8.2338
K 766.491	-1.4971u	-0.7841u	-0.8740u
Mg 279.078	-0.7743u	2.2822	-2.3156u
Mn 257.610	0.1091	0.0626	0.0018
Mo 202.032	1.2313	1.9431	2.8347
Na 330.237	238.096	-78.8390u	-117.031u
Ni 231.604	-1.6686u	1.4069	-0.4598u
Pb 220.353	-2.6917u	4.3647	-6.9814u
Sb 206.834	-1.9012u	-5.0605u	-0.1573u
Se 196.026	-11.8855u	-5.0821u	-7.0036u
Si 288.158	14.1117	11.7723	11.8720
Sn 189.925	2.3953	2.8314	0.9452
Sr 216.596	-2.0496u	0.7538	-0.2071u
Ti 334.941	0.7259	0.5557	0.4822
Tl 190.794	-4.3714u	-8.6921u	-12.0385u
V 292.401	-0.4321u	0.8232	-0.1011u
Zn 206.200	-1.8149u	0.6408	-0.3791u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.9836	ppb	0.5229	53.2	-29.8982	0.98360
Al 308.215	-15.4008	ppb	4.1588	27.0	217.486	-15.40078
As 188.980	-1.1845	ppb	8.7909	742.2	0.9508	-1.18445
B 249.678	10.1026	ppb	1.4672	14.5	46.4410	10.10262
Ba 389.178	-1.7325	ppb	0.0535	3.1	-39.8814	-1.73253
Be 313.042	0.0060	ppb	0.0001	1.6	-420.271	0.00597
Ca 370.602	-2.833	ppb	4.958	175.0	5.160	-2.83304
Cd 226.502	-0.1614	ppb	0.2943	182.3	0.5783	-0.16137
Co 228.615	0.1693	ppb	1.5438	911.8	-7.8192	0.16932
Cr 267.716	0.2183	ppb	0.3403	155.9	13.5006	0.21830
Cu 324.754	0.5939	ppb	0.1234	20.8	489.957	0.59393
Fe 271.441	3.3488	ppb	7.7277	230.8	47.6639	3.34882
K 766.491	-1.0517	ppb	0.3883	36.9	216.837	-1.05170

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-0.2693	ppb	2.3402	869.1	27.9444	-0.26926
Mn 257.610	0.0578	ppb	0.0538	93.0	26.3776	0.05785
Mo 202.032	2.0030	ppb	0.8034	40.1	5.4374	2.00303
Na 330.237	14.0755	ppb	194.945	1385.0	32.8349	14.07551
Ni 231.604	-0.2405	ppb	1.5494	644.2	-2.9705	-0.24050
Pb 220.353	-1.7695	ppb	5.7290	323.8	1.0092	-1.76948
Sb 206.834	-2.3730	ppb	2.4854	104.7	5.0961	-2.37302
Se 196.026	-7.9904	ppb	3.5074	43.9	2.9177	-7.99037
Si 288.158	12.5853	ppb	1.3228	10.5	629.834	12.58529
Sn 189.925	2.0573	ppb	0.9875	48.0	-0.5521	2.05733
Sr 216.596	-0.5010	ppb	1.4246	284.4	2.1181	-0.50097
Ti 334.941	0.5879	ppb	0.1250	21.3	19.2125	0.58794
Tl 190.794	-8.3673	ppb	3.8439	45.9	-4.4767	-8.36731
V 292.401	0.0967	ppb	0.6506	672.8	-11.0825	0.09669
Zn 206.200	-0.5177	ppb	1.2337	238.3	-1.5867	-0.51773

ni (Samp)

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Rack 1, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7184	0.8813	0.1304
Al 308.215	-2.2049u	3.8002	-1.4330u
As 188.980	1.8328	0.2388	0.8650
B 249.678	3.3389	3.1763	1.8285
Ba 389.178	0.3963	-0.9869u	-3.1407u
Be 313.042	0.0013	0.0078	0.0055
Ca 370.602	10.42	-0.2170u	2.291
Cd 226.502	-0.0911u	0.2014	-0.1517u
Co 228.615	-0.1918u	1.2688	0.6773
Cr 267.716	0.2147	0.1014	0.4109
Cu 324.754	0.2576	0.2110	1.4397
Fe 271.441	258.481	249.807	261.905
K 766.491	-1.0095u	-0.7842u	-1.9440u
Mg 279.078	5.2014	2.4124	2.7610
Mn 257.610	2.5486	2.5031	2.4710
Mo 202.032	3.6454	2.5723	0.9308
Na 330.237	134.432	-150.612u	-7.3598u
Ni 231.604	10095.7x	9963.59x	10099.8x
Pb 220.353	-3.7655u	4.3085	-2.0811u
Sb 206.834	-3.7687u	-1.7419u	-4.8359u
Se 196.026	-5.5421u	-21.7505u	-1.8678u
Si 288.158	8.9555	8.8352	7.3737
Sn 189.925	0.3459	0.5114	4.4188
Sr 216.596	4.3963u	4.5257u	3.0266u
Ti 334.941	0.6953	0.6092	0.5318
Tl 190.794	-1.1487u	1.8328	5.6070
V 292.401	0.8461	1.1001	0.3041
Zn 206.200	3.9749	3.5855	5.3676

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5767b	ppb	0.3950	68.5	-40.7754
Al 308.215	0.0541b	ppb	3.2671	6039.5	243.629
As 188.980	0.9788b	ppb	0.8031	82.0	1.4275
B 249.678	2.7813b	ppb	0.8291	29.8	0.7615

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-1.2438b	ppb	1.7824	143.3	-37.3530
Be 313.042	0.0049b	ppb	0.0033	67.4	-421.147
Ca 370.602	4.165b	ppb	5.561	133.5	14.78
Cd 226.502	-0.0138b	ppb	0.1888	1366.0	2.5728
Co 228.615	0.5848b	ppb	0.7347	125.6	-6.4394
Cr 267.716	0.2423b	ppb	0.1566	64.6	13.8693
Cu 324.754	0.6361b	ppb	0.6963	109.5	491.098
Fe 271.441	256.731b	ppb	6.2358	2.4	184.767
K 766.491	-1.2459b	ppb	0.6150	49.4	213.535
Mg 279.078	3.4583b	ppb	1.5196	43.9	32.4571
Mn 257.610	2.5075b	ppb	0.0390	1.6	194.453
Mo 202.032	2.3828b	ppb	1.3672	57.4	5.9624
Na 330.237	-7.8464b	ppb	142.523	1816.4	32.2373
Ni 231.604	10053.0xb	ppb	77.4810	0.8	9871.91
Pb 220.353	-0.5127b	ppb	4.2594	830.8	1.4744
Sb 206.834	-3.4488b	ppb	1.5716	45.6	4.7598
Se 196.026	-9.7201b	ppb	10.5794	108.8	2.6011
Si 288.158	8.3881b	ppb	0.8805	10.5	611.466
Sn 189.925	1.7587b	ppb	2.3052	131.1	-0.6192
Sr 216.596	3.9828b	ppb	0.8307	20.9	-23.7653
Ti 334.941	0.6121b	ppb	0.0818	13.4	21.0539
Tl 190.794	2.0971b	ppb	3.3856	161.4	-2.0473
V 292.401	0.7501b	ppb	0.4066	54.2	-5.7334
Zn 206.200	4.3093b	ppb	0.9369	21.7	0.9636

sn (Samp) 4/8/2019, 1:28:15 PM Rack 1, Tube 12
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.5153	0.3511	-0.6273u
Al 308.215	20.1073	28.0106	27.9626
As 188.980	23.9292	11.1299	-3.0046u
B 249.678	2.0880	0.3753	1.1933
Ba 389.178	-3.4314u	-2.6168u	-3.1838u
Be 313.042	-0.0097u	-0.0054u	0.0112
Ca 370.602	8.587	8.739	0.7573
Cd 226.502	-0.2439u	0.1607	-0.5697u
Co 228.615	0.1818u	2.1365u	2.1452u
Cr 267.716	-0.1142u	0.3134	-0.0889u
Cu 324.754	0.3271	0.1325	1.8514
Fe 271.441	5.6574	6.6518	-2.0728u
K 766.491	1.9394	1.6576	1.5947
Mg 279.078	-0.9225u	4.9858	-3.4814u
Mn 257.610	0.1676	0.2959	0.2148
Mo 202.032	2.6212	0.9302	2.8329
Na 330.237	-198.436u	14.8692	108.235
Ni 231.604	-0.6951u	2.9742	5.4405
Pb 220.353	5.6409	1.7322	2.7085
Sb 206.834	-16.0943u	-8.7477u	-16.6767u
Se 196.026	6.7230	-7.1341u	-6.2827u
Si 288.158	13838.2	14365.5	14700.4
Sn 189.925	38398.0x	39092.2x	38761.3x
Sr 216.596	0.9043	-0.0188u	1.1803
Ti 334.941	5.2346	4.2583	3.7448

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Label	Replicates Concentration		
Tl 190.794	9.2521	2.5231	-7.4553u
V 292.401	0.8205	0.5225	0.1929
Zn 206.200	0.8506	2.4709	-0.7908u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4130b	ppb	1.0726	259.7	-45.2340
Al 308.215	25.3602b	ppb	4.5492	17.9	286.377
As 188.980	10.6848b	ppb	13.4724	126.1	3.8103
B 249.678	1.2189b	ppb	0.8567	70.3	-10.5363
Ba 389.178	-3.0774b	ppb	0.4176	13.6	-46.7147
Be 313.042	-0.0013b	ppb	0.0111	853.5	-424.059
Ca 370.602	6.028b	ppb	4.565	75.7	17.82
Cd 226.502	-0.2176b	ppb	0.3659	168.1	-0.0728
Co 228.615	1.4878b	ppb	1.1311	76.0	-11.2023
Cr 267.716	0.0368b	ppb	0.2399	652.1	10.8691
Cu 324.754	0.7704b	ppb	0.9413	122.2	494.552
Fe 271.441	3.4121b	ppb	4.7761	140.0	47.6462
K 766.491	1.7306b	ppb	0.1836	10.6	264.133
Mg 279.078	0.1940b	ppb	4.3426	2238.7	28.4996
Mn 257.610	0.2261b	ppb	0.0649	28.7	39.0898
Mo 202.032	2.1281b	ppb	1.0428	49.0	5.6111
Na 330.237	-25.1103b	ppb	157.196	626.0	31.8279
Ni 231.604	2.5732b	ppb	3.0874	120.0	-0.2059
Pb 220.353	3.3606b	ppb	2.0343	60.5	2.9042
Sb 206.834	-13.8396b	ppb	4.4193	31.9	3.9414
Se 196.026	-2.2313b	ppb	7.7663	348.1	3.9697
Si 288.158	14301.4b	ppb	434.701	3.0	64286.6
Sn 189.925	38750.5xb	ppb	347.239	0.9	8705.64
Sr 216.596	0.6886b	ppb	0.6280	91.2	5.0240
Ti 334.941	4.4126b	ppb	0.7568	17.2	307.886
Tl 190.794	1.4400b	ppb	8.4062	583.8	-2.1957
V 292.401	0.5120b	ppb	0.3139	61.3	-7.6536
Zn 206.200	0.8435b	ppb	1.6309	193.3	-0.8677

ca (Samp) 4/8/2019, 1:33:25 PM Rack 1, Tube 13

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1614	0.8888	0.4085
Al 308.215	29.9439	29.9617	32.6097
As 188.980	4.1713	3.5857	1.4345
B 249.678	0.7720	1.4764	0.4692
Ba 389.178	-8.5403u	-11.6275u	-7.4819u
Be 313.042	-0.1427	-0.1723u	-0.1280
Ca 370.602	813357x	812656x	812048x
Cd 226.502	0.4908	-0.0284u	0.4296
Co 228.615	-0.7593u	-1.1154u	0.3920
Cr 267.716	1.1061	0.9501	1.0522
Cu 324.754	-0.7352u	-1.1074u	-2.4567u
Fe 271.441	17.2389	6.4970	1.9999
K 766.491	-2.7719u	-1.6917u	-1.8681u
Mg 279.078	-1.4501u	-0.6446u	4.3667
Mn 257.610	0.0636	0.0550	-0.0998u
Mo 202.032	-1.5132u	0.0977	1.1621

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Label	Replicates Concentration		
Na 330.237	82.0383	-468.443u	95.9126
Ni 231.604	-2.8167u	-1.7437u	2.0387
Pb 220.353	2.8096	1.6557	6.8169
Sb 206.834	5.0837	-4.5951u	-6.6830u
Se 196.026	-8.6871u	-8.3488u	-7.2964u
Si 288.158	171.538	147.709	134.621
Sn 189.925	4.1519	2.8205	3.4209
Sr 216.596	8.9974	12.9714	7.6078
Ti 334.941	3.5511	3.4437	3.4740
Tl 190.794	-2.5513u	-9.2289u	-10.4845u
V 292.401	-2.6480u	-0.4226u	-1.5175u
Zn 206.200	3.5599	4.3414	2.6687

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4863b	ppb	0.3699	76.1	-43.7978
Al 308.215	30.8384b	ppb	1.5340	5.0	295.596
As 188.980	3.0638b	ppb	1.4411	47.0	1.9773
B 249.678	0.9059b	ppb	0.5168	57.1	-12.5508
Ba 389.178	-9.2166b	ppb	2.1539	23.4	-77.9373
Be 313.042	-0.1477b	ppb	0.0225	15.3	-421.430
Ca 370.602	812687xb	ppb	655.4	0.1	1154214
Cd 226.502	0.2973b	ppb	0.2837	95.4	5.8312
Co 228.615	-0.4942b	ppb	0.7879	159.4	-10.0046
Cr 267.716	1.0361b	ppb	0.0792	7.6	25.3691
Cu 324.754	-1.4331b	ppb	0.9058	63.2	437.093
Fe 271.441	8.5786b	ppb	7.8298	91.3	50.4582
K 766.491	-2.1106b	ppb	0.5795	27.5	198.837
Mg 279.078	0.7574b	ppb	3.1516	416.1	29.1865
Mn 257.610	0.0063b	ppb	0.0920	1459.7	26.1191
Mo 202.032	-0.0845b	ppb	1.3469	1594.7	2.5381
Na 330.237	-96.8308b	ppb	321.901	332.4	30.0541
Ni 231.604	-0.8406b	ppb	2.5506	303.4	-3.5594
Pb 220.353	3.7607b	ppb	2.7089	72.0	3.0524
Sb 206.834	-2.0648b	ppb	6.2782	304.1	5.1939
Se 196.026	-8.1108b	ppb	0.7253	8.9	2.8957
Si 288.158	151.289b	ppb	18.7171	12.4	1218.73
Sn 189.925	3.4644b	ppb	0.6668	19.2	-0.2359
Sr 216.596	9.8589b	ppb	2.7837	28.2	27.4676
Ti 334.941	3.4896b	ppb	0.0554	1.6	238.222
Tl 190.794	-7.4216b	ppb	4.2642	57.5	-4.2569
V 292.401	-1.5294b	ppb	1.1127	72.8	-24.3218
Zn 206.200	3.5233b	ppb	0.8369	23.8	0.5475

sr (Samp) 4/8/2019, 1:38:35 PM Rack 1, Tube 14
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.5795	0.5663u	1.4074
Al 308.215	-9.9415u	-6.6733u	-5.3737u
As 188.980	-1.7851u	0.0251	6.2179
B 249.678	1.1176	0.8441	1.3755
Ba 389.178	-1.2232u	-3.2776u	-0.6335u
Be 313.042	-0.0176u	-0.0130u	0.0020
Ca 370.602	57.19	68.00	63.28

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Label	Replicates Concentration		
Cd 226.502	-0.2541u	-0.4161u	-0.3818u
Co 228.615	0.5812	-0.3845u	0.0629
Cr 267.716	-0.1177u	0.1111	-0.1772u
Cu 324.754	1.0487	1.1207	1.1185
Fe 271.441	3.1753	-9.2841u	9.0793
K 766.491	-0.6164u	-0.0025u	-0.7054u
Mg 279.078	1.9584	-0.5276u	5.7447
Mn 257.610	-0.0548u	0.1221	0.0138
Mo 202.032	-0.2395u	0.4291	3.2265
Na 330.237	-43.5089u	205.611	164.817
Ni 231.604	3.8006	-1.7023u	1.4551
Pb 220.353	4.2095	4.4769	7.4863
Sb 206.834	-9.0588u	-4.8181u	-6.5335u
Se 196.026	2.0684	-4.4613u	-12.0805u
Si 288.158	77.0992	59.6222	55.4821
Sn 189.925	-1.7849u	2.9538	-5.1430u
Sr 216.596	10023.5x	10045.9x	10020.3x
Ti 334.941	0.1549	0.2418	0.0812
Tl 190.794	-1.0082u	-12.6772u	-1.2704u
V 292.401	0.4518	-0.3533u	0.2847
Zn 206.200	1.7842	1.4992	1.3787

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1844b	ppb	0.5421	45.8	-51.1810
Al 308.215	-7.3295b	ppb	2.3535	32.1	231.122
As 188.980	1.4860b	ppb	4.1967	282.4	1.6025
B 249.678	1.1124b	ppb	0.2657	23.9	-11.2250
Ba 389.178	-1.7114b	ppb	1.3880	81.1	-39.7684
Be 313.042	-0.0095b	ppb	0.0102	107.1	-432.211
Ca 370.602	62.83b	ppb	5.421	8.6	98.40
Cd 226.502	-0.3507b	ppb	0.0854	24.4	-1.5879
Co 228.615	0.0865b	ppb	0.4833	558.5	-8.0926
Cr 267.716	-0.0613b	ppb	0.1522	248.4	9.4433
Cu 324.754	1.0960b	ppb	0.0410	3.7	503.037
Fe 271.441	0.9902b	ppb	9.3747	946.8	46.3781
K 766.491	-0.4414b	ppb	0.3828	86.7	227.211
Mg 279.078	2.3918b	ppb	3.1586	132.1	31.1832
Mn 257.610	0.0270b	ppb	0.0892	329.8	24.2851
Mo 202.032	1.1387b	ppb	1.8387	161.5	4.2369
Na 330.237	108.973b	ppb	133.619	122.6	35.1446
Ni 231.604	1.1845b	ppb	2.7614	233.1	-1.5707
Pb 220.353	5.3909b	ppb	1.8196	33.8	3.6549
Sb 206.834	-6.8035b	ppb	2.1332	31.4	3.7002
Se 196.026	-4.8245b	ppb	7.0814	146.8	3.4960
Si 288.158	64.0678b	ppb	11.4738	17.9	847.946
Sn 189.925	-1.3247b	ppb	4.0680	307.1	-1.3120
Sr 216.596	10029.9xb	ppb	13.9305	0.1	24520.8
Ti 334.941	0.1593b	ppb	0.0804	50.5	-13.1213
Tl 190.794	-4.9852b	ppb	6.6627	133.6	-3.6899
V 292.401	0.1278b	ppb	0.4249	332.6	-10.7918
Zn 206.200	1.5540b	ppb	0.2083	13.4	-0.4923

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si (Samp) 4/8/2019, 1:43:45 PM Rack 1, Tube 15

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3099	0.8143	0.3535
Al 308.215	13.5196	12.2245	13.4762
As 188.980	2.3662	3.4128	-0.5978u
B 249.678	1.2677	2.1730	1.6669
Ba 389.178	-2.8118u	0.5108	-1.1176u
Be 313.042	0.0015	0.0003	0.0004
Ca 370.602	32.45	36.51	44.28
Cd 226.502	0.2482	-0.0469u	-0.2342u
Co 228.615	-1.6583u	-1.8486u	-1.1004u
Cr 267.716	-0.4999u	0.1218	-0.4718u
Cu 324.754	1.2987	0.6342	0.6037
Fe 271.441	-11.8627u	12.5392	1.4107
K 766.491	-0.8256u	-1.1182u	0.5516
Mg 279.078	-1.1958u	-6.6491u	-5.6930u
Mn 257.610	0.2965	0.2899	0.2082
Mo 202.032	-0.4844u	-0.1609u	0.6045
Na 330.237	-358.016u	224.921	-77.7575u
Ni 231.604	-1.0540u	1.8184	1.8847
Pb 220.353	-5.8332u	-1.0067u	-1.7209u
Sb 206.834	2.0827	-0.7735u	-5.7707u
Se 196.026	-4.3352u	-2.5140u	-9.5834u
Si 288.158	35830.7	35965.4	36123.9
Sn 189.925	8.6989	0.5269	-10.6284u
Sr 216.596	1.1121	1.7205	1.2481
Ti 334.941	1.0223	0.9829	1.2463
Tl 190.794	-3.4180u	-8.8802u	-2.7879u
V 292.401	0.8377	-0.7770u	-0.3886u
Zn 206.200	4.5385	2.6626	1.8101

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4926	ppb	0.2795	56.7	-43.1009
Al 308.215	13.0734	ppb	0.7355	5.6	265.584
As 188.980	1.7271	ppb	2.0803	120.5	1.6595
B 249.678	1.7025	ppb	0.4537	26.6	-7.4424
Ba 389.178	-1.1395	ppb	1.6614	145.8	-36.8665
Be 313.042	0.0007	ppb	0.0006	90.6	-424.208
Ca 370.602	37.75	ppb	6.015	15.9	62.80
Cd 226.502	-0.0110	ppb	0.2432	2217.7	2.3043
Co 228.615	-1.5358	ppb	0.3888	25.3	-13.4907
Cr 267.716	-0.2833	ppb	0.3511	123.9	6.2230
Cu 324.754	0.8455	ppb	0.3928	46.5	496.492
Fe 271.441	0.6957	ppb	12.2167	1755.9	46.1444
K 766.491	-0.4641	ppb	0.8917	192.1	226.826
Mg 279.078	-4.5126	ppb	2.9120	64.5	22.7716
Mn 257.610	0.2649	ppb	0.0491	18.6	40.5803
Mo 202.032	-0.0136	ppb	0.5592	4113.5	2.6364
Na 330.237	-70.2842	ppb	291.540	414.8	30.7414
Ni 231.604	0.8831	ppb	1.6778	190.0	-1.8655
Pb 220.353	-2.8536	ppb	2.6050	91.3	0.6094
Sb 206.834	-1.4872	ppb	3.9750	267.3	5.3744
Se 196.026	-5.4775	ppb	3.6705	67.0	3.3767
Si 288.158	35973.3	ppb	146.769	0.4	153332

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.4675	ppb	9.7020	2075.1	-1.1194
Sr 216.596	1.3602	ppb	0.3193	23.5	6.6905
Ti 334.941	1.0839	ppb	0.1421	13.1	56.6488
Tl 190.794	-5.0287	ppb	3.3503	66.6	-3.7004
V 292.401	-0.1093	ppb	0.8428	770.9	-12.6600
Zn 206.200	3.0037	ppb	1.3958	46.5	0.2734

sb (Samp) 4/8/2019, 1:48:55 PM Rack 1, Tube 16
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1215u	0.3053	0.5738
Al 308.215	10.6632	9.2069	6.6203
As 188.980	-4.5577u	5.2805	-0.3975u
B 249.678	0.9020	0.1328	1.2048
Ba 389.178	0.3254	1.4814	-1.0099u
Be 313.042	-0.0038u	0.0019u	-0.0130u
Ca 370.602	11.55	4.449	6.102
Cd 226.502	0.0121u	0.0810	-0.3829u
Co 228.615	1.1361	-0.5570u	-0.3361u
Cr 267.716	-0.3573u	0.2938	-0.0156u
Cu 324.754	1.3263	-0.3929u	0.6438
Fe 271.441	9.5346	1.2307	-7.8200u
K 766.491	0.0918	-1.3450u	-0.7469u
Mg 279.078	-5.1410u	-3.3264u	-11.7545u
Mn 257.610	0.0290	-0.0047u	0.0625
Mo 202.032	-0.7907u	2.5529	-0.2605u
Na 330.237	-13.3030u	-449.568u	32.8335
Ni 231.604	-0.3214u	-0.8408u	-0.1267u
Pb 220.353	4.9190	-6.2775u	4.6744
Sb 206.834	56994.1x	57191.6x	57200.8x
Se 196.026	0.7616	12.7436	2.2094
Si 288.158	3968.99	3918.83	3877.32
Sn 189.925	3.4397	8.7536	2.7710
Sr 216.596	0.9859	-0.4324u	2.3419
Ti 334.941	0.7517	0.8441	0.7379
Tl 190.794	-9.6271u	-12.5468u	-13.3029u
V 292.401	0.3497	0.6760	1.2486
Zn 206.200	3.3144	1.8964	1.2119

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2526b	ppb	0.3506	138.8	-49.5457
Al 308.215	8.8301b	ppb	2.0476	23.2	258.433
As 188.980	0.1085b	ppb	4.9386	4553.6	1.3005
B 249.678	0.7465b	ppb	0.5527	74.0	-13.5638
Ba 389.178	0.2656b	ppb	1.2467	469.4	-29.7250
Be 313.042	-0.0049b	ppb	0.0075	152.1	-431.749
Ca 370.602	7.366b	ppb	3.714	50.4	19.66
Cd 226.502	-0.0966b	ppb	0.2503	259.1	0.9944
Co 228.615	0.0810b	ppb	0.9204	1136.2	-8.0991
Cr 267.716	-0.0264b	ppb	0.3257	1235.3	9.9486
Cu 324.754	0.5258b	ppb	0.8657	164.7	488.151
Fe 271.441	0.9818b	ppb	8.6800	884.1	46.3537
K 766.491	-0.6667b	ppb	0.7217	108.3	223.382

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	-6.7407b	ppb	4.4359	65.8	20.0617
Mn 257.610	0.0289b	ppb	0.0336	116.3	24.3851
Mo 202.032	0.5006b	ppb	1.7971	359.0	3.3506
Na 330.237	-143.346b	ppb	266.198	185.7	28.9564
Ni 231.604	-0.4296b	ppb	0.3692	85.9	-3.1558
Pb 220.353	1.1053b	ppb	6.3948	578.6	2.0717
Sb 206.834	57128.8xb	ppb	116.740	0.2	17996.6
Se 196.026	5.2382b	ppb	6.5401	124.9	5.3341
Si 288.158	3921.71b	ppb	45.9032	1.2	17229.0
Sn 189.925	4.9881b	ppb	3.2781	65.7	0.1064
Sr 216.596	0.9651b	ppb	1.3873	143.7	5.7284
Ti 334.941	0.7779b	ppb	0.0577	7.4	33.5501
Tl 190.794	-11.8256b	ppb	1.9411	16.4	-5.2805
V 292.401	0.7581b	ppb	0.4551	60.0	-5.3702
Zn 206.200	2.1409b	ppb	1.0724	50.1	-0.1823

as (Samp)

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Rack 1, Tube 17

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2617	-0.0119u	0.2915
Al 308.215	2.2818	-2.2801u	-7.9138u
As 188.980	22114.3x	21855.6x	22083.9x
B 249.678	0.7982	0.7835	0.2737
Ba 389.178	-1.2935u	2.4091	-4.6158u
Be 313.042	0.0087	0.0115	-0.0038u
Ca 370.602	21.89	9.621	17.55
Cd 226.502	0.3112	-0.4584u	0.5520
Co 228.615	-1.0463u	-0.3620u	-1.4543u
Cr 267.716	0.1700	-0.3771u	0.1396
Cu 324.754	1.8610	2.5772	0.0969
Fe 271.441	-11.7442u	-3.3753u	-9.6922u
K 766.491	-1.0261u	-1.9201u	-1.7588u
Mg 279.078	-2.0056u	-5.6205u	-11.8843u
Mn 257.610	-0.0742u	-0.0155u	0.1649
Mo 202.032	0.0495	0.6548	-0.5378u
Na 330.237	-179.911u	-157.192u	18.7658
Ni 231.604	-0.0087u	1.0485	-1.0284u
Pb 220.353	-0.4407u	1.0872	-1.1491u
Sb 206.834	2.2375	3.5267	4.0663
Se 196.026	2.6940	0.7494	7.8152
Si 288.158	95.7179	78.9758	70.7239
Sn 189.925	0.5363	6.2741	-6.0651u
Sr 216.596	2.4977	1.4275	-0.1633u
Ti 334.941	0.2829	0.3788	-0.0513u
Tl 190.794	-1.7993u	-1.0452u	-6.8712u
V 292.401	-0.5930u	-0.0026u	0.0176
Zn 206.200	2.3265	0.7236	3.3537

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1804b	ppb	0.1672	92.7	-51.4839
Al 308.215	-2.6374b	ppb	5.1072	193.6	239.026
As 188.980	22018.0xb	ppb	141.388	0.6	5401.02
B 249.678	0.6185b	ppb	0.2987	48.3	14.3837

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-1.1667b	ppb	3.5142	301.2	-37.0101
Be 313.042	0.0055b	ppb	0.0081	149.3	-422.002
Ca 370.602	16.35b	ppb	6.220	38.0	32.41
Cd 226.502	0.1350b	ppb	0.5277	391.1	3.9590
Co 228.615	-0.9542b	ppb	0.5519	57.8	-11.5552
Cr 267.716	-0.0225b	ppb	0.3075	1366.8	10.0065
Cu 324.754	1.5117b	ppb	1.2765	84.4	513.860
Fe 271.441	-8.2706b	ppb	4.3618	52.7	41.3179
K 766.491	-1.5683b	ppb	0.4765	30.4	208.055
Mg 279.078	-6.5035b	ppb	4.9982	76.9	20.3527
Mn 257.610	0.0251b	ppb	0.1246	497.4	24.1101
Mo 202.032	0.0555b	ppb	0.5963	1074.5	2.7326
Na 330.237	-106.112b	ppb	108.743	102.5	29.8585
Ni 231.604	0.0038b	ppb	1.0385	27445.7	-2.7296
Pb 220.353	-0.1675b	ppb	1.1429	682.1	1.6017
Sb 206.834	3.2768b	ppb	0.9397	28.7	6.8742
Se 196.026	3.7529b	ppb	3.6500	97.3	5.0628
Si 288.158	81.8059b	ppb	12.7351	15.6	922.792
Sn 189.925	0.2484b	ppb	6.1746	2485.5	-0.9585
Sr 216.596	1.2540b	ppb	1.3389	106.8	6.4322
Ti 334.941	0.2034b	ppb	0.2258	111.0	-9.8128
Tl 190.794	-3.2386b	ppb	3.1685	97.8	-3.2837
V 292.401	-0.1927b	ppb	0.3468	180.0	-13.3485
Zn 206.200	2.1346b	ppb	1.3255	62.1	-0.1857

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4365u	0.7985	0.0241
Al 308.215	-3.2522u	-2.9009u	-6.7482u
As 188.980	3.2290	-4.9698u	8.0942
B 249.678	1.2807	1.0581	1.6731
Ba 389.178	23425.0x	23371.3x	23423.8x
Be 313.042	-0.0051u	0.0185	-0.0089u
Ca 370.602	7.485	9.221	0.5957
Cd 226.502	0.1950	0.2346	0.3477
Co 228.615	-0.2136u	1.5435	-0.0176u
Cr 267.716	0.7601	-0.3932u	0.2162
Cu 324.754	0.9721	0.0559	0.7629
Fe 271.441	3.8825	2.1153	0.8784
K 766.491	-3.5747u	-2.6349u	-3.2226u
Mg 279.078	-10.9972u	-5.9415u	-4.6445u
Mn 257.610	0.0317	0.1213	0.0314
Mo 202.032	0.3856	1.3845	0.5441
Na 330.237	-49.5205u	461.207	-14.1827u
Ni 231.604	2.5269	-2.1548u	-0.8564u
Pb 220.353	0.3282	2.2965	7.9682
Sb 206.834	4.2744	5.6544	-0.6977u
Se 196.026	-11.4315u	-15.6742u	-0.9024u
Si 288.158	54.6876	43.2597	39.4830
Sn 189.925	10.1937	1.5681	6.0406
Sr 216.596	-1.3338u	0.9564	0.4787
Ti 334.941	0.0794	0.3271	0.0980

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Label	Replicates Concentration		
Tl 190.794	-5.8279u	-0.9748u	-8.4911u
V 292.401	0.5140	-0.8513u	1.1632
Zn 206.200	1.3229	1.6444	2.2322

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1287b	ppb	0.6241	485.0	-52.8790
Al 308.215	-4.3004b	ppb	2.1271	49.5	236.238
As 188.980	2.1178b	ppb	6.6025	311.8	1.7473
B 249.678	1.3373b	ppb	0.3114	23.3	-9.7793
Ba 389.178	23406.7xb	ppb	30.6272	0.1	118996
Be 313.042	0.0015b	ppb	0.0149	988.3	-427.476
Ca 370.602	5.767b	ppb	4.562	79.1	17.37
Cd 226.502	0.2591b	ppb	0.0792	30.6	5.3874
Co 228.615	0.4374b	ppb	0.9629	220.1	-6.9177
Cr 267.716	0.1944b	ppb	0.5769	296.8	13.1528
Cu 324.754	0.5970b	ppb	0.4801	80.4	490.018
Fe 271.441	2.2921b	ppb	1.5098	65.9	47.0971
K 766.491	-3.1441b	ppb	0.4748	15.1	181.269
Mg 279.078	-7.1944b	ppb	3.3565	46.7	19.5116
Mn 257.610	0.0615b	ppb	0.0518	84.3	26.6147
Mo 202.032	0.7714b	ppb	0.5369	69.6	3.7267
Na 330.237	132.501b	ppb	285.215	215.3	35.7122
Ni 231.604	-0.1614b	ppb	2.4170	1497.1	-2.8930
Pb 220.353	3.5310b	ppb	3.9668	112.3	2.9678
Sb 206.834	3.0770b	ppb	3.3410	108.6	6.8125
Se 196.026	-9.3360b	ppb	7.6056	81.5	2.6709
Si 288.158	45.8101b	ppb	7.9166	17.3	770.574
Sn 189.925	5.9341b	ppb	4.3138	72.7	0.3190
Sr 216.596	0.0338b	ppb	1.2082	3578.6	3.4390
Ti 334.941	0.1682b	ppb	0.1379	82.0	-12.4714
Tl 190.794	-5.0979b	ppb	3.8109	74.8	-3.7158
V 292.401	0.2753b	ppb	1.0283	373.5	-9.5572
Zn 206.200	1.7331b	ppb	0.4611	26.6	-0.3979

be (Samp)

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Rack 1, Tube 19

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8051	-0.5737u	0.7978
Al 308.215	-5.7737u	-7.7571u	-5.0728u
As 188.980	-0.2104	1.2193	5.8316
B 249.678	1.2011	0.9970	1.0867
Ba 389.178	-2.5824u	-1.1781u	1.2019
Be 313.042	9807.04x	9794.13x	9784.87x
Ca 370.602	14.44	7.103	8.582
Cd 226.502	-0.2687u	0.1703	-0.1990u
Co 228.615	-0.0689u	0.5020	0.9141
Cr 267.716	-0.4007u	0.5434	0.3233
Cu 324.754	1.6019	0.2315	0.0668
Fe 271.441	5.1551	-2.6356u	2.4627
K 766.491	-0.8882u	-2.0340u	-1.9792u
Mg 279.078	-7.7412u	-7.4373u	-9.5481u
Mn 257.610	0.9784	0.9668	1.0814
Mo 202.032	1.7325	0.8649	2.3485

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Label	Replicates Concentration		
Na 330.237	34.6084	215.467	-479.524u
Ni 231.604	-3.3211u	-0.0895u	0.6197
Pb 220.353	3.6783	1.7856	6.2610
Sb 206.834	5.2170	-2.2335	-6.9676
Se 196.026	9.4605	0.5749	3.7237
Si 288.158	42.1964	29.4207	27.9521
Sn 189.925	6.6428	10.2361	0.7901
Sr 216.596	-0.3000u	0.5803	-0.4545u
Ti 334.941	0.1828	0.0868	0.0856
Tl 190.794	-12.9826u	-8.0197u	-4.6621u
V 292.401	-0.1236u	0.4096	-0.6860u
Zn 206.200	1.9069	4.6631	2.8450

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3430b	ppb	0.7939	231.4	-47.1113
Al 308.215	-6.2012b	ppb	1.3923	22.5	233.021
As 188.980	2.2802b	ppb	3.1576	138.5	1.8184
B 249.678	1.0949b	ppb	0.1023	9.3	-11.3295
Ba 389.178	-0.8529b	ppb	1.9130	224.3	-35.4132
Be 313.042	9795.35xb	ppb	11.1381	0.1	7575401
Ca 370.602	10.04b	ppb	3.880	38.6	23.46
Cd 226.502	-0.0991b	ppb	0.2359	238.1	1.2823
Co 228.615	0.4490b	ppb	0.4936	109.9	-6.8841
Cr 267.716	0.1554b	ppb	0.4940	318.0	12.5871
Cu 324.754	0.6334b	ppb	0.8428	133.1	490.978
Fe 271.441	1.6607b	ppb	3.9568	238.3	46.7689
K 766.491	-1.6338b	ppb	0.6463	39.6	206.941
Mg 279.078	-8.2422b	ppb	1.1411	13.8	18.2271
Mn 257.610	1.0089b	ppb	0.0630	6.2	91.5445
Mo 202.032	1.6486b	ppb	0.7453	45.2	4.9452
Na 330.237	-76.4827b	ppb	360.568	471.4	30.5844
Ni 231.604	-0.9303b	ppb	2.1006	225.8	-3.6484
Pb 220.353	3.9083b	ppb	2.2465	57.5	3.1070
Sb 206.834	-1.3280b	ppb	6.1425	462.5	8.1958
Se 196.026	4.5864b	ppb	4.5052	98.2	5.2151
Si 288.158	33.1898b	ppb	7.8345	23.6	717.066
Sn 189.925	5.8897b	ppb	4.7678	81.0	0.3090
Sr 216.596	-0.0581b	ppb	0.5582	961.0	3.2020
Ti 334.941	0.1184b	ppb	0.0558	47.1	-16.2314
Tl 190.794	-8.5548b	ppb	4.1860	48.9	-4.5197
V 292.401	-0.1333b	ppb	0.5479	410.9	-12.9419
Zn 206.200	3.1383b	ppb	1.4013	44.7	0.3443

cd (Samp) 4/8/2019, 2:09:38 PM Rack 1, Tube 20
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.4055	0.0295	0.2912
Al 308.215	-3.9421u	0.1689	-1.4409u
As 188.980	4.7483	-0.1473u	3.0379
B 249.678	1.7366	0.5627	1.2067
Ba 389.178	-3.8295u	-3.8154u	-3.7801u
Be 313.042	0.6017	0.5834	0.5822
Ca 370.602	14.47	8.651	0.7089

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Label	Replicates Concentration		
Cd 226.502	10682.4x	10699.2x	10700.8x
Co 228.615	-1.6147u	-1.6912u	-1.2834u
Cr 267.716	0.3687	-0.6152u	-0.6988u
Cu 324.754	1.7349	0.5954	0.3494
Fe 271.441	19.8934	16.0525	10.9146
K 766.491	-2.3771u	-0.4815u	-1.9880u
Mg 279.078	-10.8624u	-9.9595u	-10.5103u
Mn 257.610	0.1112	-0.0364u	0.2105
Mo 202.032	3.5304	-1.9501u	2.7456
Na 330.237	-7.0316u	-73.3633u	75.3224
Ni 231.604	2.3286	-0.2628u	2.0238
Pb 220.353	-2.8138u	4.6981	-2.6820u
Sb 206.834	-0.4840u	-1.5865u	-7.5799u
Se 196.026	-8.3566u	-7.5849u	3.8897
Si 288.158	31.2672	18.8312	20.7721
Sn 189.925	0.1830	-4.5829u	7.7015
Sr 216.596	0.9435	-0.4241u	-0.9709u
Ti 334.941	0.2503	0.1020	0.2166
Tl 190.794	-5.0314u	-7.6890u	0.4920
V 292.401	1.4298	0.9418	1.0366
Zn 206.200	3.0929	1.2414	2.4188

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5754b	ppb	0.7307	127.0	-40.8688
Al 308.215	-1.7380b	ppb	2.0716	119.2	240.587
As 188.980	2.5463b	ppb	2.4845	97.6	1.8480
B 249.678	1.1686b	ppb	0.5879	50.3	-10.8742
Ba 389.178	-3.8083b	ppb	0.0255	0.7	-50.4386
Be 313.042	0.5891b	ppb	0.0109	1.9	30.8118
Ca 370.602	7.942b	ppb	6.905	87.0	20.44
Cd 226.502	10694.1xb	ppb	10.1908	0.1	122419
Co 228.615	-1.5298b	ppb	0.2167	14.2	-13.4868
Cr 267.716	-0.3151b	ppb	0.5937	188.4	5.7601
Cu 324.754	0.8932b	ppb	0.7392	82.8	497.748
Fe 271.441	15.6202b	ppb	4.5050	28.8	54.2182
K 766.491	-1.6155b	ppb	1.0012	62.0	207.252
Mg 279.078	-10.4441b	ppb	0.4551	4.4	15.5540
Mn 257.610	0.0951b	ppb	0.1242	130.6	28.9216
Mo 202.032	1.4420b	ppb	2.9637	205.5	4.6579
Na 330.237	-1.6909b	ppb	74.4866	4405.1	32.4175
Ni 231.604	1.3632b	ppb	1.4164	103.9	-1.3938
Pb 220.353	-0.2659b	ppb	4.2994	1616.9	1.5653
Sb 206.834	-3.2168b	ppb	3.8185	118.7	4.8283
Se 196.026	-4.0172b	ppb	6.8585	170.7	3.6434
Si 288.158	23.6235b	ppb	6.6904	28.3	676.446
Sn 189.925	1.1005b	ppb	6.1934	562.8	-0.7671
Sr 216.596	-0.1505b	ppb	0.9861	655.3	2.9806
Ti 334.941	0.1896b	ppb	0.0777	41.0	-10.8534
Tl 190.794	-4.0761b	ppb	4.1733	102.4	-3.4791
V 292.401	1.1361b	ppb	0.2587	22.8	-2.5058
Zn 206.200	2.2510b	ppb	0.9371	41.6	-0.1236

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 2:14:51 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	510.035	511.779	507.597
Al 308.215	10374.1	10378.8	10350.1
As 188.980	537.516	536.911	549.832
B 249.678	521.636	524.811	527.918
Ba 389.178	511.813	514.011	513.091
Be 313.042	534.746	534.737	533.186
Ca 370.602	10362	10349	10343
Cd 226.502	522.689	523.620	522.902
Co 228.615	520.796	520.969	522.228
Cr 267.716	515.487	516.961	517.033
Cu 324.754	517.584	521.756	517.338
Fe 271.441	10431.3	10455.7	10457.9
K 766.491	9993.90	9994.15	9972.54
Mg 279.078	10348.1	10358.3	10320.6
Mn 257.610	517.594	517.618	516.494
Mo 202.032	518.474	518.977	523.796
Na 330.237	10602.4	10428.8	10779.2
Ni 231.604	517.682	524.622	517.207
Pb 220.353	521.743	513.286	522.486
Sb 206.834	515.617	514.277	508.121
Se 196.026	526.398	509.589	521.649
Si 288.158	5066.04	5059.69	5042.35
Sn 189.925	510.735	515.046	524.622
Sr 216.596	520.384	520.518	522.116
Ti 334.941	518.394	518.930	517.766
Tl 190.794	524.731	517.405	511.110
V 292.401	527.178	529.507	525.098
Zn 206.200	1052.41	1050.82	1055.69

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	509.803	ppb	2.1006	0.4	13646.7	101.96068
Al 308.215	10367.7	ppb	15.3892	0.1	17781.8	103.67673
As 188.980	541.420	ppb	7.2917	1.3	131.338	108.28397
B 249.678	524.788	ppb	3.1411	0.6	3337.71	104.95766
Ba 389.178	512.972	ppb	1.1041	0.2	2588.01	102.59438
Be 313.042	534.223	ppb	0.8982	0.2	412729	106.84458
Ca 370.602	10351	ppb	9.438	0.1	14713	103.51217
Cd 226.502	523.070	ppb	0.4876	0.1	6003.07	104.61403
Co 228.615	521.331	ppb	0.7815	0.1	1730.74	104.26619
Cr 267.716	516.494	ppb	0.8729	0.2	7505.52	103.29874
Cu 324.754	518.893	ppb	2.4827	0.5	14009.3	103.77853
Fe 271.441	10448.3	ppb	14.7839	0.1	5725.04	104.43081
K 766.491	9986.87	ppb	12.4035	0.1	170003	99.86866
Mg 279.078	10342.4	ppb	19.5042	0.2	12613.1	103.42354
Mn 257.610	517.236	ppb	0.6423	0.1	35521.8	103.44713
Mo 202.032	520.415	ppb	2.9382	0.6	725.296	104.08305
Na 330.237	10603.5	ppb	175.222	1.7	276.369	106.03454
Ni 231.604	519.837	ppb	4.1505	0.8	507.472	103.96737
Pb 220.353	519.172	ppb	5.1109	1.0	193.230	103.83437
Sb 206.834	512.672	ppb	3.9975	0.8	168.602	102.53435
Se 196.026	519.212	ppb	8.6655	1.7	99.2348	103.84243
Si 288.158	5056.03	ppb	12.2607	0.2	22170.7	101.12057

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	516.801	ppb	7.1078	1.4	115.104	103.36024
Sr 216.596	521.006	ppb	0.9633	0.2	1270.97	104.20123
Ti 334.941	518.363	ppb	0.5825	0.1	39120.6	103.67265
Tl 190.794	517.749	ppb	6.8170	1.3	117.988	103.54979
V 292.401	527.261	ppb	2.2058	0.4	4273.98	105.45221
Zn 206.200	1052.97	ppb	2.4836	0.2	554.594	105.29716

Cont Calib Blank (CCB) 4/8/2019, 2:20:04 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1204	0.1819	0.4531
Al 308.215	-7.4022u	-5.9699u	-7.9050u
As 188.980	-3.8301u	2.1397	-2.1819u
B 249.678	11.0802	9.7951	8.9916
Ba 389.178	-3.4992u	-2.4327u	-3.2926u
Be 313.042	0.0244	0.0252	0.0166
Ca 370.602	-0.0974u	7.905	7.280
Cd 226.502	-0.0145u	0.0850	-0.1503u
Co 228.615	0.6749	-0.4472u	0.2626
Cr 267.716	-0.3417u	0.0895	-0.3551u
Cu 324.754	0.2053	0.8942	0.2701
Fe 271.441	3.9638	6.9487	-4.0330u
K 766.491	-0.9954u	-0.1675u	-0.4528u
Mg 279.078	0.4566	-4.3248u	3.1279
Mn 257.610	-0.0042u	-0.0497u	-0.0475u
Mo 202.032	0.5958	-1.4926u	0.8202
Na 330.237	-3.4155u	245.603	49.6945
Ni 231.604	-0.6227u	-1.1868u	0.8165
Pb 220.353	-1.8102u	7.9219	-5.1851u
Sb 206.834	-0.8134u	-6.0137u	-2.1578u
Se 196.026	-8.8223u	6.0247	0.7369
Si 288.158	33.3453	27.1300	19.8903
Sn 189.925	3.9391	6.8599	0.4705
Sr 216.596	-1.0227u	1.1156	-1.7597u
Ti 334.941	0.2989	0.2217	0.0533
Tl 190.794	-5.3342u	-3.8638u	4.0338
V 292.401	-0.7793u	0.1366	0.8072
Zn 206.200	-0.1741u	2.2603	4.1018

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.5851	ppb	0.4830	82.5	-40.6050	0.58514
Al 308.215	-7.0924	ppb	1.0041	14.2	231.509	-7.09238
As 188.980	-1.2908	ppb	3.0830	238.9	0.8994	-1.29077
B 249.678	9.9557	ppb	1.0535	10.6	45.5000	9.95566
Ba 389.178	-3.0748	ppb	0.5656	18.4	-46.7031	-3.07483
Be 313.042	0.0221	ppb	0.0047	21.4	-407.728	0.02207
Ca 370.602	5.029	ppb	4.451	88.5	16.32	5.02918
Cd 226.502	-0.0266	ppb	0.1181	443.8	2.1193	-0.02661
Co 228.615	0.1634	ppb	0.5676	347.3	-7.8294	0.16343
Cr 267.716	-0.2024	ppb	0.2529	124.9	7.3953	-0.20245
Cu 324.754	0.4565	ppb	0.3804	83.3	486.355	0.45654
Fe 271.441	2.2932	ppb	5.6783	247.6	47.0766	2.29318
K 766.491	-0.5386	ppb	0.4206	78.1	225.560	-0.53855

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-0.2467	ppb	3.7758	1530.3	27.9712	-0.24674
Mn 257.610	-0.0338	ppb	0.0257	76.0	20.1154	-0.03376
Mo 202.032	-0.0255	ppb	1.2755	4999.0	2.6199	-0.02552
Na 330.237	97.2939	ppb	131.156	134.8	34.8452	97.29387
Ni 231.604	-0.3310	ppb	1.0330	312.1	-3.0592	-0.33102
Pb 220.353	0.3089	ppb	6.8056	2203.5	1.7775	0.30886
Sb 206.834	-2.9950	ppb	2.6994	90.1	4.8999	-2.99496
Se 196.026	-0.6869	ppb	7.5252	1095.5	4.2518	-0.68689
Si 288.158	26.7885	ppb	6.7340	25.1	689.705	26.78851
Sn 189.925	3.7565	ppb	3.1986	85.1	-0.1703	3.75653
Sr 216.596	-0.5556	ppb	1.4935	268.8	2.0000	-0.55559
Ti 334.941	0.1913	ppb	0.1256	65.7	-10.7058	0.19130
Tl 190.794	-1.7214	ppb	5.0380	292.7	-2.9307	-1.72139
V 292.401	0.0548	ppb	0.7964	1452.0	-11.3431	0.05485
Zn 206.200	2.0627	ppb	2.1448	104.0	-0.2237	2.06267

cu (Samp)

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Rack 1, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1084	-0.0495u	0.9001
Al 308.215	-3.8777u	-5.6681u	-11.9462u
As 188.980	4.0748	6.2840	-3.7195u
B 249.678	3.0397	3.7288	3.2406
Ba 389.178	-0.9909u	0.3553	-4.6334u
Be 313.042	0.0292	0.0198	0.0032
Ca 370.602	6.790	1.667	8.699
Cd 226.502	-0.0141u	-0.4405u	0.2529
Co 228.615	-0.8576u	-2.2626u	0.7713
Cr 267.716	0.4273	0.2845	-0.9026u
Cu 324.754	53978.9x	53185.9x	54630.7x
Fe 271.441	2.2405	7.0882	-9.0868u
K 766.491	-1.8028u	-1.0972u	-1.7689u
Mg 279.078	-1.5823u	-7.5826u	-6.2951u
Mn 257.610	-0.0153u	-0.0373u	0.0445
Mo 202.032	-0.6516u	-0.2802u	0.4824
Na 330.237	-92.4816u	226.333	-39.0621u
Ni 231.604	0.9743	-0.8387u	1.6899
Pb 220.353	-2.9782u	-12.2124u	2.4711
Sb 206.834	-1.0565u	0.9261	-4.2506u
Se 196.026	-12.9513u	-1.0500u	1.9874
Si 288.158	18.8449	14.6396	14.7176
Sn 189.925	0.0528	2.7693	-1.9107u
Sr 216.596	-0.2519u	0.7224	-0.1790u
Ti 334.941	-1.5141u	-1.3256u	-1.5459u
Tl 190.794	-12.6212u	-11.3044u	-7.5209u
V 292.401	1.1048	1.4612	0.7595
Zn 206.200	-0.0941u	2.1191	2.6548

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3197b	ppb	0.5089	159.2	-47.7340
Al 308.215	-7.1640b	ppb	4.2371	59.1	231.413
As 188.980	2.2131b	ppb	5.2552	237.5	1.7898
B 249.678	3.3363b	ppb	0.3544	10.6	3.0477

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-1.7563b	ppb	2.5809	146.9	-40.0072
Be 313.042	0.0174b	ppb	0.0132	75.6	-408.447
Ca 370.602	5.719b	ppb	3.636	63.6	17.30
Cd 226.502	-0.0672b	ppb	0.3497	520.3	1.6470
Co 228.615	-0.7830b	ppb	1.5183	193.9	-10.9891
Cr 267.716	-0.0636b	ppb	0.7301	1147.4	9.4065
Cu 324.754	53931.8xb	ppb	723.517	1.3	1406579
Fe 271.441	0.0806b	ppb	8.3010	10293.4	45.8396
K 766.491	-1.5563b	ppb	0.3980	25.6	208.259
Mg 279.078	-5.1533b	ppb	3.1589	61.3	21.9973
Mn 257.610	-0.0027b	ppb	0.0423	1583.0	21.9476
Mo 202.032	-0.1498b	ppb	0.5782	386.0	2.4472
Na 330.237	31.5963b	ppb	170.749	540.4	33.2514
Ni 231.604	0.6085b	ppb	1.3034	214.2	-2.1356
Pb 220.353	-4.2398b	ppb	7.4226	175.1	0.0974
Sb 206.834	-1.4603b	ppb	2.6119	178.9	5.3826
Se 196.026	-4.0046b	ppb	7.8955	197.2	3.6457
Si 288.158	16.0674b	ppb	2.4057	15.0	643.723
Sn 189.925	0.3038b	ppb	2.3500	773.5	-0.9461
Sr 216.596	0.0972b	ppb	0.5427	558.6	3.5968
Ti 334.941	-1.4619b	ppb	0.1191	8.1	-135.497
Tl 190.794	-10.4822b	ppb	2.6477	25.3	-4.9680
V 292.401	1.1085b	ppb	0.3509	31.7	-2.6857
Zn 206.200	1.5599b	ppb	1.4573	93.4	-0.4892

b (Samp) **4/8/2019, 2:30:27 PM** **Rack 1, Tube 22**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2268	0.4791	0.2523
Al 308.215	-7.3836u	-5.3472u	-5.9105u
As 188.980	6.2249	-2.8946u	-4.0426u
B 249.678	22054.3x	22274.9x	22407.4x
Ba 389.178	-1.2320u	0.4190	-1.7392u
Be 313.042	0.0033	0.0020	-0.0010u
Ca 370.602	8.486	14.03	9.195
Cd 226.502	-0.1986u	0.5538	0.4743
Co 228.615	-0.9623u	-2.3499u	0.5863
Cr 267.716	0.3632	0.4266	-0.2232u
Cu 324.754	4.8955	4.9747	2.6861
Fe 271.441	-0.0907u	-6.4128u	1.3393
K 766.491	-2.8145u	-0.2102u	-2.2361u
Mg 279.078	-6.9181u	-8.6101u	-10.2622u
Mn 257.610	0.0640	0.0456	-0.0464u
Mo 202.032	0.7293	0.3367	0.6513
Na 330.237	-43.0535u	120.673	81.5358
Ni 231.604	0.2868	-1.2598u	2.3883
Pb 220.353	12.8501	-2.5901u	-3.9516u
Sb 206.834	-0.1148u	0.6936	5.2815
Se 196.026	-6.3778u	-7.9585u	-9.2233u
Si 288.158	18.9486	15.7815	19.2007
Sn 189.925	12.0038	-9.4038u	-0.1548u
Sr 216.596	0.0093	1.4211	-0.3317u
Ti 334.941	0.3711	0.1663	-0.1061u

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Label	Replicates Concentration		
Tl 190.794	-0.7514u	-12.1608u	-2.6570u
V 292.401	-0.0776u	-0.8570u	0.2603
Zn 206.200	0.4289	5.1125	1.0546

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3194b	ppb	0.1389	43.5	-47.7507
Al 308.215	-6.2137b	ppb	1.0515	16.9	232.993
As 188.980	-0.2374b	ppb	5.6259	2369.4	1.1689
B 249.678	22245.5xb	ppb	178.379	0.8	142671
Ba 389.178	-0.8507b	ppb	1.1285	132.6	-35.4008
Be 313.042	0.0015b	ppb	0.0022	150.4	-423.707
Ca 370.602	10.57b	ppb	3.017	28.5	24.18
Cd 226.502	0.2765b	ppb	0.4134	149.5	5.5910
Co 228.615	-0.9086b	ppb	1.4689	161.7	-11.4094
Cr 267.716	0.1889b	ppb	0.3583	189.7	13.0745
Cu 324.754	4.1854b	ppb	1.2991	31.0	583.582
Fe 271.441	-1.7214b	ppb	4.1253	239.6	44.8606
K 766.491	-1.7536b	ppb	1.3676	78.0	204.906
Mg 279.078	-8.5968b	ppb	1.6721	19.5	17.8045
Mn 257.610	0.0211b	ppb	0.0591	280.7	23.8419
Mo 202.032	0.5724b	ppb	0.2078	36.3	3.4504
Na 330.237	53.0516b	ppb	85.4989	161.2	33.7651
Ni 231.604	0.4718b	ppb	1.8311	388.1	-2.2699
Pb 220.353	2.1028b	ppb	9.3323	443.8	2.4404
Sb 206.834	1.9534b	ppb	2.9104	149.0	6.4574
Se 196.026	-7.8532b	ppb	1.4257	18.2	2.9427
Si 288.158	17.9769b	ppb	1.9055	10.6	651.706
Sn 189.925	0.8151b	ppb	10.7367	1317.2	-0.8312
Sr 216.596	0.3662b	ppb	0.9293	253.7	4.2496
Ti 334.941	0.1438b	ppb	0.2394	166.5	-14.3188
Tl 190.794	-5.1898b	ppb	6.1118	117.8	-3.7379
V 292.401	-0.2248b	ppb	0.5730	254.9	-13.6573
Zn 206.200	2.1987b	ppb	2.5428	115.7	-0.1518

pb (Samp) 4/8/2019, 2:35:39 PM Rack 1, Tube 23
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9035	-0.1098u	0.9033
Al 308.215	-1.8847u	-1.1112u	-6.9772u
As 188.980	1.9415	-3.7030u	0.9994
B 249.678	463.332	408.795	365.927
Ba 389.178	-4.2664u	-0.6734u	-1.8442u
Be 313.042	-0.0010u	0.0077	-0.0248u
Ca 370.602	7.299	10.58	7.036
Cd 226.502	-0.1355u	-0.0263u	0.1929
Co 228.615	1.5766	0.4775	-0.1336u
Cr 267.716	-0.1627u	-0.5955u	-0.1731u
Cu 324.754	1.7702	1.9724	0.8066
Fe 271.441	11.2599	7.7936	24.6717
K 766.491	-0.9433u	-3.5709u	-4.2455u
Mg 279.078	-10.0048u	-5.5357u	-2.2007u
Mn 257.610	0.0074	-0.0066u	-0.0908u
Mo 202.032	0.6335	-0.6512u	-0.3601u

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	-29.7298u	37.7332	-21.5141u
Ni 231.604	3.3257	0.9042	1.0642
Pb 220.353	21762.8x	21831.9x	21824.5x
Sb 206.834	-2.0851u	1.6983	3.6885
Se 196.026	0.7100	12.5735	6.8299
Si 288.158	16.6575	12.1872	11.2026
Sn 189.925	4.3310	6.2339	-4.5993u
Sr 216.596	-0.6522u	-0.5134u	0.2600
Ti 334.941	0.0840	0.2730	0.1570
Tl 190.794	-8.5641u	-10.4936u	-12.2561u
V 292.401	0.1112	-0.2652u	-0.5153u
Zn 206.200	-0.6927u	0.3936	1.9404

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5657b	ppb	0.5850	103.4	-41.1323
Al 308.215	-3.3244b	ppb	3.1870	95.9	237.862
As 188.980	-0.2540b	ppb	3.0238	1190.4	1.1949
B 249.678	412.685b	ppb	48.8188	11.8	2628.72
Ba 389.178	-2.2613b	ppb	1.8325	81.0	-42.5715
Be 313.042	-0.0060b	ppb	0.0168	278.4	-431.699
Ca 370.602	8.305b	ppb	1.974	23.8	20.96
Cd 226.502	0.0104b	ppb	0.1673	1612.6	2.6612
Co 228.615	0.6402b	ppb	0.8666	135.4	-6.2334
Cr 267.716	-0.3104b	ppb	0.2469	79.5	5.8288
Cu 324.754	1.5164b	ppb	0.6230	41.1	513.979
Fe 271.441	14.5750b	ppb	8.9141	61.2	53.7475
K 766.491	-2.9199b	ppb	1.7447	59.8	185.080
Mg 279.078	-5.9138b	ppb	3.9157	66.2	21.0710
Mn 257.610	-0.0300b	ppb	0.0531	176.9	20.3564
Mo 202.032	-0.1260b	ppb	0.6736	534.8	2.4803
Na 330.237	-4.5036b	ppb	36.8081	817.3	32.3636
Ni 231.604	1.7647b	ppb	1.3542	76.7	-1.0011
Pb 220.353	21806.4xb	ppb	37.9390	0.2	8058.09
Sb 206.834	1.1006b	ppb	2.9328	266.5	6.1900
Se 196.026	6.7044b	ppb	5.9327	88.5	5.6019
Si 288.158	13.3491b	ppb	2.9071	21.8	632.828
Sn 189.925	1.9885b	ppb	5.7840	290.9	-0.5675
Sr 216.596	-0.3019b	ppb	0.4915	162.8	2.6276
Ti 334.941	0.1713b	ppb	0.0953	55.6	-12.2257
Tl 190.794	-10.4379b	ppb	1.8466	17.7	-4.9579
V 292.401	-0.2231b	ppb	0.3154	141.4	-13.5752
Zn 206.200	0.5471b	ppb	1.3233	241.9	-1.0242

se (Samp) 4/8/2019, 2:40:52 PM Rack 1, Tube 24
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3532	0.0063	0.1798
Al 308.215	-8.3018u	-6.2715u	-6.8601u
As 188.980	-4.4776u	-2.5546u	2.7116
B 249.678	95.3239	89.0137	81.5631
Ba 389.178	-2.7187u	-3.4436u	-4.1138u
Be 313.042	-0.0036u	-0.0168u	-0.0108u
Ca 370.602	6.033	3.495	9.987

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Label	Replicates Concentration		
Cd 226.502	0.4219	-0.7612u	0.4876
Co 228.615	-0.5876u	0.0846	0.6927
Cr 267.716	-0.5367u	0.0172	-0.4572u
Cu 324.754	3.2769	1.5261	1.7339
Fe 271.441	3.8393	-12.6890u	6.1922
K 766.491	-2.4757u	-1.3322u	-2.6821u
Mg 279.078	-12.4121u	-11.1507u	-8.8276u
Mn 257.610	0.0520	0.0918	-0.0592u
Mo 202.032	3.2764	0.1443	-0.1908u
Na 330.237	-154.038u	-33.7729u	89.5050
Ni 231.604	0.7503	-2.0550u	0.0053
Pb 220.353	7.6749	8.8250	14.9521
Sb 206.834	16.6013	-0.1404u	-2.6122u
Se 196.026	26923.7x	26844.5x	26806.4x
Si 288.158	20.6099	13.0506	12.5978
Sn 189.925	-1.8259u	2.0347	9.3358
Sr 216.596	0.7694	-0.6283u	-0.1109u
Ti 334.941	-0.0594u	0.2283	0.1115
Tl 190.794	-7.8674u	-8.8990u	1.0484
V 292.401	0.3206	0.3243	0.3019
Zn 206.200	3.3621	2.4026	-0.7217u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1798b	ppb	0.1735	96.5	-51.5008
Al 308.215	-7.1445b	ppb	1.0446	14.6	231.436
As 188.980	-1.4402b	ppb	3.7219	258.4	0.8642
B 249.678	88.6335b	ppb	6.8883	7.8	550.165
Ba 389.178	-3.4254b	ppb	0.6977	20.4	-48.4933
Be 313.042	-0.0104b	ppb	0.0066	63.2	-435.083
Ca 370.602	6.505b	ppb	3.272	50.3	18.42
Cd 226.502	0.0494b	ppb	0.7028	1421.3	2.9879
Co 228.615	0.0632b	ppb	0.6404	1012.8	-8.1669
Cr 267.716	-0.3256b	ppb	0.2995	92.0	5.6081
Cu 324.754	2.1789b	ppb	0.9565	43.9	531.264
Fe 271.441	-0.8858b	ppb	10.2893	1161.5	45.3519
K 766.491	-2.1633b	ppb	0.7271	33.6	197.940
Mg 279.078	-10.7968b	ppb	1.8183	16.8	15.1261
Mn 257.610	0.0282b	ppb	0.0783	277.3	24.3313
Mo 202.032	1.0766b	ppb	1.9124	177.6	4.1506
Na 330.237	-32.7686b	ppb	121.775	371.6	31.6667
Ni 231.604	-0.4331b	ppb	1.4532	335.5	-3.1594
Pb 220.353	10.4840b	ppb	3.9120	37.3	5.5367
Sb 206.834	4.6162b	ppb	10.4527	226.4	7.2961
Se 196.026	26858.2xb	ppb	59.8646	0.2	4910.47
Si 288.158	15.4194b	ppb	4.5008	29.2	641.158
Sn 189.925	3.1815b	ppb	5.6685	178.2	-0.2995
Sr 216.596	0.0101b	ppb	0.7067	7030.6	3.3830
Ti 334.941	0.0934b	ppb	0.1447	154.8	-18.1136
Tl 190.794	-5.2393b	ppb	5.4697	104.4	-3.7489
V 292.401	0.3156b	ppb	0.0120	3.8	-9.2293
Zn 206.200	1.6810b	ppb	2.1354	127.0	-0.4252

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

tl (Samp)	4/8/2019, 2:46:03 PM			Rack 1, Tube 25
Weight: 1	Volume: 1			Dilution: 1
Label	Replicates Concentration			
Ag 328.068	0.7305	0.3159	1.0846	
Al 308.215	-0.3022u	-3.7883u	-2.9545u	
As 188.980	653.256	642.457u	642.503u	
B 249.678	32.5003	31.5516	29.6953	
Ba 389.178	0.5456	-1.2685u	-1.5637u	
Be 313.042	-0.0068u	0.0099	-0.0022u	
Ca 370.602	21.60	25.68	19.28	
Cd 226.502	0.2160	0.2310	-0.5125u	
Co 228.615	-0.1959u	-0.5328u	0.7395	
Cr 267.716	0.2656	-0.0907u	0.1500	
Cu 324.754	-0.0635u	1.5642	0.7403	
Fe 271.441	-12.9334u	-0.9192u	5.6075	
K 766.491	-1.0425u	-1.0195u	-2.9736u	
Mg 279.078	-9.0000u	-6.0229u	-3.8340u	
Mn 257.610	0.1946	0.1832	0.1152	
Mo 202.032	2.0565	1.6492	0.0927	
Na 330.237	90.0851	-92.4528u	78.5834	
Ni 231.604	2.7510	4.6890	5.4345	
Pb 220.353	3.3692	-3.4185u	3.0269	
Sb 206.834	1.7309	7.1403	-2.7670u	
Se 196.026	-3.5103u	-11.7468u	7.6326	
Si 288.158	17.7284	15.1707	11.4634	
Sn 189.925	2.2319	6.4387	-2.8125u	
Sr 216.596	1.7398	1.5406	-1.2104u	
Ti 334.941	0.2675	0.0342	0.0429	
Tl 190.794	32624.7x	32822.3x	32786.1x	
V 292.401	0.4561	-1.0971u	1.5184	
Zn 206.200	-1.5721u	-1.3789u	0.9281	

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7103b	ppb	0.3847	54.2	-37.2398
Al 308.215	-2.3483b	ppb	1.8204	77.5	239.535
As 188.980	646.072b	ppb	6.2218	1.0	1.2414
B 249.678	31.2491b	ppb	1.4268	4.6	182.089
Ba 389.178	-0.7622b	ppb	1.1422	149.8	-34.9497
Be 313.042	0.0003b	ppb	0.0086	2740.2	-426.632
Ca 370.602	22.19b	ppb	3.241	14.6	40.70
Cd 226.502	-0.0218b	ppb	0.4250	1945.1	2.1656
Co 228.615	0.0036b	ppb	0.6592	18153.1	-8.3680
Cr 267.716	0.1083b	ppb	0.1817	167.8	11.9043
Cu 324.754	0.7470b	ppb	0.8138	108.9	494.098
Fe 271.441	-2.7483b	ppb	9.4048	342.2	44.3585
K 766.491	-1.6785b	ppb	1.1216	66.8	206.182
Mg 279.078	-6.2856b	ppb	2.5930	41.3	20.6163
Mn 257.610	0.1643b	ppb	0.0429	26.1	33.6628
Mo 202.032	1.2661b	ppb	1.0364	81.9	4.4139
Na 330.237	25.4053b	ppb	102.230	402.4	33.1156
Ni 231.604	4.2915b	ppb	1.3852	32.3	1.4812
Pb 220.353	0.9925b	ppb	3.8239	385.3	2.0299
Sb 206.834	2.0348b	ppb	4.9606	243.8	6.4838
Se 196.026	-2.5415b	ppb	9.7260	382.7	3.9130
Si 288.158	14.7875b	ppb	3.1500	21.3	638.779

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.9527b	ppb	4.6319	237.2	-0.5756
Sr 216.596	0.6900b	ppb	1.6488	239.0	5.0211
Ti 334.941	0.1149b	ppb	0.1323	115.1	-16.4925
Tl 190.794	32744.4xb	ppb	105.193	0.3	7613.38
V 292.401	0.2925b	ppb	1.3154	449.8	-9.4472
Zn 206.200	-0.6743b	ppb	1.3911	206.3	-1.6694

ag (Samp) 4/8/2019, 2:51:12 PM Rack 1, Tube 26
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	7833.19x	7968.64x	7956.41x
Al 308.215	-7.9288u	-4.9850u	-6.3986u
As 188.980	7.0614	5.1464	1.2639
B 249.678	16.4623	15.6669	16.9461
Ba 389.178	-0.5964u	-4.8482u	-1.8439u
Be 313.042	-0.0245u	-0.0317u	-0.0015u
Ca 370.602	13.21	14.45	10.70
Cd 226.502	0.1396	-0.0442u	-0.3162u
Co 228.615	-0.4504u	0.8900	-0.2231u
Cr 267.716	-0.3437u	0.1118	-0.0659u
Cu 324.754	1.1532	0.7253	1.0975
Fe 271.441	-4.5145u	10.2952	6.5954
K 766.491	-1.5488u	-2.2800u	-1.3979u
Mg 279.078	-4.2458u	-5.3682u	-7.7014u
Mn 257.610	0.0560	0.0856	0.0490
Mo 202.032	1.6346	-0.9814u	-0.8080u
Na 330.237	-250.167u	177.518	-0.5238u
Ni 231.604	-1.5689u	0.9479	0.3844
Pb 220.353	4.4749	4.9332	4.5876
Sb 206.834	13.4064	2.6101	-4.2182u
Se 196.026	4.4302	0.8264	-9.5239u
Si 288.158	26.5753	20.8806	22.2244
Sn 189.925	5.3753	2.7536	4.6975
Sr 216.596	-1.2508u	-0.6799u	0.0196
Ti 334.941	0.0356	0.1382	0.1019
Tl 190.794	-0.7242u	1.2925	7.8989
V 292.401	-0.0946u	1.2090	-0.2833u
Zn 206.200	-1.4412u	0.2565	0.5021

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	7919.41xb	ppb	74.9191	0.9	212845
Al 308.215	-6.4375b	ppb	1.4723	22.9	232.613
As 188.980	4.4906b	ppb	2.9539	65.8	2.2954
B 249.678	16.3584b	ppb	0.6459	3.9	86.5685
Ba 389.178	-2.4295b	ppb	2.1855	90.0	-43.4287
Be 313.042	-0.0192b	ppb	0.0158	82.0	-439.650
Ca 370.602	12.79b	ppb	1.913	15.0	27.34
Cd 226.502	-0.0736b	ppb	0.2293	311.6	1.5828
Co 228.615	0.0721b	ppb	0.7173	994.3	-8.1324
Cr 267.716	-0.0992b	ppb	0.2296	231.3	8.8923
Cu 324.754	0.9920b	ppb	0.2326	23.5	500.310
Fe 271.441	4.1254b	ppb	7.7076	186.8	48.0728
K 766.491	-1.7422b	ppb	0.4718	27.1	205.099

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	-5.7718b	ppb	1.7628	30.5	21.2434
Mn 257.610	0.0635b	ppb	0.0194	30.6	26.7569
Mo 202.032	-0.0516b	ppb	1.4629	2836.6	2.5837
Na 330.237	-24.3908b	ppb	214.839	880.8	31.8812
Ni 231.604	-0.0789b	ppb	1.3208	1674.7	-2.8116
Pb 220.353	4.6652b	ppb	0.2388	5.1	3.3871
Sb 206.834	3.9328b	ppb	8.8865	226.0	7.0817
Se 196.026	-1.4224b	ppb	7.2437	509.3	4.1174
Si 288.158	23.2268b	ppb	2.9767	12.8	674.715
Sn 189.925	4.2755b	ppb	1.3608	31.8	-0.0537
Sr 216.596	-0.6370b	ppb	0.6363	99.9	1.8088
Ti 334.941	0.0919b	ppb	0.0520	56.6	-18.2246
Tl 190.794	2.8224b	ppb	4.5106	159.8	-1.8737
V 292.401	0.2770b	ppb	0.8126	293.3	-9.5042
Zn 206.200	-0.2276b	ppb	1.0582	465.1	-1.4334

MB 680-565114/1-A (Samp)

4/8/2019, 2:56:22 PM

Rack 1, Tube 27

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0805	1.3060	0.9698
Al 308.215	-3.9104u	-5.8551u	-2.3746u
As 188.980	-1.1107u	0.5091	5.1381
B 249.678	10.1275	10.0610	9.9172
Ba 389.178	-3.6347u	-1.1854u	-1.6370u
Be 313.042	0.0112	-0.0068u	-0.0105u
Ca 370.602	2.081	0.9957	-2.783u
Cd 226.502	0.3779	0.1923	-0.2176u
Co 228.615	-2.2825u	0.1908	0.0937
Cr 267.716	0.1175	0.0178	-0.0644u
Cu 324.754	0.9291	1.1015	1.6392
Fe 271.441	15.1983	3.9304	2.4462
K 766.491	3.8089	2.9232	2.8420
Mg 279.078	1.6174	-1.2504u	-0.9559u
Mn 257.610	0.0878	0.2346	0.1661
Mo 202.032	1.1575	0.3129	0.0398
Na 330.237	90.4274	-152.519u	-176.708u
Ni 231.604	2.7812	0.3086	-0.4026u
Pb 220.353	11.6116	-2.7849u	-9.7285u
Sb 206.834	-9.2589u	4.6970	-7.8054u
Se 196.026	3.4940	-6.9072u	-13.0480u
Si 288.158	9.8651	8.1695	9.0067
Sn 189.925	-4.4309u	7.2186	0.6602
Sr 216.596	1.9780	0.1336	-1.3835u
Ti 334.941	0.2410	0.3061	0.1934
Tl 190.794	8.5437	-8.0325u	2.0290
V 292.401	-0.2966u	0.0840	-0.1967u
Zn 206.200	-1.4331u	1.2425	1.0467

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1188	ppb	0.1713	15.3	-26.2587
Al 308.215	-4.0467	ppb	1.7442	43.1	236.655
As 188.980	1.5122	ppb	3.2430	214.5	1.5706
B 249.678	10.0352	ppb	0.1075	1.1	46.0073

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-2.1524	ppb	1.3035	60.6	-42.0147
Be 313.042	-0.0020	ppb	0.0116	576.0	-426.371
Ca 370.602	0.0979	ppb	2.554	2607.3	9.315
Cd 226.502	0.1176	ppb	0.3047	259.2	3.7738
Co 228.615	-0.6660	ppb	1.4008	210.3	-10.5986
Cr 267.716	0.0236	ppb	0.0911	385.3	10.6758
Cu 324.754	1.2232	ppb	0.3704	30.3	506.351
Fe 271.441	7.1916	ppb	6.9736	97.0	49.7013
K 766.491	3.1914	ppb	0.5364	16.8	288.965
Mg 279.078	-0.1963	ppb	1.5776	803.8	28.0303
Mn 257.610	0.1628	ppb	0.0735	45.1	33.5829
Mo 202.032	0.5034	ppb	0.5827	115.7	3.3545
Na 330.237	-79.5997	ppb	147.744	185.6	30.5351
Ni 231.604	0.8957	ppb	1.6712	186.6	-1.8538
Pb 220.353	-0.3006	ppb	10.8848	3621.0	1.5524
Sb 206.834	-4.1224	ppb	7.6723	186.1	4.5444
Se 196.026	-5.4871	ppb	8.3619	152.4	3.3749
Si 288.158	9.0137	ppb	0.8478	9.4	613.889
Sn 189.925	1.1493	ppb	5.8401	508.1	-0.7561
Sr 216.596	0.2427	ppb	1.6834	693.7	3.9453
Ti 334.941	0.2468	ppb	0.0566	22.9	-6.5187
Tl 190.794	0.8467	ppb	8.3511	986.3	-2.3337
V 292.401	-0.1364	ppb	0.1973	144.6	-12.9279
Zn 206.200	0.2853	ppb	1.4914	522.7	-1.1624

LCS 680-565114/2-A (Samp) 4/8/2019, 3:01:32 PM Rack 1, Tube 28

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.1265	51.9880	51.7859
Al 308.215	4999.68	4987.94	4989.16
As 188.980	102.817	102.922	101.540
B 249.678	208.621	211.003	210.827
Ba 389.178	96.6792	96.9823	97.5184
Be 313.042	51.6882	51.5922	51.5179
Ca 370.602	4959	4954	4951
Cd 226.502	51.5265	51.6478	50.9963
Co 228.615	51.0458	50.7593	49.3939
Cr 267.716	101.287	101.568	101.269
Cu 324.754	100.732	99.7591	98.9583
Fe 271.441	5039.90	5049.42	5059.85
K 766.491	8577.64	8564.58	8584.61
Mg 279.078	4971.19	4972.62	4978.32
Mn 257.610	500.513	499.971	500.862
Mo 202.032	100.984	101.791	98.3588
Na 330.237	5097.46	4786.81	5291.06
Ni 231.604	105.335	103.281	102.689
Pb 220.353	496.644	498.719	491.898
Sb 206.834	46.3718	46.7025	50.4355
Se 196.026	107.906	114.315	96.5729
Si 288.158	7.2505	1.1151	0.3082
Sn 189.925	111.640	100.396	100.279
Sr 216.596	99.6025	99.8926	100.461
Ti 334.941	402.369	402.389	402.061

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	28.8457	36.4609	42.5717
V 292.401	101.884	101.235	101.454
Zn 206.200	106.037	104.735	100.335

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.9668	ppb	0.1713	0.3	1340.13
Al 308.215	4992.26	ppb	6.4528	0.1	8683.92
As 188.980	102.426	ppb	0.7697	0.8	26.1142
B 249.678	210.150	ppb	1.3278	0.6	1324.77
Ba 389.178	97.0600	ppb	0.4250	0.4	467.325
Be 313.042	51.5995	ppb	0.0854	0.2	39479.1
Ca 370.602	4955	ppb	3.822	0.1	7052
Cd 226.502	51.3902	ppb	0.3465	0.7	596.915
Co 228.615	50.3996	ppb	0.8827	1.8	161.526
Cr 267.716	101.375	ppb	0.1676	0.2	1482.38
Cu 324.754	99.8165	ppb	0.8882	0.9	3078.54
Fe 271.441	5049.72	ppb	9.9749	0.2	2780.77
K 766.491	8575.61	ppb	10.1650	0.1	146012
Mg 279.078	4974.04	ppb	3.7772	0.1	6078.45
Mn 257.610	500.449	ppb	0.4489	0.1	34349.9
Mo 202.032	100.378	ppb	1.7944	1.8	142.009
Na 330.237	5058.44	ppb	254.380	5.0	151.791
Ni 231.604	103.769	ppb	1.3886	1.3	99.1541
Pb 220.353	495.754	ppb	3.4962	0.7	184.766
Sb 206.834	47.8366	ppb	2.2567	4.7	21.1946
Se 196.026	106.264	ppb	8.9840	8.5	23.8184
Si 288.158	2.8913	ppb	3.7967	131.3	625.160
Sn 189.925	104.105	ppb	6.5255	6.3	22.3770
Sr 216.596	99.9854	ppb	0.4367	0.4	246.902
Ti 334.941	402.273	ppb	0.1837	0.0	30346.8
Tl 190.794	35.9594	ppb	6.8767	19.1	5.8562
V 292.401	101.524	ppb	0.3303	0.3	814.534
Zn 206.200	103.702	ppb	2.9876	2.9	53.4174

680-166612-G-2-D (Samp)

4/8/2019, 3:06:42 PM

Rack 1, Tube 29

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8197	-0.6276u	0.5874
Al 308.215	71.7969	71.5043	76.3794
As 188.980	-6.8559u	1.2605	-0.6182u
B 249.678	52.4482	52.8446	52.1142
Ba 389.178	4.6250	8.0756	11.2882
Be 313.042	-0.0027	-0.0086u	0.0002
Ca 370.602	58212	58200	58232
Cd 226.502	0.1464	0.1977	-0.2748u
Co 228.615	0.6164	0.5243	-0.4179u
Cr 267.716	0.5323	0.7422	0.8529
Cu 324.754	5.1433	6.4991	7.4353
Fe 271.441	377.262	387.211	390.869
K 766.491	1656.27	1656.91	1651.65
Mg 279.078	26181.4	26183.6	26188.3
Mn 257.610	37.9449	38.0812	37.7020
Mo 202.032	67.0924	65.9481	67.3774

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	7282.66	7096.86	7198.54
Ni 231.604	15.4333	16.7913	15.0128
Pb 220.353	0.0939	5.6525	0.4442
Sb 206.834	11.3095	3.3742	-1.1906u
Se 196.026	6.1526	0.4050	-2.1123u
Si 288.158	3859.06	3848.09	3859.33
Sn 189.925	18.5652	-0.1891u	0.1072
Sr 216.596	59.8043	58.8364	59.1848
Ti 334.941	-0.2738	-0.1390	-0.2341
Tl 190.794	5.8623	3.1247	-11.7405u
V 292.401	1.0956	0.4097u	0.9834
Zn 206.200	3.5359	5.6120	3.6356

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2598	ppb	0.7773	299.1	-49.6927
Al 308.215	73.2268	ppb	2.7341	3.7	368.008
As 188.980	-2.0712	ppb	4.2488	205.1	0.6815
B 249.678	52.4690	ppb	0.3657	0.7	317.832
Ba 389.178	7.9962	ppb	3.3323	41.7	30.4163
Be 313.042	-0.0037	ppb	0.0045	120.5	-424.192
Ca 370.602	58215	ppb	16.48	0.0	82687
Cd 226.502	0.0231	ppb	0.2593	1121.8	3.2402
Co 228.615	0.2409	ppb	0.5724	237.6	-8.0853
Cr 267.716	0.7091	ppb	0.1628	23.0	20.7353
Cu 324.754	6.3593	ppb	1.1524	18.1	641.259
Fe 271.441	385.114	ppb	7.0416	1.8	254.235
K 766.491	1654.94	ppb	2.8705	0.2	28367.2
Mg 279.078	26184.4	ppb	3.5335	0.0	31906.3
Mn 257.610	37.9094	ppb	0.1921	0.5	2702.39
Mo 202.032	66.8060	ppb	0.7565	1.1	95.4398
Na 330.237	7192.69	ppb	93.0410	1.3	208.446
Ni 231.604	15.7458	ppb	0.9295	5.9	12.7323
Pb 220.353	2.0635	ppb	3.1131	150.9	2.4116
Sb 206.834	4.4977	ppb	6.3253	140.6	7.2616
Se 196.026	1.4818	ppb	4.2363	285.9	4.6503
Si 288.158	3855.49	ppb	6.4118	0.2	16956.2
Sn 189.925	6.1611	ppb	10.7433	174.4	0.3706
Sr 216.596	59.2752	ppb	0.4902	0.8	147.586
Ti 334.941	-0.2156	ppb	0.0693	32.1	17.8842
Tl 190.794	-0.9178	ppb	9.4721	1032.0	-2.7588
V 292.401	0.8296	ppb	0.3679	44.3	-8.6014
Zn 206.200	4.2612	ppb	1.1710	27.5	0.9381

680-166612-G-2-E MS (Samp) 4/8/2019, 3:11:53 PM Rack 1, Tube 30
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	50.4105	50.7448	51.7093
Al 308.215	4789.65	4802.68	4818.89
As 188.980	89.0099	92.1178	83.3447
B 249.678	237.281	240.128	240.695
Ba 389.178	106.227	105.480	100.318
Be 313.042	48.5013	48.5651	48.6797
Ca 370.602	60105	60199	60361

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	48.7864	48.6641	48.4105
Co 228.615	47.3806	48.7808	49.4265
Cr 267.716	94.5408	94.9056	96.5648
Cu 324.754	100.252	101.240	103.379
Fe 271.441	5122.53	5115.21	5113.60
K 766.491	9956.04	9969.70	9987.00
Mg 279.078	29638.4	29678.6	29722.9
Mn 257.610	507.696	507.485	508.940
Mo 202.032	159.704	157.417	157.057
Na 330.237	11779.2	11662.9	11634.3
Ni 231.604	110.536	108.642	109.956
Pb 220.353	474.637	470.968	474.736
Sb 206.834	38.4961	54.6652	52.0348
Se 196.026	105.240	82.2830	91.3791
Si 288.158	3700.64	3700.46	3713.05
Sn 189.925	92.1361	93.2328	89.3455
Sr 216.596	151.900	151.951	151.717
Ti 334.941	378.239	378.284	379.325
Tl 190.794	30.3490	41.7269	31.0100
V 292.401	95.7391	96.4980	95.5481
Zn 206.200	103.022	102.906	94.1287

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9549	ppb	0.6744	1.3	1312.64
Al 308.215	4803.74	ppb	14.6497	0.3	8365.86
As 188.980	88.1575	ppb	4.4482	5.0	22.6096
B 249.678	239.368	ppb	1.8293	0.8	1512.12
Ba 389.178	104.009	ppb	3.2179	3.1	522.259
Be 313.042	48.5821	ppb	0.0904	0.2	37148.9
Ca 370.602	60222	ppb	129.4	0.2	85544
Cd 226.502	48.6203	ppb	0.1918	0.4	565.378
Co 228.615	48.5293	ppb	1.0459	2.2	154.690
Cr 267.716	95.3371	ppb	1.0788	1.1	1394.82
Cu 324.754	101.623	ppb	1.5985	1.6	3126.53
Fe 271.441	5117.11	ppb	4.7575	0.1	2817.12
K 766.491	9970.92	ppb	15.5167	0.2	169731
Mg 279.078	29680.0	ppb	42.3036	0.1	36156.8
Mn 257.610	508.040	ppb	0.7860	0.2	34946.6
Mo 202.032	158.059	ppb	1.4358	0.9	222.124
Na 330.237	11692.1	ppb	76.7403	0.7	314.366
Ni 231.604	109.711	ppb	0.9704	0.9	104.993
Pb 220.353	473.447	ppb	2.1476	0.5	176.514
Sb 206.834	48.3987	ppb	8.6762	17.9	21.3561
Se 196.026	92.9673	ppb	11.5605	12.4	21.3900
Si 288.158	3704.72	ppb	7.2150	0.2	16349.9
Sn 189.925	91.5714	ppb	2.0042	2.2	19.5614
Sr 216.596	151.856	ppb	0.1230	0.1	373.113
Ti 334.941	378.616	ppb	0.6146	0.2	28617.3
Tl 190.794	34.3620	ppb	6.3868	18.6	5.4690
V 292.401	95.9284	ppb	0.5024	0.5	765.535
Zn 206.200	100.019	ppb	5.1016	5.1	51.4753

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 3:17:06 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	508.671	505.861	514.340
Al 308.215	10423.9	10399.9	10432.4
As 188.980	538.809	536.286	538.710
B 249.678	532.484	537.381	538.334
Ba 389.178	510.589	510.438	511.959
Be 313.042	535.415	535.046	535.648
Ca 370.602	10352	10363	10336
Cd 226.502	522.229	522.057	523.445
Co 228.615	520.812	523.897	526.100
Cr 267.716	512.609	513.686	514.456
Cu 324.754	519.149	517.113	523.271
Fe 271.441	10469.5	10445.9	10461.1
K 766.491	10052.5	10044.6	10049.9
Mg 279.078	10380.3	10380.3	10387.2
Mn 257.610	517.332	517.278	518.359
Mo 202.032	522.118	521.491	525.736
Na 330.237	11125.7	10486.6	10921.0
Ni 231.604	514.850	516.904	522.598
Pb 220.353	519.312	501.736	510.412
Sb 206.834	519.212	529.809	516.207
Se 196.026	518.528	525.765	529.264
Si 288.158	5092.26	5075.07	5084.39
Sn 189.925	514.619	519.362	520.953
Sr 216.596	519.480	519.901	518.975
Ti 334.941	520.254	519.843	520.289
Tl 190.794	535.558	517.426	541.133
V 292.401	525.322	526.629	525.883
Zn 206.200	1059.62	1060.20	1062.53

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	509.624	ppb	4.3191	0.8	13641.9	101.92486
Al 308.215	10418.7	ppb	16.8271	0.2	17868.2	104.18748
As 188.980	537.935	ppb	1.4292	0.3	130.409	107.58699
B 249.678	536.066	ppb	3.1390	0.6	3410.06	107.21323
Ba 389.178	510.995	ppb	0.8380	0.2	2578.00	102.19907
Be 313.042	535.370	ppb	0.3034	0.1	413616	107.07399
Ca 370.602	10350	ppb	13.73	0.1	14712	103.50373
Cd 226.502	522.577	ppb	0.7565	0.1	5997.42	104.51543
Co 228.615	523.603	ppb	2.6562	0.5	1738.29	104.72056
Cr 267.716	513.584	ppb	0.9273	0.2	7463.30	102.71674
Cu 324.754	519.844	ppb	3.1376	0.6	14034.2	103.96889
Fe 271.441	10458.9	ppb	11.9741	0.1	5730.86	104.53635
K 766.491	10049.0	ppb	4.0355	0.0	171059	100.49009
Mg 279.078	10382.6	ppb	3.9649	0.0	12662.0	103.82582
Mn 257.610	517.656	ppb	0.6090	0.1	35550.7	103.53123
Mo 202.032	523.115	ppb	2.2916	0.4	729.046	104.62296
Na 330.237	10844.4	ppb	326.369	3.0	282.199	108.44434
Ni 231.604	518.117	ppb	4.0139	0.8	505.781	103.62349
Pb 220.353	510.486	ppb	8.7884	1.7	190.020	102.09730
Sb 206.834	521.743	ppb	7.1454	1.4	171.456	104.34855
Se 196.026	524.519	ppb	5.4755	1.0	100.204	104.90377
Si 288.158	5083.90	ppb	8.6079	0.2	22290.0	101.67809

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	518.311	ppb	3.2951	0.6	115.443	103.66223
Sr 216.596	519.452	ppb	0.4633	0.1	1267.14	103.89043
Ti 334.941	520.129	ppb	0.2479	0.0	39254.0	104.02578
Tl 190.794	531.372	ppb	12.3951	2.3	121.157	106.27446
V 292.401	525.945	ppb	0.6556	0.1	4263.03	105.18892
Zn 206.200	1060.78	ppb	1.5393	0.1	558.720	106.07821

Cont Calib Blank (CCB) 4/8/2019, 3:22:19 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4454u	0.3585	0.1575
Al 308.215	1.2391	-4.4333u	-4.0566u
As 188.980	-4.4349u	1.6558	-3.5573u
B 249.678	15.9589	14.1996	12.3347
Ba 389.178	-0.9710u	-4.6875u	-4.0464u
Be 313.042	-0.0157u	-0.0051u	0.0045
Ca 370.602	-2.539u	4.884	7.340
Cd 226.502	-0.3183u	0.1291	0.3620
Co 228.615	-1.0939u	-0.9054u	1.6822
Cr 267.716	0.3976	0.2219	0.3761
Cu 324.754	1.6481	0.2886	0.8104
Fe 271.441	-9.0205u	-11.9426u	-8.2421u
K 766.491	-3.4941u	-2.1575u	-2.0986u
Mg 279.078	-1.2715u	-7.3578u	-1.5696u
Mn 257.610	0.0348	-0.1727u	-0.0129u
Mo 202.032	1.3431	1.9701	1.9902
Na 330.237	235.581	-145.372u	191.104
Ni 231.604	1.3427	3.5147	-1.1596u
Pb 220.353	-4.8472u	-2.7792u	-1.4161u
Sb 206.834	2.7502	-0.8359u	3.4841
Se 196.026	-10.9723u	6.7964	-9.4128u
Si 288.158	21.2436	12.9627	8.2464
Sn 189.925	-2.8443u	2.8190	6.2418
Sr 216.596	0.3209	0.3436	-0.9382u
Ti 334.941	0.3395	0.1513	0.0971
Tl 190.794	-9.9442u	-2.0052u	-0.7554u
V 292.401	1.1513	0.1326	0.6044
Zn 206.200	0.6566	0.6995	0.9077

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0235	ppb	0.4183	1778.7	-55.7010	0.02352
Al 308.215	-2.4170	ppb	3.1718	131.2	239.431	-2.41696
As 188.980	-2.1121	ppb	3.2925	155.9	0.7083	-2.11212
B 249.678	14.1644	ppb	1.8124	12.8	72.5067	14.16440
Ba 389.178	-3.2350	ppb	1.9867	61.4	-47.5201	-3.23496
Be 313.042	-0.0054	ppb	0.0101	185.5	-429.080	-0.00545
Ca 370.602	3.228	ppb	5.143	159.3	13.78	3.22818
Cd 226.502	0.0576	ppb	0.3458	600.2	3.0702	0.05761
Co 228.615	-0.1057	ppb	1.5513	1467.9	-8.7367	-0.10568
Cr 267.716	0.3319	ppb	0.0959	28.9	15.1463	0.33185
Cu 324.754	0.9157	ppb	0.6859	74.9	498.341	0.91573
Fe 271.441	-9.7351	ppb	1.9510	20.0	40.5663	-9.73506
K 766.491	-2.5834	ppb	0.7892	30.6	190.800	-2.58338

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-3.3996	ppb	3.4311	100.9	24.1314	-3.39962
Mn 257.610	-0.0503	ppb	0.1087	216.2	18.9676	-0.05027
Mo 202.032	1.7678	ppb	0.3679	20.8	5.1108	1.76781
Na 330.237	93.7711	ppb	208.295	222.1	34.7692	93.77106
Ni 231.604	1.2326	ppb	2.3391	189.8	-1.5232	1.23262
Pb 220.353	-3.0141	ppb	1.7276	57.3	0.5495	-3.01414
Sb 206.834	1.7995	ppb	2.3116	128.5	6.4100	1.79946
Se 196.026	-4.5296	ppb	9.8395	217.2	3.5499	-4.52957
Si 288.158	14.1509	ppb	6.5796	46.5	636.073	14.15086
Sn 189.925	2.0722	ppb	4.5888	221.4	-0.5487	2.07219
Sr 216.596	-0.0912	ppb	0.7336	804.0	3.1201	-0.09124
Ti 334.941	0.1960	ppb	0.1272	64.9	-10.3569	0.19600
Tl 190.794	-4.2350	ppb	4.9837	117.7	-3.5153	-4.23496
V 292.401	0.6294	ppb	0.5098	81.0	-6.7120	0.62945
Zn 206.200	0.7546	ppb	0.1343	17.8	-0.9148	0.75461

680-166612-G-2-F MSD (Samp) 4/8/2019, 3:27:29 PM

Rack 1, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.4984	51.8546	51.0765
Al 308.215	4951.31	4944.51	4942.97
As 188.980	106.296	111.527	91.0318
B 249.678	241.371	243.848	244.955
Ba 389.178	103.124	104.805	108.329
Be 313.042	50.3002	50.0686	50.1074
Ca 370.602	58563	58492	58557
Cd 226.502	49.9568	50.4385	49.4199
Co 228.615	50.4644	48.8537	47.7857
Cr 267.716	99.0113	97.1388	98.5425
Cu 324.754	103.462	103.118	104.234
Fe 271.441	5288.69	5255.63	5253.47
K 766.491	10157.2	10146.4	10137.4
Mg 279.078	28869.8	28826.2	28849.7
Mn 257.610	521.406	522.118	521.303
Mo 202.032	158.071	159.385	157.087
Na 330.237	11836.4	11741.3	11815.7
Ni 231.604	112.314	114.384	106.900
Pb 220.353	483.303	472.518	492.246
Sb 206.834	52.2781	43.2052	46.4774
Se 196.026	103.375	104.457	112.715
Si 288.158	3570.57	3562.56	3553.96
Sn 189.925	98.8081	95.3301	90.9845
Sr 216.596	153.041	151.880	153.226
Ti 334.941	389.469	388.641	388.041
Tl 190.794	35.2805	44.1100	33.0735
V 292.401	99.7214	97.0229	98.5949
Zn 206.200	103.663	103.121	101.090

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.4765	ppb	0.3895	0.8	1326.65
Al 308.215	4946.26	ppb	4.4406	0.1	8606.79
As 188.980	102.951	ppb	10.6490	10.3	26.2197
B 249.678	243.391	ppb	1.8351	0.8	1537.77

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	105.419	ppb	2.6563	2.5	528.799
Be 313.042	50.1588	ppb	0.1240	0.2	38368.2
Ca 370.602	58537	ppb	39.62	0.1	83152
Cd 226.502	49.9384	ppb	0.5095	1.0	580.658
Co 228.615	49.0346	ppb	1.3485	2.8	156.438
Cr 267.716	98.2309	ppb	0.9744	1.0	1436.84
Cu 324.754	103.604	ppb	0.5715	0.6	3178.18
Fe 271.441	5265.93	ppb	19.7393	0.4	2897.70
K 766.491	10147.0	ppb	9.9481	0.1	172725
Mg 279.078	28848.6	ppb	21.8043	0.1	35144.5
Mn 257.610	521.609	ppb	0.4440	0.1	35874.4
Mo 202.032	158.181	ppb	1.1530	0.7	222.292
Na 330.237	11797.8	ppb	49.9987	0.4	316.851
Ni 231.604	111.199	ppb	3.8647	3.5	106.454
Pb 220.353	482.689	ppb	9.8783	2.0	179.928
Sb 206.834	47.3202	ppb	4.5948	9.7	21.0258
Se 196.026	106.849	ppb	5.1090	4.8	23.9265
Si 288.158	3562.36	ppb	8.3058	0.2	15746.1
Sn 189.925	95.0409	ppb	3.9198	4.1	20.3410
Sr 216.596	152.716	ppb	0.7297	0.5	375.218
Ti 334.941	388.717	ppb	0.7170	0.2	29377.8
Tl 190.794	37.4880	ppb	5.8400	15.6	6.1968
V 292.401	98.4464	ppb	1.3554	1.4	786.156
Zn 206.200	102.625	ppb	1.3563	1.3	52.8503

680-166512-F-2-B^10 (Samp) **4/8/2019, 3:32:40 PM** **Rack 1, Tube 32**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.1805	0.9060	-0.3857u
Al 308.215	-3.7644u	-0.9551u	-3.0055u
As 188.980	-4.3261u	1.8114	-0.8832u
B 249.678	8.7537	7.3623	8.1652
Ba 389.178	-3.2920u	-2.7103u	-0.6061u
Be 313.042	-0.0180u	-0.0207u	-0.0197u
Ca 370.602	9629	9756	9858
Cd 226.502	-0.0073u	-0.4935u	-0.0783u
Co 228.615	-1.5951u	-0.9476u	-0.4558u
Cr 267.716	0.9843	0.7544	0.4134
Cu 324.754	1.4379	2.5011	2.8215
Fe 271.441	5.1718	4.5715	5.9424
K 766.491	3596.40	3627.36	3676.68
Mg 279.078	885.792	893.310	901.137
Mn 257.610	0.9275	1.0890	1.0483
Mo 202.032	0.0056	-0.4686u	-1.3780u
Na 330.237	30829.8	31338.3	31297.1
Ni 231.604	4.6928	3.1005	3.0231
Pb 220.353	-8.4441u	1.5978	0.5362
Sb 206.834	-1.3393u	0.0690	0.0552
Se 196.026	0.9743	20.2124	1.4623
Si 288.158	303.222	304.305	309.658
Sn 189.925	6.1671	9.4391	10.6351
Sr 216.596	12.8188	15.8409	14.5298
Ti 334.941	0.1564	0.3597	0.1579

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	6.2631	-8.3142u	-15.4403u
V 292.401	0.4428	0.2850	0.9502
Zn 206.200	4.5263	6.3071	1.5866

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5669	ppb	0.8364	147.5	-41.1494
Al 308.215	-2.5750	ppb	1.4533	56.4	239.146
As 188.980	-1.1326	ppb	3.0763	271.6	0.9493
B 249.678	8.0937	ppb	0.6985	8.6	33.5640
Ba 389.178	-2.2028	ppb	1.4130	64.1	-41.5646
Be 313.042	-0.0194	ppb	0.0014	7.1	-439.773
Ca 370.602	9748	ppb	114.6	1.2	13853
Cd 226.502	-0.1930	ppb	0.2626	136.1	0.1658
Co 228.615	-0.9995	ppb	0.5714	57.2	-11.7020
Cr 267.716	0.7174	ppb	0.2872	40.0	20.8941
Cu 324.754	2.2535	ppb	0.7243	32.1	533.187
Fe 271.441	5.2286	ppb	0.6872	13.1	48.6217
K 766.491	3633.48	ppb	40.4866	1.1	62000.6
Mg 279.078	893.413	ppb	7.6733	0.9	1115.95
Mn 257.610	1.0216	ppb	0.0840	8.2	95.2105
Mo 202.032	-0.6137	ppb	0.7031	114.6	1.8029
Na 330.237	31155.1	ppb	282.468	0.9	794.919
Ni 231.604	3.6054	ppb	0.9425	26.1	0.8082
Pb 220.353	-2.1034	ppb	5.5168	262.3	0.8868
Sb 206.834	-0.4050	ppb	0.8091	199.8	5.7175
Se 196.026	7.5496	ppb	10.9690	145.3	5.7564
Si 288.158	305.728	ppb	3.4462	1.1	1874.48
Sn 189.925	8.7471	ppb	2.3130	26.4	0.9537
Sr 216.596	14.3965	ppb	1.5154	10.5	38.5500
Ti 334.941	0.2246	ppb	0.1170	52.1	-6.7561
Tl 190.794	-5.8305	ppb	11.0628	189.7	-3.8861
V 292.401	0.5593	ppb	0.3476	62.1	-7.2296
Zn 206.200	4.1400	ppb	2.3838	57.6	0.8730

MB 680-564975/1-A (Samp) 4/8/2019, 3:37:52 PM Rack 1, Tube 33

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4337	0.8218	0.3639
Al 308.215	-3.0496u	-1.7519u	-7.4806u
As 188.980	1.0552	0.2687	-2.5267u
B 249.678	4.4785	4.1046	2.6035
Ba 389.178	-0.7422u	-1.3680u	0.5154
Be 313.042	-0.0244u	-0.0180u	-0.0560u
Ca 370.602	3.352	12.01	-2.542u
Cd 226.502	-0.2599u	0.0726	0.1182
Co 228.615	0.4061	-1.2156u	-1.4046u
Cr 267.716	0.6604	0.2691	0.0521
Cu 324.754	0.6999	2.5412	1.2415
Fe 271.441	4.1356	-1.0340u	0.2741
K 766.491	-2.1682u	-1.7897u	-2.2023u
Mg 279.078	-2.1193u	2.2926	-1.8004u
Mn 257.610	-0.0083u	0.0802	-0.0556u
Mo 202.032	0.6999	1.8952	0.6319

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	177.936	316.766	269.952
Ni 231.604	1.8071	0.8577	5.0925
Pb 220.353	2.6723	2.9908	1.8749
Sb 206.834	-5.3435u	0.6656	-8.1196u
Se 196.026	-2.4335u	-3.9411u	-6.1905u
Si 288.158	12.2145	7.6060	11.2032
Sn 189.925	1.3518	-5.1736u	2.0635
Sr 216.596	0.6154	-0.6625u	-1.6408u
Ti 334.941	0.1964	0.0839	0.1229
Tl 190.794	-4.6300u	-0.4730u	-2.8902u
V 292.401	-0.2999u	0.7636	0.6565
Zn 206.200	3.2537	0.7714	2.7040

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5398	ppb	0.2467	45.7	-41.8218
Al 308.215	-4.0940	ppb	3.0038	73.4	236.587
As 188.980	-0.4009	ppb	1.8825	469.5	1.1287
B 249.678	3.7289	ppb	0.9924	26.6	5.5655
Ba 389.178	-0.5316	ppb	0.9592	180.4	-33.7721
Be 313.042	-0.0328	ppb	0.0204	62.1	-450.178
Ca 370.602	4.275	ppb	7.321	171.3	15.26
Cd 226.502	-0.0230	ppb	0.2064	895.7	2.1525
Co 228.615	-0.7380	ppb	0.9954	134.9	-10.8400
Cr 267.716	0.3272	ppb	0.3083	94.2	15.0797
Cu 324.754	1.4942	ppb	0.9463	63.3	513.409
Fe 271.441	1.1252	ppb	2.6878	238.9	46.4220
K 766.491	-2.0534	ppb	0.2290	11.2	199.809
Mg 279.078	-0.5424	ppb	2.4603	453.6	27.6100
Mn 257.610	0.0054	ppb	0.0689	1269.5	22.7923
Mo 202.032	1.0757	ppb	0.7106	66.1	4.1494
Na 330.237	254.885	ppb	70.6307	27.7	38.7090
Ni 231.604	2.5858	ppb	2.2222	85.9	-0.1937
Pb 220.353	2.5127	ppb	0.5748	22.9	2.5917
Sb 206.834	-4.2658	ppb	4.4907	105.3	4.4997
Se 196.026	-4.1883	ppb	1.8907	45.1	3.6122
Si 288.158	10.3412	ppb	2.4221	23.4	619.785
Sn 189.925	-0.5861	ppb	3.9888	680.6	-1.1460
Sr 216.596	-0.5626	ppb	1.1314	201.1	1.9744
Ti 334.941	0.1344	ppb	0.0572	42.5	-15.0035
Tl 190.794	-2.6644	ppb	2.0877	78.4	-3.1500
V 292.401	0.3734	ppb	0.5855	156.8	-8.7521
Zn 206.200	2.2431	ppb	1.3038	58.1	-0.1285

LCS 680-564975/2-A (Samp) 4/8/2019, 3:43:28 PM Rack 1, Tube 34

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	22.0292	21.3334	21.6883
Al 308.215	2094.33	2085.20	2083.97
As 188.980	48.1956	47.9373	33.9945
B 249.678	85.4980	86.2315	86.8031
Ba 389.178	40.3467	38.7756	41.7684
Be 313.042	21.2499	21.2442	21.2357
Ca 370.602	2068	2075	2073

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	21.4168	21.7269	21.6623
Co 228.615	21.0840	19.5671	21.6840
Cr 267.716	40.7714	41.3860	41.3727
Cu 324.754	42.2250	41.6903	40.8719
Fe 271.441	2082.13	2073.47	2076.61
K 766.491	3649.85	3641.36	3649.38
Mg 279.078	2055.88	2066.03	2057.53
Mn 257.610	207.024	207.230	207.413
Mo 202.032	43.9212	43.0180	41.9692
Na 330.237	2296.22	2076.34	2331.78
Ni 231.604	41.0193	42.2264	44.1753
Pb 220.353	209.648	198.009	214.664
Sb 206.834	22.8095	5.4861	9.1858
Se 196.026	35.6283	44.2709	36.0179
Si 288.158	12.6288	7.2014	0.9974
Sn 189.925	44.0635	39.2479	38.3904
Sr 216.596	41.9685	42.3629	43.5969
Ti 334.941	165.886	166.154	166.166
Tl 190.794	5.0645	25.9598	10.6980
V 292.401	41.6007	42.5803	41.3700
Zn 206.200	42.6081	45.1677	44.0187

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	21.6836	ppb	0.3479	1.6	526.359
Al 308.215	2087.84	ppb	5.6616	0.3	3773.40
As 188.980	43.3758	ppb	8.1255	18.7	11.7660
B 249.678	86.1776	ppb	0.6542	0.8	532.415
Ba 389.178	40.2969	ppb	1.4970	3.7	175.846
Be 313.042	21.2433	ppb	0.0072	0.0	16003.4
Ca 370.602	2072	ppb	3.695	0.2	2955
Cd 226.502	21.6020	ppb	0.1636	0.8	252.273
Co 228.615	20.7784	ppb	1.0911	5.3	61.6609
Cr 267.716	41.1767	ppb	0.3510	0.9	608.264
Cu 324.754	41.5957	ppb	0.6815	1.6	1559.64
Fe 271.441	2077.40	ppb	4.3809	0.2	1170.95
K 766.491	3646.87	ppb	4.7706	0.1	62228.2
Mg 279.078	2059.81	ppb	5.4492	0.3	2533.72
Mn 257.610	207.222	ppb	0.1950	0.1	14236.5
Mo 202.032	42.9695	ppb	0.9769	2.3	62.3107
Na 330.237	2234.78	ppb	138.360	6.2	85.3210
Ni 231.604	42.4737	ppb	1.5925	3.7	38.9700
Pb 220.353	207.440	ppb	8.5441	4.1	78.2798
Sb 206.834	12.4938	ppb	9.1231	73.0	9.8953
Se 196.026	38.6391	ppb	4.8812	12.6	11.4478
Si 288.158	6.9425	ppb	5.8200	83.8	620.581
Sn 189.925	40.5673	ppb	3.0580	7.5	8.1007
Sr 216.596	42.6428	ppb	0.8495	2.0	107.232
Ti 334.941	166.069	ppb	0.1581	0.1	12513.2
Tl 190.794	13.9074	ppb	10.8111	77.7	0.7136
V 292.401	41.8503	ppb	0.6426	1.5	328.788
Zn 206.200	43.9315	ppb	1.2820	2.9	21.8730

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166583-B-2-D (Samp) **4/8/2019, 3:47:40 PM** **Rack 1, Tube 35****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.4107	1.0467	0.3872
Al 308.215	23.1625	27.5766	22.9996
As 188.980	-3.0523u	-3.7198u	-4.2260u
B 249.678	17.0861	15.9018	15.6659
Ba 389.178	33.9897	31.6066	31.2046
Be 313.042	-0.0069	0.0168	0.0124
Ca 370.602	66476	66476	66542
Cd 226.502	-0.4071u	-0.0262	0.1512
Co 228.615	0.1093	-0.3743u	1.1667
Cr 267.716	2.5958	3.1565	2.5755
Cu 324.754	27.0335	26.2365	25.9920
Fe 271.441	979.552	984.701	988.990
K 766.491	2142.84	2142.95	2133.33
Mg 279.078	3105.50	3109.56	3104.84
Mn 257.610	200.097	200.661	200.124
Mo 202.032	2.7456	5.5125	2.2701
Na 330.237	18937.2	18158.8	18965.4
Ni 231.604	7.1423	2.2815	0.7278
Pb 220.353	4.8199	-4.6954u	3.1684
Sb 206.834	-0.6590u	-6.4979u	-6.8273u
Se 196.026	3.9452	4.3833	3.0668
Si 288.158	12597.8	12587.6	12564.6
Sn 189.925	9.3136	5.6900	8.4683
Sr 216.596	920.861	921.087	928.767
Ti 334.941	1.7385	1.8355	1.8288
Tl 190.794	-12.9500u	-5.0142u	10.6656
V 292.401	2.1268	1.3967	1.5688
Zn 206.200	583.105	584.107	583.626

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9482	ppb	0.5188	54.7	-33.1882
Al 308.215	24.5796	ppb	2.5968	10.6	285.132
As 188.980	-3.6660	ppb	0.5887	16.1	0.3040
B 249.678	16.2179	ppb	0.7610	4.7	84.7332
Ba 389.178	32.2670	ppb	1.5054	4.7	135.616
Be 313.042	0.0074	ppb	0.0126	169.5	-410.453
Ca 370.602	66498	ppb	37.97	0.1	94453
Cd 226.502	-0.0940	ppb	0.2853	303.3	2.5166
Co 228.615	0.3006	ppb	0.7881	262.2	-7.4012
Cr 267.716	2.7759	ppb	0.3298	11.9	51.0282
Cu 324.754	26.4207	ppb	0.5446	2.1	1163.47
Fe 271.441	984.414	ppb	4.7258	0.5	578.477
K 766.491	2139.71	ppb	5.5247	0.3	36607.8
Mg 279.078	3106.63	ppb	2.5531	0.1	3808.60
Mn 257.610	200.294	ppb	0.3179	0.2	13762.2
Mo 202.032	3.5094	ppb	1.7509	49.9	7.5200
Na 330.237	18687.1	ppb	457.799	2.4	483.643
Ni 231.604	3.3839	ppb	3.3463	98.9	0.5897
Pb 220.353	1.0976	ppb	5.0844	463.2	2.0811
Sb 206.834	-4.6614	ppb	3.4701	74.4	4.3950
Se 196.026	3.7984	ppb	0.6704	17.6	5.0864
Si 288.158	12583.3	ppb	17.0222	0.1	54009.8

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	7.8240	ppb	1.8957	24.2	0.7452
Sr 216.596	923.572	ppb	4.5007	0.5	2261.03
Ti 334.941	1.8009	ppb	0.0541	3.0	117.472
Tl 190.794	-2.4329	ppb	12.0176	494.0	-3.0746
V 292.401	1.6974	ppb	0.3817	22.5	1.9313
Zn 206.200	583.613	ppb	0.5009	0.1	306.939

680-166583-B-2-E MS (Samp) 4/8/2019, 3:51:53 PM Rack 1, Tube 36

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	27.9346	27.8010	27.3956
Al 308.215	2239.74	2250.41	2249.52
As 188.980	45.3700	37.0716	38.5499
B 249.678	104.251	103.869	105.345
Ba 389.178	75.8323	76.8768	77.4134
Be 313.042	22.8326	22.8967	22.8816
Ca 370.602	69033	69216	69154
Cd 226.502	21.8646	22.5175	22.8649
Co 228.615	23.4205	22.8852	22.5426
Cr 267.716	46.5871	46.9447	46.7411
Cu 324.754	70.7635	71.0802	72.2137
Fe 271.441	3241.54	3250.34	3250.72
K 766.491	6044.77	6041.80	6059.89
Mg 279.078	5329.60	5346.73	5343.89
Mn 257.610	423.363	424.752	424.230
Mo 202.032	49.2483	44.6337	46.9799
Na 330.237	21657.4	21111.2	20861.9
Ni 231.604	47.1224	47.2742	47.5411
Pb 220.353	213.572	239.068	223.066
Sb 206.834	21.0786	15.2695	19.7526
Se 196.026	41.1290	51.8687	38.1914
Si 288.158	12733.2	12761.8	12767.0
Sn 189.925	49.7706	31.1517	49.4184
Sr 216.596	971.332	978.710	973.387
Ti 334.941	177.279	177.813	177.648
Tl 190.794	15.5250	14.3631	11.4311
V 292.401	46.1254	45.3498	45.4836
Zn 206.200	630.210	631.279	633.545

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	27.7104	ppb	0.2807	1.0	686.000
Al 308.215	2246.56	ppb	5.9193	0.3	4041.81
As 188.980	40.3305	ppb	4.4265	11.0	10.9869
B 249.678	104.488	ppb	0.7661	0.7	648.758
Ba 389.178	76.7075	ppb	0.8040	1.0	363.770
Be 313.042	22.8703	ppb	0.0335	0.1	17270.4
Ca 370.602	69134	ppb	92.87	0.1	98200
Cd 226.502	22.4157	ppb	0.5079	2.3	262.978
Co 228.615	22.9494	ppb	0.4424	1.9	68.9209
Cr 267.716	46.7577	ppb	0.1794	0.4	689.699
Cu 324.754	71.3525	ppb	0.7625	1.1	2335.68
Fe 271.441	3247.53	ppb	5.1940	0.2	1804.17
K 766.491	6048.82	ppb	9.7024	0.2	103059

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5340.07	ppb	9.1820	0.2	6525.26
Mn 257.610	424.115	ppb	0.7013	0.2	29114.8
Mo 202.032	46.9540	ppb	2.3074	4.9	67.8331
Na 330.237	21210.2	ppb	406.876	1.9	543.398
Ni 231.604	47.3126	ppb	0.2120	0.4	43.7215
Pb 220.353	225.235	ppb	12.8860	5.7	84.8655
Sb 206.834	18.7002	ppb	3.0441	16.3	11.8785
Se 196.026	43.7297	ppb	7.2000	16.5	12.3940
Si 288.158	12754.0	ppb	18.2140	0.1	54750.7
Sn 189.925	43.4469	ppb	10.6494	24.5	8.7494
Sr 216.596	974.476	ppb	3.8077	0.4	2385.08
Ti 334.941	177.580	ppb	0.2736	0.2	13389.1
Tl 190.794	13.7731	ppb	2.1097	15.3	0.7045
V 292.401	45.6529	ppb	0.4146	0.9	359.652
Zn 206.200	631.678	ppb	1.7031	0.3	332.307

680-166583-B-2-F MSD (Samp) 4/8/2019, 3:56:04 PM

Rack 1, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	27.6810	27.9112	26.9041
Al 308.215	2268.20	2265.65	2271.12
As 188.980	44.0009	39.1956	46.0335
B 249.678	105.863	107.172	106.551
Ba 389.178	77.9030	76.1756	73.7199
Be 313.042	23.0632	23.0703	23.0261
Ca 370.602	66689	66715	66729
Cd 226.502	22.5024	23.7099	23.1727
Co 228.615	23.5599	23.3966	20.8324
Cr 267.716	47.5062	47.6434	47.9319
Cu 324.754	70.9318	71.8348	70.5552
Fe 271.441	3231.22	3238.32	3212.01
K 766.491	6029.64	6027.25	6015.37
Mg 279.078	5257.66	5274.68	5248.91
Mn 257.610	418.557	418.873	418.566
Mo 202.032	43.9992	48.5313	47.4199
Na 330.237	20549.9	20199.3	20597.7
Ni 231.604	50.1382	47.3574	48.3335
Pb 220.353	220.295	223.744	224.695
Sb 206.834	24.9989	14.6753	17.3081
Se 196.026	44.9319	46.0471	39.5183
Si 288.158	12289.5	12279.4	12221.4
Sn 189.925	52.4943	45.4696	43.2292
Sr 216.596	943.979	943.749	938.294
Ti 334.941	179.188	178.925	178.825
Tl 190.794	17.5042	6.2976	13.3542
V 292.401	45.9896	46.0087	47.5649
Zn 206.200	607.830	616.247	610.394

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	27.4987	ppb	0.5277	1.9	680.378
Al 308.215	2268.32	ppb	2.7409	0.1	4078.61
As 188.980	43.0767	ppb	3.5114	8.2	11.6768
B 249.678	106.529	ppb	0.6550	0.6	661.848

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	75.9329	ppb	2.1021	2.8	359.767
Be 313.042	23.0532	ppb	0.0237	0.1	17411.5
Ca 370.602	66711	ppb	20.36	0.0	94758
Cd 226.502	23.1283	ppb	0.6050	2.6	271.133
Co 228.615	22.5963	ppb	1.5297	6.8	67.7542
Cr 267.716	47.6939	ppb	0.2173	0.5	703.271
Cu 324.754	71.1073	ppb	0.6576	0.9	2329.28
Fe 271.441	3227.18	ppb	13.6152	0.4	1793.15
K 766.491	6024.09	ppb	7.6440	0.1	102639
Mg 279.078	5260.41	ppb	13.1055	0.2	6428.33
Mn 257.610	418.665	ppb	0.1796	0.0	28741.1
Mo 202.032	46.6502	ppb	2.3621	5.1	67.4111
Na 330.237	20449.0	ppb	217.527	1.1	524.978
Ni 231.604	48.6097	ppb	1.4108	2.9	44.9958
Pb 220.353	222.911	ppb	2.3154	1.0	84.0064
Sb 206.834	18.9941	ppb	5.3643	28.2	11.9717
Se 196.026	43.4991	ppb	3.4923	8.0	12.3513
Si 288.158	12263.4	ppb	36.7335	0.3	52667.5
Sn 189.925	47.0644	ppb	4.8340	10.3	9.5621
Sr 216.596	942.007	ppb	3.2178	0.3	2305.71
Ti 334.941	178.979	ppb	0.1874	0.1	13494.5
Tl 190.794	12.3853	ppb	5.6658	45.7	0.3809
V 292.401	46.5211	ppb	0.9040	1.9	366.777
Zn 206.200	611.490	ppb	4.3141	0.7	321.644

680-166583-A-1-B (Samp)

4/8/2019, 4:00:15 PM

Rack 1, Tube 38

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3822	-0.8876u	-0.2269u
Al 308.215	25.2076	26.8480	30.0498
As 188.980	-1.3816u	2.7177	-2.7748u
B 249.678	12.6765	13.2421	11.8685
Ba 389.178	25.1012	24.8979	22.4871
Be 313.042	-0.0102u	-0.0107u	-0.0086u
Ca 370.602	6467	6472	6470
Cd 226.502	0.0384	0.1439	0.1166
Co 228.615	-0.9217u	-0.3145u	-0.6448u
Cr 267.716	-0.0430u	0.4121	0.2587
Cu 324.754	7.2739	7.4017	8.3812
Fe 271.441	17.5768	1.9868	18.3566
K 766.491	2430.68	2426.13	2426.55
Mg 279.078	1671.96	1680.64	1676.39
Mn 257.610	10.3544	10.2735	10.4075
Mo 202.032	1.9926	0.7627	0.1803
Na 330.237	10087.5	10118.6	9492.11
Ni 231.604	-1.7224u	-0.9477u	0.7682
Pb 220.353	-0.6809u	-0.2005u	-1.1480u
Sb 206.834	5.2011	2.7754	-5.4336u
Se 196.026	0.3381	-5.6750u	-4.3578u
Si 288.158	5655.00	5658.29	5663.30
Sn 189.925	1.8107	2.4976	-3.5834u
Sr 216.596	31.8073	31.6887	31.4658
Ti 334.941	0.5775	0.4837	0.4316

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	1.1728	-6.5049u	-6.3591u
V 292.401	0.4168	0.8025	0.2700
Zn 206.200	50.8140	50.0719	49.0432

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2441	ppb	0.6351	260.1	-62.9807
Al 308.215	27.3685	ppb	2.4627	9.0	289.768
As 188.980	-0.4796	ppb	2.8552	595.4	1.1062
B 249.678	12.5957	ppb	0.6904	5.5	62.4272
Ba 389.178	24.1621	ppb	1.4541	6.0	93.1286
Be 313.042	-0.0098	ppb	0.0011	11.2	-431.989
Ca 370.602	6470	ppb	2.240	0.0	9198
Cd 226.502	0.0996	ppb	0.0548	55.0	3.5688
Co 228.615	-0.6270	ppb	0.3040	48.5	-10.4708
Cr 267.716	0.2093	ppb	0.2315	110.7	13.4308
Cu 324.754	7.6856	ppb	0.6058	7.9	674.841
Fe 271.441	12.6401	ppb	9.2343	73.1	52.6399
K 766.491	2427.79	ppb	2.5169	0.1	41504.9
Mg 279.078	1676.33	ppb	4.3405	0.3	2069.03
Mn 257.610	10.3451	ppb	0.0675	0.7	736.757
Mo 202.032	0.9785	ppb	0.9252	94.6	4.0143
Na 330.237	9899.39	ppb	353.055	3.6	274.233
Ni 231.604	-0.6340	ppb	1.2746	201.1	-3.3561
Pb 220.353	-0.6765	ppb	0.4737	70.0	1.4138
Sb 206.834	0.8476	ppb	5.5733	657.5	6.1110
Se 196.026	-3.2315	ppb	3.1608	97.8	3.7879
Si 288.158	5658.86	ppb	4.1770	0.1	24605.9
Sn 189.925	0.2416	ppb	3.3303	1378.2	-0.9592
Sr 216.596	31.6539	ppb	0.1734	0.5	80.7239
Ti 334.941	0.4976	ppb	0.0740	14.9	16.0304
Tl 190.794	-3.8971	ppb	4.3912	112.7	-3.4351
V 292.401	0.4964	ppb	0.2750	55.4	-7.7892
Zn 206.200	49.9764	ppb	0.8892	1.8	25.0830

680-166733-A-6-B (Samp)

4/8/2019, 4:04:25 PM

Rack 1, Tube 39

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3638u	1.3473	-0.8820u
Al 308.215	102246	101870	101541
As 188.980	5.0649	-1.3458u	7.1272
B 249.678	7.8300	8.5084	7.7662
Ba 389.178	-0.9553u	-4.9012u	-3.1757u
Be 313.042	2.0576	2.0825	2.0321
Ca 370.602	26651	26536	26454
Cd 226.502	-0.1025	-0.2627	0.0380
Co 228.615	5.2768	6.5281	3.9834
Cr 267.716	199.800	198.038	199.123
Cu 324.754	5.5877	4.8454	4.3838
Fe 271.441	11150.1	11060.2	11038.8
K 766.491	1339.08	1350.59	1346.37
Mg 279.078	3639.83	3625.66	3607.97
Mn 257.610	48.8473	48.6420	48.1612
Mo 202.032	1.5513	1.5050	-1.1628u

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	20696.0	20836.0	20884.2
Ni 231.604	84.2921	83.3082	85.5789
Pb 220.353	14.1101	16.4269	1.1536
Sb 206.834	-6.2903u	3.3958	2.0021
Se 196.026	8.3835	8.5162	3.6655
Si 288.158	685.140	679.177	675.481
Sn 189.925	12.8664	-5.6432u	-4.9593u
Sr 216.596	391.433	388.281	386.104
Ti 334.941	12.8127	12.4590	12.5177
Tl 190.794	-15.4300u	-3.7872u	8.6080
V 292.401	61.1077	60.9482	61.3848
Zn 206.200	32.5011	35.1782	40.7936

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0338	ppb	1.1666	3448.1	-57.9601
Al 308.215	101886	ppb	353.122	0.3	172435
As 188.980	3.6154	ppb	4.4186	122.2	2.0482
B 249.678	8.0348	ppb	0.4113	5.1	22.5390
Ba 389.178	-3.0107	ppb	1.9781	65.7	-41.8750
Be 313.042	2.0574	ppb	0.0252	1.2	1174.65
Ca 370.602	26547	ppb	99.03	0.4	37698
Cd 226.502	-0.1091	ppb	0.1504	137.9	18.1124
Co 228.615	5.2628	ppb	1.2724	24.2	9.1773
Cr 267.716	198.987	ppb	0.8891	0.4	2898.75
Cu 324.754	4.9390	ppb	0.6074	12.3	604.626
Fe 271.441	11083.0	ppb	59.0877	0.5	6042.89
K 766.491	1345.35	ppb	5.8218	0.4	23104.4
Mg 279.078	3624.49	ppb	15.9621	0.4	4422.85
Mn 257.610	48.5502	ppb	0.3521	0.7	3367.79
Mo 202.032	0.6312	ppb	1.5538	246.2	3.4167
Na 330.237	20805.4	ppb	97.7345	0.5	540.758
Ni 231.604	84.3931	ppb	1.1387	1.3	80.1718
Pb 220.353	10.5635	ppb	8.2311	77.9	5.3139
Sb 206.834	-0.2975	ppb	5.2365	1760.2	6.3039
Se 196.026	6.8551	ppb	2.7630	40.3	5.5998
Si 288.158	679.933	ppb	4.8734	0.7	3463.77
Sn 189.925	0.7546	ppb	10.4947	1390.7	-0.8430
Sr 216.596	388.606	ppb	2.6794	0.7	954.044
Ti 334.941	12.5965	ppb	0.1896	1.5	934.720
Tl 190.794	-3.5364	ppb	12.0210	339.9	-3.5539
V 292.401	61.1469	ppb	0.2209	0.4	486.480
Zn 206.200	36.1576	ppb	4.2321	11.7	17.7027

680-166733-A-2-B (Samp)

4/8/2019, 4:08:35 PM

Rack 1, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5807	-0.2293u	0.4265
Al 308.215	5710.09	5715.05	5689.36
As 188.980	4.1913	6.6875	6.0427
B 249.678	4.5481	4.3489	3.2110
Ba 389.178	-1.6140u	-0.3259u	3.1818
Be 313.042	0.1040	0.1004	0.0884
Ca 370.602	2048	2047	2045

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.1461	1.0027	-0.3600u
Co 228.615	-0.6726u	0.4023	0.2916
Cr 267.716	11.1487	11.6385	12.2712
Cu 324.754	1.1813	1.5831	1.5998
Fe 271.441	656.270	638.623	655.279
K 766.491	113.897	113.451	111.581
Mg 279.078	297.665	289.847	298.932
Mn 257.610	3.1310	3.1802	3.1886
Mo 202.032	-0.9936u	0.7248	-0.9955u
Na 330.237	10078.0	10143.5	10742.9
Ni 231.604	6.2934	7.0767	6.0292
Pb 220.353	11.1467	5.6759	4.2531
Sb 206.834	3.1066	-4.8825u	6.3057
Se 196.026	6.4360	-5.4194u	-16.6886u
Si 288.158	61.3286	58.3470	61.1306
Sn 189.925	1.4702	-2.3549u	0.6433
Sr 216.596	27.7314	25.2252	23.8433
Ti 334.941	0.8422	0.7798	0.7898
Tl 190.794	-12.4159u	11.5553	-2.0745u
V 292.401	3.6094	4.7393	4.6197
Zn 206.200	4.1461	4.9869	6.0351

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2593	ppb	0.4301	165.9	-49.5242
Al 308.215	5704.83	ppb	13.6301	0.2	9884.93
As 188.980	5.6405	ppb	1.2958	23.0	2.5969
B 249.678	4.0360	ppb	0.7214	17.9	6.9075
Ba 389.178	0.4140	ppb	2.4820	599.6	-28.6336
Be 313.042	0.0976	ppb	0.0082	8.4	-349.110
Ca 370.602	2047	ppb	1.693	0.1	2915
Cd 226.502	0.2629	ppb	0.6888	262.0	6.4019
Co 228.615	0.0071	ppb	0.5913	8343.1	-8.3481
Cr 267.716	11.6861	ppb	0.5628	4.8	180.007
Cu 324.754	1.4548	ppb	0.2370	16.3	512.452
Fe 271.441	650.058	ppb	9.9147	1.5	397.571
K 766.491	112.976	ppb	1.2291	1.1	2155.21
Mg 279.078	295.481	ppb	4.9201	1.7	386.989
Mn 257.610	3.1666	ppb	0.0311	1.0	240.751
Mo 202.032	-0.4214	ppb	0.9927	235.5	2.0632
Na 330.237	10321.5	ppb	366.461	3.6	285.008
Ni 231.604	6.4665	ppb	0.5448	8.4	3.6185
Pb 220.353	7.0252	ppb	3.6395	51.8	4.2451
Sb 206.834	1.5099	ppb	5.7625	381.6	6.3504
Se 196.026	-5.2240	ppb	11.5635	221.4	3.4213
Si 288.158	60.2687	ppb	1.6672	2.8	831.490
Sn 189.925	-0.0805	ppb	2.0126	2500.8	-1.0315
Sr 216.596	25.6000	ppb	1.9709	7.7	65.9801
Ti 334.941	0.8039	ppb	0.0335	4.2	36.0791
Tl 190.794	-0.9784	ppb	12.0231	1228.9	-2.7694
V 292.401	4.3228	ppb	0.6207	14.4	23.4772
Zn 206.200	5.0560	ppb	0.9464	18.7	1.3526

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 4:12:47 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	497.121	496.089	501.281
Al 308.215	10212.1	10201.7	10192.2
As 188.980	537.709	513.165	528.625
B 249.678	518.809	519.770	523.338
Ba 389.178	492.625	500.751	498.211
Be 313.042	526.110	524.672	524.361
Ca 370.602	10133	10128	10147
Cd 226.502	512.383	510.352	512.327
Co 228.615	514.091	513.422	512.647
Cr 267.716	500.088	499.471	499.335
Cu 324.754	507.320	505.217	513.292
Fe 271.441	10219.6	10215.9	10195.9
K 766.491	9853.49	9838.92	9851.63
Mg 279.078	10185.2	10184.8	10180.8
Mn 257.610	506.916	506.873	506.740
Mo 202.032	514.570	510.446	511.525
Na 330.237	10562.1	10830.2	10624.0
Ni 231.604	507.885	510.229	507.659
Pb 220.353	512.248	500.912	495.440
Sb 206.834	504.622	510.660	512.768
Se 196.026	531.082	520.656	514.437
Si 288.158	4997.49	4981.77	4983.94
Sn 189.925	506.620	497.284	498.059
Sr 216.596	506.783	506.561	507.757
Ti 334.941	508.714	508.258	508.016
Tl 190.794	480.913	500.060	510.632
V 292.401	513.705	513.495	511.747
Zn 206.200	1030.06	1035.09	1042.12

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	498.164	ppb	2.7488	0.6	13333.8	99.63273
Al 308.215	10202.0	ppb	9.9621	0.1	17501.5	102.02004
As 188.980	526.500	ppb	12.4094	2.4	127.780	105.29993
B 249.678	520.639	ppb	2.3864	0.5	3311.33	104.12775
Ba 389.178	497.195	ppb	4.1572	0.8	2507.62	99.43908
Be 313.042	525.048	ppb	0.9334	0.2	405633	105.00954
Ca 370.602	10136	ppb	9.466	0.1	14408	101.36174
Cd 226.502	511.687	ppb	1.1570	0.2	5872.46	102.33743
Co 228.615	513.387	ppb	0.7227	0.1	1704.18	102.67737
Cr 267.716	499.631	ppb	0.4012	0.1	7260.83	99.92625
Cu 324.754	508.610	ppb	4.1887	0.8	13741.2	101.72192
Fe 271.441	10210.5	ppb	12.7457	0.1	5595.96	102.05403
K 766.491	9848.02	ppb	7.9346	0.1	167642	98.48016
Mg 279.078	10183.6	ppb	2.4542	0.0	12419.9	101.83598
Mn 257.610	506.843	ppb	0.0916	0.0	34808.6	101.36864
Mo 202.032	512.180	ppb	2.1388	0.4	713.863	102.43606
Na 330.237	10672.1	ppb	140.367	1.3	278.338	106.72102
Ni 231.604	508.591	ppb	1.4228	0.3	496.432	101.71815
Pb 220.353	502.867	ppb	8.5725	1.7	187.210	100.57334
Sb 206.834	509.350	ppb	4.2278	0.8	167.522	101.87002
Se 196.026	522.058	ppb	8.4107	1.6	99.7545	104.41167
Si 288.158	4987.73	ppb	8.5179	0.2	21878.8	99.75468

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	500.655	ppb	5.1806	1.0	111.476	100.13091
Sr 216.596	507.034	ppb	0.6359	0.1	1236.89	101.40672
Ti 334.941	508.329	ppb	0.3544	0.1	38363.0	101.66588
Tl 190.794	497.202	ppb	15.0643	3.0	113.207	99.44039
V 292.401	512.982	ppb	1.0750	0.2	4157.46	102.59646
Zn 206.200	1035.76	ppb	6.0574	0.6	545.508	103.57570

Cont Calib Blank (CCB) 4/8/2019, 4:17:00 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1607u	0.0803	0.9613
Al 308.215	0.8938	-1.9223u	0.1949
As 188.980	1.1811	1.2650	-1.2465u
B 249.678	17.5656	14.3660	13.2337
Ba 389.178	-3.8324u	-1.4753u	0.0798
Be 313.042	0.0091	-0.0089u	-0.0170u
Ca 370.602	5.214	7.045	1.372
Cd 226.502	-0.2964u	0.8559	-0.0568u
Co 228.615	-1.0744u	-0.0499u	0.8830
Cr 267.716	0.1286	0.3734	-0.2600u
Cu 324.754	0.8050	0.6855	0.0445
Fe 271.441	-0.4153u	0.4442	17.6884
K 766.491	-0.5934u	-0.4348u	-0.8987u
Mg 279.078	0.3109	1.1394	-4.9227u
Mn 257.610	0.0112	0.0140	-0.0181u
Mo 202.032	1.9627	2.9935	2.7797
Na 330.237	77.9434	-55.7214u	-201.471u
Ni 231.604	-0.2701u	1.5550	0.7558
Pb 220.353	0.1219	-2.4879u	-6.3977u
Sb 206.834	-0.2900u	1.8438	-11.5222u
Se 196.026	-8.3139u	-10.8281u	4.4802
Si 288.158	18.4041	12.4153	9.2035
Sn 189.925	12.8021	7.8449	5.1913
Sr 216.596	-0.1395u	1.0560	-0.8883u
Ti 334.941	0.3112	0.1078	0.2591
Tl 190.794	-9.9177u	-0.6892u	-13.7353u
V 292.401	0.5990	0.6186	0.5079
Zn 206.200	2.5509	1.4466	2.1949

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.2937	ppb	0.5906	201.1	-48.4436	0.29365
Al 308.215	-0.2779	ppb	1.4663	527.7	243.053	-0.27787
As 188.980	0.3999	ppb	1.4264	356.7	1.3438	0.39986
B 249.678	15.0551	ppb	2.2467	14.9	78.2149	15.05511
Ba 389.178	-1.7426	ppb	1.9698	113.0	-39.9309	-1.74264
Be 313.042	-0.0056	ppb	0.0134	239.3	-429.180	-0.00559
Ca 370.602	4.544	ppb	2.895	63.7	15.64	4.54379
Cd 226.502	0.1676	ppb	0.6080	362.9	4.3356	0.16757
Co 228.615	-0.0805	ppb	0.9791	1216.9	-8.6533	-0.08046
Cr 267.716	0.0807	ppb	0.3194	395.9	11.5017	0.08069
Cu 324.754	0.5116	ppb	0.4090	79.9	487.806	0.51165
Fe 271.441	5.9058	ppb	10.2131	172.9	49.0230	5.90576
K 766.491	-0.6423	ppb	0.2358	36.7	223.796	-0.64230

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-1.1575	ppb	3.2870	284.0	26.8603	-1.15749
Mn 257.610	0.0024	ppb	0.0178	754.7	22.5766	0.00236
Mo 202.032	2.5786	ppb	0.5440	21.1	6.2368	2.57864
Na 330.237	-59.7498	ppb	139.751	233.9	31.0016	-59.74982
Ni 231.604	0.6802	ppb	0.9149	134.5	-2.0657	0.68024
Pb 220.353	-2.9212	ppb	3.2813	112.3	0.5838	-2.92124
Sb 206.834	-3.3228	ppb	7.1806	216.1	4.7964	-3.32280
Se 196.026	-4.8873	ppb	8.2093	168.0	3.4845	-4.88728
Si 288.158	13.3410	ppb	4.6696	35.0	632.805	13.34099
Sn 189.925	8.6128	ppb	3.8631	44.9	0.9208	8.61277
Sr 216.596	0.0094	ppb	0.9807	10424.2	3.3652	0.00941
Ti 334.941	0.2260	ppb	0.1056	46.7	-8.0898	0.22604
Tl 190.794	-8.1140	ppb	6.7075	82.7	-4.4176	-8.11404
V 292.401	0.5752	ppb	0.0591	10.3	-7.1515	0.57517
Zn 206.200	2.0641	ppb	0.5636	27.3	-0.2229	2.06414

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4/8/2019, 4:21:10 PM

Rack 1, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4417	0.7251	0.3638
Al 308.215	756.028	759.295	763.098
As 188.980	-2.0372u	-0.7788u	12.8236
B 249.678	6.8509	5.5294	5.6475
Ba 389.178	-2.6655u	-3.5079u	2.1359
Be 313.042	-0.0167u	-0.0299u	-0.0457u
Ca 370.602	3371	3368	3367
Cd 226.502	-0.3930u	-0.3968u	-0.4794u
Co 228.615	-0.3255u	0.3368	-0.2424u
Cr 267.716	1.9541	2.1490	2.5975
Cu 324.754	2.4989	0.2645	0.8774
Fe 271.441	104.750	109.012	100.980
K 766.491	61.9515	61.3751	59.6160
Mg 279.078	446.248	451.823	446.614
Mn 257.610	1.1278	1.0801	1.1226
Mo 202.032	0.8290	0.5200	1.0463
Na 330.237	15931.7	15900.9	15854.9
Ni 231.604	2.2603	-0.5843u	2.3943
Pb 220.353	-5.2310u	0.0569	-5.0755u
Sb 206.834	3.1974	-10.3874u	3.2440
Se 196.026	-11.4285u	8.2124	10.5257
Si 288.158	90.6027	90.1850	91.0813
Sn 189.925	6.8738	1.3249	12.2398
Sr 216.596	15.2512	17.5014	16.4510
Ti 334.941	0.1750	0.0622	0.1330
Tl 190.794	-7.0342u	-8.9237u	-6.4834u
V 292.401	1.0513	0.9555	1.2314
Zn 206.200	2.5489	7.1645	3.5383

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5102	ppb	0.1901	37.3	-42.6822
Al 308.215	759.474	ppb	3.5384	0.5	1527.06
As 188.980	3.3359	ppb	8.2407	247.0	2.0466
B 249.678	6.0093	ppb	0.7312	12.2	20.0881

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-1.3458	ppb	3.0445	226.2	-37.5400
Be 313.042	-0.0308	ppb	0.0145	47.1	-448.784
Ca 370.602	3369	ppb	2.259	0.1	4794
Cd 226.502	-0.4231	ppb	0.0488	11.5	-2.2908
Co 228.615	-0.0770	ppb	0.3608	468.4	-8.6378
Cr 267.716	2.2335	ppb	0.3300	14.8	42.8276
Cu 324.754	1.2136	ppb	1.1545	95.1	506.114
Fe 271.441	104.914	ppb	4.0183	3.8	102.587
K 766.491	60.9809	ppb	1.2166	2.0	1271.34
Mg 279.078	448.228	ppb	3.1187	0.7	573.826
Mn 257.610	1.1102	ppb	0.0262	2.4	99.9603
Mo 202.032	0.7984	ppb	0.2645	33.1	3.7632
Na 330.237	15895.9	ppb	38.6594	0.2	421.474
Ni 231.604	1.3568	ppb	1.6823	124.0	-1.4010
Pb 220.353	-3.4165	ppb	3.0091	88.1	0.3993
Sb 206.834	-1.3153	ppb	7.8567	597.3	5.4337
Se 196.026	2.4365	ppb	12.0630	495.1	4.8221
Si 288.158	90.6230	ppb	0.4485	0.5	960.573
Sn 189.925	6.8128	ppb	5.4577	80.1	0.5178
Sr 216.596	16.4012	ppb	1.1259	6.9	43.4482
Ti 334.941	0.1234	ppb	0.0570	46.2	-15.1013
Tl 190.794	-7.4804	ppb	1.2799	17.1	-4.2721
V 292.401	1.0794	ppb	0.1401	13.0	-3.0452
Zn 206.200	4.4172	ppb	2.4301	55.0	1.0191

680-166733-A-5-B (Samp)

4/8/2019, 4:25:21 PM

Rack 1, Tube 42

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3688	0.2136	-0.3609u
Al 308.215	92.8037	91.4110	90.5600
As 188.980	-0.1379	-0.0336	-2.6174u
B 249.678	3.5163	3.2210	2.7110
Ba 389.178	0.8659	-3.2054u	-0.4480u
Be 313.042	-0.0219u	-0.0279u	-0.0144u
Ca 370.602	2458	2443	2464
Cd 226.502	0.1413	-0.4841u	-0.1572u
Co 228.615	-0.7914u	-0.5819u	-1.4018u
Cr 267.716	-0.0753u	-0.1007u	0.6949
Cu 324.754	1.0578	1.2632	0.8287
Fe 271.441	25.6219	13.7111	11.8568
K 766.491	50.6194	50.0887	50.0373
Mg 279.078	298.192	302.719	305.698
Mn 257.610	1.2657	1.0280	1.0945
Mo 202.032	0.7314	2.0943	0.4813
Na 330.237	14558.9	13881.1	14174.4
Ni 231.604	1.4765	3.8999	-0.0498u
Pb 220.353	-2.5945u	2.0055	-0.8754u
Sb 206.834	3.4470	-3.4255u	-2.5397u
Se 196.026	-6.7158u	-16.1877u	-4.5642u
Si 288.158	28.6755	26.6367	27.7370
Sn 189.925	7.4972	3.8295	1.6783
Sr 216.596	9.1121	9.5128	10.2356
Ti 334.941	0.1497	0.0108	-0.0179u

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-9.2581u	-6.6226u	-2.5065u
V 292.401	1.2964	0.3760	-1.2661u
Zn 206.200	0.9258	2.2104	4.6456

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0739	ppb	0.3844	520.5	-54.3798
Al 308.215	91.5916	ppb	1.1327	1.2	398.295
As 188.980	-0.9296	ppb	1.4626	157.3	1.0062
B 249.678	3.1494	ppb	0.4074	12.9	1.8282
Ba 389.178	-0.9292	ppb	2.0778	223.6	-35.5525
Be 313.042	-0.0214	ppb	0.0068	31.8	-441.635
Ca 370.602	2455	ppb	11.07	0.5	3496
Cd 226.502	-0.1667	ppb	0.3128	187.7	0.5174
Co 228.615	-0.9250	ppb	0.4260	46.1	-11.4660
Cr 267.716	0.1730	ppb	0.4522	261.4	12.9144
Cu 324.754	1.0499	ppb	0.2174	20.7	501.833
Fe 271.441	17.0633	ppb	7.4697	43.8	55.0308
K 766.491	50.2485	ppb	0.3223	0.6	1088.89
Mg 279.078	302.203	ppb	3.7794	1.3	396.162
Mn 257.610	1.1294	ppb	0.1226	10.9	100.767
Mo 202.032	1.1023	ppb	0.8681	78.8	4.1862
Na 330.237	14204.8	ppb	339.893	2.4	380.102
Ni 231.604	1.7755	ppb	1.9918	112.2	-0.9894
Pb 220.353	-0.4881	ppb	2.3243	476.2	1.4830
Sb 206.834	-0.8394	ppb	3.7385	445.4	5.5797
Se 196.026	-9.1559	ppb	6.1840	67.5	2.7048
Si 288.158	27.6831	ppb	1.0205	3.7	693.563
Sn 189.925	4.3350	ppb	2.9422	67.9	-0.0391
Sr 216.596	9.6202	ppb	0.5694	5.9	26.8653
Ti 334.941	0.0475	ppb	0.0896	188.6	-21.1437
Tl 190.794	-6.1291	ppb	3.4027	55.5	-3.9563
V 292.401	0.1355	ppb	1.2981	958.2	-10.7403
Zn 206.200	2.5940	ppb	1.8893	72.8	0.0567

680-166733-A-4-B (Samp)

4/8/2019, 4:29:32 PM

Rack 1, Tube 43

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0467	0.4497	0.5387
Al 308.215	26.8590	22.9529	31.1011
As 188.980	-3.0768u	-0.6422u	-1.8070u
B 249.678	2.6513	1.1486	0.8089
Ba 389.178	1.7038	-4.7072u	-3.8132u
Be 313.042	-0.0162u	-0.0380u	-0.0108u
Ca 370.602	985.2	998.0	990.3
Cd 226.502	-0.2549u	-0.2756u	0.2621
Co 228.615	0.9498	1.2283	-0.4880u
Cr 267.716	-0.0031	0.2488	0.1472
Cu 324.754	0.8918	2.1289	1.7682
Fe 271.441	149.234	126.535	126.460
K 766.491	50.5136	50.9948	53.2658
Mg 279.078	411.739	417.153	418.154
Mn 257.610	0.7540	0.7790	0.6456
Mo 202.032	0.6393	-0.6296u	2.4673

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	15388.4	15757.8	14714.7
Ni 231.604	4.4131	2.3470	2.2109
Pb 220.353	-1.1861u	-1.1987u	-2.3506u
Sb 206.834	-3.5959u	-4.1593u	4.1022
Se 196.026	-15.5888u	11.4098	7.0465
Si 288.158	26.6064	25.0800	22.1571
Sn 189.925	11.2806	1.5564	2.2722
Sr 216.596	1.8117	3.0067	2.4160
Ti 334.941	0.0784	0.0061	0.1962
Tl 190.794	-3.1730u	-12.9647u	-5.7426u
V 292.401	0.7144	-0.3415u	0.7203
Zn 206.200	2.8496	2.9850	3.2360

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3450	ppb	0.2622	76.0	-47.0922
Al 308.215	26.9710	ppb	4.0753	15.1	289.092
As 188.980	-1.8420	ppb	1.2176	66.1	0.7865
B 249.678	1.5363	ppb	0.9805	63.8	-8.6226
Ba 389.178	-2.2722	ppb	3.4722	152.8	-42.2753
Be 313.042	-0.0217	ppb	0.0144	66.7	-442.109
Ca 370.602	991.2	ppb	6.438	0.6	1417
Cd 226.502	-0.0894	ppb	0.3046	340.6	1.5286
Co 228.615	0.5634	ppb	0.9211	163.5	-6.5042
Cr 267.716	0.1310	ppb	0.1267	96.8	12.3170
Cu 324.754	1.5963	ppb	0.6362	39.9	516.100
Fe 271.441	134.076	ppb	13.1270	9.8	118.397
K 766.491	51.5914	ppb	1.4699	2.8	1111.72
Mg 279.078	415.682	ppb	3.4515	0.8	534.333
Mn 257.610	0.7262	ppb	0.0709	9.8	73.5339
Mo 202.032	0.8257	ppb	1.5568	188.6	3.8009
Na 330.237	15286.9	ppb	528.898	3.5	406.584
Ni 231.604	2.9903	ppb	1.2340	41.3	0.2029
Pb 220.353	-1.5785	ppb	0.6687	42.4	1.0804
Sb 206.834	-1.2177	ppb	4.6158	379.1	5.4618
Se 196.026	0.9558	ppb	14.4932	1516.3	4.5515
Si 288.158	24.6145	ppb	2.2609	9.2	680.700
Sn 189.925	5.0364	ppb	5.4195	107.6	0.1186
Sr 216.596	2.4115	ppb	0.5975	24.8	9.2488
Ti 334.941	0.0936	ppb	0.0959	102.5	-17.4283
Tl 190.794	-7.2935	ppb	5.0768	69.6	-4.2291
V 292.401	0.3644	ppb	0.6113	167.8	-8.8791
Zn 206.200	3.0236	ppb	0.1961	6.5	0.2840

680-166733-A-8-B (Samp)

4/8/2019, 4:33:44 PM

Rack 1, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5025u	1.7094	0.1808
Al 308.215	61.8855	67.3429	65.0164
As 188.980	-5.0045u	-4.4620u	-5.2488u
B 249.678	2.4941	1.3158	2.6618
Ba 389.178	-3.5520u	-1.8411u	-0.7521u
Be 313.042	-0.0144u	-0.0358u	-0.0322u
Ca 370.602	762.5	772.6	768.1

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	-0.0310u	-0.3844u	-0.2666u
Co 228.615	0.4749	0.1815	-0.9999u
Cr 267.716	0.1812	0.5401	0.4347
Cu 324.754	4.4172	5.1126	3.8716
Fe 271.441	35.8247	25.1108	22.8785
K 766.491	37.0664	36.4460	38.4603
Mg 279.078	225.755	225.293	226.257
Mn 257.610	0.8082	0.7181	0.7278
Mo 202.032	2.9566	-0.7730u	0.4553
Na 330.237	8378.54	8627.49	8351.29
Ni 231.604	0.4690	4.1590	3.1957
Pb 220.353	5.1479	1.4784	-1.6604u
Sb 206.834	-2.7273u	2.4968	-4.7689u
Se 196.026	2.4366	-0.1762u	4.8093
Si 288.158	35.8673	33.9663	31.5899
Sn 189.925	-4.4077u	-6.5315u	3.7949
Sr 216.596	2.0278	3.2389	5.0772
Ti 334.941	-0.0308u	-0.0581u	0.1452
Tl 190.794	9.3489	-4.1667u	-8.7684u
V 292.401	0.8106	0.2390	0.6970
Zn 206.200	10.5730	11.2702	10.4435

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4626	ppb	1.1326	244.8	-43.9126
Al 308.215	64.7483	ppb	2.7386	4.2	352.936
As 188.980	-4.9051	ppb	0.4027	8.2	0.0045
B 249.678	2.1572	ppb	0.7335	34.0	-4.5468
Ba 389.178	-2.0484	ppb	1.4114	68.9	-41.3024
Be 313.042	-0.0275	ppb	0.0115	41.8	-446.297
Ca 370.602	767.7	ppb	5.045	0.7	1099
Cd 226.502	-0.2273	ppb	0.1800	79.2	-0.1558
Co 228.615	-0.1145	ppb	0.7807	681.7	-8.7600
Cr 267.716	0.3853	ppb	0.1845	47.9	15.9664
Cu 324.754	4.4671	ppb	0.6220	13.9	590.924
Fe 271.441	27.9380	ppb	6.9207	24.8	60.9402
K 766.491	37.3243	ppb	1.0316	2.8	869.194
Mg 279.078	225.768	ppb	0.4825	0.2	303.114
Mn 257.610	0.7514	ppb	0.0495	6.6	74.6282
Mo 202.032	0.8796	ppb	1.9007	216.1	3.8768
Na 330.237	8452.44	ppb	152.211	1.8	239.256
Ni 231.604	2.6079	ppb	1.9139	73.4	-0.1722
Pb 220.353	1.6553	ppb	3.4076	205.9	2.2749
Sb 206.834	-1.6665	ppb	3.7472	224.9	5.3185
Se 196.026	2.3566	ppb	2.4937	105.8	4.8077
Si 288.158	33.8078	ppb	2.1431	6.3	719.215
Sn 189.925	-2.3814	ppb	5.4532	229.0	-1.5487
Sr 216.596	3.4479	ppb	1.5354	44.5	11.7764
Ti 334.941	0.0188	ppb	0.1103	587.3	-23.3751
Tl 190.794	-1.1954	ppb	9.4171	787.8	-2.8088
V 292.401	0.5822	ppb	0.3026	52.0	-7.0560
Zn 206.200	10.7622	ppb	0.4447	4.1	4.3712

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166733-A-1-B (Samp) **4/8/2019, 4:37:56 PM** **Rack 1, Tube 45****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.0198	-0.1353u	-0.3360u
Al 308.215	80.6521	67.1997	77.0726
As 188.980	-4.2970u	4.8111	-3.4835u
B 249.678	1.5401	1.8646	1.3745
Ba 389.178	-1.3320u	-2.9141u	-2.9286u
Be 313.042	-0.0280u	-0.0137u	-0.0271u
Ca 370.602	231.4	234.3	229.2
Cd 226.502	0.0360	0.2129	-0.4084u
Co 228.615	-0.8264u	1.7278	1.5994
Cr 267.716	1.1650	1.2901	1.3264
Cu 324.754	1.7081	1.6664	2.9646
Fe 271.441	21.9164	6.3312	16.9987
K 766.491	81.2562	81.7573	80.1049
Mg 279.078	68.8117	76.6556	60.6045
Mn 257.610	0.3923	0.6114	0.4885
Mo 202.032	0.4448	-1.4359u	0.5853
Na 330.237	89681.7	88843.5	89465.4
Ni 231.604	2.5354	3.4648	3.2393
Pb 220.353	1.5397	6.8711	-11.1077u
Sb 206.834	-4.5007u	-0.0376u	-2.5586u
Se 196.026	-8.1706u	17.5442	1.3122
Si 288.158	24.6460	22.2659	19.2704
Sn 189.925	4.7005	2.0431	-8.4975u
Sr 216.596	0.2886	1.6479	2.0177
Ti 334.941	0.3857	0.1244	0.1637
Tl 190.794	-14.8558u	-7.4609u	-8.8448u
V 292.401	2.8734	2.5560	3.5815
Zn 206.200	3.1285	1.1981	1.2978

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1505	ppb	0.1784	118.5	-60.3851
Al 308.215	74.9748	ppb	6.9672	9.3	370.264
As 188.980	-0.9898	ppb	5.0401	509.2	1.0234
B 249.678	1.5931	ppb	0.2493	15.6	-8.1482
Ba 389.178	-2.3916	ppb	0.9176	38.4	-43.1741
Be 313.042	-0.0229	ppb	0.0080	34.8	-446.267
Ca 370.602	231.6	ppb	2.566	1.1	338.2
Cd 226.502	-0.0532	ppb	0.3201	602.2	1.6898
Co 228.615	0.8336	ppb	1.4390	172.6	-5.5898
Cr 267.716	1.2605	ppb	0.0847	6.7	29.0557
Cu 324.754	2.1130	ppb	0.7378	34.9	529.525
Fe 271.441	15.0821	ppb	7.9674	52.8	54.0293
K 766.491	81.0395	ppb	0.8472	1.0	1612.31
Mg 279.078	68.6906	ppb	8.0263	11.7	111.880
Mn 257.610	0.4974	ppb	0.1098	22.1	56.6027
Mo 202.032	-0.1353	ppb	1.1286	834.3	2.4670
Na 330.237	89330.2	ppb	435.145	0.5	2218.71
Ni 231.604	3.0798	ppb	0.4848	15.7	0.2908
Pb 220.353	-0.8990	ppb	9.2342	1027.2	1.3311
Sb 206.834	-2.3656	ppb	2.2378	94.6	5.0999
Se 196.026	3.5619	ppb	13.0042	365.1	5.0279
Si 288.158	22.0608	ppb	2.6937	12.2	669.308

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-0.5846	ppb	6.9804	1194.0	-1.1379
Sr 216.596	1.3181	ppb	0.9105	69.1	6.5761
Ti 334.941	0.2246	ppb	0.1409	62.7	-9.7427
Tl 190.794	-10.3872	ppb	3.9313	37.8	-4.9453
V 292.401	3.0037	ppb	0.5250	17.5	12.6276
Zn 206.200	1.8748	ppb	1.0869	58.0	-0.3235

180-88281-D-3-B (Samp) 4/8/2019, 4:42:08 PM Rack 1, Tube 46

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4139u	-0.8763u	-0.0600u
Al 308.215	4.4327	4.7576	4.9973
As 188.980	9.3497	-1.1730u	6.9363
B 249.678	71.0962	70.9099	70.5283
Ba 389.178	64.9157	67.1473	69.9865
Be 313.042	-0.0454u	-0.0497u	-0.0423u
Ca 370.602	72977	73052	73152
Cd 226.502	0.3657	-0.0508u	0.5016
Co 228.615	0.2217	1.1280	-0.9525u
Cr 267.716	0.2458	0.5303	0.1782
Cu 324.754	8.5079	8.1667	7.7736
Fe 271.441	-1.4520u	2.7880	15.0307
K 766.491	2175.74	2175.39	2172.49
Mg 279.078	20826.5	20852.0	20878.3
Mn 257.610	13.9118	13.8745	13.8826
Mo 202.032	0.0008	1.6668	-1.0812u
Na 330.237	17485.8	17346.5	17392.5
Ni 231.604	0.8583	0.8663	0.7834
Pb 220.353	12.0502	-1.6859u	1.5032
Sb 206.834	0.7733	2.2779	-9.6650u
Se 196.026	-4.4872u	-6.5983u	-4.0443u
Si 288.158	7899.37	7912.77	7916.14
Sn 189.925	-0.7775u	0.2159	2.2971
Sr 216.596	1653.24	1658.57	1659.97
Ti 334.941	-0.2134	0.0753	-0.1385
Tl 190.794	-7.3199u	-11.5993u	-8.1534u
V 292.401	0.0159	-0.8531u	0.5429
Zn 206.200	17.6967	20.0846	19.1116

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4501	ppb	0.4093	91.0	-73.0195
Al 308.215	4.7292	ppb	0.2834	6.0	251.486
As 188.980	5.0377	ppb	5.5123	109.4	2.4872
B 249.678	70.8448	ppb	0.2895	0.4	436.062
Ba 389.178	67.3498	ppb	2.5414	3.8	327.912
Be 313.042	-0.0458	ppb	0.0037	8.1	-450.740
Ca 370.602	73060	ppb	87.63	0.1	103772
Cd 226.502	0.2722	ppb	0.2879	105.8	5.5942
Co 228.615	0.1324	ppb	1.0431	788.0	-7.9310
Cr 267.716	0.3181	ppb	0.1868	58.7	15.0529
Cu 324.754	8.1494	ppb	0.3674	4.5	686.924
Fe 271.441	5.4556	ppb	8.5590	156.9	48.7977
K 766.491	2174.54	ppb	1.7843	0.1	37200.0

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	20852.2	ppb	25.8867	0.1	25414.8
Mn 257.610	13.8896	ppb	0.0196	0.1	1039.33
Mo 202.032	0.1955	ppb	1.3843	708.2	2.9268
Na 330.237	17408.3	ppb	70.9810	0.4	458.332
Ni 231.604	0.8360	ppb	0.0457	5.5	-1.9131
Pb 220.353	3.9558	ppb	7.1890	181.7	3.1255
Sb 206.834	-2.2046	ppb	6.5045	295.0	5.1488
Se 196.026	-5.0433	ppb	1.3648	27.1	3.4573
Si 288.158	7909.43	ppb	8.8673	0.1	34162.1
Sn 189.925	0.5785	ppb	1.5690	271.2	-0.8828
Sr 216.596	1657.26	ppb	3.5489	0.2	4054.42
Ti 334.941	-0.0922	ppb	0.1498	162.5	14.9480
Tl 190.794	-9.0242	ppb	2.2687	25.1	-4.6261
V 292.401	-0.0981	ppb	0.7049	718.4	-12.5653
Zn 206.200	18.9643	ppb	1.2007	6.3	8.7033

180-88281-D-1-B (Samp)

4/8/2019, 4:46:20 PM

Rack 1, Tube 47

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1979	-0.1094u	-0.2142u
Al 308.215	27.4931	32.0939	27.3066
As 188.980	1.7925	5.7079	-2.6379u
B 249.678	118.299	120.770	121.011
Ba 389.178	195.593	200.872	200.356
Be 313.042	-0.0567u	-0.0173u	-0.0459u
Ca 370.602	74118	74261	74317
Cd 226.502	0.0661	-0.0976u	-0.1616u
Co 228.615	-0.9713u	-0.1141u	-1.2847u
Cr 267.716	1.0901	0.0980	0.3397
Cu 324.754	12.2721	11.2154	10.9010
Fe 271.441	303.919	302.012	307.936
K 766.491	5191.43	5187.09	5201.62
Mg 279.078	21928.3	21970.5	22037.2
Mn 257.610	92.9466	93.4772	93.2766
Mo 202.032	-1.2513u	0.0513	0.0470
Na 330.237	21270.0	21245.8	21820.0
Ni 231.604	2.8136	1.3591	2.6613
Pb 220.353	9.0687	1.8913	-5.4649u
Sb 206.834	-8.4769u	-2.1575u	-4.1463u
Se 196.026	4.2076	-17.3601u	7.3167
Si 288.158	7082.43	7100.56	7119.38
Sn 189.925	6.6336	11.4479	3.6116
Sr 216.596	1504.33	1511.68	1507.86
Ti 334.941	-0.0472	-0.0263	-0.0411
Tl 190.794	-6.3979u	-8.5520u	-5.1159u
V 292.401	-1.0018u	1.7796	0.0163
Zn 206.200	14.0127	13.1293	14.0700

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0419	ppb	0.2142	510.9	-61.5681
Al 308.215	28.9646	ppb	2.7117	9.4	292.462
As 188.980	1.6208	ppb	4.1755	257.6	1.6341
B 249.678	120.027	ppb	1.5007	1.3	751.240

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	198.940	ppb	2.9104	1.5	998.007
Be 313.042	-0.0400	ppb	0.0204	50.9	-446.274
Ca 370.602	74232	ppb	102.8	0.1	105437
Cd 226.502	-0.0644	ppb	0.1174	182.5	2.1118
Co 228.615	-0.7900	ppb	0.6060	76.7	-11.0114
Cr 267.716	0.5093	ppb	0.5173	101.6	17.9717
Cu 324.754	11.4628	ppb	0.7183	6.3	773.349
Fe 271.441	304.622	ppb	3.0240	1.0	210.619
K 766.491	5193.38	ppb	7.4581	0.1	88517.5
Mg 279.078	21978.7	ppb	54.8949	0.2	26785.5
Mn 257.610	93.2335	ppb	0.2679	0.3	6481.71
Mo 202.032	-0.3843	ppb	0.7508	195.4	2.1186
Na 330.237	21445.3	ppb	324.731	1.5	557.181
Ni 231.604	2.2780	ppb	0.7994	35.1	-0.4959
Pb 220.353	1.8317	ppb	7.2670	396.7	2.3459
Sb 206.834	-4.9269	ppb	3.2312	65.6	4.2960
Se 196.026	-1.9453	ppb	13.4398	690.9	4.0295
Si 288.158	7100.79	ppb	18.4779	0.3	30728.6
Sn 189.925	7.2310	ppb	3.9521	54.7	0.6123
Sr 216.596	1507.96	ppb	3.6789	0.2	3689.48
Ti 334.941	-0.0382	ppb	0.0107	28.1	21.5055
Tl 190.794	-6.6886	ppb	1.7364	26.0	-4.0727
V 292.401	0.2647	ppb	1.4073	531.7	-9.5527
Zn 206.200	13.7374	ppb	0.5274	3.8	5.9433

180-88219-D-1-B (Samp)

4/8/2019, 4:50:32 PM

Rack 1, Tube 48

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1224	-0.3974u	-0.3099u
Al 308.215	13.1199	15.4172	17.7031
As 188.980	7.9193	-2.8268u	0.1167
B 249.678	52.5180	51.9373	52.7087
Ba 389.178	123.292	126.668	126.177
Be 313.042	-0.0441u	-0.0414u	-0.0356u
Ca 370.602	49129	49329	49286
Cd 226.502	0.0784	0.1498	-0.0356
Co 228.615	0.0305	-0.8461u	-0.2571u
Cr 267.716	5.2104	7.1402	6.3685
Cu 324.754	8.7981	9.7485	9.8351
Fe 271.441	574.100	565.238	552.029
K 766.491	2189.68	2192.79	2187.78
Mg 279.078	19967.8	19985.6	20006.8
Mn 257.610	23.8112	23.9044	23.9389
Mo 202.032	1.0712	-0.7581u	2.0366
Na 330.237	16204.0	16738.5	16460.6
Ni 231.604	4.6755	9.7527	7.5899
Pb 220.353	3.5757	5.5181	-5.8029u
Sb 206.834	-2.3399u	-9.9175u	-10.4565u
Se 196.026	-2.9931u	-7.7823u	-14.6328u
Si 288.158	7534.20	7546.10	7547.80
Sn 189.925	9.1364	5.9116	-0.3530u
Sr 216.596	257.020	256.936	257.042
Ti 334.941	-0.4272	-0.3148	-0.1144

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	2.0045	-11.9021u	-9.2619u
V 292.401	0.7459	0.3399	-0.1170u
Zn 206.200	22.7084	21.8309	20.3902

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1384	ppb	0.8533	616.7	-53.4946
Al 308.215	15.4134	ppb	2.2916	14.9	269.575
As 188.980	1.7364	ppb	5.5531	319.8	1.6520
B 249.678	52.3880	ppb	0.4018	0.8	317.138
Ba 389.178	125.379	ppb	1.8240	1.5	622.402
Be 313.042	-0.0404	ppb	0.0043	10.7	-449.956
Ca 370.602	49248	ppb	105.0	0.2	69952
Cd 226.502	0.0642	ppb	0.0935	145.6	3.8917
Co 228.615	-0.3576	ppb	0.4469	125.0	-9.5760
Cr 267.716	6.2397	ppb	0.9713	15.6	101.022
Cu 324.754	9.4606	ppb	0.5754	6.1	721.196
Fe 271.441	563.789	ppb	11.1070	2.0	350.847
K 766.491	2190.08	ppb	2.5309	0.1	37464.2
Mg 279.078	19986.7	ppb	19.5139	0.1	24361.0
Mn 257.610	23.8848	ppb	0.0661	0.3	1722.01
Mo 202.032	0.7832	ppb	1.4195	181.2	3.7377
Na 330.237	16467.7	ppb	267.356	1.6	435.255
Ni 231.604	7.3394	ppb	2.5478	34.7	4.4757
Pb 220.353	1.0970	ppb	6.0539	551.9	2.0722
Sb 206.834	-7.5713	ppb	4.5386	59.9	3.4784
Se 196.026	-8.4694	ppb	5.8502	69.1	2.8307
Si 288.158	7542.70	ppb	7.4087	0.1	32604.9
Sn 189.925	4.8983	ppb	4.8252	98.5	0.0877
Sr 216.596	257.000	ppb	0.0559	0.0	631.603
Ti 334.941	-0.2855	ppb	0.1584	55.5	-1.5737
Tl 190.794	-6.3865	ppb	7.3858	115.6	-4.0224
V 292.401	0.3229	ppb	0.4317	133.7	-9.1930
Zn 206.200	21.6432	ppb	1.1704	5.4	10.1163

180-88281-D-2-B (Samp)

4/8/2019, 4:54:44 PM

Rack 1, Tube 49

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1094	0.1272	1.1724
Al 308.215	57.6237	51.6371	49.5382
As 188.980	7.5859	-4.6361u	-3.3291u
B 249.678	25.2230	25.0729	25.1068
Ba 389.178	21.3228	26.1301	19.7339
Be 313.042	-0.0241u	-0.0318u	-0.0339u
Ca 370.602	30675	30651	30630
Cd 226.502	-0.1579u	0.1293	-0.4462u
Co 228.615	1.7907	-0.7530u	-0.5507u
Cr 267.716	0.3538	0.4376	0.9539
Cu 324.754	2.0347	1.3536	2.1313
Fe 271.441	31.7987	40.8635	34.8620
K 766.491	1421.96	1421.49	1425.01
Mg 279.078	9883.32	9884.08	9885.05
Mn 257.610	0.6749	0.6276	0.6178
Mo 202.032	-0.5426u	1.1172	0.7204

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	6658.54	6407.99	6821.34
Ni 231.604	0.7356	-2.4332u	1.0960
Pb 220.353	1.0664	9.3316	-8.1608u
Sb 206.834	-2.3271u	-3.5942u	3.1446
Se 196.026	-0.9917u	7.6602	-6.2085u
Si 288.158	6934.00	6975.42	6940.98
Sn 189.925	-4.3856u	1.6541	2.1034
Sr 216.596	134.821	134.775	132.702
Ti 334.941	0.3557	0.5239	0.5057
Tl 190.794	-11.2414u	-17.7321u	2.7379
V 292.401	0.5604	-0.9748u	-0.1030u
Zn 206.200	1.2624	2.1783	4.9291

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4697	ppb	0.6087	129.6	-44.1479
Al 308.215	52.9330	ppb	4.1956	7.9	332.955
As 188.980	-0.1264	ppb	6.7110	5309.0	1.2128
B 249.678	25.1342	ppb	0.0787	0.3	142.827
Ba 389.178	22.3956	ppb	3.3303	14.9	90.6411
Be 313.042	-0.0300	ppb	0.0052	17.2	-443.998
Ca 370.602	30652	ppb	22.58	0.1	43542
Cd 226.502	-0.1583	ppb	0.2878	181.8	0.6855
Co 228.615	0.1623	ppb	1.4138	871.1	-7.8310
Cr 267.716	0.5817	ppb	0.3250	55.9	18.8114
Cu 324.754	1.8399	ppb	0.4239	23.0	522.430
Fe 271.441	35.8414	ppb	4.6111	12.9	65.2311
K 766.491	1422.82	ppb	1.9093	0.1	24421.4
Mg 279.078	9884.15	ppb	0.8639	0.0	12061.8
Mn 257.610	0.6401	ppb	0.0305	4.8	97.0376
Mo 202.032	0.4317	ppb	0.8667	200.8	3.2546
Na 330.237	6629.29	ppb	208.222	3.1	194.699
Ni 231.604	-0.2005	ppb	1.9419	968.4	-2.9311
Pb 220.353	0.7457	ppb	8.7506	1173.4	1.9388
Sb 206.834	-0.9256	ppb	3.5814	386.9	5.5521
Se 196.026	0.1533	ppb	7.0049	4569.1	4.4052
Si 288.158	6950.13	ppb	22.1763	0.3	30088.6
Sn 189.925	-0.2094	ppb	3.6237	1730.8	-1.0608
Sr 216.596	134.099	ppb	1.2104	0.9	331.155
Ti 334.941	0.4618	ppb	0.0923	20.0	32.0379
Tl 190.794	-8.7452	ppb	10.4608	119.6	-4.5649
V 292.401	-0.1725	ppb	0.7700	446.5	-13.1958
Zn 206.200	2.7899	ppb	1.9083	68.4	0.1604

180-88312-D-2-B (Samp)

4/8/2019, 4:58:54 PM

Rack 1, Tube 50

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0251	-0.3037u	0.9290
Al 308.215	9.2256	1.1185	1.1791
As 188.980	4.6910	-1.4173u	1.7520
B 249.678	13.9307	13.0063	13.7904
Ba 389.178	55.2155	53.5149	52.6450
Be 313.042	-0.0205u	-0.0372u	-0.0589u
Ca 370.602	61696	61693	61854

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	-0.1504u	0.4497	-0.3012u
Co 228.615	-0.1998u	-1.3344u	-0.4553u
Cr 267.716	0.1512	0.3088	0.6760
Cu 324.754	13.0831	12.7007	11.7520
Fe 271.441	10.7492	18.3803	23.3673
K 766.491	1115.51	1112.85	1117.30
Mg 279.078	9001.22	8991.30	9035.83
Mn 257.610	1.3355	1.1738	1.1707
Mo 202.032	1.6651	-0.5820u	0.2915
Na 330.237	13373.8	13544.7	13490.7
Ni 231.604	0.3029	1.8736	1.0569
Pb 220.353	2.8471	-1.5413u	-3.4884u
Sb 206.834	-0.8529u	-9.9844u	-2.8309u
Se 196.026	-7.5196u	-0.0880u	0.1070
Si 288.158	7940.84	7922.74	7953.33
Sn 189.925	10.0008	-2.9189u	-7.3435u
Sr 216.596	125.918	125.378	126.148
Ti 334.941	0.1177	0.1875	0.1940
Tl 190.794	-12.0080u	-5.3168u	-6.0067u
V 292.401	0.8946	1.7883	-0.9884u
Zn 206.200	38.0544	38.4166	41.9763

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5501	ppb	0.7410	134.7	-41.9749
Al 308.215	3.8411	ppb	4.6632	121.4	250.008
As 188.980	1.6752	ppb	3.0549	182.4	1.6505
B 249.678	13.5758	ppb	0.4982	3.7	68.7028
Ba 389.178	53.7918	ppb	1.3074	2.4	249.604
Be 313.042	-0.0388	ppb	0.0193	49.6	-446.587
Ca 370.602	61748	ppb	92.08	0.1	87705
Cd 226.502	-0.0006	ppb	0.3972	62973.5	2.4547
Co 228.615	-0.6632	ppb	0.5952	89.8	-10.5886
Cr 267.716	0.3787	ppb	0.2693	71.1	15.8950
Cu 324.754	12.5119	ppb	0.6853	5.5	800.663
Fe 271.441	17.4989	ppb	6.3551	36.3	55.2829
K 766.491	1115.22	ppb	2.2411	0.2	19192.5
Mg 279.078	9009.45	ppb	23.3738	0.3	10996.9
Mn 257.610	1.2267	ppb	0.0943	7.7	134.643
Mo 202.032	0.4582	ppb	1.1328	247.2	3.2915
Na 330.237	13469.7	ppb	87.3652	0.6	361.727
Ni 231.604	1.0778	ppb	0.7856	72.9	-1.6750
Pb 220.353	-0.7275	ppb	3.2452	446.1	1.3948
Sb 206.834	-4.5561	ppb	4.8040	105.4	4.4086
Se 196.026	-2.5002	ppb	4.3480	173.9	3.9206
Si 288.158	7938.97	ppb	15.3797	0.2	34287.8
Sn 189.925	-0.0872	ppb	9.0122	10335.9	-1.0327
Sr 216.596	125.814	ppb	0.3953	0.3	310.901
Ti 334.941	0.1664	ppb	0.0423	25.4	7.6305
Tl 190.794	-7.7772	ppb	3.6802	47.3	-4.3393
V 292.401	0.5648	ppb	1.4174	250.9	-7.1739
Zn 206.200	39.4824	ppb	2.1673	5.5	19.5406

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 5:03:06 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	490.587	495.643	501.449
Al 308.215	10208.2	10202.4	10231.4
As 188.980	527.589	537.357	522.300
B 249.678	517.032	522.571	527.291
Ba 389.178	489.050	492.553	489.345
Be 313.042	527.710	527.372	528.930
Ca 370.602	10100	10107	10088
Cd 226.502	513.935	512.401	511.745
Co 228.615	511.210	513.905	517.839
Cr 267.716	500.264	500.977	501.713
Cu 324.754	510.809	511.895	516.068
Fe 271.441	10244.3	10223.5	10264.3
K 766.491	9899.25	9900.99	9919.16
Mg 279.078	10218.9	10225.9	10241.1
Mn 257.610	508.160	507.704	509.042
Mo 202.032	510.100	512.036	510.509
Na 330.237	10310.5	10059.1	10893.8
Ni 231.604	512.111	515.519	505.772
Pb 220.353	494.231	502.320	495.522
Sb 206.834	499.292	505.883	512.265
Se 196.026	520.180	538.856	527.679
Si 288.158	5015.93	4999.61	5007.11
Sn 189.925	507.535	515.862	502.638
Sr 216.596	509.960	508.325	505.039
Ti 334.941	506.964	507.407	508.500
Tl 190.794	489.870	511.419	496.880
V 292.401	514.677	514.891	517.287
Zn 206.200	1039.24	1040.79	1045.92

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	495.893	ppb	5.4355	1.1	13272.8	99.17860
Al 308.215	10214.0	ppb	15.3526	0.2	17521.7	102.13994
As 188.980	529.082	ppb	7.6389	1.4	128.385	105.81639
B 249.678	522.298	ppb	5.1350	1.0	3321.95	104.45952
Ba 389.178	490.316	ppb	1.9432	0.4	2472.67	98.06316
Be 313.042	528.004	ppb	0.8195	0.2	407919	105.60079
Ca 370.602	10098	ppb	9.171	0.1	14354	100.98328
Cd 226.502	512.694	ppb	1.1241	0.2	5884.02	102.53873
Co 228.615	514.318	ppb	3.3339	0.6	1707.29	102.86359
Cr 267.716	500.985	ppb	0.7242	0.1	7280.47	100.19694
Cu 324.754	512.924	ppb	2.7764	0.5	13853.6	102.58478
Fe 271.441	10244.1	ppb	20.3918	0.2	5614.18	102.38937
K 766.491	9906.46	ppb	11.0279	0.1	168636	99.06464
Mg 279.078	10228.6	ppb	11.3720	0.1	12474.7	102.28635
Mn 257.610	508.302	ppb	0.6798	0.1	34908.8	101.66042
Mo 202.032	510.882	ppb	1.0202	0.2	712.059	102.17632
Na 330.237	10421.2	ppb	428.221	4.1	272.126	104.21150
Ni 231.604	511.134	ppb	4.9462	1.0	498.928	102.22674
Pb 220.353	497.358	ppb	4.3456	0.9	185.175	99.47150
Sb 206.834	505.813	ppb	6.4871	1.3	166.410	101.16266
Se 196.026	528.905	ppb	9.3982	1.8	101.005	105.78105
Si 288.158	5007.55	ppb	8.1732	0.2	21962.9	100.15102

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	508.678	ppb	6.6859	1.3	113.279	101.73561
Sr 216.596	507.775	ppb	2.5059	0.5	1238.71	101.55490
Ti 334.941	507.623	ppb	0.7907	0.2	38309.8	101.52470
Tl 190.794	499.389	ppb	10.9917	2.2	113.717	99.87788
V 292.401	515.618	ppb	1.4490	0.3	4179.16	103.12370
Zn 206.200	1041.99	ppb	3.4969	0.3	548.798	104.19859

Cont Calib Blank (CCB) 4/8/2019, 5:07:19 PM Rack S, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9144	1.0390	1.7819
Al 308.215	-5.3739u	1.1041	2.7903
As 188.980	-3.6437u	8.1819	10.7699
B 249.678	16.9419	15.1510	13.7035
Ba 389.178	-1.6720u	-0.5821u	-2.1596u
Be 313.042	0.0267	0.0016	0.0084
Ca 370.602	10.31	7.569	9.658
Cd 226.502	0.2791	-0.0310u	0.1000
Co 228.615	1.1011	-1.9036u	-0.5330u
Cr 267.716	-0.8201u	0.0098	-0.3601u
Cu 324.754	1.0365	1.0860	2.5093
Fe 271.441	-3.0929u	-0.6957u	-0.3101u
K 766.491	-0.7730u	0.3360	-1.4758u
Mg 279.078	-0.1394u	0.0952	1.8083
Mn 257.610	-0.0395u	0.0725	-0.0393u
Mo 202.032	3.3310	0.1924	3.4628
Na 330.237	-80.3045u	228.232	224.535
Ni 231.604	1.8892	3.8186	1.4765
Pb 220.353	-1.2644u	0.1812	7.2632
Sb 206.834	-0.0089u	-2.7739u	-3.3101u
Se 196.026	7.6679	8.6571	-2.9628u
Si 288.158	15.6359	11.2387	11.6087
Sn 189.925	1.5592	-2.0768u	0.7927
Sr 216.596	0.6754	0.7185	-0.1792u
Ti 334.941	0.1480	0.4468	0.1478
Tl 190.794	-4.3708u	-11.3331u	-13.4512u
V 292.401	-0.2513u	0.3646	1.0078
Zn 206.200	0.6806	-0.2125u	0.7975

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	1.2451	ppb	0.4690	37.7	-22.8620	1.24510
Al 308.215	-0.4932	ppb	4.3101	874.0	242.687	-0.49317
As 188.980	5.1027	ppb	7.6843	150.6	2.4939	5.10271
B 249.678	15.2655	ppb	1.6222	10.6	79.5634	15.26548
Ba 389.178	-1.4712	ppb	0.8077	54.9	-38.5479	-1.47123
Be 313.042	0.0122	ppb	0.0130	106.4	-415.447	0.01220
Ca 370.602	9.180	ppb	1.433	15.6	22.22	9.18036
Cd 226.502	0.1160	ppb	0.1557	134.2	3.7464	0.11603
Co 228.615	-0.4452	ppb	1.5043	337.9	-9.8712	-0.44517
Cr 267.716	-0.3901	ppb	0.4158	106.6	4.6715	-0.39013
Cu 324.754	1.5439	ppb	0.8364	54.2	514.723	1.54391
Fe 271.441	-1.3662	ppb	1.5077	110.4	45.0767	-1.36621
K 766.491	-0.6376	ppb	0.9135	143.3	223.876	-0.63761

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	0.5881	ppb	1.0633	180.8	28.9854	0.58805
Mn 257.610	-0.0021	ppb	0.0646	3108.6	22.2826	-0.00208
Mo 202.032	2.3288	ppb	1.8513	79.5	5.8898	2.32877
Na 330.237	124.154	ppb	177.076	142.6	35.5318	124.15443
Ni 231.604	2.3948	ppb	1.2502	52.2	-0.3814	2.39478
Pb 220.353	2.0600	ppb	4.5637	221.5	2.4241	2.05997
Sb 206.834	-2.0310	ppb	1.7716	87.2	5.2027	-2.03098
Se 196.026	4.4541	ppb	6.4422	144.6	5.1909	4.45408
Si 288.158	12.8278	ppb	2.4389	19.0	630.407	12.82775
Sn 189.925	0.0917	ppb	1.9167	2089.6	-0.9937	0.09173
Sr 216.596	0.4049	ppb	0.5063	125.1	4.3297	0.40490
Ti 334.941	0.2475	ppb	0.1725	69.7	-6.4624	0.24755
Tl 190.794	-9.7184	ppb	4.7507	48.9	-4.7910	-9.71838
V 292.401	0.3737	ppb	0.6296	168.5	-8.8095	0.37370
Zn 206.200	0.4219	ppb	0.5525	131.0	-1.0903	0.42187

180-88312-D-1-B (Samp)

4/8/2019, 5:11:29 PM

Rack 1, Tube 51

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8786	-0.1460u	0.0797
Al 308.215	3.1744	5.7219	0.1536
As 188.980	-3.4256u	-3.6132u	-3.0809u
B 249.678	17.2738	18.6879	19.4384
Ba 389.178	-1.1304u	-0.4443	0.6487
Be 313.042	0.0001	-0.0278u	0.0076
Ca 370.602	23130	23254	23175
Cd 226.502	-0.6137u	0.0914	-0.1411u
Co 228.615	0.3064	-0.1681u	-0.5714u
Cr 267.716	1.2555	0.3349	0.4457
Cu 324.754	1.2315	1.6154	0.2157
Fe 271.441	19.5008	8.1547	19.3615
K 766.491	1727.64	1726.04	1723.11
Mg 279.078	6339.49	6303.49	6315.51
Mn 257.610	0.1768	0.0669	0.0200
Mo 202.032	0.0388	0.4420	1.0065
Na 330.237	7097.56	6934.53	6527.79
Ni 231.604	5.4184	3.6005	2.6029
Pb 220.353	-2.7705u	-9.2034u	-2.6583u
Sb 206.834	-2.7126u	-6.0571u	-2.0060u
Se 196.026	-5.7360u	-2.7964u	-9.2359u
Si 288.158	5954.18	5958.35	5962.02
Sn 189.925	5.5195	0.4237	1.6810
Sr 216.596	77.5651	74.6205	76.9796
Ti 334.941	0.1023	0.5551	0.1566
Tl 190.794	1.7710	10.8108	-2.2634u
V 292.401	0.0247	0.8747	0.6038
Zn 206.200	4.0048	4.7085	2.9296

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2708	ppb	0.5383	198.8	-49.3171
Al 308.215	3.0166	ppb	2.7875	92.4	248.610
As 188.980	-3.3733	ppb	0.2700	8.0	0.3764
B 249.678	18.4667	ppb	1.0991	6.0	100.082

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.3086	ppb	0.8972	290.7	-27.6355
Be 313.042	-0.0067	ppb	0.0187	278.8	-427.024
Ca 370.602	23186	ppb	62.80	0.3	32939
Cd 226.502	-0.2211	ppb	0.3593	162.5	-0.0779
Co 228.615	-0.1444	ppb	0.4394	304.3	-8.8565
Cr 267.716	0.6787	ppb	0.5026	74.1	20.2134
Cu 324.754	1.0209	ppb	0.7232	70.8	501.071
Fe 271.441	15.6724	ppb	6.5108	41.5	54.3170
K 766.491	1725.60	ppb	2.2964	0.1	29568.3
Mg 279.078	6319.50	ppb	18.3300	0.3	7721.98
Mn 257.610	0.0879	ppb	0.0805	91.6	48.1082
Mo 202.032	0.4958	ppb	0.4861	98.0	3.3437
Na 330.237	6853.29	ppb	293.445	4.3	200.161
Ni 231.604	3.8739	ppb	1.4275	36.9	1.0712
Pb 220.353	-4.8774	ppb	3.7468	76.8	-0.1386
Sb 206.834	-3.5919	ppb	2.1640	60.2	4.7124
Se 196.026	-5.9227	ppb	3.2238	54.4	3.2953
Si 288.158	5958.18	ppb	3.9225	0.1	25876.4
Sn 189.925	2.5414	ppb	2.6547	104.5	-0.4427
Sr 216.596	76.3884	ppb	1.5588	2.0	190.074
Ti 334.941	0.2713	ppb	0.2473	91.1	9.5679
Tl 190.794	3.4395	ppb	6.6949	194.6	-1.7304
V 292.401	0.5011	ppb	0.4342	86.7	-7.6970
Zn 206.200	3.8810	ppb	0.8959	23.1	0.7366

MB 680-565066/1-A (Samp)

4/8/2019, 5:15:39 PM

Rack 1, Tube 52

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1019	0.2892	0.7359
Al 308.215	1.0224	-4.4825u	-5.6448u
As 188.980	-2.2815u	2.6347	0.6654
B 249.678	2.3177	2.2974	2.7870
Ba 389.178	0.8128	-6.6202u	-1.3847u
Be 313.042	-0.0533u	-0.0545u	-0.0728u
Ca 370.602	0.7483	14.60	7.353
Cd 226.502	0.1674	0.5764	0.0440
Co 228.615	-1.5695u	-0.2702u	-0.5707u
Cr 267.716	-0.5485u	-0.2099u	-0.1115u
Cu 324.754	1.6299	1.7937	0.4663
Fe 271.441	-8.8421u	-9.0897u	-7.3511u
K 766.491	-2.6080u	-0.8435u	-0.7122u
Mg 279.078	-3.3255u	0.9577	-1.7788u
Mn 257.610	-0.0690u	-0.0599u	0.0362
Mo 202.032	0.0678	0.9548	0.6950
Na 330.237	41.1253	-124.752u	21.1366
Ni 231.604	1.8328	1.7998	-1.3145u
Pb 220.353	6.0282	4.6522	-2.8218u
Sb 206.834	3.0439	12.6890	-5.3782u
Se 196.026	1.6348	-1.3918u	1.7472
Si 288.158	11.5076	10.6344	7.7254
Sn 189.925	-0.9621u	-1.2699u	0.6646
Sr 216.596	-0.4021u	0.4668	0.3534
Ti 334.941	0.1465	-0.0016u	-0.0188u

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-17.7775u	4.0414	-0.3697u
V 292.401	-0.2239u	0.2628	0.8383
Zn 206.200	2.2683	-0.2288u	2.9616

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7090	ppb	0.4070	57.4	-37.2747
Al 308.215	-3.0350	ppb	3.5615	117.3	238.379
As 188.980	0.3395	ppb	2.4742	728.7	1.3045
B 249.678	2.4674	ppb	0.2770	11.2	-2.5257
Ba 389.178	-2.3974	ppb	3.8186	159.3	-43.2621
Be 313.042	-0.0602	ppb	0.0109	18.2	-471.380
Ca 370.602	7.569	ppb	6.931	91.6	19.93
Cd 226.502	0.2626	ppb	0.2787	106.1	5.4221
Co 228.615	-0.8035	ppb	0.6802	84.7	-11.0595
Cr 267.716	-0.2900	ppb	0.2292	79.1	6.1237
Cu 324.754	1.2966	ppb	0.7237	55.8	508.261
Fe 271.441	-8.4276	ppb	0.9405	11.2	41.2410
K 766.491	-1.3879	ppb	1.0587	76.3	211.122
Mg 279.078	-1.3822	ppb	2.1690	156.9	26.5875
Mn 257.610	-0.0309	ppb	0.0583	188.4	20.2899
Mo 202.032	0.5725	ppb	0.4560	79.7	3.4505
Na 330.237	-20.8302	ppb	90.5525	434.7	31.9504
Ni 231.604	0.7727	ppb	1.8077	233.9	-1.9745
Pb 220.353	2.6196	ppb	4.7623	181.8	2.6312
Sb 206.834	3.4516	ppb	9.0405	261.9	6.9297
Se 196.026	0.6634	ppb	1.7807	268.4	4.4984
Si 288.158	9.9558	ppb	1.9803	19.9	617.961
Sn 189.925	-0.5225	ppb	1.0395	199.0	-1.1317
Sr 216.596	0.1394	ppb	0.4724	338.9	3.6927
Ti 334.941	0.0420	ppb	0.0909	216.2	-21.9781
Tl 190.794	-4.7019	ppb	11.5366	245.4	-3.6241
V 292.401	0.2924	ppb	0.5317	181.8	-9.4210
Zn 206.200	1.6671	ppb	1.6781	100.7	-0.4327

LCS 680-565066/2-A (Samp) 4/8/2019, 5:19:50 PM Rack 1, Tube 53

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.3977	52.8914	53.8500
Al 308.215	5177.78	5167.56	5183.36
As 188.980	107.993	102.489	104.679
B 249.678	211.900	213.165	215.286
Ba 389.178	100.834	101.989	96.8330
Be 313.042	54.3976	54.3928	54.3796
Ca 370.602	5109	5091	5092
Cd 226.502	53.3249	53.7499	53.5349
Co 228.615	52.4684	53.2720	52.5521
Cr 267.716	104.097	104.285	103.868
Cu 324.754	106.717	106.415	106.584
Fe 271.441	5180.71	5190.14	5207.87
K 766.491	8287.59	8280.20	8275.51
Mg 279.078	5189.74	5193.92	5204.66
Mn 257.610	520.067	519.019	518.976
Mo 202.032	103.944	106.144	105.089

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	5527.49	5276.42	5266.46
Ni 231.604	104.397	101.752	99.9467
Pb 220.353	512.414	513.971	511.459
Sb 206.834	51.4322	46.7462	49.5398
Se 196.026	105.223	106.445	106.382
Si 288.158	10.8878	8.3521	7.4659
Sn 189.925	101.786	94.7992	108.553
Sr 216.596	102.838	102.911	105.028
Ti 334.941	413.080	413.857	413.573
Tl 190.794	34.6937	30.6633	26.5891
V 292.401	103.879	104.150	104.724
Zn 206.200	113.173	108.225	112.156

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.0464	ppb	0.7385	1.4	1369.14
Al 308.215	5176.23	ppb	8.0112	0.2	8994.97
As 188.980	105.054	ppb	2.7712	2.6	26.7589
B 249.678	213.450	ppb	1.7110	0.8	1345.79
Ba 389.178	99.8854	ppb	2.7059	2.7	481.901
Be 313.042	54.3900	ppb	0.0093	0.0	41637.0
Ca 370.602	5097	ppb	10.05	0.2	7255
Cd 226.502	53.5366	ppb	0.2125	0.4	621.678
Co 228.615	52.7642	ppb	0.4418	0.8	169.430
Cr 267.716	104.083	ppb	0.2088	0.2	1521.73
Cu 324.754	106.572	ppb	0.1512	0.1	3254.77
Fe 271.441	5192.91	ppb	13.7914	0.3	2858.35
K 766.491	8281.10	ppb	6.0884	0.1	141006
Mg 279.078	5196.11	ppb	7.7012	0.1	6348.60
Mn 257.610	519.354	ppb	0.6178	0.1	35646.7
Mo 202.032	105.059	ppb	1.1005	1.0	148.510
Na 330.237	5356.79	ppb	147.914	2.8	158.933
Ni 231.604	102.032	ppb	2.2384	2.2	97.4466
Pb 220.353	512.615	ppb	1.2678	0.2	190.993
Sb 206.834	49.2394	ppb	2.3574	4.8	21.6449
Se 196.026	106.017	ppb	0.6878	0.6	23.7744
Si 288.158	8.9020	ppb	1.7760	20.0	651.521
Sn 189.925	101.713	ppb	6.8771	6.8	21.8395
Sr 216.596	103.592	ppb	1.2439	1.2	255.682
Ti 334.941	413.504	ppb	0.3936	0.1	31194.9
Tl 190.794	30.6487	ppb	4.0523	13.2	4.6218
V 292.401	104.251	ppb	0.4311	0.4	836.522
Zn 206.200	111.185	ppb	2.6129	2.4	57.3681

680-166626-M-1-D (Samp)

4/8/2019, 5:24:01 PM

Rack 1, Tube 54

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2511u	-0.1344u	0.2573
Al 308.215	15.4587	27.5785	22.9586
As 188.980	-3.8674u	15.4699	-3.4992u
B 249.678	16.8429	15.0903	14.8837
Ba 389.178	-0.0380	-4.1478u	-6.1754u
Be 313.042	-0.0261u	-0.0400u	-0.0410u
Ca 370.602	43671	43596	43572

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	-0.4429u	0.7111	-0.1688u
Co 228.615	1.2457	-0.5297u	0.0562
Cr 267.716	-0.0785u	0.4040	-0.1042u
Cu 324.754	4.1197	4.4886	4.2885
Fe 271.441	49.2597	27.5098	31.8729
K 766.491	6146.17	6153.65	6172.04
Mg 279.078	9838.04	9815.76	9792.98
Mn 257.610	3.3527	3.2864	3.2508
Mo 202.032	0.3275	0.8861	2.3088
Na 330.237	11805.0	11939.1	11568.5
Ni 231.604	3.2301	-0.5569u	0.7763
Pb 220.353	2.8644	7.8850	-8.5683u
Sb 206.834	8.5923	-1.9060u	1.1554
Se 196.026	13.6111	-2.5151u	6.2247
Si 288.158	1077.42	1070.11	1071.82
Sn 189.925	5.0923	1.4429	2.1020
Sr 216.596	185.777	185.898	186.130
Ti 334.941	0.6125	0.6034	0.7020
Tl 190.794	2.3083	-10.6189u	-14.8449u
V 292.401	0.6817	0.0124	0.8961
Zn 206.200	7.4123	7.1470	4.3939

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0427	ppb	0.2663	623.4	-58.0688
Al 308.215	21.9986	ppb	6.1167	27.8	280.698
As 188.980	2.7011	ppb	11.0597	409.5	1.9112
B 249.678	15.6056	ppb	1.0764	6.9	81.7191
Ba 389.178	-3.4537	ppb	3.1270	90.5	-40.8596
Be 313.042	-0.0357	ppb	0.0083	23.4	-446.867
Ca 370.602	43613	ppb	51.97	0.1	61950
Cd 226.502	0.0331	ppb	0.6029	1819.9	2.8593
Co 228.615	0.2574	ppb	0.9047	351.5	-7.5170
Cr 267.716	0.0738	ppb	0.2863	388.0	11.4669
Cu 324.754	4.2989	ppb	0.1847	4.3	586.548
Fe 271.441	36.2141	ppb	11.5065	31.8	65.4397
K 766.491	6157.29	ppb	13.3110	0.2	104903
Mg 279.078	9815.59	ppb	22.5332	0.2	11978.3
Mn 257.610	3.2967	ppb	0.0517	1.6	278.972
Mo 202.032	1.1742	ppb	1.0216	87.0	4.2858
Na 330.237	11770.9	ppb	187.657	1.6	320.494
Ni 231.604	1.1498	ppb	1.9210	167.1	-1.6048
Pb 220.353	0.7270	ppb	8.4323	1159.8	1.9319
Sb 206.834	2.6139	ppb	5.3990	206.6	6.6669
Se 196.026	5.7736	ppb	8.0726	139.8	5.4321
Si 288.158	1073.12	ppb	3.8217	0.4	5132.85
Sn 189.925	2.8791	ppb	1.9449	67.6	-0.3664
Sr 216.596	185.935	ppb	0.1793	0.1	457.854
Ti 334.941	0.6393	ppb	0.0545	8.5	45.1884
Tl 190.794	-7.7185	ppb	8.9369	115.8	-4.3253
V 292.401	0.5301	ppb	0.4609	87.0	-7.4909
Zn 206.200	6.3177	ppb	1.6713	26.5	2.0236

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166626-M-1-Dsd^5 (Samp) 4/8/2019, 5:28:12 PM Rack 1, Tube 55**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7025	0.1789	0.0034u
Al 308.215	6.5870	3.2838	6.4447
As 188.980	7.5963	0.4115	2.3493
B 249.678	3.9359	3.9047	3.0942
Ba 389.178	-1.8340u	-1.9241u	-2.0809u
Be 313.042	-0.0186u	-0.0339u	-0.0305u
Ca 370.602	8324	8305	8295
Cd 226.502	0.0930	0.1028	-0.1764u
Co 228.615	-0.7658u	0.8592	0.8708
Cr 267.716	0.4543	0.1259	-0.4811u
Cu 324.754	2.0302	2.5913	2.2428
Fe 271.441	-0.7272u	3.8368	11.2396
K 766.491	1104.16	1102.76	1104.76
Mg 279.078	1886.99	1883.91	1890.72
Mn 257.610	0.7119	0.6527	0.7008
Mo 202.032	3.0430	0.6968	1.5531
Na 330.237	2252.99	2314.46	2443.66
Ni 231.604	2.9476	-1.9090u	-0.5938u
Pb 220.353	0.3319	3.4429	9.1695
Sb 206.834	-8.5280u	-0.9648u	-10.9123u
Se 196.026	8.3498	3.5903	7.3950
Si 288.158	216.046	215.404	217.456
Sn 189.925	-2.2598u	9.5667	-3.8912u
Sr 216.596	36.7579	37.1109	32.7160
Ti 334.941	-0.0232	0.1510	0.0722
Tl 190.794	-5.3819u	-7.8079u	-5.5767u
V 292.401	-0.1929u	-0.1061u	-0.3211u
Zn 206.200	1.8538	2.2100	1.4193

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2949	ppb	0.3637	123.3	-48.5188
Al 308.215	5.4385	ppb	1.8674	34.3	252.691
As 188.980	3.4524	ppb	3.7172	107.7	2.0857
B 249.678	3.6450	ppb	0.4772	13.1	5.0140
Ba 389.178	-1.9463	ppb	0.1249	6.4	-39.4686
Be 313.042	-0.0277	ppb	0.0081	29.1	-445.172
Ca 370.602	8308	ppb	14.44	0.2	11809
Cd 226.502	0.0065	ppb	0.1584	2434.9	2.5132
Co 228.615	0.3214	ppb	0.9415	292.9	-7.3065
Cr 267.716	0.0330	ppb	0.4745	1436.4	10.8257
Cu 324.754	2.2881	ppb	0.2833	12.4	534.115
Fe 271.441	4.7831	ppb	6.0393	126.3	48.4465
K 766.491	1103.89	ppb	1.0237	0.1	18999.9
Mg 279.078	1887.21	ppb	3.4104	0.2	2325.85
Mn 257.610	0.6884	ppb	0.0315	4.6	75.5005
Mo 202.032	1.7643	ppb	1.1873	67.3	5.1057
Na 330.237	2337.04	ppb	97.3200	4.2	89.6587
Ni 231.604	0.1483	ppb	2.5119	1694.3	-2.5888
Pb 220.353	4.3148	ppb	4.4828	103.9	3.2573
Sb 206.834	-6.8017	ppb	5.1936	76.4	3.7006
Se 196.026	6.4450	ppb	2.5180	39.1	5.5546
Si 288.158	216.302	ppb	1.0499	0.5	1494.37

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.1385	ppb	7.3444	645.1	-0.7583
Sr 216.596	35.5282	ppb	2.4419	6.9	90.2021
Ti 334.941	0.0667	ppb	0.0873	130.9	-15.8655
Tl 190.794	-6.2555	ppb	1.3479	21.5	-3.9852
V 292.401	-0.2067	ppb	0.1082	52.3	-13.5102
Zn 206.200	1.8277	ppb	0.3960	21.7	-0.3477

680-166626-M-1-Dpds (Samp) 4/8/2019, 5:32:23 PM Rack 1, Tube 56

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	54.1937	53.1449	54.2144
Al 308.215	5137.18	5139.13	5137.32
As 188.980	111.122	107.232	105.091
B 249.678	217.892	222.591	220.935
Ba 389.178	100.028	100.226	99.1399
Be 313.042	53.4615	53.4641	53.4704
Ca 370.602	49041	48997	48981
Cd 226.502	52.7392	52.0155	52.6104
Co 228.615	52.2106	52.3559	50.4897
Cr 267.716	101.930	102.864	103.253
Cu 324.754	107.218	107.331	109.831
Fe 271.441	5149.92	5137.51	5140.74
K 766.491	14967.1	14994.3	14974.7
Mg 279.078	15036.8	15044.1	15036.3
Mn 257.610	513.359	513.414	514.180
Mo 202.032	105.668	104.312	103.890
Na 330.237	17557.1	17890.0	17540.8
Ni 231.604	102.310	105.942	104.246
Pb 220.353	504.814	499.778	497.333
Sb 206.834	51.9512	34.8280	50.1935
Se 196.026	115.732	106.673	100.317
Si 288.158	1082.92	1092.04	1086.39
Sn 189.925	109.900	114.699	96.1317
Sr 216.596	287.610	291.805	290.372
Ti 334.941	405.706	406.177	406.057
Tl 190.794	48.9230	40.8606	29.5754
V 292.401	102.510	102.282	104.003
Zn 206.200	109.952	106.708	113.168

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.8510	ppb	0.6116	1.1	1390.20
Al 308.215	5137.88	ppb	1.0868	0.0	8930.11
As 188.980	107.815	ppb	3.0572	2.8	27.4103
B 249.678	220.473	ppb	2.3832	1.1	1390.89
Ba 389.178	99.7979	ppb	0.5784	0.6	489.236
Be 313.042	53.4653	ppb	0.0046	0.0	40927.4
Ca 370.602	49006	ppb	31.13	0.1	69616
Cd 226.502	52.4550	ppb	0.3860	0.7	609.254
Co 228.615	51.6854	ppb	1.0381	2.0	165.793
Cr 267.716	102.682	ppb	0.6801	0.7	1501.44
Cu 324.754	108.126	ppb	1.4770	1.4	3295.28
Fe 271.441	5142.73	ppb	6.4379	0.1	2831.15
K 766.491	14978.7	ppb	14.0473	0.1	254860

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	15039.1	ppb	4.3582	0.0	18332.1
Mn 257.610	513.651	ppb	0.4593	0.1	35286.3
Mo 202.032	104.623	ppb	0.9294	0.9	147.905
Na 330.237	17662.6	ppb	197.027	1.1	460.173
Ni 231.604	104.166	ppb	1.8174	1.7	99.5432
Pb 220.353	500.642	ppb	3.8150	0.8	186.570
Sb 206.834	45.6576	ppb	9.4198	20.6	20.5128
Se 196.026	107.574	ppb	7.7466	7.2	24.0585
Si 288.158	1087.11	ppb	4.6019	0.4	5229.92
Sn 189.925	106.910	ppb	9.6380	9.0	23.0083
Sr 216.596	289.929	ppb	2.1320	0.7	711.164
Ti 334.941	405.980	ppb	0.2447	0.1	30649.2
Tl 190.794	39.7863	ppb	9.7184	24.4	6.7465
V 292.401	102.932	ppb	0.9349	0.9	825.783
Zn 206.200	109.943	ppb	3.2301	2.9	56.7129

680-166626-M-1-E MS (Samp) 4/8/2019, 5:36:35 PM

Rack 1, Tube 57

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.0376	51.9157	51.5402
Al 308.215	5097.72	5108.48	5105.35
As 188.980	102.863	101.695	103.711
B 249.678	222.660	223.626	226.221
Ba 389.178	99.0227	102.855	96.9127
Be 313.042	53.1044	53.2719	53.3138
Ca 370.602	46638	46689	46671
Cd 226.502	52.2614	52.1600	52.6779
Co 228.615	51.5235	51.8312	51.5386
Cr 267.716	102.104	101.680	101.586
Cu 324.754	107.998	106.892	106.882
Fe 271.441	5118.01	5107.25	5137.57
K 766.491	14560.1	14584.0	14606.5
Mg 279.078	14465.2	14495.5	14505.1
Mn 257.610	511.286	511.967	512.709
Mo 202.032	103.343	104.137	104.968
Na 330.237	16926.8	17280.6	16389.3
Ni 231.604	106.526	101.710	104.108
Pb 220.353	494.455	508.021	500.661
Sb 206.834	55.0325	55.7446	56.6547
Se 196.026	101.793	115.806	108.959
Si 288.158	1030.02	1033.90	1030.08
Sn 189.925	112.587	95.8052	100.069
Sr 216.596	277.297	280.472	282.763
Ti 334.941	403.837	404.361	405.027
Tl 190.794	37.6394	18.3817	41.5562
V 292.401	101.577	102.172	101.561
Zn 206.200	109.860	107.758	107.356

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.8312	ppb	0.2592	0.5	1335.93
Al 308.215	5103.85	ppb	5.5382	0.1	8872.56
As 188.980	102.756	ppb	1.0119	1.0	26.1858
B 249.678	224.169	ppb	1.8415	0.8	1414.62

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	99.5968	ppb	3.0125	3.0	487.773
Be 313.042	53.2300	ppb	0.1108	0.2	40745.2
Ca 370.602	46666	ppb	26.20	0.1	66292
Cd 226.502	52.3664	ppb	0.2745	0.5	608.205
Co 228.615	51.6311	ppb	0.1735	0.3	165.609
Cr 267.716	101.790	ppb	0.2760	0.3	1488.49
Cu 324.754	107.257	ppb	0.6413	0.6	3272.60
Fe 271.441	5120.94	ppb	15.3706	0.3	2819.36
K 766.491	14583.5	ppb	23.1985	0.2	248141
Mg 279.078	14488.6	ppb	20.8178	0.1	17661.8
Mn 257.610	511.987	ppb	0.7122	0.1	35170.5
Mo 202.032	104.149	ppb	0.8125	0.8	147.247
Na 330.237	16865.5	ppb	448.780	2.7	440.694
Ni 231.604	104.115	ppb	2.4081	2.3	99.4928
Pb 220.353	501.046	ppb	6.7914	1.4	186.720
Sb 206.834	55.8106	ppb	0.8131	1.5	23.7085
Se 196.026	108.853	ppb	7.0070	6.4	24.2920
Si 288.158	1031.33	ppb	2.2216	0.2	4992.75
Sn 189.925	102.821	ppb	8.7228	8.5	22.0894
Sr 216.596	280.177	ppb	2.7445	1.0	687.333
Ti 334.941	404.409	ppb	0.5967	0.1	30529.4
Tl 190.794	32.5258	ppb	12.4047	38.1	5.0579
V 292.401	101.770	ppb	0.3479	0.3	816.318
Zn 206.200	108.325	ppb	1.3449	1.2	55.8588

680-166626-M-1-F MSD (Samp) 4/8/2019, 5:40:47 PM**Rack 1, Tube 58****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	54.4009	54.7591	53.9042
Al 308.215	5159.98	5163.20	5176.72
As 188.980	101.210	107.445	110.602
B 249.678	228.211	227.534	227.702
Ba 389.178	97.2809	99.7887	96.4299
Be 313.042	54.0844	54.0217	53.9875
Ca 370.602	46734	46798	46698
Cd 226.502	52.2437	52.2116	53.2918
Co 228.615	52.5727	52.5484	51.4657
Cr 267.716	103.155	102.542	102.708
Cu 324.754	110.033	109.563	109.418
Fe 271.441	5156.36	5169.17	5165.51
K 766.491	14577.4	14573.4	14554.5
Mg 279.078	14592.8	14584.2	14591.4
Mn 257.610	516.899	517.131	515.944
Mo 202.032	104.802	102.946	106.955
Na 330.237	17280.7	16937.8	16910.0
Ni 231.604	104.093	107.028	106.115
Pb 220.353	508.920	501.830	501.396
Sb 206.834	50.4310	50.7509	47.0756
Se 196.026	109.285	106.579	108.682
Si 288.158	1066.02	1064.40	1062.16
Sn 189.925	111.648	98.2087	103.340
Sr 216.596	281.209	279.603	280.570
Ti 334.941	409.921	408.904	409.760

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	46.2088	32.1511	32.9150
V 292.401	103.034	102.644	102.704
Zn 206.200	114.197	109.317	111.111

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	54.3547	ppb	0.4293	0.8	1403.76
Al 308.215	5166.63	ppb	8.8851	0.2	8978.71
As 188.980	106.419	ppb	4.7789	4.5	27.0795
B 249.678	227.815	ppb	0.3525	0.2	1437.96
Ba 389.178	97.8331	ppb	1.7462	1.8	478.890
Be 313.042	54.0312	ppb	0.0492	0.1	41364.8
Ca 370.602	46743	ppb	50.64	0.1	66402
Cd 226.502	52.5823	ppb	0.6146	1.2	610.743
Co 228.615	52.1956	ppb	0.6322	1.2	167.518
Cr 267.716	102.802	ppb	0.3171	0.3	1503.18
Cu 324.754	109.671	ppb	0.3216	0.3	3335.57
Fe 271.441	5163.68	ppb	6.5984	0.1	2842.51
K 766.491	14568.4	ppb	12.2509	0.1	247885
Mg 279.078	14589.5	ppb	4.6324	0.0	17784.6
Mn 257.610	516.658	ppb	0.6291	0.1	35491.1
Mo 202.032	104.901	ppb	2.0064	1.9	148.291
Na 330.237	17042.8	ppb	206.481	1.2	444.964
Ni 231.604	105.746	ppb	1.5021	1.4	101.095
Pb 220.353	504.049	ppb	4.2242	0.8	187.829
Sb 206.834	49.4192	ppb	2.0359	4.1	21.6990
Se 196.026	108.182	ppb	1.4207	1.3	24.1697
Si 288.158	1064.20	ppb	1.9385	0.2	5132.71
Sn 189.925	104.399	ppb	6.7817	6.5	22.4440
Sr 216.596	280.461	ppb	0.8084	0.3	688.017
Ti 334.941	409.528	ppb	0.5466	0.1	30916.0
Tl 190.794	37.0916	ppb	7.9049	21.3	6.1201
V 292.401	102.794	ppb	0.2099	0.2	824.660
Zn 206.200	111.542	ppb	2.4681	2.2	57.5573

480-151000-G-54-B (Samp)

4/8/2019, 5:46:32 PM

Rack 1, Tube 59

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7755	-0.2006u	0.8342
Al 308.215	18.7005	12.9130	18.2158
As 188.980	0.8693	-3.4030u	0.5744
B 249.678	6.4188	5.4104	4.0543
Ba 389.178	-3.3614u	-0.2925u	-3.3827u
Be 313.042	-0.0334u	-0.0339u	-0.0205u
Ca 370.602	141.3	126.8	137.4
Cd 226.502	0.1078	0.1835	0.0059
Co 228.615	1.4442	-0.3988u	0.5497
Cr 267.716	0.2928	-0.2400u	-0.1269u
Cu 324.754	1.3402	0.7527	1.5513
Fe 271.441	49.5079	63.7586	62.8674
K 766.491	12.8443	13.2288	11.4745
Mg 279.078	21.5380	26.6147	23.3585
Mn 257.610	3.8735	3.9030	3.6730
Mo 202.032	0.3575	2.3515	2.0403

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	90.5523	391.858	-15.6853u
Ni 231.604	-4.1657u	0.5808	0.9747
Pb 220.353	-6.9740u	5.7430	-0.8679u
Sb 206.834	1.7707	-4.8572u	-3.5543u
Se 196.026	0.0707	6.3400	10.4124
Si 288.158	34.3645	32.2211	29.4461
Sn 189.925	2.8460	-2.4886u	4.1030
Sr 216.596	2.5709	1.3012	0.7558
Ti 334.941	0.4645	0.5381	0.3716
Tl 190.794	-4.2049u	-10.7216u	-4.9878u
V 292.401	1.1316	0.0903	1.5355
Zn 206.200	2.9155	2.1527	1.4599

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4697	ppb	0.5813	123.8	-43.7143
Al 308.215	16.6098	ppb	3.2107	19.3	271.602
As 188.980	-0.6531	ppb	2.3860	365.3	1.0708
B 249.678	5.2945	ppb	1.1865	22.4	15.5479
Ba 389.178	-2.3455	ppb	1.7780	75.8	-42.9699
Be 313.042	-0.0293	ppb	0.0076	26.0	-447.493
Ca 370.602	135.1	ppb	7.488	5.5	201.1
Cd 226.502	0.0991	ppb	0.0891	90.0	3.6272
Co 228.615	0.5317	ppb	0.9216	173.3	-6.6089
Cr 267.716	-0.0247	ppb	0.2807	1134.9	9.9823
Cu 324.754	1.2147	ppb	0.4138	34.1	506.144
Fe 271.441	58.7113	ppb	7.9828	13.6	77.6266
K 766.491	12.5158	ppb	0.9221	7.4	447.473
Mg 279.078	23.8371	ppb	2.5719	10.8	57.2515
Mn 257.610	3.8165	ppb	0.1252	3.3	284.129
Mo 202.032	1.5831	ppb	1.0728	67.8	4.8534
Na 330.237	155.575	ppb	211.409	135.9	36.2625
Ni 231.604	-0.8700	ppb	2.8609	328.8	-3.5890
Pb 220.353	-0.6996	ppb	6.3602	909.1	1.4048
Sb 206.834	-2.2136	ppb	3.5115	158.6	5.1463
Se 196.026	5.6077	ppb	5.2096	92.9	5.4017
Si 288.158	32.0106	ppb	2.4659	7.7	711.630
Sn 189.925	1.4868	ppb	3.4997	235.4	-0.6802
Sr 216.596	1.5426	ppb	0.9313	60.4	7.1252
Ti 334.941	0.4581	ppb	0.0834	18.2	9.4687
Tl 190.794	-6.6381	ppb	3.5580	53.6	-4.0745
V 292.401	0.9192	ppb	0.7457	81.1	-4.3313
Zn 206.200	2.1760	ppb	0.7281	33.5	-0.1637

680-166741-D-1-B (Samp)

4/8/2019, 5:50:56 PM

Rack 1, Tube 60

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4909u	0.8468	0.0765
Al 308.215	-1.6207u	-4.2225u	-5.3446u
As 188.980	4.9007	2.8639	3.5042
B 249.678	10.0432	9.2260	10.0650
Ba 389.178	29.7393	27.6158	26.9782
Be 313.042	0.0513	0.0384	0.0639
Ca 370.602	3216	3256	3235

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.1307	-0.1822u	-0.4356u
Co 228.615	-0.7456u	0.4983	0.9019
Cr 267.716	-0.1623u	0.2137	-0.0653u
Cu 324.754	2.8786	2.0407	2.2779
Fe 271.441	700.285	715.538	729.504
K 766.491	2731.42	2737.45	2728.49
Mg 279.078	2619.61	2637.31	2620.51
Mn 257.610	60.2995	60.3797	60.2589
Mo 202.032	2.5223	0.0056	-1.2500u
Na 330.237	11769.1	11824.0	11597.0
Ni 231.604	3.9039	2.6340	4.5671
Pb 220.353	2.7283	-9.4850u	-1.5577u
Sb 206.834	9.9383	-0.8553u	-3.7666u
Se 196.026	7.2316	15.8180	-2.1571u
Si 288.158	27222.6	27247.1	27207.5
Sn 189.925	-0.1538u	-0.7262u	-6.0713u
Sr 216.596	43.4442	44.2209	42.9916
Ti 334.941	0.0653	0.2457	0.2813
Tl 190.794	-3.1184u	-14.4705u	-17.4876u
V 292.401	1.0339	-0.3471u	-0.1032u
Zn 206.200	10.8874	8.8116	9.2551

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1442	ppb	0.6714	465.7	-52.6077
Al 308.215	-3.7293	ppb	1.9103	51.2	237.211
As 188.980	3.7563	ppb	1.0415	27.7	2.1776
B 249.678	9.7781	ppb	0.4782	4.9	43.6779
Ba 389.178	28.1111	ppb	1.4457	5.1	114.064
Be 313.042	0.0512	ppb	0.0127	24.9	-385.352
Ca 370.602	3236	ppb	20.14	0.6	4604
Cd 226.502	-0.1624	ppb	0.2837	174.7	1.4250
Co 228.615	0.2182	ppb	0.8587	393.5	-7.6561
Cr 267.716	-0.0046	ppb	0.1952	4200.8	10.4525
Cu 324.754	2.3991	ppb	0.4319	18.0	537.107
Fe 271.441	715.109	ppb	14.6143	2.0	432.759
K 766.491	2732.45	ppb	4.5654	0.2	46684.0
Mg 279.078	2625.81	ppb	9.9732	0.4	3224.52
Mn 257.610	60.3127	ppb	0.0614	0.1	4165.16
Mo 202.032	0.4260	ppb	1.9209	450.9	3.2401
Na 330.237	11730.0	ppb	118.426	1.0	319.428
Ni 231.604	3.7017	ppb	0.9823	26.5	0.9017
Pb 220.353	-2.7715	ppb	6.1965	223.6	0.6450
Sb 206.834	1.7721	ppb	7.2204	407.4	6.4114
Se 196.026	6.9642	ppb	8.9905	129.1	5.6527
Si 288.158	27225.7	ppb	19.9848	0.1	116186
Sn 189.925	-2.3171	ppb	3.2638	140.9	-1.5339
Sr 216.596	43.5522	ppb	0.6217	1.4	109.882
Ti 334.941	0.1974	ppb	0.1158	58.7	-4.4979
Tl 190.794	-11.6922	ppb	7.5768	64.8	-5.2518
V 292.401	0.1945	ppb	0.7370	378.9	-10.1694
Zn 206.200	9.6514	ppb	1.0932	11.3	3.7859

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 5:55:22 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	495.052	493.251	493.401
Al 308.215	10202.4	10228.1	10237.9
As 188.980	535.723	525.909	517.948
B 249.678	518.658	525.242	530.519
Ba 389.178	489.182	487.797	488.653
Be 313.042	529.307	529.836	529.886
Ca 370.602	10092	10064	10092
Cd 226.502	510.939	511.435	513.887
Co 228.615	512.052	516.084	510.167
Cr 267.716	497.777	498.530	499.133
Cu 324.754	514.309	511.472	509.215
Fe 271.441	10229.5	10202.6	10229.0
K 766.491	9933.10	9953.99	9944.93
Mg 279.078	10256.1	10255.6	10265.0
Mn 257.610	509.046	508.174	508.054
Mo 202.032	513.294	510.092	511.260
Na 330.237	10748.1	10475.0	10513.2
Ni 231.604	509.460	517.551	511.947
Pb 220.353	504.268	517.695	496.944
Sb 206.834	515.554	499.647	513.846
Se 196.026	528.318	533.714	539.599
Si 288.158	5027.76	5014.32	5011.21
Sn 189.925	491.577	504.279	513.332
Sr 216.596	506.987	502.532	507.857
Ti 334.941	505.381	504.416	504.314
Tl 190.794	501.266	512.940	494.416
V 292.401	515.970	513.325	514.357
Zn 206.200	1034.66	1049.29	1039.53

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	493.901	ppb	0.9996	0.2	13219.3	98.78027
Al 308.215	10222.8	ppb	18.3407	0.2	17536.7	102.22812
As 188.980	526.527	ppb	8.9035	1.7	127.737	105.30536
B 249.678	524.807	ppb	5.9421	1.1	3338.04	104.96130
Ba 389.178	488.544	ppb	0.6987	0.1	2463.69	97.70883
Be 313.042	529.677	ppb	0.3206	0.1	409213	105.93532
Ca 370.602	10083	ppb	16.13	0.2	14332	100.82710
Cd 226.502	512.087	ppb	1.5783	0.3	5877.07	102.41736
Co 228.615	512.768	ppb	3.0226	0.6	1702.09	102.55350
Cr 267.716	498.480	ppb	0.6792	0.1	7244.13	99.69601
Cu 324.754	511.666	ppb	2.5524	0.5	13820.8	102.33311
Fe 271.441	10220.4	ppb	15.3728	0.2	5601.31	102.15262
K 766.491	9944.01	ppb	10.4795	0.1	169274	99.44008
Mg 279.078	10258.9	ppb	5.3083	0.1	12511.6	102.58911
Mn 257.610	508.425	ppb	0.5415	0.1	34917.3	101.68498
Mo 202.032	511.549	ppb	1.6205	0.3	712.986	102.30975
Na 330.237	10578.8	ppb	147.902	1.4	275.966	105.78777
Ni 231.604	512.986	ppb	4.1442	0.8	500.749	102.59721
Pb 220.353	506.302	ppb	10.5238	2.1	188.479	101.26044
Sb 206.834	509.683	ppb	8.7330	1.7	167.630	101.93652
Se 196.026	533.877	ppb	5.6424	1.1	101.913	106.77541
Si 288.158	5017.76	ppb	8.7968	0.2	22006.6	100.35526

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	503.063	ppb	10.9281	2.2	112.017	100.61256
Sr 216.596	505.792	ppb	2.8562	0.6	1233.82	101.15842
Ti 334.941	504.703	ppb	0.5887	0.1	38089.5	100.94067
Tl 190.794	502.874	ppb	9.3663	1.9	114.526	100.57475
V 292.401	514.551	ppb	1.3334	0.3	4170.24	102.91018
Zn 206.200	1041.16	ppb	7.4516	0.7	548.363	104.11615

Cont Calib Blank (CCB) 4/8/2019, 5:59:46 PM Rack S, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7017	1.4234	0.9838
Al 308.215	-0.9315u	0.8052	0.3516
As 188.980	-6.3887u	-6.1967u	0.5643
B 249.678	16.0332	13.8969	12.2398
Ba 389.178	-1.3204u	0.6763	-4.2437u
Be 313.042	-0.0277u	-0.0143u	-0.0085u
Ca 370.602	3.932	8.259	6.513
Cd 226.502	0.1069	0.2313	0.0836
Co 228.615	-0.2646u	-0.6598u	0.8773
Cr 267.716	-0.6900u	-0.3940u	0.4654
Cu 324.754	2.0274	2.1375	3.0309
Fe 271.441	0.2087	-4.3413u	-7.6303u
K 766.491	1.2386	-2.1872u	0.0735
Mg 279.078	-1.4482u	-0.4466u	-0.3353u
Mn 257.610	-0.0557u	-0.0187u	0.0671
Mo 202.032	2.1664	-0.6065u	2.6585
Na 330.237	-106.879u	137.955	-44.8917u
Ni 231.604	1.8680	-0.9913u	1.0112
Pb 220.353	-5.2116u	-3.9160u	4.2990
Sb 206.834	-4.1696u	0.8282	-3.3998u
Se 196.026	3.2750	7.7218	13.2190
Si 288.158	13.3747	16.2948	11.9486
Sn 189.925	10.8637	-4.3270u	-4.3465u
Sr 216.596	0.7660	1.7087	2.7201
Ti 334.941	0.0732	0.1679	0.2279
Tl 190.794	-7.2866u	-1.0132u	-0.7970u
V 292.401	0.6422	-0.8984u	0.0082
Zn 206.200	0.5535	2.5775	0.0171

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	1.0363	ppb	0.3637	35.1	-28.4788	1.03630
Al 308.215	0.0751	ppb	0.9008	1199.4	243.626	0.07510
As 188.980	-4.0070	ppb	3.9601	98.8	0.2483	-4.00703
B 249.678	14.0566	ppb	1.9018	13.5	71.8072	14.05662
Ba 389.178	-1.6293	ppb	2.4745	151.9	-39.3513	-1.62926
Be 313.042	-0.0168	ppb	0.0099	58.6	-437.841	-0.01682
Ca 370.602	6.235	ppb	2.177	34.9	18.03	6.23460
Cd 226.502	0.1406	ppb	0.0794	56.5	4.0307	0.14059
Co 228.615	-0.0157	ppb	0.7982	5074.6	-8.4319	-0.01573
Cr 267.716	-0.2062	ppb	0.6002	291.1	7.3407	-0.20620
Cu 324.754	2.3986	ppb	0.5504	22.9	536.996	2.39858
Fe 271.441	-3.9210	ppb	3.9363	100.4	43.7074	-3.92095
K 766.491	-0.2917	ppb	1.7419	597.1	229.756	-0.29173

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	-0.7434	ppb	0.6129	82.4	27.3642	-0.74340
Mn 257.610	-0.0024	ppb	0.0630	2586.5	22.2635	-0.00244
Mo 202.032	1.4061	ppb	1.7603	125.2	4.6084	1.40612
Na 330.237	-4.6051	ppb	127.291	2764.1	32.3695	-4.60515
Ni 231.604	0.6293	ppb	1.4674	233.2	-2.1158	0.62933
Pb 220.353	-1.6095	ppb	5.1578	320.5	1.0686	-1.60952
Sb 206.834	-2.2471	ppb	2.6909	119.8	5.1360	-2.24706
Se 196.026	8.0719	ppb	4.9813	61.7	5.8517	8.07194
Si 288.158	13.8727	ppb	2.2155	16.0	634.968	13.87268
Sn 189.925	0.7301	ppb	8.7760	1202.1	-0.8503	0.73006
Sr 216.596	1.7316	ppb	0.9772	56.4	7.5771	1.73157
Ti 334.941	0.1563	ppb	0.0780	49.9	-13.3418	0.15633
Tl 190.794	-3.0323	ppb	3.6859	121.6	-3.2358	-3.03227
V 292.401	-0.0827	ppb	0.7743	936.4	-12.5099	-0.08269
Zn 206.200	1.0494	ppb	1.3503	128.7	-0.7591	1.04939

680-166741-D-2-B (Samp)

4/8/2019, 6:04:09 PM

Rack 2, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3867	0.2717	0.6230
Al 308.215	167.659	156.601	156.669
As 188.980	-3.2427u	-3.2375u	-2.0385u
B 249.678	11.1655	9.6620	9.6677
Ba 389.178	9.9189	11.4262	11.3713
Be 313.042	-0.0221u	-0.0443u	-0.0514u
Ca 370.602	3749	3744	3758
Cd 226.502	0.1379	-0.0267u	-0.3608u
Co 228.615	2.7203	1.3313	0.1674
Cr 267.716	0.4578	-0.0347u	-0.0169u
Cu 324.754	77.4162	77.1102	76.4634
Fe 271.441	112.881	112.284	132.083
K 766.491	1981.27	1985.00	1981.91
Mg 279.078	1650.24	1642.43	1641.64
Mn 257.610	25.0525	24.8990	24.6671
Mo 202.032	1.8403	1.5060	0.1184
Na 330.237	4690.00	4746.38	4851.10
Ni 231.604	4.2800	5.5385	6.1722
Pb 220.353	-5.0596u	1.7689	0.0549
Sb 206.834	2.3042	0.2945	-5.5567u
Se 196.026	-3.0561u	-23.9617u	-7.0705u
Si 288.158	14760.5	14737.1	14716.9
Sn 189.925	4.8106	-2.6442u	4.9917
Sr 216.596	32.5700	28.3083	31.2691
Ti 334.941	0.7786	0.6914	0.5762
Tl 190.794	-18.5333u	2.7759	-11.5248u
V 292.401	0.0929	0.3275	0.4685
Zn 206.200	258.409	264.309	259.078

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4271	ppb	0.1791	41.9	-44.9245
Al 308.215	160.309	ppb	6.3648	4.0	514.433
As 188.980	-2.8396	ppb	0.6937	24.4	0.5524
B 249.678	10.1651	ppb	0.8664	8.5	46.7334

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	10.9055	ppb	0.8549	7.8	25.7090
Be 313.042	-0.0393	ppb	0.0153	38.9	-454.902
Ca 370.602	3750	ppb	6.902	0.2	5336
Cd 226.502	-0.0832	ppb	0.2541	305.3	1.6176
Co 228.615	1.4063	ppb	1.2781	90.9	-3.6802
Cr 267.716	0.1354	ppb	0.2793	206.3	12.3614
Cu 324.754	76.9966	ppb	0.4864	0.6	2481.92
Fe 271.441	119.083	ppb	11.2624	9.5	110.319
K 766.491	1982.73	ppb	1.9911	0.1	33939.3
Mg 279.078	1644.77	ppb	4.7544	0.3	2030.45
Mn 257.610	24.8729	ppb	0.1940	0.8	1732.55
Mo 202.032	1.1549	ppb	0.9131	79.1	4.2582
Na 330.237	4762.49	ppb	81.7469	1.7	146.273
Ni 231.604	5.3302	ppb	0.9632	18.1	2.5008
Pb 220.353	-1.0786	ppb	3.5526	329.4	1.2657
Sb 206.834	-0.9860	ppb	4.0839	414.2	5.5344
Se 196.026	-11.3628	ppb	11.0941	97.6	2.3035
Si 288.158	14738.2	ppb	21.8321	0.1	63159.5
Sn 189.925	2.3860	ppb	4.3572	182.6	-0.4778
Sr 216.596	30.7158	ppb	2.1841	7.1	78.4337
Ti 334.941	0.6821	ppb	0.1015	14.9	29.9855
Tl 190.794	-9.0941	ppb	10.8606	119.4	-4.6422
V 292.401	0.2963	ppb	0.1897	64.0	-9.3731
Zn 206.200	260.599	ppb	3.2305	1.2	136.329

680-166741-D-3-B (Samp)

4/8/2019, 6:08:32 PM

Rack 2, Tube 2

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8752u	0.2428	0.1402
Al 308.215	927.696	923.610	923.088
As 188.980	-3.2440u	3.0585	-0.8098u
B 249.678	17.5079	17.5181	16.3070
Ba 389.178	15.3526	15.1200	15.7737
Be 313.042	-0.0255u	-0.0395u	-0.0215u
Ca 370.602	4703	4717	4704
Cd 226.502	0.1718	0.3347	-0.0034
Co 228.615	1.1867	2.2624	1.6137
Cr 267.716	1.5730	1.4444	1.7161
Cu 324.754	22.8878	23.9514	23.6653
Fe 271.441	1343.73	1341.31	1340.62
K 766.491	1952.06	1948.22	1951.96
Mg 279.078	2038.95	2028.54	2044.37
Mn 257.610	35.3185	35.3674	35.3761
Mo 202.032	4.3313	1.7351	3.2038
Na 330.237	4432.49	4748.97	4370.54
Ni 231.604	5.9981	4.0861	2.3073
Pb 220.353	8.8391	-1.0719u	0.9729
Sb 206.834	-4.4178u	10.9436	-7.4868u
Se 196.026	-5.1484u	-0.2160u	2.1485
Si 288.158	15111.9	15114.2	15140.0
Sn 189.925	14.7910	7.4015	9.6801
Sr 216.596	30.0673	29.1667	30.8992
Ti 334.941	44.0066	44.1218	44.0817

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	3.9087	-0.4081u	4.3000
V 292.401	4.1055	3.6502	2.6838
Zn 206.200	452.290	448.097	443.891

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1641	ppb	0.6180	376.7	-61.0389
Al 308.215	924.798	ppb	2.5236	0.3	1806.56
As 188.980	-0.3318	ppb	3.1783	958.0	1.1049
B 249.678	17.1110	ppb	0.6963	4.1	90.1094
Ba 389.178	15.4155	ppb	0.3313	2.1	49.1320
Be 313.042	-0.0288	ppb	0.0094	32.7	-446.692
Ca 370.602	4708	ppb	7.660	0.2	6695
Cd 226.502	0.1677	ppb	0.1691	100.9	5.9976
Co 228.615	1.6876	ppb	0.5417	32.1	-2.5111
Cr 267.716	1.5778	ppb	0.1359	8.6	33.4107
Cu 324.754	23.5015	ppb	0.5504	2.3	1087.40
Fe 271.441	1341.89	ppb	1.6332	0.1	771.967
K 766.491	1950.75	ppb	2.1896	0.1	33395.7
Mg 279.078	2037.29	ppb	8.0475	0.4	2508.09
Mn 257.610	35.3540	ppb	0.0311	0.1	2453.44
Mo 202.032	3.0901	ppb	1.3018	42.1	6.9338
Na 330.237	4517.33	ppb	202.982	4.5	137.910
Ni 231.604	4.1305	ppb	1.8458	44.7	1.3219
Pb 220.353	2.9134	ppb	5.2327	179.6	2.7370
Sb 206.834	-0.3203	ppb	9.8748	3082.7	5.7646
Se 196.026	-1.0720	ppb	3.7230	347.3	4.1805
Si 288.158	15122.1	ppb	15.6107	0.1	64791.8
Sn 189.925	10.6242	ppb	3.7842	35.6	1.3732
Sr 216.596	30.0444	ppb	0.8665	2.9	76.8964
Ti 334.941	44.0700	ppb	0.0585	0.1	3305.50
Tl 190.794	2.6002	ppb	2.6126	100.5	-1.9449
V 292.401	3.4798	ppb	0.7260	20.9	16.7739
Zn 206.200	448.093	ppb	4.1991	0.9	235.361

680-166566-A-15-A (Samp) 4/8/2019, 6:12:55 PM Rack 2, Tube 3

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1114	1.2270	-0.8895u
Al 308.215	2.8809	0.7921	2.7879
As 188.980	-2.4866u	-3.5928u	2.5345
B 249.678	3.0040	1.8383	3.0219
Ba 389.178	-4.3630u	-0.8374u	0.1675
Be 313.042	-0.0447u	-0.0504u	-0.0435u
Ca 370.602	3420	3415	3409
Cd 226.502	-0.1701u	0.1740	-0.3378u
Co 228.615	-0.9214u	0.3860	0.6260
Cr 267.716	0.8628	0.6733	0.5584
Cu 324.754	1.9703	3.2404	2.2241
Fe 271.441	60.3832	54.6570	32.4455
K 766.491	35.7408	33.7914	36.1589
Mg 279.078	340.263	339.893	340.486
Mn 257.610	1.5908	1.4337	1.4161
Mo 202.032	0.1690	1.2668	0.2039

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	15328.1	15660.1	15662.0
Ni 231.604	-0.4449u	-0.8337u	1.2557
Pb 220.353	-2.7674u	-1.5762u	-2.5185u
Sb 206.834	2.6411	9.2451	-5.0482u
Se 196.026	6.9797	11.3621	16.8411
Si 288.158	166.558	165.024	163.069
Sn 189.925	3.2660	3.5709	7.5327
Sr 216.596	14.0055	13.3088	12.4276
Ti 334.941	0.2312	0.0827	-0.0779u
Tl 190.794	0.0919	-3.4098u	-12.1591u
V 292.401	0.7720	-0.4564u	-0.1881u
Zn 206.200	3.5586	7.7427	2.7286

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1496	ppb	1.0588	707.5	-52.3544
Al 308.215	2.1536	ppb	1.1800	54.8	247.136
As 188.980	-1.1816	ppb	3.2654	276.4	0.9330
B 249.678	2.6214	ppb	0.6782	25.9	-1.5811
Ba 389.178	-1.6776	ppb	2.3793	141.8	-39.3279
Be 313.042	-0.0462	ppb	0.0037	7.9	-460.705
Ca 370.602	3415	ppb	5.334	0.2	4859
Cd 226.502	-0.1113	ppb	0.2609	234.4	1.1738
Co 228.615	0.0302	ppb	0.8328	2758.8	-8.2743
Cr 267.716	0.6982	ppb	0.1537	22.0	20.5441
Cu 324.754	2.4782	ppb	0.6721	27.1	539.070
Fe 271.441	49.1619	ppb	14.7572	30.0	72.4522
K 766.491	35.2304	ppb	1.2636	3.6	833.599
Mg 279.078	340.214	ppb	0.2996	0.1	442.450
Mn 257.610	1.4802	ppb	0.0962	6.5	124.938
Mo 202.032	0.5466	ppb	0.6240	114.2	3.4141
Na 330.237	15550.1	ppb	192.222	1.2	413.003
Ni 231.604	-0.0076	ppb	1.1112	14556.7	-2.7418
Pb 220.353	-2.2874	ppb	0.6283	27.5	0.8185
Sb 206.834	2.2793	ppb	7.1535	313.8	6.5626
Se 196.026	11.7276	ppb	4.9408	42.1	6.5195
Si 288.158	164.883	ppb	1.7486	1.1	1275.82
Sn 189.925	4.7899	ppb	2.3802	49.7	0.0633
Sr 216.596	13.2473	ppb	0.7908	6.0	35.7443
Ti 334.941	0.0787	ppb	0.1546	196.4	-18.7418
Tl 190.794	-5.1590	ppb	6.3100	122.3	-3.7306
V 292.401	0.0425	ppb	0.6459	1520.4	-11.4860
Zn 206.200	4.6766	ppb	2.6876	57.5	1.1566

680-166566-A-15-B MS (Samp) 4/8/2019, 6:17:17 PM

Rack 2, Tube 4

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5264	1.2437	0.9693
Al 308.215	26.6556	22.6553	21.6777
As 188.980	4.0799	-1.2675u	-5.1558u
B 249.678	2.6393	3.0264	1.7992
Ba 389.178	0.9180	0.7932	1.2723
Be 313.042	0.1828	0.1958	0.1890
Ca 370.602	3672	3661	3650

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.1496	-0.1620u	0.3977
Co 228.615	0.7959	-0.6725u	-0.3523u
Cr 267.716	0.4590	1.0420	1.0347
Cu 324.754	1.8924	1.9738	3.1390
Fe 271.441	74.2287	80.0102	66.5037
K 766.491	73.1359	73.6497	72.4378
Mg 279.078	389.007	387.214	382.880
Mn 257.610	3.6782	3.6936	3.5692
Mo 202.032	1.8880	2.1927	1.1841
Na 330.237	16192.9	16575.6	16589.9
Ni 231.604	2.6177	-0.4874u	3.8309
Pb 220.353	2.0919	1.0826	-4.4564u
Sb 206.834	13.6551	-9.0848u	5.1821
Se 196.026	-9.7371u	1.9057	1.1390
Si 288.158	169.598	169.098	168.133
Sn 189.925	1.4709	3.3722	4.4174
Sr 216.596	13.9314	15.5986	15.5867
Ti 334.941	1.8904	1.7526	1.9663
Tl 190.794	-2.9114u	-4.3293u	2.8370
V 292.401	0.8575	1.8412	0.0877
Zn 206.200	6.1252	6.9179	3.6507

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9132	ppb	0.3620	39.6	-31.8401
Al 308.215	23.6629	ppb	2.6375	11.1	283.522
As 188.980	-0.7812	ppb	4.6370	593.6	1.0263
B 249.678	2.4883	ppb	0.6274	25.2	-2.4660
Ba 389.178	0.9945	ppb	0.2485	25.0	-25.6934
Be 313.042	0.1892	ppb	0.0065	3.4	-278.712
Ca 370.602	3661	ppb	10.72	0.3	5208
Cd 226.502	0.1284	ppb	0.2805	218.4	3.9563
Co 228.615	-0.0763	ppb	0.7721	1012.0	-8.6294
Cr 267.716	0.8452	ppb	0.3345	39.6	22.6874
Cu 324.754	2.3351	ppb	0.6974	29.9	535.356
Fe 271.441	73.5809	ppb	6.7765	9.2	85.6459
K 766.491	73.0745	ppb	0.6082	0.8	1476.92
Mg 279.078	386.367	ppb	3.1499	0.8	498.616
Mn 257.610	3.6470	ppb	0.0678	1.9	273.660
Mo 202.032	1.7549	ppb	0.5173	29.5	5.0920
Na 330.237	16452.8	ppb	225.167	1.4	435.071
Ni 231.604	1.9871	ppb	2.2272	112.1	-0.7822
Pb 220.353	-0.4273	ppb	3.5256	825.1	1.5054
Sb 206.834	3.2508	ppb	11.4923	353.5	6.8685
Se 196.026	-2.2308	ppb	6.5120	291.9	3.9699
Si 288.158	168.943	ppb	0.7446	0.4	1293.40
Sn 189.925	3.0868	ppb	1.4939	48.4	-0.3193
Sr 216.596	15.0389	ppb	0.9591	6.4	40.1051
Ti 334.941	1.8698	ppb	0.1083	5.8	116.535
Tl 190.794	-1.4679	ppb	3.7950	258.5	-2.8725
V 292.401	0.9288	ppb	0.8789	94.6	-4.2840
Zn 206.200	5.5646	ppb	1.7042	30.6	1.6258

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166566-A-15-C MS (Samp) 4/8/2019, 6:21:41 PM Rack 2, Tube 5**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.4617	0.7796	1.3070
Al 308.215	26.3938	28.9426	17.8179
As 188.980	-0.7419u	-2.1385u	-6.2886u
B 249.678	1.3548	2.3986	2.7679
Ba 389.178	-2.7694u	-0.2125u	-2.1690u
Be 313.042	0.1528	0.1768	0.1787
Ca 370.602	3482	3468	3480
Cd 226.502	0.3398	0.3888	0.5010
Co 228.615	-0.1048u	0.5947	-0.5355u
Cr 267.716	0.9436	0.0850	-0.0835u
Cu 324.754	1.9323	2.0607	2.0147
Fe 271.441	72.4285	54.8879	58.2256
K 766.491	69.1358	69.5467	71.0388
Mg 279.078	365.297	359.559	359.771
Mn 257.610	3.5194	3.6319	3.4469
Mo 202.032	0.4241	0.8240	0.2704
Na 330.237	15675.7	15234.3	16046.8
Ni 231.604	3.8020	3.1251	2.1684
Pb 220.353	3.9708	-11.3306u	5.3310
Sb 206.834	-5.3534u	6.6357	3.3788
Se 196.026	-9.8131u	-4.0857u	0.3186
Si 288.158	163.713	161.719	161.075
Sn 189.925	2.8977	6.0764	1.8090
Sr 216.596	14.6602	12.2622	10.7824
Ti 334.941	1.6357	1.8845	1.8023
Tl 190.794	-7.4748u	-0.3561u	-4.5211u
V 292.401	0.6405	0.3545	0.7815
Zn 206.200	3.1726	6.3928	5.0424

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1828	ppb	0.3576	30.2	-24.5832
Al 308.215	24.3848	ppb	5.8281	23.9	284.721
As 188.980	-3.0563	ppb	2.8850	94.4	0.4871
B 249.678	2.1737	ppb	0.7329	33.7	-4.4788
Ba 389.178	-1.7169	ppb	1.3370	77.9	-39.5036
Be 313.042	0.1694	ppb	0.0144	8.5	-293.922
Ca 370.602	3476	ppb	7.359	0.2	4947
Cd 226.502	0.4099	ppb	0.0826	20.2	7.1736
Co 228.615	-0.0152	ppb	0.5704	3756.5	-8.4142
Cr 267.716	0.3150	ppb	0.5508	174.8	14.9901
Cu 324.754	2.0026	ppb	0.0651	3.2	526.667
Fe 271.441	61.8473	ppb	9.3143	15.1	79.3095
K 766.491	69.9071	ppb	1.0014	1.4	1423.07
Mg 279.078	361.542	ppb	3.2531	0.9	468.394
Mn 257.610	3.5327	ppb	0.0932	2.6	265.745
Mo 202.032	0.5062	ppb	0.2858	56.5	3.3576
Na 330.237	15652.3	ppb	406.761	2.6	415.489
Ni 231.604	3.0318	ppb	0.8208	27.1	0.2439
Pb 220.353	-0.6763	ppb	9.2519	1368.1	1.4137
Sb 206.834	1.5537	ppb	6.1994	399.0	6.3341
Se 196.026	-4.5267	ppb	5.0802	112.2	3.5505
Si 288.158	162.169	ppb	1.3753	0.8	1264.35

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	3.5944	ppb	2.2174	61.7	-0.2053
Sr 216.596	12.5683	ppb	1.9570	15.6	34.0825
Ti 334.941	1.7742	ppb	0.1267	7.1	109.276
Tl 190.794	-4.1173	ppb	3.5765	86.9	-3.4883
V 292.401	0.5922	ppb	0.2176	36.7	-6.9602
Zn 206.200	4.8693	ppb	1.6171	33.2	1.2585

680-166566-A-7-A (Samp) 4/8/2019, 6:26:04 PM Rack 2, Tube 6
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1651u	0.2522	-0.1897u
Al 308.215	3.0188	-5.6953u	-0.9124u
As 188.980	-0.0046	2.0644	4.1408
B 249.678	1.5747	1.2201	1.4886
Ba 389.178	-3.0271u	-3.6903u	-3.1771u
Be 313.042	-0.0509u	-0.0220u	-0.0578u
Ca 370.602	2277	2279	2279
Cd 226.502	0.2906	-0.1635u	-0.2600u
Co 228.615	0.6439	-0.2521u	1.5502
Cr 267.716	0.7156	0.4251	-0.5015u
Cu 324.754	2.0595	2.2816	2.8939
Fe 271.441	-0.2021u	-7.7645u	0.4848
K 766.491	36.0930	38.7367	38.0720
Mg 279.078	281.882	278.342	275.174
Mn 257.610	0.7023	0.7155	0.6869
Mo 202.032	1.1757	2.1891	1.2265
Na 330.237	8867.98	8738.83	8923.72
Ni 231.604	1.8279	1.7968	1.3401
Pb 220.353	5.8921	-2.6708u	8.2797
Sb 206.834	-8.5604u	-7.0563u	0.9651
Se 196.026	9.3283	-8.6010u	-5.2395u
Si 288.158	44.8284	42.8885	41.7627
Sn 189.925	-3.7968u	-2.5223u	5.8645
Sr 216.596	10.0585	7.8498	10.3948
Ti 334.941	0.0154	-0.0986u	0.0260
Tl 190.794	-2.5693u	-1.2207u	-11.5682u
V 292.401	0.1739	0.1393	-0.4877u
Zn 206.200	1.5317	-1.8477u	0.6413

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0342	ppb	0.2483	726.3	-57.2806
Al 308.215	-1.1963	ppb	4.3640	364.8	241.485
As 188.980	2.0669	ppb	2.0727	100.3	1.7373
B 249.678	1.4278	ppb	0.1850	13.0	-9.1902
Ba 389.178	-3.2982	ppb	0.3478	10.5	-47.6168
Be 313.042	-0.0436	ppb	0.0189	43.5	-458.640
Ca 370.602	2278	ppb	1.163	0.1	3245
Cd 226.502	-0.0443	ppb	0.2940	663.8	1.8916
Co 228.615	0.6473	ppb	0.9011	139.2	-6.2261
Cr 267.716	0.2130	ppb	0.6357	298.4	13.4683
Cu 324.754	2.4117	ppb	0.4321	17.9	537.349
Fe 271.441	-2.4939	ppb	4.5774	183.5	44.5155
K 766.491	37.6339	ppb	1.3752	3.7	874.458

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	278.466	ppb	3.3562	1.2	367.283
Mn 257.610	0.7016	ppb	0.0143	2.0	71.3758
Mo 202.032	1.5304	ppb	0.5710	37.3	4.7811
Na 330.237	8843.51	ppb	94.8426	1.1	248.908
Ni 231.604	1.6549	ppb	0.2731	16.5	-1.1090
Pb 220.353	3.8337	ppb	5.7581	150.2	3.0793
Sb 206.834	-4.8839	ppb	5.1209	104.9	4.3045
Se 196.026	-1.5040	ppb	9.5305	633.7	4.1026
Si 288.158	43.1599	ppb	1.5508	3.6	759.023
Sn 189.925	-0.1516	ppb	5.2489	3463.0	-1.0476
Sr 216.596	9.4344	ppb	1.3825	14.7	26.4002
Ti 334.941	-0.0191	ppb	0.0690	362.1	-26.1162
Tl 190.794	-5.1194	ppb	5.6254	109.9	-3.7208
V 292.401	-0.0582	ppb	0.3724	640.0	-12.3709
Zn 206.200	0.1084	ppb	1.7516	1615.8	-1.2560

680-166566-A-7-B MS (Samp) 4/8/2019, 6:30:26 PM Rack 2, Tube 7
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7665	-0.0122u	1.0373
Al 308.215	21.8658	21.6189	26.7367
As 188.980	-0.0073	-1.0539u	-1.2681u
B 249.678	2.8401	2.2309	2.2449
Ba 389.178	-4.0479u	-4.0944u	-0.8422u
Be 313.042	0.1850	0.1900	0.1896
Ca 370.602	2322	2315	2312
Cd 226.502	0.4264	0.2712	-0.2511u
Co 228.615	-1.5255u	0.8635	1.9187
Cr 267.716	0.0939	0.7473	0.5639
Cu 324.754	2.2494	3.1982	3.0543
Fe 271.441	25.9463	12.8038	42.1709
K 766.491	74.1173	72.3846	73.1006
Mg 279.078	306.432	302.025	308.356
Mn 257.610	2.9817	2.8313	2.9657
Mo 202.032	-0.4277u	2.3182	0.2481
Na 330.237	8954.21	8574.92	9012.09
Ni 231.604	-0.0335u	-0.3993u	-1.8632u
Pb 220.353	3.1565	7.2676	1.2478
Sb 206.834	-5.6865u	-4.3510u	-3.6253u
Se 196.026	18.4447	20.6329	9.3903
Si 288.158	43.6812	43.4136	39.6131
Sn 189.925	6.4910	8.5156	1.3207
Sr 216.596	12.8817	13.7354	10.5094
Ti 334.941	1.6831	1.9172	1.9167
Tl 190.794	-18.7312u	-11.7531u	-1.7899u
V 292.401	1.2200	0.7601	0.2159
Zn 206.200	0.6453	2.4778	0.7251

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5972	ppb	0.5449	91.2	-40.3175
Al 308.215	23.4072	ppb	2.8861	12.3	283.076
As 188.980	-0.7764	ppb	0.6746	86.9	1.0664
B 249.678	2.4386	ppb	0.3477	14.3	-2.7351

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-2.9948	ppb	1.8644	62.3	-46.0534
Be 313.042	0.1882	ppb	0.0027	1.5	-279.301
Ca 370.602	2316	ppb	5.378	0.2	3299
Cd 226.502	0.1488	ppb	0.3549	238.5	4.1393
Co 228.615	0.4189	ppb	1.7646	421.3	-6.9705
Cr 267.716	0.4684	ppb	0.3371	72.0	17.1768
Cu 324.754	2.8340	ppb	0.5113	18.0	548.347
Fe 271.441	26.9737	ppb	14.7105	54.5	60.4543
K 766.491	73.2008	ppb	0.8707	1.2	1479.06
Mg 279.078	305.604	ppb	3.2455	1.1	400.298
Mn 257.610	2.9262	ppb	0.0826	2.8	223.977
Mo 202.032	0.7129	ppb	1.4308	200.7	3.6452
Na 330.237	8847.07	ppb	237.458	2.7	248.971
Ni 231.604	-0.7653	ppb	0.9682	126.5	-3.4862
Pb 220.353	3.8906	ppb	3.0763	79.1	3.1005
Sb 206.834	-4.5543	ppb	1.0456	23.0	4.4105
Se 196.026	16.1559	ppb	5.9605	36.9	7.3286
Si 288.158	42.2360	ppb	2.2754	5.4	755.299
Sn 189.925	5.4424	ppb	3.7103	68.2	0.2093
Sr 216.596	12.3755	ppb	1.6715	13.5	33.6074
Ti 334.941	1.8390	ppb	0.1350	7.3	114.169
Tl 190.794	-10.7581	ppb	8.5144	79.1	-5.0321
V 292.401	0.7320	ppb	0.5027	68.7	-5.8521
Zn 206.200	1.2827	ppb	1.0357	80.7	-0.6360

680-166566-A-7-C MSD (Samp) 4/8/2019, 6:34:50 PM

Rack 2, Tube 8

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2630	-0.1868u	0.3334
Al 308.215	19.6358	26.7140	29.6746
As 188.980	-4.2657u	9.0578	-4.1210u
B 249.678	1.5623	2.6771	1.8314
Ba 389.178	-0.9082u	0.4733	-5.6978u
Be 313.042	0.1809	0.1682	0.1693
Ca 370.602	2309	2303	2302
Cd 226.502	0.3111	0.3180	-0.0070u
Co 228.615	0.4144	0.7733	1.7742
Cr 267.716	0.9148	1.0171	1.4860
Cu 324.754	2.4105	2.3130	1.2483
Fe 271.441	32.2449	28.1474	23.9982
K 766.491	71.3019	72.6135	70.5713
Mg 279.078	296.035	305.001	301.351
Mn 257.610	2.9610	2.8575	2.8567
Mo 202.032	0.5897	0.7169	0.4170
Na 330.237	9061.93	8975.38	8671.50
Ni 231.604	3.3059	2.4552	3.6124
Pb 220.353	15.2924	0.6971	1.2570
Sb 206.834	-4.5155u	9.2110	-5.9590u
Se 196.026	4.3830	-0.7515u	0.8164
Si 288.158	41.8844	42.9702	40.6608
Sn 189.925	-6.2245u	9.7688	7.7353
Sr 216.596	7.8608	11.4831	13.3518
Ti 334.941	1.6521	1.5534	1.5341

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-9.2693u	-10.9635u	-2.9714u
V 292.401	0.1567	0.6696	0.8434
Zn 206.200	3.0012	1.2214	1.5318

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1365	ppb	0.2822	206.7	-52.6975
Al 308.215	25.3415	ppb	5.1582	20.4	286.334
As 188.980	0.2237	ppb	7.6509	3420.4	1.3012
B 249.678	2.0236	ppb	0.5817	28.7	-5.4077
Ba 389.178	-2.0442	ppb	3.2386	158.4	-41.2199
Be 313.042	0.1728	ppb	0.0071	4.1	-291.194
Ca 370.602	2305	ppb	3.690	0.2	3283
Cd 226.502	0.2073	ppb	0.1857	89.6	4.8224
Co 228.615	0.9873	ppb	0.7047	71.4	-5.0718
Cr 267.716	1.1393	ppb	0.3045	26.7	26.9129
Cu 324.754	1.9906	ppb	0.6447	32.4	526.356
Fe 271.441	28.1302	ppb	4.1234	14.7	61.1097
K 766.491	71.4956	ppb	1.0348	1.4	1450.08
Mg 279.078	300.795	ppb	4.5088	1.5	394.443
Mn 257.610	2.8917	ppb	0.0600	2.1	221.609
Mo 202.032	0.5745	ppb	0.1506	26.2	3.4529
Na 330.237	8902.94	ppb	205.051	2.3	250.337
Ni 231.604	3.1245	ppb	0.5995	19.2	0.3342
Pb 220.353	5.7488	ppb	8.2697	143.9	3.7871
Sb 206.834	-0.4212	ppb	8.3728	1988.0	5.7125
Se 196.026	1.4826	ppb	2.6313	177.5	4.6482
Si 288.158	41.8385	ppb	1.1554	2.8	753.576
Sn 189.925	3.7599	ppb	8.7063	231.6	-0.1688
Sr 216.596	10.8985	ppb	2.7918	25.6	29.9908
Ti 334.941	1.5799	ppb	0.0633	4.0	94.6092
Tl 190.794	-7.7347	ppb	4.2112	54.4	-4.3288
V 292.401	0.5566	ppb	0.3570	64.1	-7.2661
Zn 206.200	1.9181	ppb	0.9508	49.6	-0.3005

680-166566-A-13-A (Samp) 4/8/2019, 6:39:13 PM Rack 2, Tube 9

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0444u	0.6239	0.0155
Al 308.215	2.3011	-1.9166u	3.1479
As 188.980	7.2899	-5.5442u	5.5190
B 249.678	1.8896	1.5806	2.7755
Ba 389.178	-3.5635u	1.9481	-1.3973u
Be 313.042	-0.0462u	-0.0396u	-0.0645u
Ca 370.602	1325	1325	1324
Cd 226.502	0.3063	0.5138	0.3112
Co 228.615	1.1054	-0.7343u	0.2828
Cr 267.716	-0.3938u	-0.1665u	0.3671
Cu 324.754	2.3420	2.9103	2.3547
Fe 271.441	60.3891	57.5924	61.1326
K 766.491	6.8317	5.8357	6.7492
Mg 279.078	282.021	291.627	291.905
Mn 257.610	0.7487	0.7123	0.6990
Mo 202.032	0.9641	1.7968	2.5502

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	1559.03	1307.92	1371.51
Ni 231.604	0.3918	4.2173	2.1444
Pb 220.353	-2.8266u	-0.7727u	-1.0446u
Sb 206.834	-0.7552u	-6.9755u	4.0735
Se 196.026	0.1720	-1.1095u	-4.7853u
Si 288.158	90.9358	89.7409	93.5248
Sn 189.925	0.6677	-5.7785u	-8.2561u
Sr 216.596	7.7542	5.1467	8.1572
Ti 334.941	-0.0990u	-0.0815u	-0.0795u
Tl 190.794	-6.8547u	2.2388	-4.0351u
V 292.401	0.6534	0.1471	-0.0655u
Zn 206.200	0.8225	1.3139	-0.4944u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1983	ppb	0.3697	186.4	-51.0307
Al 308.215	1.1775	ppb	2.7128	230.4	245.507
As 188.980	2.4216	ppb	6.9552	287.2	1.8201
B 249.678	2.0819	ppb	0.6202	29.8	-5.0581
Ba 389.178	-1.0042	ppb	2.7768	276.5	-35.9388
Be 313.042	-0.0501	ppb	0.0129	25.8	-463.470
Ca 370.602	1324	ppb	0.5006	0.0	1890
Cd 226.502	0.3771	ppb	0.1184	31.4	6.8070
Co 228.615	0.2180	ppb	0.9215	422.8	-7.6575
Cr 267.716	-0.0644	ppb	0.3906	606.2	9.4097
Cu 324.754	2.5357	ppb	0.3245	12.8	540.585
Fe 271.441	59.7047	ppb	1.8667	3.1	78.1313
K 766.491	6.4722	ppb	0.5528	8.5	344.736
Mg 279.078	288.518	ppb	5.6280	2.0	379.520
Mn 257.610	0.7200	ppb	0.0257	3.6	72.6975
Mo 202.032	1.7704	ppb	0.7934	44.8	5.1137
Na 330.237	1412.82	ppb	130.555	9.2	67.0515
Ni 231.604	2.2511	ppb	1.9150	85.1	-0.5227
Pb 220.353	-1.5480	ppb	1.1156	72.1	1.0915
Sb 206.834	-1.2191	ppb	5.5391	454.4	5.4595
Se 196.026	-1.9076	ppb	2.5732	134.9	4.0287
Si 288.158	91.4005	ppb	1.9343	2.1	963.704
Sn 189.925	-4.4557	ppb	4.6066	103.4	-2.0153
Sr 216.596	7.0194	ppb	1.6343	23.3	20.5051
Ti 334.941	-0.0867	ppb	0.0107	12.4	-31.0673
Tl 190.794	-2.8837	ppb	4.6548	161.4	-3.2022
V 292.401	0.2450	ppb	0.3693	150.7	-9.8489
Zn 206.200	0.5473	ppb	0.9350	170.8	-1.0240

680-166566-A-16-A (Samp)

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Rack 2, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2993	0.3239	0.4988
Al 308.215	25.4874	23.9232	29.0940
As 188.980	-0.1642	-1.5222u	-4.4451u
B 249.678	4.0344	3.9850	2.5046
Ba 389.178	-2.7321u	-1.7546u	-0.7962u
Be 313.042	-0.0568u	-0.0534u	-0.0397u
Ca 370.602	34.75	32.20	38.76

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.2230	0.4954	0.2061
Co 228.615	1.5933	0.6309	-0.6143u
Cr 267.716	0.7300	0.0080	-0.2286u
Cu 324.754	2.1016	2.4421	0.7538
Fe 271.441	5.9506	22.6865	12.2084
K 766.491	7.8458	7.7642	9.6867
Mg 279.078	12.4202	9.1725	10.8576
Mn 257.610	0.5555	0.5573	0.3887
Mo 202.032	0.0391	0.3832	-0.3932u
Na 330.237	783.068	1636.89	1029.22
Ni 231.604	1.5221	-1.3150u	1.5937
Pb 220.353	0.3943	9.9783	0.1513
Sb 206.834	-6.2458u	7.2522	-1.9558u
Se 196.026	-3.2266u	-20.4369u	2.0098
Si 288.158	45.4407	46.0843	41.7378
Sn 189.925	11.6960	8.0543	-0.4351u
Sr 216.596	-1.0205u	1.9073	0.0985
Ti 334.941	-0.0292u	0.1673	0.0758
Tl 190.794	-10.2540u	-13.5377u	-14.3261u
V 292.401	-0.2955u	1.0070	1.3809
Zn 206.200	-0.3259u	2.6756	0.3775

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3740	ppb	0.1088	29.1	-46.2822
Al 308.215	26.1682	ppb	2.6518	10.1	287.723
As 188.980	-2.0438	ppb	2.1876	107.0	0.7766
B 249.678	3.5080	ppb	0.8693	24.8	4.1324
Ba 389.178	-1.7610	ppb	0.9680	55.0	-40.0168
Be 313.042	-0.0500	ppb	0.0091	18.2	-463.425
Ca 370.602	35.24	ppb	3.307	9.4	59.21
Cd 226.502	0.3082	ppb	0.1624	52.7	5.9643
Co 228.615	0.5367	ppb	1.1068	206.2	-6.5801
Cr 267.716	0.1698	ppb	0.4994	294.1	12.8024
Cu 324.754	1.7658	ppb	0.8928	50.6	520.480
Fe 271.441	13.6152	ppb	8.4562	62.1	53.2305
K 766.491	8.4322	ppb	1.0872	12.9	378.055
Mg 279.078	10.8168	ppb	1.6242	15.0	41.4292
Mn 257.610	0.5005	ppb	0.0968	19.3	56.7564
Mo 202.032	0.0097	ppb	0.3890	4008.0	2.6686
Na 330.237	1149.72	ppb	439.479	38.2	60.6103
Ni 231.604	0.6003	ppb	1.6590	276.4	-2.1449
Pb 220.353	3.5079	ppb	5.6048	159.8	2.9595
Sb 206.834	-0.3165	ppb	6.8967	2179.1	5.7446
Se 196.026	-7.2179	ppb	11.7436	162.7	3.0588
Si 288.158	44.4209	ppb	2.3458	5.3	764.776
Sn 189.925	6.4384	ppb	6.2249	96.7	0.4324
Sr 216.596	0.3284	ppb	1.4774	449.9	4.1725
Ti 334.941	0.0713	ppb	0.0984	138.0	-19.7706
Tl 190.794	-12.7059	ppb	2.1597	17.0	-5.4852
V 292.401	0.6974	ppb	0.8801	126.2	-6.0498
Zn 206.200	0.9091	ppb	1.5698	172.7	-0.8332

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 6:48:03 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	496.514	498.193	498.910
Al 308.215	10256.7	10261.2	10251.1
As 188.980	550.859	532.426	529.880
B 249.678	522.358	529.701	530.587
Ba 389.178	486.229	491.325	484.452
Be 313.042	534.069	534.427	534.570
Ca 370.602	10083	10098	10117
Cd 226.502	512.953	512.532	512.164
Co 228.615	515.372	515.206	515.070
Cr 267.716	502.667	502.966	502.626
Cu 324.754	508.506	510.594	515.153
Fe 271.441	10242.9	10229.4	10255.3
K 766.491	9964.67	9953.95	9966.23
Mg 279.078	10290.4	10301.1	10315.2
Mn 257.610	507.575	507.427	508.483
Mo 202.032	514.169	511.889	511.150
Na 330.237	10999.9	10771.3	10561.4
Ni 231.604	518.095	513.859	512.228
Pb 220.353	512.329	507.225	503.717
Sb 206.834	513.097	510.471	512.234
Se 196.026	549.849	533.193	529.623
Si 288.158	5034.70	5018.98	5024.42
Sn 189.925	495.628	495.756	508.470
Sr 216.596	506.141	502.105	505.018
Ti 334.941	505.120	505.884	505.940
Tl 190.794	511.520	495.236	507.073
V 292.401	512.578	513.007	512.532
Zn 206.200	1060.35	1047.03	1044.41

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	497.872	ppb	1.2299	0.2	13326.0	99.57444
Al 308.215	10256.3	ppb	5.0848	0.0	17593.3	102.56343
As 188.980	537.722	ppb	11.4485	2.1	130.515	107.54436
B 249.678	527.549	ppb	4.5171	0.9	3355.62	105.50974
Ba 389.178	487.335	ppb	3.5677	0.7	2457.57	97.46706
Be 313.042	534.355	ppb	0.2579	0.0	412831	106.87108
Ca 370.602	10099	ppb	16.68	0.2	14355	100.99302
Cd 226.502	512.550	ppb	0.3946	0.1	5882.38	102.50995
Co 228.615	515.216	ppb	0.1512	0.0	1710.27	103.04323
Cr 267.716	502.753	ppb	0.1858	0.0	7306.13	100.55058
Cu 324.754	511.417	ppb	3.3991	0.7	13814.4	102.28349
Fe 271.441	10242.5	ppb	12.9176	0.1	5613.39	102.37422
K 766.491	9961.61	ppb	6.6871	0.1	169573	99.61614
Mg 279.078	10302.3	ppb	12.4419	0.1	12564.3	103.02268
Mn 257.610	507.828	ppb	0.5720	0.1	34876.5	101.56567
Mo 202.032	512.403	ppb	1.5741	0.3	714.172	102.48053
Na 330.237	10777.5	ppb	219.324	2.0	280.772	107.77546
Ni 231.604	514.727	ppb	3.0284	0.6	502.457	102.94540
Pb 220.353	507.757	ppb	4.3305	0.9	189.016	101.55141
Sb 206.834	511.934	ppb	1.3380	0.3	168.348	102.38680
Se 196.026	537.555	ppb	10.7955	2.0	102.585	107.51101
Si 288.158	5026.03	ppb	7.9785	0.2	22041.5	100.52069

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	499.951	ppb	7.3774	1.5	111.318	99.99025
Sr 216.596	504.421	ppb	2.0833	0.4	1230.48	100.88424
Ti 334.941	505.648	ppb	0.4584	0.1	38160.9	101.12960
Tl 190.794	504.610	ppb	8.4169	1.7	114.930	100.92193
V 292.401	512.706	ppb	0.2620	0.1	4155.10	102.54116
Zn 206.200	1050.60	ppb	8.5469	0.8	553.343	105.05951

Cont Calib Blank (CCB) 4/8/2019, 6:52:27 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6323	-0.2141u	0.5797
Al 308.215	-3.7092u	-7.4813u	-4.6057u
As 188.980	-4.9629u	-5.4023u	-2.9310u
B 249.678	15.7799	13.8823	11.7751
Ba 389.178	-3.1747u	-1.4771u	-0.6030u
Be 313.042	-0.0007u	0.0125	-0.0036u
Ca 370.602	6.858	-2.757u	7.250
Cd 226.502	0.0116	0.2598	0.2113
Co 228.615	0.6129	0.4028	-0.6008u
Cr 267.716	0.4526	-0.0156u	0.0634
Cu 324.754	1.4902	1.6996	1.4386
Fe 271.441	-2.5116u	-16.4273u	-2.1533u
K 766.491	-0.8026u	0.6780	-0.9376u
Mg 279.078	1.6117	-1.3108u	8.1570
Mn 257.610	-0.0781u	0.0723	-0.1675u
Mo 202.032	1.7379	2.6340	1.1310
Na 330.237	133.069	462.267	73.6024
Ni 231.604	-1.1100u	2.3555	0.1828
Pb 220.353	-7.1032u	-5.4808u	2.6120
Sb 206.834	-5.0261u	8.7515	-8.8356u
Se 196.026	-2.8543u	-18.1739u	4.4803
Si 288.158	17.4456	12.6861	10.9824
Sn 189.925	4.6324	9.4146	4.4979
Sr 216.596	0.0730	0.6995	-0.9854u
Ti 334.941	0.2456	0.2189	0.0735
Tl 190.794	-19.0665u	2.7836	-9.4744u
V 292.401	-0.1001u	0.1907	-0.0383u
Zn 206.200	0.0355	0.8257	0.2013

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3327	ppb	0.4742	142.6	-47.3934	0.33266
Al 308.215	-5.2654	ppb	1.9707	37.4	234.606	-5.26540
As 188.980	-4.4320	ppb	1.3184	29.7	0.1680	-4.43205
B 249.678	13.8125	ppb	2.0033	14.5	70.2449	13.81246
Ba 389.178	-1.7516	ppb	1.3077	74.7	-39.9751	-1.75161
Be 313.042	0.0027	ppb	0.0086	315.4	-422.752	0.00273
Ca 370.602	3.783	ppb	5.668	149.8	14.56	3.78346
Cd 226.502	0.1609	ppb	0.1316	81.8	4.2577	0.16088
Co 228.615	0.1383	ppb	0.6486	468.9	-7.9202	0.13832
Cr 267.716	0.1668	ppb	0.2506	150.2	12.7531	0.16681
Cu 324.754	1.5428	ppb	0.1382	9.0	514.689	1.54282
Fe 271.441	-7.0307	ppb	8.1396	115.8	42.0308	-7.03072
K 766.491	-0.3541	ppb	0.8963	253.1	228.696	-0.35408

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	2.8193	ppb	4.8480	172.0	31.7031	2.81931
Mn 257.610	-0.0578	ppb	0.1212	209.7	18.4617	-0.05778
Mo 202.032	1.8343	ppb	0.7561	41.2	5.2031	1.83427
Na 330.237	222.980	ppb	209.351	93.9	37.9422	222.97955
Ni 231.604	0.4761	ppb	1.7512	367.8	-2.2664	0.47611
Pb 220.353	-3.3240	ppb	5.2044	156.6	0.4351	-3.32400
Sb 206.834	-1.7034	ppb	9.2524	543.2	5.3064	-1.70338
Se 196.026	-5.5160	ppb	11.5593	209.6	3.3697	-5.51596
Si 288.158	13.7047	ppb	3.3498	24.4	634.201	13.70468
Sn 189.925	6.1816	ppb	2.8006	45.3	0.3746	6.18165
Sr 216.596	-0.0709	ppb	0.8516	1200.3	3.1744	-0.07095
Ti 334.941	0.1793	ppb	0.0926	51.7	-11.6112	0.17935
Tl 190.794	-8.5857	ppb	10.9521	127.6	-4.5273	-8.58573
V 292.401	0.0175	ppb	0.1532	877.3	-11.7029	0.01746
Zn 206.200	0.3541	ppb	0.4167	117.7	-1.1262	0.35414

680-166566-A-4-A (Samp)

4/8/2019, 6:56:50 PM

Rack 2, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4663	0.4085	0.6904
Al 308.215	4.6624	2.6907	1.4387
As 188.980	-3.3354u	-1.8296u	0.8597
B 249.678	3.9851	5.0774	4.0223
Ba 389.178	-0.9475u	-1.7525u	-0.0237
Be 313.042	-0.0274u	-0.0421u	-0.0561u
Ca 370.602	2998	2996	2988
Cd 226.502	-0.2958u	0.1446	0.0020
Co 228.615	0.8800	0.2233	-2.2062u
Cr 267.716	-0.3407u	-0.1756u	0.6973
Cu 324.754	1.6823	2.0226	0.3637
Fe 271.441	26.7422	26.9382	37.6930
K 766.491	40.6014	39.3180	38.5982
Mg 279.078	287.622	293.063	279.292
Mn 257.610	1.2457	1.1784	1.3303
Mo 202.032	3.5343	1.3684	2.0455
Na 330.237	14396.3	13704.0	14251.9
Ni 231.604	1.6829	2.9137	0.5063
Pb 220.353	3.0042	4.0940	7.4733
Sb 206.834	6.4052	3.2164	18.5016
Se 196.026	-8.7135u	-2.4874u	-19.2011u
Si 288.158	38.5909	36.8135	36.5562
Sn 189.925	0.0989	8.4744	2.8862
Sr 216.596	9.8597	9.1746	11.4917
Ti 334.941	-0.0529u	-0.0253u	-0.2128u
Tl 190.794	-6.2891u	-7.9716u	-1.8265u
V 292.401	1.0052	-0.1966u	-0.7869u
Zn 206.200	4.6427	4.1603	3.0596

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5218	ppb	0.1489	28.5	-42.3413
Al 308.215	2.9306	ppb	1.6252	55.5	248.465
As 188.980	-1.4351	ppb	2.1252	148.1	0.8791
B 249.678	4.3616	ppb	0.6202	14.2	9.5870

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.9079	ppb	0.8651	95.3	-35.4542
Be 313.042	-0.0418	ppb	0.0143	34.3	-457.443
Ca 370.602	2994	ppb	5.476	0.2	4261
Cd 226.502	-0.0498	ppb	0.2247	451.7	1.8731
Co 228.615	-0.3676	ppb	1.6257	442.2	-9.6146
Cr 267.716	0.0604	ppb	0.5578	924.0	11.2821
Cu 324.754	1.3562	ppb	0.8762	64.6	509.839
Fe 271.441	30.4578	ppb	6.2666	20.6	62.3051
K 766.491	39.5059	ppb	1.0148	2.6	906.279
Mg 279.078	286.659	ppb	6.9359	2.4	377.252
Mn 257.610	1.2515	ppb	0.0761	6.1	109.094
Mo 202.032	2.3161	ppb	1.1080	47.8	5.8719
Na 330.237	14117.4	ppb	365.181	2.6	377.961
Ni 231.604	1.7009	ppb	1.2038	70.8	-1.0631
Pb 220.353	4.8572	ppb	2.3303	48.0	3.4577
Sb 206.834	9.3744	ppb	8.0636	86.0	8.7951
Se 196.026	-10.1340	ppb	8.4469	83.4	2.5261
Si 288.158	37.3202	ppb	1.1079	3.0	734.162
Sn 189.925	3.8198	ppb	4.2651	111.7	-0.1548
Sr 216.596	10.1754	ppb	1.1904	11.7	28.2172
Ti 334.941	-0.0970	ppb	0.1012	104.4	-32.0921
Tl 190.794	-5.3624	ppb	3.1756	59.2	-3.7784
V 292.401	0.0072	ppb	0.9133	12612.3	-11.8497
Zn 206.200	3.9542	ppb	0.8114	20.5	0.7754

680-166566-A-9-A (Samp)

4/8/2019, 7:01:15 PM

Rack 2, Tube 12

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1987	-0.1615u	0.9288
Al 308.215	30.3028	38.1358	31.7456
As 188.980	8.5394	-0.1027	2.8375
B 249.678	2.9358	1.9212	3.2715
Ba 389.178	0.9902	-5.7917u	-0.0087u
Be 313.042	-0.0347u	-0.0647u	-0.0530u
Ca 370.602	327.9	327.4	325.9
Cd 226.502	-0.1871u	-0.3192u	0.3374
Co 228.615	-1.1073u	-1.3434u	-0.0781u
Cr 267.716	0.5865	-0.1069u	0.2539
Cu 324.754	1.1760	3.1496	1.4073
Fe 271.441	34.4885	21.6468	19.2293
K 766.491	129.804	129.568	130.169
Mg 279.078	37.7666	34.3423	41.3669
Mn 257.610	0.6693	0.6335	0.5946
Mo 202.032	1.2583	1.5053	1.3997
Na 330.237	44255.2	43824.9	44318.3
Ni 231.604	3.1792	0.7955	2.6524
Pb 220.353	-3.8545u	-6.6947u	7.2333
Sb 206.834	3.3728	9.2381	1.2092
Se 196.026	-2.1520u	-0.1644u	-9.6235u
Si 288.158	55.6045	55.8603	54.1527
Sn 189.925	-1.2712u	-2.3989u	4.6703
Sr 216.596	3.7083	1.7189	2.6984
Ti 334.941	0.1426	0.1670	0.1980

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-4.7569u	2.6140	-9.6263u
V 292.401	0.0619	0.9881	0.2194
Zn 206.200	1.2305	1.4026	6.2644

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6553	ppb	0.7201	109.9	-38.7235
Al 308.215	33.3947	ppb	4.1688	12.5	299.948
As 188.980	3.7581	ppb	4.3939	116.9	2.1567
B 249.678	2.7095	ppb	0.7031	25.9	-0.9870
Ba 389.178	-1.6034	ppb	3.6614	228.4	-39.1897
Be 313.042	-0.0508	ppb	0.0151	29.7	-466.011
Ca 370.602	327.1	ppb	1.044	0.3	473.7
Cd 226.502	-0.0563	ppb	0.3473	616.7	1.7225
Co 228.615	-0.8429	ppb	0.6728	79.8	-11.1932
Cr 267.716	0.2445	ppb	0.3468	141.9	14.0970
Cu 324.754	1.9110	ppb	1.0789	56.5	524.285
Fe 271.441	25.1215	ppb	8.2016	32.6	59.3764
K 766.491	129.847	ppb	0.3027	0.2	2441.99
Mg 279.078	37.8253	ppb	3.5126	9.3	74.3079
Mn 257.610	0.6325	ppb	0.0374	5.9	65.8382
Mo 202.032	1.3878	ppb	0.1239	8.9	4.5827
Na 330.237	44132.8	ppb	268.543	0.6	1112.54
Ni 231.604	2.2090	ppb	1.2522	56.7	-0.5633
Pb 220.353	-1.1053	ppb	7.3598	665.9	1.2550
Sb 206.834	4.6067	ppb	4.1542	90.2	7.2940
Se 196.026	-3.9800	ppb	4.9875	125.3	3.6503
Si 288.158	55.2058	ppb	0.9209	1.7	810.265
Sn 189.925	0.3334	ppb	3.7979	1139.2	-0.9356
Sr 216.596	2.7085	ppb	0.9947	36.7	9.9702
Ti 334.941	0.1692	ppb	0.0277	16.4	-13.1309
Tl 190.794	-3.9231	ppb	6.1626	157.1	-3.4433
V 292.401	0.4231	ppb	0.4956	117.1	-8.4642
Zn 206.200	2.9658	ppb	2.8579	96.4	0.2532

680-166566-A-10-A (Samp)

4/8/2019, 7:05:38 PM

Rack 2, Tube 13

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6144	0.0404	0.9649
Al 308.215	11.7285	6.9752	14.0297
As 188.980	3.1728	-3.8404u	4.0183
B 249.678	2.0244	0.2398	1.4519
Ba 389.178	-3.5408u	-5.3540u	-1.9334u
Be 313.042	-0.0387u	-0.0377u	-0.0436u
Ca 370.602	1493	1484	1484
Cd 226.502	0.1278	-0.0081u	0.7134
Co 228.615	-0.1231u	-0.7619u	0.3834
Cr 267.716	0.3282	0.7978	0.5605
Cu 324.754	1.2178	1.6016	1.5909
Fe 271.441	47.8926	42.9157	50.7938
K 766.491	100.490	99.3847	100.099
Mg 279.078	485.846	491.072	486.930
Mn 257.610	0.9499	1.0769	0.8399
Mo 202.032	1.3364	-1.1195u	2.3889

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	64222.6	62624.0	64102.7
Ni 231.604	3.0376	1.7202	1.4965
Pb 220.353	0.4447	12.4198	-2.6985u
Sb 206.834	-0.2306u	-7.2611u	-14.6847u
Se 196.026	-15.2308u	5.1464	-0.4777u
Si 288.158	39.2891	41.5684	38.2362
Sn 189.925	-4.1663u	7.0101	3.2658
Sr 216.596	4.8274	4.7330	8.0007
Ti 334.941	0.2496	0.0741	0.1540
Tl 190.794	-13.0845u	-5.7561u	-10.0812u
V 292.401	1.3434	2.1816	1.5168
Zn 206.200	2.3795	2.9565	2.6817

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5399	ppb	0.4667	86.4	-41.8399
Al 308.215	10.9112	ppb	3.5976	33.0	261.982
As 188.980	1.1169	ppb	4.3139	386.2	1.5309
B 249.678	1.2387	ppb	0.9112	73.6	-10.4512
Ba 389.178	-3.6094	ppb	1.7113	47.4	-49.0295
Be 313.042	-0.0400	ppb	0.0031	7.9	-458.260
Ca 370.602	1487	ppb	5.164	0.3	2121
Cd 226.502	0.2777	ppb	0.3834	138.1	5.5547
Co 228.615	-0.1672	ppb	0.5739	343.2	-8.9370
Cr 267.716	0.5622	ppb	0.2348	41.8	18.8010
Cu 324.754	1.4701	ppb	0.2186	14.9	512.787
Fe 271.441	47.2007	ppb	3.9844	8.4	71.3712
K 766.491	99.9913	ppb	0.5605	0.6	1934.48
Mg 279.078	487.949	ppb	2.7582	0.6	622.315
Mn 257.610	0.9556	ppb	0.1186	12.4	89.3697
Mo 202.032	0.8686	ppb	1.8004	207.3	3.8611
Na 330.237	63649.7	ppb	890.375	1.4	1590.20
Ni 231.604	2.0848	ppb	0.8327	39.9	-0.6861
Pb 220.353	3.3886	ppb	7.9775	235.4	2.9154
Sb 206.834	-7.3921	ppb	7.2279	97.8	3.5160
Se 196.026	-3.5207	ppb	10.5239	298.9	3.7341
Si 288.158	39.6979	ppb	1.7033	4.3	744.049
Sn 189.925	2.0365	ppb	5.6887	279.3	-0.5512
Sr 216.596	5.8537	ppb	1.8599	31.8	17.6589
Ti 334.941	0.1592	ppb	0.0879	55.2	-13.2285
Tl 190.794	-9.6406	ppb	3.6840	38.2	-4.7729
V 292.401	1.6806	ppb	0.4424	26.3	1.8026
Zn 206.200	2.6726	ppb	0.2887	10.8	0.0983

180-88113-D-2-A (Samp)

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Rack 2, Tube 14

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8995	-0.2743u	0.4914
Al 308.215	601.991	604.920	604.279
As 188.980	295.998	293.812	286.915
B 249.678	81.6700	83.0511	83.3406
Ba 389.178	255.258	257.570	256.221
Be 313.042	0.1948	0.1835	0.2031
Ca 370.602	64010	64521	64099

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Label	Replicates Concentration		
Cd 226.502	0.5382	0.2795	0.3223
Co 228.615	1.4191	1.2702	0.6758
Cr 267.716	15.1741	16.2170	15.7509
Cu 324.754	98.7775	98.7361	96.9203
Fe 271.441	40890.5	40892.3	40932.7
K 766.491	3068.95	3075.45	3061.57
Mg 279.078	13293.2	13324.0	13329.4
Mn 257.610	5585.26	5595.77	5593.13
Mo 202.032	2.7731	4.3484	1.1313
Na 330.237	25258.2	25031.5	25134.6
Ni 231.604	11.5092	8.7172	11.1599
Pb 220.353	11.7289	8.6269	5.5798
Sb 206.834	-1.2649	4.1111	3.3365
Se 196.026	-13.0956u	-25.2507u	-9.1899u
Si 288.158	16146.0	16156.2	16190.0
Sn 189.925	-11.9673u	5.1705	-0.9846u
Sr 216.596	633.862	631.919	631.435
Ti 334.941	4.8190	4.9711	4.9233
Tl 190.794	-2.8670u	-18.1692u	-9.0331u
V 292.401	2.1854	1.6187	2.5947
Zn 206.200	70.0414	70.7430	68.3102

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3722	ppb	0.5959	160.1	-45.5299
Al 308.215	603.730	ppb	1.5397	0.3	1264.99
As 188.980	292.242	ppb	4.7406	1.6	72.6934
B 249.678	82.6872	ppb	0.8928	1.1	472.758
Ba 389.178	256.349	ppb	1.1615	0.5	1288.99
Be 313.042	0.1938	ppb	0.0099	5.1	-268.060
Ca 370.602	64210	ppb	273.0	0.4	91216
Cd 226.502	0.3800	ppb	0.1387	36.5	56.4644
Co 228.615	1.1217	ppb	0.3933	35.1	-5.4127
Cr 267.716	15.7140	ppb	0.5224	3.3	248.700
Cu 324.754	98.1446	ppb	1.0605	1.1	3039.62
Fe 271.441	40905.2	ppb	23.8250	0.1	22177.7
K 766.491	3068.66	ppb	6.9452	0.2	52399.2
Mg 279.078	13315.5	ppb	19.5500	0.1	16187.5
Mn 257.610	5591.39	ppb	5.4675	0.1	383355
Mo 202.032	2.7509	ppb	1.6087	58.5	6.0816
Na 330.237	25141.5	ppb	113.504	0.5	645.427
Ni 231.604	10.4621	ppb	1.5211	14.5	7.5418
Pb 220.353	8.6452	ppb	3.0746	35.6	5.2733
Sb 206.834	2.0609	ppb	2.9062	141.0	7.1351
Se 196.026	-15.8454	ppb	8.3761	52.9	1.8674
Si 288.158	16164.1	ppb	23.0163	0.1	69214.7
Sn 189.925	-2.5938	ppb	8.6815	334.7	-1.5949
Sr 216.596	632.405	ppb	1.2844	0.2	1553.14
Ti 334.941	4.9045	ppb	0.0778	1.6	374.704
Tl 190.794	-10.0231	ppb	7.6990	76.8	-4.5395
V 292.401	2.1330	ppb	0.4901	23.0	7.3499
Zn 206.200	69.6982	ppb	1.2522	1.8	35.5772

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

180-88138-D-2-A (Samp) **4/8/2019, 7:14:24 PM** **Rack 2, Tube 15****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.2602	-0.3803u	-0.1303
Al 308.215	430.985	427.711	429.527
As 188.980	12.2044	17.3173	15.3455
B 249.678	41.9342	42.2627	41.9509
Ba 389.178	407.692	410.609	410.318
Be 313.042	0.0051	-0.0183u	0.0136
Ca 370.602	52257	52356	52290
Cd 226.502	0.8248	0.2903	0.5006
Co 228.615	8.9863	8.5478	9.9291
Cr 267.716	0.6424	1.4845	0.9258
Cu 324.754	12.4695	12.9519	12.3782
Fe 271.441	21508.0	21523.4	21563.9
K 766.491	2065.72	2057.40	2060.96
Mg 279.078	12003.6	12002.0	12012.5
Mn 257.610	8983.66	9004.85	8993.40
Mo 202.032	1.1264	2.6768	2.0132
Na 330.237	9171.45	9017.18	9122.10
Ni 231.604	4.8275	6.5670	5.2075
Pb 220.353	8.0248	-4.9946u	9.4606
Sb 206.834	2.0060	-7.0130u	-9.6037u
Se 196.026	-8.5835u	-9.3077u	0.1290
Si 288.158	9814.58	9800.36	9820.11
Sn 189.925	3.9266	-6.1098u	-4.0687u
Sr 216.596	678.435	677.633	676.993
Ti 334.941	5.5029	5.6133	5.5697
Tl 190.794	-7.6491u	-10.7226u	4.8887
V 292.401	0.7819	1.1377	2.8782
Zn 206.200	19.3232	18.6486	17.8893

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0835	ppb	0.3228	386.7	-49.2155
Al 308.215	429.408	ppb	1.6404	0.4	969.832
As 188.980	14.9557	ppb	2.5786	17.2	4.7372
B 249.678	42.0493	ppb	0.1851	0.4	230.673
Ba 389.178	409.540	ppb	1.6065	0.4	2064.11
Be 313.042	0.0001	ppb	0.0165	11672.1	-419.044
Ca 370.602	52301	ppb	50.39	0.1	74373
Cd 226.502	0.5386	ppb	0.2693	50.0	34.7954
Co 228.615	9.1544	ppb	0.7059	7.7	21.7721
Cr 267.716	1.0176	ppb	0.4285	42.1	38.4318
Cu 324.754	12.5998	ppb	0.3082	2.4	806.309
Fe 271.441	21531.8	ppb	28.8511	0.1	11696.0
K 766.491	2061.36	ppb	4.1750	0.2	35276.0
Mg 279.078	12006.0	ppb	5.6215	0.0	14561.8
Mn 257.610	8993.97	ppb	10.6057	0.1	616575
Mo 202.032	1.9388	ppb	0.7779	40.1	5.1402
Na 330.237	9103.58	ppb	78.7867	0.9	254.196
Ni 231.604	5.5340	ppb	0.9145	16.5	2.6947
Pb 220.353	4.1636	ppb	7.9637	191.3	3.7082
Sb 206.834	-4.8702	ppb	6.0942	125.1	4.6341
Se 196.026	-5.9207	ppb	5.2517	88.7	4.0505
Si 288.158	9811.68	ppb	10.1863	0.1	42240.2

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.0840	ppb	5.3044	254.5	-1.4818
Sr 216.596	677.687	ppb	0.7229	0.1	1661.97
Ti 334.941	5.5620	ppb	0.0556	1.0	421.592
Tl 190.794	-4.4943	ppb	8.2700	184.0	-2.1375
V 292.401	1.5993	ppb	1.1218	70.1	2.2876
Zn 206.200	18.6203	ppb	0.7174	3.9	8.5662

680-166566-A-1-A (Samp) 4/8/2019, 7:18:47 PM Rack 2, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2491	0.7280	0.3235
Al 308.215	378.065	375.275	375.454
As 188.980	1.5230	-4.9338u	2.5131
B 249.678	11.7237	12.1609	11.0043
Ba 389.178	-0.1174u	-2.0523u	-0.1095u
Be 313.042	0.0007u	-0.0032u	0.0050
Ca 370.602	205.7	201.1	198.7
Cd 226.502	-0.5958u	0.2023	-0.2332u
Co 228.615	-0.2695u	-0.0396u	-1.7453u
Cr 267.716	3.6464	3.5609	4.0404
Cu 324.754	4.0843	3.1460	3.3764
Fe 271.441	45.1113	27.3704	41.2095
K 766.491	35.1426	34.6748	35.2231
Mg 279.078	6.3532	4.4453	13.7234
Mn 257.610	0.7503	0.5899	0.7086
Mo 202.032	0.8452	2.0287	1.1702
Na 330.237	22037.4	21916.9	22081.1
Ni 231.604	1.2864	3.9945	2.3299
Pb 220.353	3.3652	-6.6753u	4.0926
Sb 206.834	4.6052	1.4535	6.1730
Se 196.026	5.3645	-10.5592u	-2.4726u
Si 288.158	734.531	732.232	729.826
Sn 189.925	13.9470	-1.0542u	-7.8560u
Sr 216.596	1.3263	3.0350	2.4750
Ti 334.941	1.5473	1.8740	1.5909
Tl 190.794	-10.9138u	-3.2388u	-17.2518u
V 292.401	2.5859	2.2593	2.6600
Zn 206.200	2.6418	5.2242	3.7110

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4335	ppb	0.2577	59.4	-44.6916
Al 308.215	376.265	ppb	1.5614	0.4	879.460
As 188.980	-0.2992	ppb	4.0440	1351.5	1.1859
B 249.678	11.6296	ppb	0.5840	5.0	56.2028
Ba 389.178	-0.7597	ppb	1.1194	147.3	-34.9190
Be 313.042	0.0008	ppb	0.0041	480.5	-425.032
Ca 370.602	201.8	ppb	3.566	1.8	295.8
Cd 226.502	-0.2089	ppb	0.3996	191.3	0.0552
Co 228.615	-0.6848	ppb	0.9256	135.2	-10.6557
Cr 267.716	3.7492	ppb	0.2557	6.8	64.8410
Cu 324.754	3.5355	ppb	0.4890	13.8	566.634
Fe 271.441	37.8971	ppb	9.3228	24.6	66.3300
K 766.491	35.0135	ppb	0.2961	0.8	829.913

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	8.1740	ppb	4.8997	59.9	38.1492
Mn 257.610	0.6829	ppb	0.0832	12.2	69.2645
Mo 202.032	1.3480	ppb	0.6115	45.4	4.5269
Na 330.237	22011.8	ppb	85.0530	0.4	571.134
Ni 231.604	2.5370	ppb	1.3659	53.8	-0.2417
Pb 220.353	0.2608	ppb	6.0179	2307.3	1.7587
Sb 206.834	4.0772	ppb	2.4036	59.0	7.1354
Se 196.026	-2.5558	ppb	7.9622	311.5	3.9103
Si 288.158	732.196	ppb	2.3530	0.3	3685.33
Sn 189.925	1.6789	ppb	11.1555	664.4	-0.6352
Sr 216.596	2.2788	ppb	0.8711	38.2	8.9146
Ti 334.941	1.6707	ppb	0.1774	10.6	100.552
Tl 190.794	-10.4681	ppb	7.0171	67.0	-4.9653
V 292.401	2.5017	ppb	0.2132	8.5	8.5567
Zn 206.200	3.8590	ppb	1.2976	33.6	0.7230

680-166566-A-12-A (Samp)

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Rack 2, Tube 17

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5844	-0.5134u	-0.2271u
Al 308.215	31.4856	30.1688	27.9202
As 188.980	7.5470	-4.6724u	-0.3287u
B 249.678	0.8776	1.3578	2.0222
Ba 389.178	-4.3445u	-0.4845u	2.8944
Be 313.042	-0.0833u	-0.0418u	-0.0502u
Ca 370.602	751.6	751.9	750.0
Cd 226.502	-0.0530u	0.3201	0.4235
Co 228.615	1.2511	-1.5870u	-0.3836u
Cr 267.716	0.8435	1.0028	1.7659
Cu 324.754	2.6610	1.5103	1.9319
Fe 271.441	37.9566	35.5101	27.7621
K 766.491	49.6022	51.4009	48.6096
Mg 279.078	421.156	418.163	413.938
Mn 257.610	0.2837	0.3583	0.2698
Mo 202.032	4.3288	2.3869	1.3917
Na 330.237	89736.1	89608.7	90648.5
Ni 231.604	1.1859	-0.7874u	-0.9392u
Pb 220.353	-7.6137u	-5.0503u	5.9509
Sb 206.834	-3.2922u	-5.3742u	8.5429
Se 196.026	11.4580	-15.3170u	-7.5459u
Si 288.158	46.6476	45.6019	45.3571
Sn 189.925	7.5217	4.6269	2.3553
Sr 216.596	3.3175	1.9371	3.1676
Ti 334.941	0.3066	0.2385	0.0949
Tl 190.794	3.9193	-4.7446u	-7.0988u
V 292.401	10.5435	11.7136	11.1537
Zn 206.200	2.1159	1.7343	2.2721

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0521	ppb	0.5695	1094.0	-57.7394
Al 308.215	29.8582	ppb	1.8029	6.0	294.223
As 188.980	0.8486	ppb	6.1942	729.9	1.4241
B 249.678	1.4192	ppb	0.5748	40.5	9.2767

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-0.6449	ppb	3.6221	561.7	-34.0088
Be 313.042	-0.0584	ppb	0.0220	37.6	-473.634
Ca 370.602	751.2	ppb	1.022	0.1	1076
Cd 226.502	0.2302	ppb	0.2506	108.9	4.9491
Co 228.615	-0.2398	ppb	1.4245	593.9	-9.1895
Cr 267.716	1.2041	ppb	0.4931	40.9	28.2286
Cu 324.754	2.0344	ppb	0.5821	28.6	527.466
Fe 271.441	33.7429	ppb	5.3220	15.8	64.1058
K 766.491	49.8709	ppb	1.4149	2.8	1082.48
Mg 279.078	417.752	ppb	3.6266	0.9	536.856
Mn 257.610	0.3039	ppb	0.0476	15.6	44.4263
Mo 202.032	2.7025	ppb	1.4938	55.3	6.4071
Na 330.237	89997.8	ppb	567.144	0.6	2235.05
Ni 231.604	-0.1802	ppb	1.1855	657.8	-2.9107
Pb 220.353	-2.2377	ppb	7.2064	322.0	0.8363
Sb 206.834	-0.0412	ppb	7.5066	18223.5	5.8327
Se 196.026	-3.8016	ppb	13.7746	362.3	3.6828
Si 288.158	45.8689	ppb	0.6854	1.5	771.027
Sn 189.925	4.8346	ppb	2.5894	53.6	0.0798
Sr 216.596	2.8074	ppb	0.7574	27.0	10.2029
Ti 334.941	0.2133	ppb	0.1081	50.7	-9.8179
Tl 190.794	-2.6414	ppb	5.8023	219.7	-3.1426
V 292.401	11.1369	ppb	0.5852	5.3	79.1493
Zn 206.200	2.0408	ppb	0.2767	13.6	-0.2359

680-166566-A-5-A (Samp)

4/8/2019, 7:27:33 PM

Rack 2, Tube 18

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9001u	0.4252	0.3508
Al 308.215	414.945	411.829	406.901
As 188.980	2.6090	-4.6405u	12.9885
B 249.678	2.3414	2.5686	3.5020
Ba 389.178	-2.4496u	-2.0309u	-0.3638u
Be 313.042	-0.0566u	-0.0411u	-0.0510u
Ca 370.602	310.3	303.4	315.9
Cd 226.502	0.0289	-0.2172u	0.2264
Co 228.615	-0.4394u	-0.1707u	-1.6553u
Cr 267.716	1.5952	1.1160	1.4198
Cu 324.754	2.0707	1.8026	1.4209
Fe 271.441	36.9199	43.4686	52.1828
K 766.491	39.5543	38.9048	39.3126
Mg 279.078	27.1329	23.4213	29.2327
Mn 257.610	0.4162	0.3226	0.2007
Mo 202.032	2.6225	-0.3122u	1.3286
Na 330.237	21013.4	21624.9	21470.5
Ni 231.604	-1.1832u	0.5661	3.3028
Pb 220.353	0.0811	-5.8830u	-3.6786u
Sb 206.834	8.8889	0.3426	0.1299
Se 196.026	-5.6542u	-5.7106u	-0.7248u
Si 288.158	216.554	216.385	211.639
Sn 189.925	-0.5383u	-2.0231u	-5.4057u
Sr 216.596	1.9212	2.2037	3.7091
Ti 334.941	0.7557	0.7735	0.7125

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-5.1577u	1.2847	2.5565
V 292.401	1.4508	1.4645	0.9206
Zn 206.200	2.2867	3.5446	6.0282

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0414	ppb	0.7446	1799.1	-57.4616
Al 308.215	411.225	ppb	4.0562	1.0	938.516
As 188.980	3.6523	ppb	8.8607	242.6	2.1068
B 249.678	2.8040	ppb	0.6151	21.9	-0.4065
Ba 389.178	-1.6148	ppb	1.1035	68.3	-39.2536
Be 313.042	-0.0496	ppb	0.0079	15.9	-464.069
Ca 370.602	309.9	ppb	6.286	2.0	449.2
Cd 226.502	0.0127	ppb	0.2223	1751.6	2.5931
Co 228.615	-0.7552	ppb	0.7911	104.8	-10.9022
Cr 267.716	1.3770	ppb	0.2425	17.6	30.4195
Cu 324.754	1.7647	ppb	0.3266	18.5	520.484
Fe 271.441	44.1904	ppb	7.6570	17.3	69.7151
K 766.491	39.2572	ppb	0.3283	0.8	902.052
Mg 279.078	26.5956	ppb	2.9427	11.1	60.5740
Mn 257.610	0.3131	ppb	0.1081	34.5	43.9600
Mo 202.032	1.2130	ppb	1.4708	121.2	4.3397
Na 330.237	21369.6	ppb	317.994	1.5	555.437
Ni 231.604	0.8953	ppb	2.2610	252.6	-1.8540
Pb 220.353	-3.1601	ppb	3.0157	95.4	0.4945
Sb 206.834	3.1205	ppb	4.9968	160.1	6.8289
Se 196.026	-4.0299	ppb	2.8624	71.0	3.6410
Si 288.158	214.859	ppb	2.7899	1.3	1488.21
Sn 189.925	-2.6557	ppb	2.4946	93.9	-1.6092
Sr 216.596	2.6113	ppb	0.9611	36.8	9.7242
Ti 334.941	0.7472	ppb	0.0314	4.2	30.9042
Tl 190.794	-0.4388	ppb	4.1358	942.4	-2.6334
V 292.401	1.2786	ppb	0.3102	24.3	-1.4688
Zn 206.200	3.9532	ppb	1.9040	48.2	0.7740

680-166566-A-2-A (Samp)

4/8/2019, 7:31:56 PM

Rack 2, Tube 19

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2897u	1.2555	0.4388
Al 308.215	102.249	99.4632	98.5609
As 188.980	7.3799	-2.0259u	1.4497
B 249.678	7.0262	7.1335	7.3648
Ba 389.178	2.4285	-4.0678u	3.3191
Be 313.042	-0.0266u	-0.0448u	-0.0573u
Ca 370.602	511.7	518.0	516.4
Cd 226.502	-0.3596u	-0.7935u	0.2262
Co 228.615	-0.5473u	-1.9338u	-0.3848u
Cr 267.716	2.3645	1.7857	2.4033
Cu 324.754	2.4707	1.5506	1.7410
Fe 271.441	17.8446	8.0616	11.4947
K 766.491	89.6037	89.0153	90.9752
Mg 279.078	395.777	384.653	391.096
Mn 257.610	0.0153	0.2033	0.2618
Mo 202.032	0.6610	-0.5608u	0.4819

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	42349.9	42392.8	42670.3
Ni 231.604	0.2314	1.1687	-0.2783u
Pb 220.353	-6.7773u	-7.5778u	4.7498
Sb 206.834	3.2442	-8.4369u	-1.6015u
Se 196.026	-18.3843u	-1.1289u	-6.4583u
Si 288.158	68.7860	62.8947	67.2751
Sn 189.925	9.8254	10.3280	0.1960
Sr 216.596	2.1418	3.6940	2.7034
Ti 334.941	0.2335	0.3163	0.5528
Tl 190.794	0.5589	-11.5245u	-7.3271u
V 292.401	4.7441	3.4874	3.5692
Zn 206.200	-1.7968u	0.1317	3.8873

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4682	ppb	0.7730	165.1	-43.7583
Al 308.215	100.091	ppb	1.9223	1.9	412.731
As 188.980	2.2679	ppb	4.7560	209.7	1.7908
B 249.678	7.1749	ppb	0.1730	2.4	27.6537
Ba 389.178	0.5599	ppb	4.0324	720.2	-27.9110
Be 313.042	-0.0429	ppb	0.0154	36.0	-459.607
Ca 370.602	515.3	ppb	3.254	0.6	741.1
Cd 226.502	-0.3090	ppb	0.5118	165.6	-1.1616
Co 228.615	-0.9553	ppb	0.8513	89.1	-11.5575
Cr 267.716	2.1845	ppb	0.3459	15.8	42.2321
Cu 324.754	1.9208	ppb	0.4856	25.3	524.503
Fe 271.441	12.4670	ppb	4.9634	39.8	52.5529
K 766.491	89.8647	ppb	1.0057	1.1	1762.34
Mg 279.078	390.509	ppb	5.5853	1.4	503.678
Mn 257.610	0.1601	ppb	0.1288	80.4	34.5520
Mo 202.032	0.1940	ppb	0.6598	340.0	2.9242
Na 330.237	42471.0	ppb	173.929	0.4	1071.90
Ni 231.604	0.3739	ppb	0.7339	196.3	-2.3660
Pb 220.353	-3.2018	ppb	6.8979	215.4	0.4806
Sb 206.834	-2.2648	ppb	5.8687	259.1	5.1342
Se 196.026	-8.6572	ppb	8.8354	102.1	2.7958
Si 288.158	66.3186	ppb	3.0599	4.6	857.880
Sn 189.925	6.7831	ppb	5.7101	84.2	0.5134
Sr 216.596	2.8464	ppb	0.7859	27.6	10.3240
Ti 334.941	0.3675	ppb	0.1657	45.1	2.6669
Tl 190.794	-6.0976	ppb	6.1348	100.6	-3.9478
V 292.401	3.9336	ppb	0.7032	17.9	20.3506
Zn 206.200	0.7408	ppb	2.8906	390.2	-0.9230

680-166566-A-6-A (Samp)

4/8/2019, 7:36:20 PM

Rack 2, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9569	0.4861	-0.0949u
Al 308.215	411.490	402.724	401.610
As 188.980	0.1740	5.4005	-3.7404u
B 249.678	2.7438	2.5216	4.4206
Ba 389.178	0.4190	-0.4790u	0.4120
Be 313.042	-0.0162u	-0.0369u	-0.0347u
Ca 370.602	62.54	45.09	56.50

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.1575	0.0625	0.1439
Co 228.615	-0.7134u	-0.1371u	-0.5582u
Cr 267.716	2.1753	2.5492	2.0759
Cu 324.754	1.8762	1.4596	2.2968
Fe 271.441	3.5437	6.7725	-0.0118u
K 766.491	34.2333	33.1925	33.5850
Mg 279.078	11.6958	10.5734	11.5095
Mn 257.610	-0.0255u	0.1298	0.2592
Mo 202.032	0.0705	1.0543	-0.5626u
Na 330.237	53114.7	52795.8	53415.0
Ni 231.604	2.7378	-1.3699u	1.3918
Pb 220.353	-6.0962u	5.5823	-1.3409u
Sb 206.834	7.5540	-0.4053u	-0.0969u
Se 196.026	-7.4578u	9.8399	-7.9473u
Si 288.158	163.457	158.963	159.844
Sn 189.925	-0.6318u	11.6553	-2.7964u
Sr 216.596	2.1371	-0.1245u	1.7906
Ti 334.941	0.0935	0.1395	0.2005
Tl 190.794	-2.5652u	-3.7760u	-5.2294u
V 292.401	3.5791	4.2398	3.4986
Zn 206.200	0.7489	2.4891	2.3040

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4493	ppb	0.5269	117.3	-44.2516
Al 308.215	405.275	ppb	5.4116	1.3	928.498
As 188.980	0.6114	ppb	4.5861	750.2	1.3715
B 249.678	3.2287	ppb	1.0382	32.2	2.3549
Ba 389.178	0.1173	ppb	0.5165	440.1	-30.4645
Be 313.042	-0.0293	ppb	0.0114	38.9	-449.595
Ca 370.602	54.71	ppb	8.862	16.2	86.90
Cd 226.502	0.1213	ppb	0.0514	42.4	3.7387
Co 228.615	-0.4696	ppb	0.2982	63.5	-9.9383
Cr 267.716	2.2668	ppb	0.2496	11.0	43.4785
Cu 324.754	1.8775	ppb	0.4186	22.3	523.378
Fe 271.441	3.4348	ppb	3.3934	98.8	47.6764
K 766.491	33.6703	ppb	0.5256	1.6	807.079
Mg 279.078	11.2596	ppb	0.6015	5.3	41.9055
Mn 257.610	0.1212	ppb	0.1426	117.7	30.6747
Mo 202.032	0.1874	ppb	0.8148	434.8	2.9151
Na 330.237	53108.5	ppb	309.629	0.6	1332.23
Ni 231.604	0.9199	ppb	2.0941	227.6	-1.8298
Pb 220.353	-0.6183	ppb	5.8726	949.8	1.4340
Sb 206.834	2.3506	ppb	4.5089	191.8	6.5868
Se 196.026	-1.8551	ppb	10.1311	546.1	4.0384
Si 288.158	160.755	ppb	2.3810	1.5	1258.51
Sn 189.925	2.7424	ppb	7.7943	284.2	-0.3935
Sr 216.596	1.2677	ppb	1.2181	96.1	6.4601
Ti 334.941	0.1445	ppb	0.0537	37.2	-15.2318
Tl 190.794	-3.8569	ppb	1.3339	34.6	-3.4264
V 292.401	3.7725	ppb	0.4067	10.8	18.9952
Zn 206.200	1.8474	ppb	0.9558	51.7	-0.3384

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 7:40:45 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	502.808	502.377	499.883
Al 308.215	10263.2	10271.1	10267.0
As 188.980	541.561	542.685	537.009
B 249.678	526.570	527.454	532.819
Ba 389.178	487.254	488.491	490.999
Be 313.042	536.720	536.674	537.350
Ca 370.602	10131	10121	10133
Cd 226.502	513.090	510.280	515.703
Co 228.615	516.067	516.027	517.744
Cr 267.716	502.606	504.714	504.929
Cu 324.754	515.990	517.594	515.818
Fe 271.441	10239.0	10243.7	10263.5
K 766.491	9996.91	9943.43	9973.89
Mg 279.078	10332.2	10370.3	10357.2
Mn 257.610	508.972	508.591	509.137
Mo 202.032	508.727	507.720	509.351
Na 330.237	10798.1	11321.9	10275.5
Ni 231.604	516.129	517.643	509.810
Pb 220.353	507.689	496.424	489.310
Sb 206.834	505.033	539.759	503.817
Se 196.026	549.105	535.833	556.632
Si 288.158	5051.38	5038.78	5031.96
Sn 189.925	501.365	510.815	507.499
Sr 216.596	505.372	501.338	506.191
Ti 334.941	505.139	505.754	506.205
Tl 190.794	513.225	491.653	516.324
V 292.401	512.215	510.873	512.870
Zn 206.200	1060.84	1059.85	1060.79

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	501.690	ppb	1.5789	0.3	13428.6	100.33792
Al 308.215	10267.1	ppb	3.9601	0.0	17611.5	102.67120
As 188.980	540.418	ppb	3.0057	0.6	131.121	108.08360
B 249.678	528.948	ppb	3.3818	0.6	3364.58	105.78957
Ba 389.178	488.915	ppb	1.9079	0.4	2465.64	97.78292
Be 313.042	536.915	ppb	0.3779	0.1	414811	107.38292
Ca 370.602	10128	ppb	6.119	0.1	14397	101.28454
Cd 226.502	513.024	ppb	2.7121	0.5	5887.83	102.60481
Co 228.615	516.613	ppb	0.9801	0.2	1714.96	103.32255
Cr 267.716	504.083	ppb	1.2840	0.3	7325.43	100.81657
Cu 324.754	516.468	ppb	0.9794	0.2	13946.0	103.29350
Fe 271.441	10248.8	ppb	12.9948	0.1	5616.81	102.43647
K 766.491	9971.41	ppb	26.8238	0.3	169740	99.71411
Mg 279.078	10353.2	ppb	19.3499	0.2	12626.4	103.53211
Mn 257.610	508.900	ppb	0.2799	0.1	34950.1	101.77995
Mo 202.032	508.599	ppb	0.8227	0.2	708.889	101.71983
Na 330.237	10798.5	ppb	523.216	4.8	281.173	107.98517
Ni 231.604	514.527	ppb	4.1547	0.8	502.260	102.90546
Pb 220.353	497.808	ppb	9.2672	1.9	185.341	99.56156
Sb 206.834	516.203	ppb	20.4091	4.0	169.698	103.24059
Se 196.026	547.190	ppb	10.5308	1.9	104.345	109.43794
Si 288.158	5040.70	ppb	9.8511	0.2	22103.8	100.81409

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	506.560	ppb	4.7944	0.9	112.803	101.31194
Sr 216.596	504.300	ppb	2.5980	0.5	1230.21	100.86003
Ti 334.941	505.699	ppb	0.5350	0.1	38164.8	101.13982
Tl 190.794	507.068	ppb	13.4391	2.7	115.502	101.41351
V 292.401	511.986	ppb	1.0177	0.2	4149.33	102.39720
Zn 206.200	1060.49	ppb	0.5594	0.1	558.569	106.04907

Cont Calib Blank (CCB) 4/8/2019, 7:45:09 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5224	0.3192	1.0924
Al 308.215	0.7679	-0.3368u	-2.4006u
As 188.980	0.9090	-4.4920u	6.2536
B 249.678	15.6091	12.5299	10.8638
Ba 389.178	-5.0285u	-0.4254u	-0.9301u
Be 313.042	0.0139	-0.0307u	-0.0150u
Ca 370.602	2.645	8.238	4.385
Cd 226.502	0.3813	-0.0445u	-0.2700u
Co 228.615	0.2602	0.0108	-1.3752u
Cr 267.716	0.5563	0.3585	0.4239
Cu 324.754	1.4461	1.3612	0.9732
Fe 271.441	6.1723	7.7196	-1.2751u
K 766.491	-1.7516u	-0.2453u	-0.5888u
Mg 279.078	5.0586	5.0295	1.6116
Mn 257.610	0.0429	-0.0217u	0.0347
Mo 202.032	0.5504	0.5497	-0.9864u
Na 330.237	-260.647u	182.775	-64.7441u
Ni 231.604	1.1346	1.9637	-1.4117u
Pb 220.353	-0.3560u	5.1190	1.5045
Sb 206.834	5.1824	-7.1869u	-9.6151u
Se 196.026	-5.8128u	-5.6890u	3.0600
Si 288.158	13.8401	11.7681	10.7779
Sn 189.925	12.3866	-9.9933u	7.8480
Sr 216.596	0.7294	0.9593	1.1641
Ti 334.941	0.0975	0.1241	0.1850
Tl 190.794	-3.4562u	1.5648	0.0256
V 292.401	0.5796	0.6965	-0.1906u
Zn 206.200	2.4459	1.2153	0.3092

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.6447	ppb	0.4009	62.2	-39.0066	0.64466
Al 308.215	-0.6565	ppb	1.6082	245.0	242.391	-0.65651
As 188.980	0.8902	ppb	5.3728	603.6	1.4220	0.89020
B 249.678	13.0009	ppb	2.4075	18.5	65.0287	13.00092
Ba 389.178	-2.1280	ppb	2.5245	118.6	-41.8863	-2.12800
Be 313.042	-0.0106	ppb	0.0226	213.6	-432.977	-0.01059
Ca 370.602	5.089	ppb	2.862	56.2	16.40	5.08948
Cd 226.502	0.0223	ppb	0.3307	1484.9	2.6847	0.02227
Co 228.615	-0.3681	ppb	0.8811	239.4	-9.6015	-0.36805
Cr 267.716	0.4462	ppb	0.1008	22.6	16.8080	0.44623
Cu 324.754	1.2602	ppb	0.2521	20.0	507.304	1.26019
Fe 271.441	4.2056	ppb	4.8091	114.3	48.1006	4.20561
K 766.491	-0.8619	ppb	0.7894	91.6	220.063	-0.86192

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	3.8999	ppb	1.9818	50.8	33.0169	3.89990
Mn 257.610	0.0186	ppb	0.0352	188.6	23.7143	0.01863
Mo 202.032	0.0379	ppb	0.8871	2340.3	2.7079	0.03791
Na 330.237	-47.5389	ppb	222.211	467.4	31.3165	-47.53894
Ni 231.604	0.5622	ppb	1.7590	312.9	-2.1816	0.56221
Pb 220.353	2.0892	ppb	2.7839	133.3	2.4354	2.08920
Sb 206.834	-3.8732	ppb	7.9358	204.9	4.6235	-3.87319
Se 196.026	-2.8139	ppb	5.0874	180.8	3.8632	-2.81394
Si 288.158	12.1287	ppb	1.5626	12.9	627.192	12.12868
Sn 189.925	3.4138	ppb	11.8305	346.6	-0.2473	3.41375
Sr 216.596	0.9509	ppb	0.2174	22.9	5.6817	0.95093
Ti 334.941	0.1355	ppb	0.0449	33.1	-14.9139	0.13551
Tl 190.794	-0.6219	ppb	2.5724	413.6	-2.6750	-0.62192
V 292.401	0.3618	ppb	0.4820	133.2	-8.8217	0.36182
Zn 206.200	1.3235	ppb	1.0725	81.0	-0.6142	1.32348

680-166566-A-3-A (Samp)

4/8/2019, 7:49:32 PM

Rack 2, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3631	1.2250	-0.1207u
Al 308.215	1228.19	1239.79	1225.94
As 188.980	6.8820	2.5484	0.5884
B 249.678	5.8281	5.8705	5.6851
Ba 389.178	2.1935	2.9811	-1.4274u
Be 313.042	-0.0311u	-0.0028u	-0.0052u
Ca 370.602	109.2	98.68	102.8
Cd 226.502	-0.3077u	-0.2867u	-0.1947u
Co 228.615	-0.4276u	-1.0252u	-0.9989u
Cr 267.716	10.1108	9.9338	9.9666
Cu 324.754	2.4794	3.2703	3.2632
Fe 271.441	44.1873	43.0699	46.9125
K 766.491	28.7109	29.4701	29.5060
Mg 279.078	53.0262	54.9872	49.1658
Mn 257.610	0.2790	0.0341	0.2587
Mo 202.032	4.3681	1.9822	1.8694
Na 330.237	59147.4	59382.2	59625.1
Ni 231.604	-2.2468u	2.7939	7.2307
Pb 220.353	3.7297	4.5487	8.9506
Sb 206.834	-3.0479u	-6.6148u	-9.7936u
Se 196.026	-10.9213u	-2.4512u	14.5059
Si 288.158	181.818	183.043	177.550
Sn 189.925	-3.7932u	2.1237	4.1658
Sr 216.596	3.2028	1.6623	3.7512
Ti 334.941	1.1045	0.9920	1.1997
Tl 190.794	-9.1258u	1.9475	-10.1792u
V 292.401	12.6496	13.2329	12.7810
Zn 206.200	3.6999	1.6445	2.5356

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4891	ppb	0.6816	139.4	-43.1836
Al 308.215	1231.31	ppb	7.4337	0.6	2324.75
As 188.980	3.3396	ppb	3.2205	96.4	2.0538
B 249.678	5.7946	ppb	0.0971	1.7	18.7689

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	1.2491	ppb	2.3511	188.2	-24.6588
Be 313.042	-0.0130	ppb	0.0157	120.5	-437.231
Ca 370.602	103.6	ppb	5.320	5.1	156.3
Cd 226.502	-0.2630	ppb	0.0601	22.8	-0.5848
Co 228.615	-0.8172	ppb	0.3377	41.3	-11.1097
Cr 267.716	10.0037	ppb	0.0942	0.9	155.762
Cu 324.754	3.0043	ppb	0.4546	15.1	552.756
Fe 271.441	44.7232	ppb	1.9766	4.4	70.0362
K 766.491	29.2290	ppb	0.4490	1.5	731.582
Mg 279.078	52.3931	ppb	2.9619	5.7	91.8396
Mn 257.610	0.1906	ppb	0.1359	71.3	35.6049
Mo 202.032	2.7399	ppb	1.4112	51.5	6.4587
Na 330.237	59384.9	ppb	238.851	0.4	1485.81
Ni 231.604	2.5926	ppb	4.7419	182.9	-0.1865
Pb 220.353	5.7430	ppb	2.8079	48.9	3.7815
Sb 206.834	-6.4854	ppb	3.3747	52.0	3.8202
Se 196.026	0.3778	ppb	12.9475	3427.2	4.4461
Si 288.158	180.804	ppb	2.8837	1.6	1343.94
Sn 189.925	0.8321	ppb	4.1337	496.8	-0.8222
Sr 216.596	2.8721	ppb	1.0830	37.7	10.3495
Ti 334.941	1.0987	ppb	0.1040	9.5	56.7875
Tl 190.794	-5.7858	ppb	6.7179	116.1	-3.8743
V 292.401	12.8878	ppb	0.3060	2.4	93.3954
Zn 206.200	2.6267	ppb	1.0307	39.2	0.0691

680-166566-A-17-A (Samp)

4/8/2019, 7:53:56 PM

Rack 2, Tube 22

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6806	-0.1521u	0.5926
Al 308.215	207.668	207.798	207.974
As 188.980	3.1741	-3.6298u	2.5335
B 249.678	3.7750	1.2212	1.0868
Ba 389.178	-6.0575u	-3.1970u	-4.0679u
Be 313.042	-0.0436u	-0.0667u	-0.0582u
Ca 370.602	174.1	166.5	159.8
Cd 226.502	0.8696	-0.5656u	0.1026
Co 228.615	0.6719	-0.8550u	0.6034
Cr 267.716	1.9452	1.7648	1.6006
Cu 324.754	1.8047	1.9741	2.7639
Fe 271.441	25.7976	25.3712	30.6716
K 766.491	72.9316	72.7700	71.8642
Mg 279.078	27.0586	24.6784	17.7697
Mn 257.610	0.2997	0.2115	0.1795
Mo 202.032	0.2099	0.5051	2.5780
Na 330.237	69412.4	68619.0	68051.5
Ni 231.604	1.2247	0.2590	1.1100
Pb 220.353	-4.5509u	-1.4212u	-2.4807u
Sb 206.834	5.3526	-0.2591u	-0.4317u
Se 196.026	7.9509	3.0971	-11.9753u
Si 288.158	81.7154	83.8240	85.4648
Sn 189.925	-4.3198u	1.4361	-1.9390u
Sr 216.596	0.1709	1.1085	2.7563
Ti 334.941	0.4683	0.4890	0.4703

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	0.5733	-1.2495u	-12.9526u
V 292.401	4.8222	4.6252	4.1057
Zn 206.200	-0.7055u	-0.5628u	0.0381

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3737	ppb	0.4575	122.4	-46.2956
Al 308.215	207.814	ppb	0.1537	0.1	594.812
As 188.980	0.6926	ppb	3.7570	542.4	1.4006
B 249.678	2.0276	ppb	1.5147	74.7	-5.3663
Ba 389.178	-4.4408	ppb	1.4662	33.0	-53.6288
Be 313.042	-0.0562	ppb	0.0117	20.8	-471.102
Ca 370.602	166.8	ppb	7.162	4.3	246.0
Cd 226.502	0.1355	ppb	0.7182	530.0	3.8930
Co 228.615	0.1401	ppb	0.8625	615.7	-7.9085
Cr 267.716	1.7702	ppb	0.1724	9.7	36.3483
Cu 324.754	2.1809	ppb	0.5119	23.5	531.299
Fe 271.441	27.2801	ppb	2.9448	10.8	60.6178
K 766.491	72.5219	ppb	0.5753	0.8	1467.52
Mg 279.078	23.1689	ppb	4.8249	20.8	56.4380
Mn 257.610	0.2302	ppb	0.0623	27.1	38.1828
Mo 202.032	1.0977	ppb	1.2905	117.6	4.1792
Na 330.237	68694.3	ppb	683.562	1.0	1713.67
Ni 231.604	0.8646	ppb	0.5276	61.0	-1.8849
Pb 220.353	-2.8176	ppb	1.5919	56.5	0.6217
Sb 206.834	1.5540	ppb	3.2909	211.8	6.3361
Se 196.026	-0.3091	ppb	10.3906	3361.6	4.3207
Si 288.158	83.6681	ppb	1.8795	2.2	931.033
Sn 189.925	-1.6075	ppb	2.8922	179.9	-1.3695
Sr 216.596	1.3452	ppb	1.3089	97.3	6.6426
Ti 334.941	0.4758	ppb	0.0114	2.4	9.5092
Tl 190.794	-4.5429	ppb	7.3398	161.6	-3.5860
V 292.401	4.5177	ppb	0.3702	8.2	25.0146
Zn 206.200	-0.4101	ppb	0.3946	96.2	-1.5308

680-166566-A-11-A (Samp)

4/8/2019, 7:58:20 PM

Rack 2, Tube 23

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0691	-0.4242u	0.0137
Al 308.215	150.430	159.632	154.567
As 188.980	-1.5745u	-3.1568u	-5.6735u
B 249.678	1.2129	0.2384	2.0146
Ba 389.178	1.6737	0.2056	-4.6075u
Be 313.042	-0.0482u	-0.0578u	-0.0423u
Ca 370.602	151.5	148.7	137.3
Cd 226.502	-0.0256u	-0.1921u	0.2117
Co 228.615	-0.4271u	-1.3321u	-0.8115u
Cr 267.716	1.5943	1.8910	1.6365
Cu 324.754	2.8435	0.9685	1.7312
Fe 271.441	39.6639	31.2255	13.4367
K 766.491	67.7632	68.6595	68.8505
Mg 279.078	25.2054	26.5064	19.5883
Mn 257.610	0.1285	0.2372	0.1958
Mo 202.032	0.1531	-0.7773u	1.1538

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	72262.0	70589.1	71283.2
Ni 231.604	3.0410	-0.8827u	4.5583
Pb 220.353	-1.9973u	8.9496	2.8485
Sb 206.834	-15.6142u	3.0410	-1.3927u
Se 196.026	-5.8969u	-13.0478u	1.0001
Si 288.158	72.4969	73.7579	73.9356
Sn 189.925	-3.1138u	12.4204	6.9909
Sr 216.596	2.3143	0.8561	2.0152
Ti 334.941	0.2126	0.2938	0.2028
Tl 190.794	11.0144	-3.2504u	-5.2230u
V 292.401	5.2368	5.7281	5.6036
Zn 206.200	3.0294	-0.0748u	2.0584

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1138	ppb	0.2702	237.4	-59.3989
Al 308.215	154.877	ppb	4.6088	3.0	505.362
As 188.980	-3.4683	ppb	2.0672	59.6	0.3534
B 249.678	1.1553	ppb	0.8895	77.0	-10.9683
Ba 389.178	-0.9094	ppb	3.2857	361.3	-35.6702
Be 313.042	-0.0494	ppb	0.0078	15.8	-465.937
Ca 370.602	145.9	ppb	7.552	5.2	216.3
Cd 226.502	-0.0020	ppb	0.2030	10193.4	2.3216
Co 228.615	-0.8569	ppb	0.4542	53.0	-11.2316
Cr 267.716	1.7073	ppb	0.1606	9.4	35.4474
Cu 324.754	1.8477	ppb	0.9429	51.0	522.599
Fe 271.441	28.1087	ppb	13.3885	47.6	61.0216
K 766.491	68.4244	ppb	0.5805	0.8	1397.87
Mg 279.078	23.7667	ppb	3.6766	15.5	57.1754
Mn 257.610	0.1872	ppb	0.0549	29.3	35.2284
Mo 202.032	0.1765	ppb	0.9657	547.1	2.8995
Na 330.237	71378.1	ppb	840.485	1.2	1779.35
Ni 231.604	2.2388	ppb	2.8078	125.4	-0.5342
Pb 220.353	3.2669	ppb	5.4854	167.9	2.8702
Sb 206.834	-4.6553	ppb	9.7461	209.4	4.3800
Se 196.026	-5.9815	ppb	7.0243	117.4	3.2846
Si 288.158	73.3968	ppb	0.7844	1.1	887.008
Sn 189.925	5.4325	ppb	7.8835	145.1	0.2125
Sr 216.596	1.7285	ppb	0.7702	44.6	7.5786
Ti 334.941	0.2364	ppb	0.0500	21.1	-8.6146
Tl 190.794	0.8470	ppb	8.8603	1046.1	-2.3325
V 292.401	5.5228	ppb	0.2554	4.6	33.2877
Zn 206.200	1.6710	ppb	1.5879	95.0	-0.4314

MB 680-565367/1-A (Samp)

4/8/2019, 8:02:44 PM

Rack 2, Tube 24

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6898u	0.1043	0.5500
Al 308.215	19.7858	19.2636	24.5065
As 188.980	2.8872	0.5390	5.0311
B 249.678	0.1304	1.7066	0.3791
Ba 389.178	-5.4549u	-3.9864u	-6.4172u
Be 313.042	-0.0606u	-0.0505u	-0.0697u
Ca 370.602	68.28	64.80	64.48

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.4815	0.1302	0.2638
Co 228.615	0.3621	-1.4754u	0.3298
Cr 267.716	0.5640	1.1635	0.9394
Cu 324.754	2.0431	2.2568	1.2099
Fe 271.441	103.199	111.737	111.788
K 766.491	34.1718	36.1679	33.2723
Mg 279.078	-3.2232u	2.5636	-10.3358u
Mn 257.610	0.5711	0.4664	0.5002
Mo 202.032	1.4775	0.8066	0.5625
Na 330.237	371.297	144.348	263.869
Ni 231.604	4.7594	2.1955	3.0804
Pb 220.353	-1.0568u	6.0127	-2.3388u
Sb 206.834	-0.5474u	4.0729	7.3534
Se 196.026	5.9559	-1.6211u	2.5679
Si 288.158	18.0712	16.5662	17.6037
Sn 189.925	17.7168	14.9589	19.0779
Sr 216.596	1.2376	-0.8995u	-0.7887u
Ti 334.941	0.4955	0.7992	0.6046
Tl 190.794	-0.4164u	-0.3641u	-12.3887u
V 292.401	0.4266	0.9183	-0.6500u
Zn 206.200	0.7850	1.5005	-1.7648u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0118	ppb	0.6280	5321.4	-56.6685
Al 308.215	21.1853	ppb	2.8881	13.6	279.307
As 188.980	2.8191	ppb	2.2468	79.7	1.9275
B 249.678	0.7387	ppb	0.8474	114.7	-13.7230
Ba 389.178	-5.2862	ppb	1.2242	23.2	-57.9368
Be 313.042	-0.0603	ppb	0.0096	15.9	-471.428
Ca 370.602	65.85	ppb	2.109	3.2	102.6
Cd 226.502	0.2918	ppb	0.1773	60.8	5.8949
Co 228.615	-0.2612	ppb	1.0517	402.7	-9.2499
Cr 267.716	0.8890	ppb	0.3029	34.1	23.2404
Cu 324.754	1.8366	ppb	0.5532	30.1	522.356
Fe 271.441	108.908	ppb	4.9444	4.5	104.743
K 766.491	34.5373	ppb	1.4820	4.3	821.819
Mg 279.078	-3.6652	ppb	6.4610	176.3	23.7984
Mn 257.610	0.5126	ppb	0.0534	10.4	57.6111
Mo 202.032	0.9489	ppb	0.4738	49.9	3.9722
Na 330.237	259.838	ppb	113.528	43.7	38.8321
Ni 231.604	3.3451	ppb	1.3023	38.9	0.5520
Pb 220.353	0.8724	ppb	4.4976	515.6	1.9860
Sb 206.834	3.6263	ppb	3.9693	109.5	6.9878
Se 196.026	2.3009	ppb	3.7956	165.0	4.7972
Si 288.158	17.4137	ppb	0.7703	4.4	650.719
Sn 189.925	17.2512	ppb	2.0986	12.2	2.8618
Sr 216.596	-0.1502	ppb	1.2031	801.0	2.9897
Ti 334.941	0.6331	ppb	0.1539	24.3	22.6224
Tl 190.794	-4.3897	ppb	6.9274	157.8	-3.5536
V 292.401	0.2316	ppb	0.8021	346.3	-9.9075
Zn 206.200	0.1736	ppb	1.7164	989.0	-1.2214

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

LCS 680-565367/2-A (Samp) 4/8/2019, 8:07:08 PM Rack 2, Tube 25

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	48.8161	49.1226	48.5168
Al 308.215	4723.37	4718.67	4719.62
As 188.980	100.903	98.4781	106.410
B 249.678	190.225	188.811	191.560
Ba 389.178	88.4481	88.4857	90.9494
Be 313.042	49.6783	49.5787	49.6586
Ca 370.602	4625	4635	4643
Cd 226.502	48.4013	47.9735	48.0452
Co 228.615	47.4749	47.4447	48.8895
Cr 267.716	92.8499	92.7041	94.0991
Cu 324.754	97.2189	97.2758	95.2668
Fe 271.441	4744.75	4728.50	4730.82
K 766.491	7617.38	7586.20	7602.63
Mg 279.078	4713.30	4705.20	4713.66
Mn 257.610	467.351	466.796	468.236
Mo 202.032	94.4628	94.3477	93.5882
Na 330.237	5304.12	4854.74	5021.72
Ni 231.604	92.7257	96.8500	96.9638
Pb 220.353	465.063	463.943	465.096
Sb 206.834	55.0564	40.0870	54.5863
Se 196.026	102.929	103.447	101.466
Si 288.158	17.4023	15.8603	13.9589
Sn 189.925	99.6553	99.7307	105.763
Sr 216.596	94.7868	94.7297	91.9672
Ti 334.941	371.437	371.223	370.933
Tl 190.794	19.8221	17.3347	34.7663
V 292.401	91.4986	92.5894	91.6064
Zn 206.200	99.2436	100.052	98.2462

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.8185	ppb	0.3029	0.6	1255.53
Al 308.215	4720.55	ppb	2.4852	0.1	8224.46
As 188.980	101.931	ppb	4.0647	4.0	26.0421
B 249.678	190.199	ppb	1.3748	0.7	1197.09
Ba 389.178	89.2944	ppb	1.4334	1.6	427.569
Be 313.042	49.6385	ppb	0.0528	0.1	37962.6
Ca 370.602	4634	ppb	8.928	0.2	6597
Cd 226.502	48.1400	ppb	0.2291	0.5	559.338
Co 228.615	47.9364	ppb	0.8256	1.7	153.151
Cr 267.716	93.2177	ppb	0.7668	0.8	1363.96
Cu 324.754	96.5872	ppb	1.1438	1.2	2994.27
Fe 271.441	4734.69	ppb	8.7920	0.2	2610.15
K 766.491	7602.07	ppb	15.5949	0.2	129463
Mg 279.078	4710.72	ppb	4.7822	0.1	5758.22
Mn 257.610	467.461	ppb	0.7263	0.2	32087.3
Mo 202.032	94.1329	ppb	0.4752	0.5	133.340
Na 330.237	5060.19	ppb	227.148	4.5	152.133
Ni 231.604	95.5132	ppb	2.4147	2.5	91.0472
Pb 220.353	464.701	ppb	0.6563	0.1	173.297
Sb 206.834	49.9099	ppb	8.5101	17.1	21.8286
Se 196.026	102.614	ppb	1.0276	1.0	23.1495
Si 288.158	15.7405	ppb	1.7248	11.0	677.216

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	101.716	ppb	3.5047	3.4	21.8403
Sr 216.596	93.8279	ppb	1.6117	1.7	231.904
Ti 334.941	371.198	ppb	0.2529	0.1	28000.9
Tl 190.794	23.9743	ppb	9.4285	39.3	3.0656
V 292.401	91.8981	ppb	0.6011	0.7	735.944
Zn 206.200	99.1807	ppb	0.9047	0.9	51.0323

680-167031-B-2-A (Samp) 4/8/2019, 8:11:32 PM Rack 2, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3504u	0.3922u	0.8570
Al 308.215	160323	160475	160479
As 188.980	28.6938	8.3709	12.5341
B 249.678	22.0508	19.1077	19.7690
Ba 389.178	1348.91	1352.11	1351.55
Be 313.042	1.5504	1.5764	1.5492
Ca 370.602	136583	136990	136847
Cd 226.502	0.9128	1.4906	1.0678
Co 228.615	14.8495	16.1399	15.6495
Cr 267.716	159.092	160.056	159.832
Cu 324.754	92.8489	92.9192	92.1862
Fe 271.441	115238	115523	115367
K 766.491	20993.3	21040.3	21075.9
Mg 279.078	22724.2	22701.7	22689.7
Mn 257.610	921.770	925.760	923.391
Mo 202.032	3.5389	7.1329	1.9408
Na 330.237	5847.96	5625.35	5911.74
Ni 231.604	56.6295	57.9412	62.8233
Pb 220.353	149.036	129.017	136.391
Sb 206.834	0.5692	-17.1605u	1.4658
Se 196.026	-2.4230u	-2.1531u	-17.1098u
Si 288.158	6397.94	6416.30	6408.13
Sn 189.925	25.6576	16.8416	-0.8622u
Sr 216.596	126.352	124.188	124.984
Ti 334.941	4805.82	4815.51	4812.27
Tl 190.794	-8.6491u	-7.0180u	-11.4990u
V 292.401	453.806	456.681	456.244
Zn 206.200	213.374	213.902	215.922

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2996	ppb	0.6090	203.3	-69.9296
Al 308.215	160426	ppb	88.5977	0.1	271381
As 188.980	16.5329	ppb	10.7353	64.9	4.7727
B 249.678	20.3091	ppb	1.5441	7.6	0.9656
Ba 389.178	1350.85	ppb	1.7054	0.1	6873.30
Be 313.042	1.5586	ppb	0.0154	1.0	814.887
Ca 370.602	136807	ppb	206.3	0.2	194238
Cd 226.502	1.1571	ppb	0.2991	25.8	160.516
Co 228.615	15.5463	ppb	0.6514	4.2	71.4290
Cr 267.716	159.660	ppb	0.5043	0.3	2339.06
Cu 324.754	92.6514	ppb	0.4045	0.4	2905.62
Fe 271.441	115376	ppb	142.720	0.1	62472.6
K 766.491	21036.5	ppb	41.4419	0.2	357836

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	22705.2	ppb	17.5255	0.1	27634.5
Mn 257.610	923.640	ppb	2.0065	0.2	63533.2
Mo 202.032	4.2042	ppb	2.6592	63.3	7.3170
Na 330.237	5795.02	ppb	150.356	2.6	129.168
Ni 231.604	59.1313	ppb	3.2639	5.5	55.3518
Pb 220.353	138.148	ppb	10.1245	7.3	52.0734
Sb 206.834	-5.0418	ppb	10.5046	208.3	6.3026
Se 196.026	-7.2286	ppb	8.5584	118.4	2.7856
Si 288.158	6407.46	ppb	9.1962	0.1	27988.0
Sn 189.925	13.8790	ppb	13.5058	97.3	2.1045
Sr 216.596	125.175	ppb	1.0942	0.9	320.300
Ti 334.941	4811.20	ppb	4.9345	0.1	363143
Tl 190.794	-9.0553	ppb	2.2680	25.0	-6.7051
V 292.401	455.577	ppb	1.5495	0.3	3739.36
Zn 206.200	214.399	ppb	1.3448	0.6	112.085

680-167031-B-2-Asd^5 (Samp) 4/8/2019, 8:15:55 PM

Rack 2, Tube 27

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2240	0.7163	1.8888
Al 308.215	32791.3	32552.2	32187.0
As 188.980	-2.7770u	4.9610	-0.0260u
B 249.678	5.6477	4.5762	5.9064
Ba 389.178	271.842	265.402	267.074
Be 313.042	0.2917	0.2988	0.2966
Ca 370.602	28209	28033	27683
Cd 226.502	0.0629	0.1779	-0.3918
Co 228.615	3.8439	2.9447	2.8149
Cr 267.716	33.0163	32.0252	31.6685
Cu 324.754	20.1092	18.1954	19.9540
Fe 271.441	23719.9	23576.4	23352.2
K 766.491	3788.71	3765.05	3724.59
Mg 279.078	4675.11	4645.01	4598.67
Mn 257.610	189.602	188.266	186.453
Mo 202.032	2.2989	2.8158	1.9082
Na 330.237	1175.81	1660.04	1056.50
Ni 231.604	16.0523	12.1981	14.5436
Pb 220.353	22.0806	29.7888	33.9950
Sb 206.834	5.5285	-2.6010u	-0.0276
Se 196.026	8.1845	-1.7210u	6.3292
Si 288.158	1322.29	1305.45	1283.29
Sn 189.925	7.2648	7.7744	4.0449
Sr 216.596	25.8431	26.3065	25.1953
Ti 334.941	989.324	983.177	973.380
Tl 190.794	-10.3474u	-11.1898u	-9.4310u
V 292.401	93.0883	93.6565	91.1670
Zn 206.200	44.3701	43.5019	41.8117

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9430	ppb	0.8552	90.7	-35.4040
Al 308.215	32510.2	ppb	304.351	0.9	55189.3
As 188.980	0.7193	ppb	3.9224	545.3	1.3230
B 249.678	5.3768	ppb	0.7053	13.1	6.5009

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	268.106	ppb	3.3416	1.2	1339.45
Be 313.042	0.2957	ppb	0.0036	1.2	-189.151
Ca 370.602	27975	ppb	267.6	1.0	39727
Cd 226.502	-0.0503	ppb	0.3013	598.6	31.3864
Co 228.615	3.2012	ppb	0.5604	17.5	8.0010
Cr 267.716	32.2366	ppb	0.6984	2.2	480.547
Cu 324.754	19.4195	ppb	1.0629	5.5	983.938
Fe 271.441	23549.5	ppb	185.334	0.8	12787.9
K 766.491	3759.45	ppb	32.4258	0.9	64142.0
Mg 279.078	4639.60	ppb	38.5082	0.8	5669.39
Mn 257.610	188.107	ppb	1.5804	0.8	12957.0
Mo 202.032	2.3410	ppb	0.4553	19.4	5.6666
Na 330.237	1297.45	ppb	319.625	24.6	55.0352
Ni 231.604	14.2647	ppb	1.9422	13.6	11.2781
Pb 220.353	28.6215	ppb	6.0424	21.1	12.1098
Sb 206.834	0.9666	ppb	4.1549	429.8	6.5642
Se 196.026	4.2642	ppb	5.2658	123.5	5.1008
Si 288.158	1303.68	ppb	19.5588	1.5	6153.19
Sn 189.925	6.3614	ppb	2.0222	31.8	0.4151
Sr 216.596	25.7816	ppb	0.5581	2.2	68.6017
Ti 334.941	981.960	ppb	8.0410	0.8	74097.1
Tl 190.794	-10.3227	ppb	0.8797	8.5	-5.3533
V 292.401	92.6373	ppb	1.3046	1.4	750.971
Zn 206.200	43.2279	ppb	1.3010	3.0	21.5510

680-167031-B-2-Apds (Samp) 4/8/2019, 8:20:18 PM Rack 2, Tube 28

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	53.8887	53.3383	52.9442
Al 308.215	162683	162354	162435
As 188.980	128.335	110.718	125.830
B 249.678	228.873	231.164	231.697
Ba 389.178	1432.24	1422.32	1427.14
Be 313.042	56.3101	56.2353	56.2132
Ca 370.602	139014	138769	139174
Cd 226.502	53.3817	53.8366	54.1629
Co 228.615	68.2578	68.5605	67.1216
Cr 267.716	259.651	259.189	259.444
Cu 324.754	194.260	196.378	194.692
Fe 271.441	117991	117780	117860
K 766.491	30128.5	30161.8	30140.5
Mg 279.078	27462.3	27471.1	27507.8
Mn 257.610	1412.33	1411.89	1411.14
Mo 202.032	108.131	114.366	108.138
Na 330.237	11618.6	11821.5	11634.7
Ni 231.604	156.279	158.366	161.893
Pb 220.353	637.722	658.423	636.510
Sb 206.834	45.5889	61.8937	55.5911
Se 196.026	108.053	88.4569	101.438
Si 288.158	6305.46	6298.32	6303.71
Sn 189.925	116.467	111.160	129.102
Sr 216.596	220.531	224.372	223.844
Ti 334.941	5127.85	5109.88	5113.06

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	41.3849	49.2719	33.7449
V 292.401	551.225	550.925	548.721
Zn 206.200	311.998	320.464	318.035

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.3904	ppb	0.4744	0.9	1357.22
Al 308.215	162490	ppb	171.512	0.1	274873
As 188.980	121.628	ppb	9.5305	7.8	30.2334
B 249.678	230.578	ppb	1.5006	0.7	1347.17
Ba 389.178	1427.23	ppb	4.9616	0.3	7266.02
Be 313.042	56.2529	ppb	0.0508	0.1	43111.2
Ca 370.602	138985	ppb	203.9	0.1	197341
Cd 226.502	53.7937	ppb	0.3924	0.7	766.278
Co 228.615	67.9800	ppb	0.7586	1.1	247.513
Cr 267.716	259.428	ppb	0.2316	0.1	3787.56
Cu 324.754	195.110	ppb	1.1188	0.6	5578.36
Fe 271.441	117877	ppb	106.533	0.1	63829.0
K 766.491	30143.6	ppb	16.8474	0.1	512649
Mg 279.078	27480.4	ppb	24.1210	0.1	33443.1
Mn 257.610	1411.78	ppb	0.6021	0.0	97014.0
Mo 202.032	110.212	ppb	3.5979	3.3	154.514
Na 330.237	11691.6	ppb	112.822	1.0	269.872
Ni 231.604	158.846	ppb	2.8377	1.8	153.256
Pb 220.353	644.218	ppb	12.3168	1.9	238.995
Sb 206.834	54.3579	ppb	8.2221	15.1	25.2577
Se 196.026	99.3159	ppb	9.9689	10.0	22.2841
Si 288.158	6302.50	ppb	3.7211	0.1	27575.3
Sn 189.925	118.910	ppb	9.2172	7.8	25.7039
Sr 216.596	222.916	ppb	2.0821	0.9	558.060
Ti 334.941	5116.93	ppb	9.5881	0.2	386229
Tl 190.794	41.4673	ppb	7.7638	18.7	5.1134
V 292.401	550.290	ppb	1.3675	0.2	4509.08
Zn 206.200	316.832	ppb	4.3589	1.4	166.140

680-167031-B-2-B MS (Samp) 4/8/2019, 8:24:41 PM Rack 2, Tube 29

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	50.8323	50.6202	50.3040
Al 308.215	175291	175232	175306
As 188.980	108.660	112.226	102.146
B 249.678	195.695	196.450	194.878
Ba 389.178	1602.11	1604.34	1602.23
Be 313.042	50.9005	50.9285	50.8658
Ca 370.602	143606	143593	143557
Cd 226.502	48.4795	48.1906	49.0303
Co 228.615	63.3089	65.5506	67.4374
Cr 267.716	253.199	253.277	253.608
Cu 324.754	227.100	225.529	227.225
Fe 271.441	125831	125976	125872
K 766.491	32913.5	32852.6	32916.4
Mg 279.078	30115.2	30205.3	30166.2
Mn 257.610	1473.42	1476.95	1475.89
Mo 202.032	89.6018	94.0189	94.2996

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	11639.9	11440.4	11753.1
Ni 231.604	138.201	142.504	139.261
Pb 220.353	609.609	605.302	598.768
Sb 206.834	34.0486	27.4277	24.8804
Se 196.026	86.1329	81.6533	70.3870
Si 288.158	8339.21	8349.96	8356.76
Sn 189.925	107.892	112.630	110.142
Sr 216.596	216.469	219.315	214.098
Ti 334.941	6055.81	6054.10	6062.27
Tl 190.794	32.9787	37.2551	18.6522
V 292.401	575.556	575.703	576.121
Zn 206.200	387.978	397.915	392.673

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.5855	ppb	0.2659	0.5	1279.75
Al 308.215	175276	ppb	39.0311	0.0	296483
As 188.980	107.677	ppb	5.1113	4.7	26.8961
B 249.678	195.674	ppb	0.7863	0.4	1115.67
Ba 389.178	1602.89	ppb	1.2553	0.1	8162.56
Be 313.042	50.8983	ppb	0.0314	0.1	38972.6
Ca 370.602	143585	ppb	25.20	0.0	203879
Cd 226.502	48.5668	ppb	0.4266	0.9	716.314
Co 228.615	65.4323	ppb	2.0668	3.2	244.835
Cr 267.716	253.361	ppb	0.2173	0.1	3700.72
Cu 324.754	226.618	ppb	0.9453	0.4	6400.66
Fe 271.441	125893	ppb	74.4425	0.1	68165.8
K 766.491	32894.2	ppb	36.0213	0.1	559406
Mg 279.078	30162.3	ppb	45.1629	0.1	36705.4
Mn 257.610	1475.42	ppb	1.8080	0.1	101401
Mo 202.032	92.6401	ppb	2.6350	2.8	130.029
Na 330.237	11611.1	ppb	158.326	1.4	259.332
Ni 231.604	139.989	ppb	2.2422	1.6	134.735
Pb 220.353	604.560	ppb	5.4584	0.9	224.222
Sb 206.834	28.7855	ppb	4.7325	16.4	17.3117
Se 196.026	79.3911	ppb	8.1130	10.2	18.6259
Si 288.158	8348.64	ppb	8.8481	0.1	36300.7
Sn 189.925	110.221	ppb	2.3703	2.2	23.7517
Sr 216.596	216.628	ppb	2.6121	1.2	543.706
Ti 334.941	6057.39	ppb	4.3090	0.1	457214
Tl 190.794	29.6287	ppb	9.7434	32.9	2.2196
V 292.401	575.794	ppb	0.2931	0.1	4722.52
Zn 206.200	392.855	ppb	4.9710	1.3	206.314

680-167031-B-2-C MSD (Samp) 4/8/2019, 8:29:05 PM Rack 2, Tube 30

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.9302	52.9981	52.9123
Al 308.215	175482	175429	175323
As 188.980	101.877	107.330	111.477
B 249.678	197.263	198.448	198.846
Ba 389.178	1544.37	1550.10	1542.96
Be 313.042	52.1401	52.2143	52.0734
Ca 370.602	143671	143715	143479

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	49.6787	49.7274	50.8319
Co 228.615	64.3346	65.8724	65.8100
Cr 267.716	260.000	260.859	260.215
Cu 324.754	197.571	196.343	196.666
Fe 271.441	116724	116946	116549
K 766.491	30305.5	30141.8	30147.6
Mg 279.078	28180.5	28176.3	28142.5
Mn 257.610	1400.15	1401.21	1398.30
Mo 202.032	96.7142	93.7300	95.8080
Na 330.237	11835.7	12137.7	12206.8
Ni 231.604	134.129	129.688	129.257
Pb 220.353	619.193	600.107	591.809
Sb 206.834	29.4507	28.0726	45.9047
Se 196.026	101.521	87.9949	76.5169
Si 288.158	6177.03	6166.76	6162.17
Sn 189.925	107.910	114.582	108.155
Sr 216.596	221.360	226.134	223.891
Ti 334.941	5372.99	5373.10	5366.24
Tl 190.794	31.5898	34.0660	26.7747
V 292.401	543.600	547.077	545.623
Zn 206.200	298.600	296.941	299.060

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.6135	ppb	0.5933	1.1	1336.27
Al 308.215	175411	ppb	80.7237	0.0	296710
As 188.980	106.895	ppb	4.8146	4.5	26.7188
B 249.678	198.185	ppb	0.8233	0.4	1140.57
Ba 389.178	1545.81	ppb	3.7816	0.2	7869.35
Be 313.042	52.1426	ppb	0.0705	0.1	39934.2
Ca 370.602	143622	ppb	125.4	0.1	203931
Cd 226.502	50.0793	ppb	0.6522	1.3	722.658
Co 228.615	65.3390	ppb	0.8704	1.3	240.405
Cr 267.716	260.358	ppb	0.4469	0.2	3801.14
Cu 324.754	196.860	ppb	0.6365	0.3	5623.61
Fe 271.441	116739	ppb	198.705	0.2	63213.3
K 766.491	30198.3	ppb	92.8607	0.3	513579
Mg 279.078	28166.4	ppb	20.7963	0.1	34276.3
Mn 257.610	1399.89	ppb	1.4716	0.1	96203.4
Mo 202.032	95.4174	ppb	1.5300	1.6	133.979
Na 330.237	12060.1	ppb	197.310	1.6	277.124
Ni 231.604	131.024	ppb	2.6968	2.1	125.932
Pb 220.353	603.703	ppb	14.0418	2.3	223.957
Sb 206.834	34.4760	ppb	9.9215	28.8	18.9793
Se 196.026	88.6777	ppb	12.5162	14.1	20.3436
Si 288.158	6168.65	ppb	7.6122	0.1	27015.7
Sn 189.925	110.216	ppb	3.7831	3.4	23.7505
Sr 216.596	223.795	ppb	2.3888	1.1	560.349
Ti 334.941	5370.78	ppb	3.9287	0.1	405389
Tl 190.794	30.8102	ppb	3.7077	12.0	2.6588
V 292.401	545.433	ppb	1.7462	0.3	4470.84
Zn 206.200	298.200	ppb	1.1147	0.4	156.296

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 8:33:30 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.560	501.525	500.581
Al 308.215	10293.7	10317.6	10297.9
As 188.980	533.121	553.306	534.512
B 249.678	533.328	535.935	541.714
Ba 389.178	489.164	483.086	481.608
Be 313.042	537.705	539.570	539.147
Ca 370.602	10125	10110	10124
Cd 226.502	514.377	514.858	514.917
Co 228.615	514.229	513.555	519.499
Cr 267.716	502.905	505.235	505.372
Cu 324.754	512.162	514.878	513.941
Fe 271.441	10242.5	10274.3	10257.3
K 766.491	9975.83	9996.52	9993.85
Mg 279.078	10322.9	10353.9	10364.6
Mn 257.610	507.159	507.241	508.351
Mo 202.032	507.155	509.748	509.373
Na 330.237	10414.1	11150.0	10875.3
Ni 231.604	515.724	510.251	510.329
Pb 220.353	499.078	509.739	512.537
Sb 206.834	509.835	511.985	507.566
Se 196.026	549.699	529.956	542.303
Si 288.158	5090.58	5075.77	5071.34
Sn 189.925	510.889	502.935	497.254
Sr 216.596	497.906	501.288	505.701
Ti 334.941	507.541	508.300	507.433
Tl 190.794	503.609	500.214	511.317
V 292.401	512.607	513.353	512.049
Zn 206.200	1066.24	1058.87	1045.64

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	500.889	ppb	0.5509	0.1	13407.1	100.17771
Al 308.215	10303.1	ppb	12.7917	0.1	17672.2	103.03072
As 188.980	540.313	ppb	11.2740	2.1	131.124	108.06262
B 249.678	536.992	ppb	4.2917	0.8	3416.19	107.39848
Ba 389.178	484.620	ppb	4.0048	0.8	2443.80	96.92390
Be 313.042	538.807	ppb	0.9779	0.2	416275	107.76144
Ca 370.602	10120	ppb	8.354	0.1	14384	101.19842
Cd 226.502	514.717	ppb	0.2960	0.1	5907.21	102.94347
Co 228.615	515.761	ppb	3.2546	0.6	1712.13	103.15222
Cr 267.716	504.504	ppb	1.3869	0.3	7331.54	100.90082
Cu 324.754	513.660	ppb	1.3795	0.3	13872.8	102.73206
Fe 271.441	10258.0	ppb	15.9134	0.2	5621.78	102.52914
K 766.491	9988.74	ppb	11.2527	0.1	170034	99.88735
Mg 279.078	10347.1	ppb	21.7000	0.2	12619.0	103.47130
Mn 257.610	507.584	ppb	0.6656	0.1	34859.9	101.51675
Mo 202.032	508.758	ppb	1.4014	0.3	709.110	101.75167
Na 330.237	10813.1	ppb	371.881	3.4	281.552	108.13111
Ni 231.604	512.101	ppb	3.1374	0.6	499.878	102.42020
Pb 220.353	507.118	ppb	7.1020	1.4	188.781	101.42364
Sb 206.834	509.795	ppb	2.2099	0.4	167.677	101.95907
Se 196.026	540.653	ppb	9.9743	1.8	103.151	108.13058
Si 288.158	5079.23	ppb	10.0790	0.2	22266.8	101.58455

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	503.693	ppb	6.8489	1.4	112.159	100.73854
Sr 216.596	501.632	ppb	3.9087	0.8	1223.70	100.32630
Ti 334.941	507.758	ppb	0.4725	0.1	38320.2	101.55155
Tl 190.794	505.046	ppb	5.6893	1.1	115.032	101.00929
V 292.401	512.670	ppb	0.6546	0.1	4155.00	102.53392
Zn 206.200	1056.92	ppb	10.4395	1.0	556.682	105.69176

Cont Calib Blank (CCB) 4/8/2019, 8:37:54 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1014u	0.3312	0.3011
Al 308.215	8.9120	10.9927	6.7159
As 188.980	1.7944	7.1462	-1.9881u
B 249.678	16.3741	16.3230	14.1577
Ba 389.178	-3.8319u	-4.3610u	-0.0786u
Be 313.042	0.0126	0.0204	0.0112
Ca 370.602	8.684	-0.1565u	0.8774
Cd 226.502	-0.2405u	0.4148	-0.5829u
Co 228.615	-1.1772u	-0.8806u	-0.5540u
Cr 267.716	-0.4926u	0.0723	0.2773
Cu 324.754	2.7354	2.4408	1.6081
Fe 271.441	3.1311	11.9465	9.4384
K 766.491	0.7296	1.3562	1.4506
Mg 279.078	2.6256	-0.8858u	2.8768
Mn 257.610	0.1104	0.0685	0.1017
Mo 202.032	1.6898	3.4045	1.1180
Na 330.237	147.540	233.243	60.5413
Ni 231.604	-0.4134u	-3.4023u	1.2119
Pb 220.353	-1.6105u	-3.5617u	4.8200
Sb 206.834	3.8490	-8.8886u	-2.3169u
Se 196.026	-8.8942u	4.2209	5.3623
Si 288.158	22.6488	20.7627	19.6690
Sn 189.925	-0.7442u	-4.8413u	-0.7657u
Sr 216.596	-1.5477u	2.7535	0.7871
Ti 334.941	0.5194	0.6668	0.3924
Tl 190.794	-1.0964u	0.3417	6.5234
V 292.401	-0.1083u	-0.4634u	0.6004
Zn 206.200	1.9752	1.1051	1.9603

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1770	ppb	0.2415	136.5	-51.5780	0.17697
Al 308.215	8.8736	ppb	2.1386	24.1	258.515	8.87356
As 188.980	2.3175	ppb	4.5896	198.0	1.7671	2.31752
B 249.678	15.6183	ppb	1.2652	8.1	81.8238	15.61827
Ba 389.178	-2.7572	ppb	2.3348	84.7	-45.0868	-2.75718
Be 313.042	0.0147	ppb	0.0050	33.7	-413.554	0.01471
Ca 370.602	3.135	ppb	4.833	154.2	13.64	3.13483
Cd 226.502	-0.1362	ppb	0.5070	372.3	0.8628	-0.13618
Co 228.615	-0.8706	ppb	0.3117	35.8	-11.2927	-0.87057
Cr 267.716	-0.0476	ppb	0.3987	836.8	9.6425	-0.04765
Cu 324.754	2.2614	ppb	0.5847	25.9	533.440	2.26142
Fe 271.441	8.1720	ppb	4.5421	55.6	50.2019	8.17200
K 766.491	1.1788	ppb	0.3919	33.2	254.753	1.17880

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	1.5389	ppb	2.1036	136.7	30.1400	1.53886
Mn 257.610	0.0935	ppb	0.0221	23.7	28.8389	0.09351
Mo 202.032	2.0708	ppb	1.1899	57.5	5.5315	2.07075
Na 330.237	147.108	ppb	86.3516	58.7	36.0717	147.10805
Ni 231.604	-0.8679	ppb	2.3404	269.7	-3.5856	-0.86790
Pb 220.353	-0.1174	ppb	4.3858	3735.6	1.6196	-0.11741
Sb 206.834	-2.4522	ppb	6.3699	259.8	5.0710	-2.45217
Se 196.026	0.2297	ppb	7.9221	3449.3	4.4192	0.22967
Si 288.158	21.0268	ppb	1.5073	7.2	665.182	21.02679
Sn 189.925	-2.1171	ppb	2.3593	111.4	-1.4900	-2.11706
Sr 216.596	0.6643	ppb	2.1533	324.1	4.9631	0.66431
Ti 334.941	0.5262	ppb	0.1373	26.1	14.5655	0.52620
Tl 190.794	1.9229	ppb	4.0485	210.5	-2.0839	1.92292
V 292.401	0.0096	ppb	0.5416	5656.4	-11.8332	0.00958
Zn 206.200	1.6802	ppb	0.4981	29.6	-0.4259	1.68020

680-167031-B-3-A (Samp)

4/8/2019, 8:42:17 PM

Rack 2, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4072u	0.1137u	0.2330u
Al 308.215	165395	165538	165334
As 188.980	11.7574	12.6748	6.1762
B 249.678	15.3731u	11.5001u	12.4319u
Ba 389.178	366.049	365.455	364.175
Be 313.042	4.2654	4.2421	4.2506
Ca 370.602	537.1	528.9	528.1
Cd 226.502	1.1533	2.5032	1.3405
Co 228.615	19.7793	18.4590	19.3957
Cr 267.716	82.3966	83.2481	82.4722
Cu 324.754	309.426	313.456	314.603
Fe 271.441	174271	173847	174052
K 766.491	3301.38	3304.30	3302.65
Mg 279.078	6490.00	6476.09	6482.50
Mn 257.610	289.969	290.317	289.782
Mo 202.032	0.0475u	0.8326u	3.5434
Na 330.237	2421.32u	2601.14u	2677.88u
Ni 231.604	20.8535	22.1880	21.2069
Pb 220.353	93.1261	93.4596	92.1270
Sb 206.834	-6.7819	-11.2195u	5.3305
Se 196.026	1.4984u	-16.5237u	-10.4290u
Si 288.158	3437.39	3423.27	3421.11
Sn 189.925	17.9293	41.9680	27.4525
Sr 216.596	3.7951	5.7703	6.6945
Ti 334.941	11125.3	11103.1	11091.3
Tl 190.794	-6.5503u	11.5050u	-21.1380u
V 292.401	1235.01	1234.93	1232.49
Zn 206.200	122.612	127.359	124.646

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2513	ppb	0.1476	58.7	-86.7139
Al 308.215	165422	ppb	105.085	0.1	279844
As 188.980	10.2028	ppb	3.5172	34.5	2.9573
B 249.678	13.1017	ppb	2.0215	15.4	-101.742

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	365.227	ppb	0.9575	0.3	1857.37
Be 313.042	4.2527	ppb	0.0118	0.3	2897.65
Ca 370.602	531.4	ppb	4.987	0.9	714.0
Cd 226.502	1.6657	ppb	0.7314	43.9	236.429
Co 228.615	19.2113	ppb	0.6792	3.5	121.746
Cr 267.716	82.7056	ppb	0.4713	0.6	1228.34
Cu 324.754	312.495	ppb	2.7186	0.9	8642.35
Fe 271.441	174057	ppb	211.947	0.1	94225.2
K 766.491	3302.77	ppb	1.4653	0.0	56378.9
Mg 279.078	6482.86	ppb	6.9649	0.1	7889.48
Mn 257.610	290.022	ppb	0.2714	0.1	20167.2
Mo 202.032	1.4745	ppb	1.8342	124.4	2.8503
Na 330.237	2566.78	ppb	131.687	5.1	-1.2214
Ni 231.604	21.4162	ppb	0.6914	3.2	18.2945
Pb 220.353	92.9042	ppb	0.6934	0.7	34.7104
Sb 206.834	-4.2236	ppb	8.5665	202.8	7.2919
Se 196.026	-8.4848	ppb	9.1670	108.0	2.3174
Si 288.158	3427.26	ppb	8.8406	0.3	15595.9
Sn 189.925	29.1166	ppb	12.1054	41.6	5.5279
Sr 216.596	5.4200	ppb	1.4811	27.3	33.4317
Ti 334.941	11106.6	ppb	17.2691	0.2	838236
Tl 190.794	-5.3944	ppb	16.3521	303.1	-6.9819
V 292.401	1234.14	ppb	1.4302	0.1	10143.4
Zn 206.200	124.872	ppb	2.3818	1.9	64.9625

680-167031-B-5-A (Samp)

4/8/2019, 8:46:40 PM

Rack 2, Tube 32

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8916	1.0644	0.8689
Al 308.215	218379	218288	218368
As 188.980	19.5685	9.5744	14.1028
B 249.678	6.6419u	8.7570u	6.8144u
Ba 389.178	1493.66	1492.55	1491.44
Be 313.042	4.7169	4.7626	4.7671
Ca 370.602	203.7	199.9	211.5
Cd 226.502	0.1986	0.9505	0.8456
Co 228.615	37.0499	36.8527	38.6992
Cr 267.716	8.5719	8.3949	7.7902
Cu 324.754	77.2442	77.0208	78.5692
Fe 271.441	95830.5	96014.6	95964.9
K 766.491	28858.6	28820.0	28801.6
Mg 279.078	23895.0	23942.0	23913.5
Mn 257.610	5099.29	5106.43	5107.41
Mo 202.032	2.7644	2.3293	3.4704
Na 330.237	927.674u	1278.13u	390.976u
Ni 231.604	25.6694	30.6823	28.4938
Pb 220.353	28.6207	31.6930	44.1620
Sb 206.834	5.5392	-17.8414u	-10.2897u
Se 196.026	14.1993	-9.3604u	21.2408
Si 288.158	3011.33	3015.43	3010.71
Sn 189.925	11.3714	17.1035	12.0132
Sr 216.596	6.8807	4.9058	8.5703
Ti 334.941	5433.00	5435.62	5440.98

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-2.6832u	11.5845	-20.6477u
V 292.401	150.553	150.267	150.642
Zn 206.200	298.439	293.892	293.709

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9416	ppb	0.1069	11.4	-43.0789
Al 308.215	218345	ppb	49.7456	0.0	369258
As 188.980	14.4152	ppb	5.0044	34.7	4.2904
B 249.678	7.4045	ppb	1.1745	15.9	-62.9604
Ba 389.178	1492.55	ppb	1.1067	0.1	7591.78
Be 313.042	4.7489	ppb	0.0278	0.6	3257.45
Ca 370.602	205.0	ppb	5.931	2.9	321.6
Cd 226.502	0.6649	ppb	0.4072	61.2	132.911
Co 228.615	37.5339	ppb	1.0139	2.7	148.872
Cr 267.716	8.2524	ppb	0.4099	5.0	147.168
Cu 324.754	77.6114	ppb	0.8370	1.1	2512.02
Fe 271.441	95936.7	ppb	95.2668	0.1	51955.1
K 766.491	28826.7	ppb	29.1146	0.1	490263
Mg 279.078	23916.8	ppb	23.6545	0.1	29061.0
Mn 257.610	5104.38	ppb	4.4347	0.1	350108
Mo 202.032	2.8547	ppb	0.5759	20.2	5.6741
Na 330.237	865.593	ppb	446.822	51.6	3.6452
Ni 231.604	28.2818	ppb	2.5131	8.9	25.0396
Pb 220.353	34.8252	ppb	8.2305	23.6	13.7708
Sb 206.834	-7.5306	ppb	11.9320	158.4	4.9293
Se 196.026	8.6932	ppb	16.0264	184.4	6.1360
Si 288.158	3012.49	ppb	2.5645	0.1	13596.2
Sn 189.925	13.4960	ppb	3.1406	23.3	2.0180
Sr 216.596	6.7856	ppb	1.8341	27.0	29.1340
Ti 334.941	5436.53	ppb	4.0665	0.1	410343
Tl 190.794	-3.9155	ppb	16.1514	412.5	-4.3045
V 292.401	150.487	ppb	0.1959	0.1	1242.71
Zn 206.200	295.347	ppb	2.6798	0.9	154.878

680-167031-B-6-A (Samp)

4/8/2019, 8:51:04 PM

Rack 2, Tube 33

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3474u	0.3413u	1.1554
Al 308.215	189142	189380	188911
As 188.980	1.3609u	10.9217	3.9396u
B 249.678	9.9945u	11.7385u	11.6329u
Ba 389.178	3409.88	3411.95	3406.88
Be 313.042	5.5264	5.5234	5.4944
Ca 370.602	307.9	297.8	293.9
Cd 226.502	1.9812	2.1928	1.7150
Co 228.615	126.804	131.070	129.750
Cr 267.716	7.5865	7.6277	8.4651
Cu 324.754	114.628	114.820	113.881
Fe 271.441	233778	234450	234019
K 766.491	48206.4x	48051.1x	48065.0x
Mg 279.078	39984.3	39949.1	39915.0
Mn 257.610	15462.5	15454.7	15439.2
Mo 202.032	1.0413u	0.1962u	2.5362

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	1391.40u	1487.54u	1600.41u
Ni 231.604	27.3809	34.8646	32.0167
Pb 220.353	98.0260	86.9768	112.158
Sb 206.834	3.3916	-2.6739	-4.2361
Se 196.026	-15.0335u	-7.4966u	-17.9146u
Si 288.158	3035.33	3028.45	3022.57
Sn 189.925	17.4913	23.3130	17.5241
Sr 216.596	36.5444	37.0302	36.8603
Ti 334.941	9113.41	9121.70	9103.11
Tl 190.794	-1.1564u	-4.2404u	-3.3911u
V 292.401	294.274	293.673	293.834
Zn 206.200	492.608	506.634	504.552

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6147b	ppb	0.4683	76.2	-60.8852
Al 308.215	189144b	ppb	234.221	0.1	319915
As 188.980	5.4074b	ppb	4.9465	91.5	1.4335
B 249.678	11.1220b	ppb	0.9779	8.8	-172.026
Ba 389.178	3409.57b	ppb	2.5469	0.1	17373.1
Be 313.042	5.5147b	ppb	0.0177	0.3	3848.59
Ca 370.602	299.9b	ppb	7.249	2.4	454.6
Cd 226.502	1.9630b	ppb	0.2394	12.2	314.120
Co 228.615	129.208b	ppb	2.1843	1.7	475.097
Cr 267.716	7.8931b	ppb	0.4958	6.3	167.226
Cu 324.754	114.443b	ppb	0.4963	0.4	3492.96
Fe 271.441	234083b	ppb	340.460	0.1	126704
K 766.491	48107.5xb	ppb	85.9352	0.2	818019
Mg 279.078	39949.5b	ppb	34.6248	0.1	48489.2
Mn 257.610	15452.1b	ppb	11.8576	0.1	1059582
Mo 202.032	1.2579b	ppb	1.1850	94.2	2.1016
Na 330.237	1493.12b	ppb	104.617	7.0	-17.8527
Ni 231.604	31.4207b	ppb	3.7773	12.0	28.0416
Pb 220.353	99.0536b	ppb	12.6220	12.7	38.0956
Sb 206.834	-1.1728b	ppb	4.0293	343.6	9.0083
Se 196.026	-13.4816b	ppb	5.3796	39.9	2.6040
Si 288.158	3028.78b	ppb	6.3869	0.2	13819.2
Sn 189.925	19.4428b	ppb	3.3517	17.2	3.3541
Sr 216.596	36.8116b	ppb	0.2465	0.7	115.956
Ti 334.941	9112.74b	ppb	9.3156	0.1	687832
Tl 190.794	-2.9293b	ppb	1.5930	54.4	-4.7067
V 292.401	293.927b	ppb	0.3110	0.1	2436.83
Zn 206.200	501.264b	ppb	7.5690	1.5	263.929

480-151367-A-1-A (Samp)

4/8/2019, 8:55:28 PM

Rack 2, Tube 34

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6406	-0.6158u	1.2220
Al 308.215	3145.83	3150.31	3140.65
As 188.980	16.0314	5.4597	25.6052
B 249.678	26.4555	27.3144	27.0047
Ba 389.178	119.069	124.422	121.897
Be 313.042	0.0876	0.0833	0.0962
Ca 370.602	25477	25428	25456

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	8.9362	9.3071	8.7136
Co 228.615	4.5592	1.6061	1.5970
Cr 267.716	61.0517	60.7632	60.8409
Cu 324.754	173.432	173.142	171.923
Fe 271.441	17626.4	17569.2	17622.1
K 766.491	8529.79	8544.15	8578.25
Mg 279.078	3033.80	3031.57	3034.02
Mn 257.610	372.515	371.973	372.380
Mo 202.032	2.8957	2.3641	2.9530
Na 330.237	714.313	819.764	1099.12
Ni 231.604	12.1712	5.5469	14.9801
Pb 220.353	1958.55	1971.37	1977.19
Sb 206.834	21.9714	30.6934	19.1359
Se 196.026	1.3786	4.2756	3.9170
Si 288.158	904.005	907.010	911.013
Sn 189.925	11.1233	13.5846	11.3051
Sr 216.596	156.668	156.833	158.737
Ti 334.941	123.032	122.137	122.760
Tl 190.794	-0.3860u	-13.4613u	3.4133
V 292.401	5.8052	7.0061	6.4160
Zn 206.200	261.916	261.445	258.719

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4156	ppb	0.9393	226.0	-47.9463
Al 308.215	3145.60	ppb	4.8333	0.2	5560.27
As 188.980	15.6988	ppb	10.0768	64.2	4.9931
B 249.678	26.9249	ppb	0.4350	1.6	137.417
Ba 389.178	121.796	ppb	2.6784	2.2	593.265
Be 313.042	0.0890	ppb	0.0065	7.4	-352.747
Ca 370.602	25454	ppb	24.52	0.1	36142
Cd 226.502	8.9856	ppb	0.2998	3.3	126.804
Co 228.615	2.5875	ppb	1.7076	66.0	0.7015
Cr 267.716	60.8853	ppb	0.1493	0.2	895.583
Cu 324.754	172.832	ppb	0.8006	0.5	4983.24
Fe 271.441	17605.9	ppb	31.8525	0.2	9571.72
K 766.491	8550.73	ppb	24.8902	0.3	145589
Mg 279.078	3033.13	ppb	1.3546	0.0	3716.99
Mn 257.610	372.290	ppb	0.2820	0.1	25562.2
Mo 202.032	2.7376	ppb	0.3247	11.9	6.2867
Na 330.237	877.731	ppb	198.843	22.7	49.5623
Ni 231.604	10.8994	ppb	4.8435	44.4	7.9702
Pb 220.353	1969.04	ppb	9.5369	0.5	729.188
Sb 206.834	23.9336	ppb	6.0234	25.2	13.7641
Se 196.026	3.1904	ppb	1.5792	49.5	4.9397
Si 288.158	907.343	ppb	3.5158	0.4	4435.04
Sn 189.925	12.0043	ppb	1.3716	11.4	1.6829
Sr 216.596	157.412	ppb	1.1498	0.7	389.794
Ti 334.941	122.643	ppb	0.4588	0.4	9237.98
Tl 190.794	-3.4780	ppb	8.8520	254.5	-3.6249
V 292.401	6.4091	ppb	0.6005	9.4	40.9276
Zn 206.200	260.693	ppb	1.7261	0.7	136.384

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-167069-A-1-A (Samp) **4/8/2019, 8:59:52 PM** **Rack 2, Tube 35****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.9887u	0.8329u	2.4328
Al 308.215	14214.8	14200.4	14153.6
As 188.980	6.1544	7.4139	2.0665
B 249.678	13.5337	15.1450	14.7928
Ba 389.178	265.345	264.669	260.079
Be 313.042	0.1495	0.1269	0.1544
Ca 370.602	1156249x	1157937x	1156951x
Cd 226.502	0.8742	0.7138	0.2857
Co 228.615	42.8626	41.9511	41.1416
Cr 267.716	3541.09	3543.73	3539.71
Cu 324.754	54.1155	54.8549	53.9515
Fe 271.441	51064.9	51150.3	51122.0
K 766.491	1530.52	1524.32	1523.68
Mg 279.078	91804.9	91869.7	91472.8
Mn 257.610	604.077	603.693	603.350
Mo 202.032	354.495	350.591	352.023
Na 330.237	46755.9	46780.0	45665.7
Ni 231.604	3044.31	3045.01	3028.79
Pb 220.353	47.7542	46.8179	27.5388
Sb 206.834	-8.8647	5.0429	-6.9257
Se 196.026	36.6712	7.8732	21.5077
Si 288.158	1512.72	1515.53	1496.70
Sn 189.925	47.4852	29.8181	40.1111
Sr 216.596	19833.1x	19870.4x	19847.5x
Ti 334.941	470.065	470.594	469.819
Tl 190.794	-1.7592u	-0.4685u	-10.1274u
V 292.401	14.0642	14.6913	14.5019
Zn 206.200	3789.46	3816.96	3787.01

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.4181b	ppb	0.8822	62.2	-80.5179
Al 308.215	14189.6b	ppb	31.9821	0.2	24229.7
As 188.980	5.2116b	ppb	2.7956	53.6	2.0628
B 249.678	14.4905b	ppb	0.8471	5.8	25.2817
Ba 389.178	263.365b	ppb	2.8651	1.1	1388.65
Be 313.042	0.1436b	ppb	0.0146	10.2	-171.223
Ca 370.602	1157046xb	ppb	847.9	0.1	1643226
Cd 226.502	0.6246b	ppb	0.3043	48.7	72.5924
Co 228.615	41.9851b	ppb	0.8610	2.1	133.318
Cr 267.716	3541.51b	ppb	2.0424	0.1	51401.4
Cu 324.754	54.3073b	ppb	0.4813	0.9	1903.34
Fe 271.441	51112.4b	ppb	43.5256	0.1	27704.6
K 766.491	1526.17b	ppb	3.7765	0.2	26178.3
Mg 279.078	91715.8b	ppb	212.915	0.2	111680
Mn 257.610	603.706b	ppb	0.3641	0.1	41727.1
Mo 202.032	352.370b	ppb	1.9750	0.6	491.572
Na 330.237	46400.5b	ppb	636.487	1.4	1122.34
Ni 231.604	3039.37b	ppb	9.1690	0.3	2982.68
Pb 220.353	40.7036b	ppb	11.4107	28.0	16.8736
Sb 206.834	-3.5825b	ppb	7.5325	210.3	12.3978
Se 196.026	22.0174b	ppb	14.4057	65.4	8.2965
Si 288.158	1508.32b	ppb	10.1556	0.7	7046.87

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	39.1381b	ppb	8.8736	22.7	7.7834
Sr 216.596	19850.3xb	ppb	18.8116	0.1	48516.5
Ti 334.941	470.159b	ppb	0.3956	0.1	35666.9
Tl 190.794	-4.1184b	ppb	5.2438	127.3	-4.4917
V 292.401	14.4191b	ppb	0.3216	2.2	35.5670
Zn 206.200	3797.81b	ppb	16.6289	0.4	2002.84

680-166652-A-1-B (Samp) 4/8/2019, 9:04:16 PM Rack 2, Tube 36

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	3.2885	1.9967u	0.6457u
Al 308.215	115740	115640	115616
As 188.980	51.1338	51.9777	54.7401
B 249.678	33.1587u	32.2559u	32.3813u
Ba 389.178	3575.58	3570.11	3568.72
Be 313.042	1.2419	1.2383	1.2365
Ca 370.602	58112	57915	58016
Cd 226.502	98.4061	98.2045	97.8200
Co 228.615	79.7013	79.1275	82.1778
Cr 267.716	1217.90	1215.05	1215.75
Cu 324.754	619.685	620.616	619.713
Fe 271.441	460394	459185	459653
K 766.491	1172.64	1175.40	1173.57
Mg 279.078	34391.0	34337.1	34370.6
Mn 257.610	8097.39	8087.44	8084.37
Mo 202.032	140.844	138.400	143.307
Na 330.237	3605.24u	3604.42u	3253.67u
Ni 231.604	703.439	698.233	711.105
Pb 220.353	101.346	90.4540	114.080
Sb 206.834	-3.9529	-2.6431	5.7473
Se 196.026	-3.2191u	2.2625u	-13.3067u
Si 288.158	10095.5	10092.9	10072.6
Sn 189.925	271.533	296.824	290.221
Sr 216.596	719.006	714.450	718.591
Ti 334.941	2215.69	2211.37	2209.37
Tl 190.794	-4.0262u	8.9898u	-8.9521u
V 292.401	242.796	240.745	240.886
Zn 206.200	45971.9x	45954.3x	46033.7x

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.9770b	ppb	1.3215	66.8	-67.8427
Al 308.215	115665b	ppb	65.6023	0.1	195740
As 188.980	52.6172b	ppb	1.8862	3.6	11.9568
B 249.678	32.5986b	ppb	0.4891	1.5	-252.438
Ba 389.178	3571.47b	ppb	3.6272	0.1	18225.4
Be 313.042	1.2389b	ppb	0.0027	0.2	537.649
Ca 370.602	58014b	ppb	98.60	0.2	81894
Cd 226.502	98.1436b	ppb	0.2977	0.3	1689.95
Co 228.615	80.3355b	ppb	1.6210	2.0	264.095
Cr 267.716	1216.23b	ppb	1.4839	0.1	17702.2
Cu 324.754	620.005b	ppb	0.5293	0.1	16711.4
Fe 271.441	459744b	ppb	609.447	0.1	248796
K 766.491	1173.87b	ppb	1.4056	0.1	20189.5

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	34366.2b	ppb	27.2304	0.1	41772.7
Mn 257.610	8089.73b	ppb	6.8083	0.1	554931
Mo 202.032	140.850b	ppb	2.4535	1.7	193.802
Na 330.237	3487.78b	ppb	202.743	5.8	-402.551
Ni 231.604	704.259b	ppb	6.4753	0.9	688.996
Pb 220.353	101.960b	ppb	11.8251	11.6	40.7853
Sb 206.834	-0.2829b	ppb	5.2632	1860.5	15.0697
Se 196.026	-4.7544b	ppb	7.8973	166.1	2.8267
Si 288.158	10087.0b	ppb	12.5082	0.1	43540.9
Sn 189.925	286.193b	ppb	13.1182	4.6	63.2886
Sr 216.596	717.349b	ppb	2.5193	0.4	1797.67
Ti 334.941	2212.14b	ppb	3.2284	0.1	167011
Tl 190.794	-1.3295b	ppb	9.2699	697.2	-10.6588
V 292.401	241.476b	ppb	1.1459	0.5	1969.57
Zn 206.200	45986.7xb	ppb	41.6898	0.1	24288.1

680-166652-A-2-B (Samp)

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Rack 2, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0986	-1.0812u	-0.4511u
Al 308.215	3582.71	3567.62	3573.69
As 188.980	3.4542	3.1500	3.5961
B 249.678	5.4237	6.1582	5.6675
Ba 389.178	105.998	109.810	105.150
Be 313.042	-0.0088u	0.0014	-0.0199u
Ca 370.602	955.1	953.1	959.0
Cd 226.502	2.5962	3.7110	3.3989
Co 228.615	1.8025	2.9351	3.1844
Cr 267.716	37.7688	37.7688	38.1809
Cu 324.754	21.5776	19.9179	19.8517
Fe 271.441	14314.2	14269.0	14284.5
K 766.491	5888.80	5887.38	5879.87
Mg 279.078	1073.31	1085.10	1083.00
Mn 257.610	252.165	251.441	251.639
Mo 202.032	3.5729	4.4095	5.1813
Na 330.237	18836.2	18760.5	18208.5
Ni 231.604	19.6879	23.3846	21.9823
Pb 220.353	1.3744	0.7381	-0.8152u
Sb 206.834	-14.1204u	-9.4274u	-9.3653u
Se 196.026	4.0757	9.5067	3.0145
Si 288.158	1137.82	1133.08	1126.68
Sn 189.925	20.6816	25.2569	32.9670
Sr 216.596	6.2740	6.0595	4.7075
Ti 334.941	78.9425	78.4907	78.6173
Tl 190.794	-17.6288u	14.3275	-6.7741u
V 292.401	6.7001	8.3907	9.2047
Zn 206.200	1483.87	1466.61	1476.90

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4779	ppb	0.5903	123.5	-71.1484
Al 308.215	3574.68	ppb	7.5924	0.2	6285.40
As 188.980	3.4001	ppb	0.2279	6.7	2.0046
B 249.678	5.7498	ppb	0.3741	6.5	4.7876

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	106.986	ppb	2.4822	2.3	515.927
Be 313.042	-0.0091	ppb	0.0107	117.7	-432.659
Ca 370.602	955.8	ppb	3.011	0.3	1351
Cd 226.502	3.2354	ppb	0.5751	17.8	56.9182
Co 228.615	2.6406	ppb	0.7365	27.9	0.6362
Cr 267.716	37.9062	ppb	0.2379	0.6	561.821
Cu 324.754	20.4491	ppb	0.9779	4.8	1009.83
Fe 271.441	14289.2	ppb	22.9511	0.2	7777.21
K 766.491	5885.35	ppb	4.8032	0.1	100280
Mg 279.078	1080.47	ppb	6.2850	0.6	1340.75
Mn 257.610	251.748	ppb	0.3743	0.1	17291.0
Mo 202.032	4.3879	ppb	0.8044	18.3	8.6107
Na 330.237	18601.7	ppb	342.622	1.8	471.009
Ni 231.604	21.6849	ppb	1.8662	8.6	18.5651
Pb 220.353	0.4324	ppb	1.1263	260.5	1.8672
Sb 206.834	-10.9710	ppb	2.7276	24.9	2.6788
Se 196.026	5.5323	ppb	3.4826	63.0	5.3667
Si 288.158	1132.52	ppb	5.5913	0.5	5391.00
Sn 189.925	26.3018	ppb	6.2090	23.6	4.8969
Sr 216.596	5.6803	ppb	0.8493	15.0	18.5137
Ti 334.941	78.6835	ppb	0.2330	0.3	5915.47
Tl 190.794	-3.3585	ppb	16.2496	483.8	-3.5534
V 292.401	8.0985	ppb	1.2776	15.8	54.6732
Zn 206.200	1475.79	ppb	8.6830	0.6	778.176

MB 680-565041/1-A (Samp) 4/8/2019, 9:13:03 PM Rack 2, Tube 38

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1379	0.6432	0.5490
Al 308.215	9.6720	9.8149	14.7013
As 188.980	-1.9699u	2.1772	1.5816
B 249.678	0.3333	1.0791	1.1110
Ba 389.178	-2.6732u	-4.4919u	-3.8794u
Be 313.042	-0.0625u	-0.0413u	-0.0391u
Ca 370.602	39.00	44.32	45.52
Cd 226.502	-0.0811u	-0.2165u	-1.0060u
Co 228.615	0.3285	-0.1838u	0.8625
Cr 267.716	1.0554	0.2279	0.4647
Cu 324.754	0.4532	2.3046	2.2744
Fe 271.441	37.7581	47.4500	17.9974
K 766.491	22.0208	21.8258	21.4152
Mg 279.078	1.2553	0.6650	-4.9133u
Mn 257.610	0.8856	0.9464	0.8994
Mo 202.032	-0.8122u	-0.4518u	0.8769
Na 330.237	1058.21	366.837	726.277
Ni 231.604	4.6845	-2.9941u	3.2277
Pb 220.353	4.5659	-2.1846u	1.3927
Sb 206.834	3.1811	-2.7615u	-2.9821u
Se 196.026	0.4642	-4.7859u	3.9091
Si 288.158	33.2261	31.7125	28.1697
Sn 189.925	25.4135	9.8214	11.3523
Sr 216.596	0.4436	2.6815	-0.5496u
Ti 334.941	1.0341	0.9519	1.2100

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-4.4899u	3.8386	-0.0058u
V 292.401	0.3708	0.8689	0.2416
Zn 206.200	1.7595	4.5743	3.5781

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7767	ppb	0.3163	40.7	-35.4624
Al 308.215	11.3961	ppb	2.8633	25.1	262.762
As 188.980	0.5963	ppb	2.2422	376.0	1.3352
B 249.678	0.8411	ppb	0.4401	52.3	-12.9895
Ba 389.178	-3.6815	ppb	0.9254	25.1	-49.7872
Be 313.042	-0.0477	ppb	0.0129	27.1	-461.658
Ca 370.602	42.95	ppb	3.470	8.1	70.16
Cd 226.502	-0.4346	ppb	0.4995	115.0	-2.5180
Co 228.615	0.3357	ppb	0.5232	155.8	-7.2503
Cr 267.716	0.5827	ppb	0.4262	73.1	18.7933
Cu 324.754	1.6774	ppb	1.0603	63.2	518.185
Fe 271.441	34.4019	ppb	15.0104	43.6	64.4708
K 766.491	21.7539	ppb	0.3091	1.4	604.512
Mg 279.078	-0.9977	ppb	3.4038	341.2	27.0441
Mn 257.610	0.9105	ppb	0.0319	3.5	84.8524
Mo 202.032	-0.1290	ppb	0.8896	689.6	2.4759
Na 330.237	717.109	ppb	345.779	48.2	49.9993
Ni 231.604	1.6394	ppb	4.0783	248.8	-1.1241
Pb 220.353	1.2580	ppb	3.3773	268.5	2.1281
Sb 206.834	-0.8542	ppb	3.4964	409.3	5.5761
Se 196.026	-0.1375	ppb	4.3786	3184.1	4.3521
Si 288.158	31.0361	ppb	2.5952	8.4	708.569
Sn 189.925	15.5291	ppb	8.5943	55.3	2.4749
Sr 216.596	0.8585	ppb	1.6550	192.8	5.4561
Ti 334.941	1.0653	ppb	0.1319	12.4	55.2401
Tl 190.794	-0.2191	ppb	4.1683	1902.8	-2.5813
V 292.401	0.4938	ppb	0.3312	67.1	-7.7437
Zn 206.200	3.3040	ppb	1.4273	43.2	0.4317

LCS 680-565041/2-A (Samp) 4/8/2019, 9:17:27 PM Rack 2, Tube 39

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.2516	50.8373	50.6347
Al 308.215	5355.74	5371.96	5348.08
As 188.980	108.858	113.875	103.669
B 249.678	215.847	217.234	218.957
Ba 389.178	105.181	99.2594	100.640
Be 313.042	56.4243	56.3650	56.2095
Ca 370.602	5306	5310	5295
Cd 226.502	53.9465	55.0186	54.3592
Co 228.615	52.8027	52.1113	53.5740
Cr 267.716	107.016	106.466	105.668
Cu 324.754	109.346	110.915	111.592
Fe 271.441	5363.85	5361.57	5329.04
K 766.491	8624.85	8610.51	8637.43
Mg 279.078	5358.17	5346.73	5333.13
Mn 257.610	532.184	532.550	531.042
Mo 202.032	110.612	111.847	108.308

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	5604.45	5452.39	5852.47
Ni 231.604	108.246	106.786	105.553
Pb 220.353	508.277	509.937	513.279
Sb 206.834	50.1865	51.9868	47.5813
Se 196.026	124.160	110.724	120.079
Si 288.158	28.1010	27.4345	25.0434
Sn 189.925	116.395	116.365	116.249
Sr 216.596	106.667	104.004	102.832
Ti 334.941	425.681	425.618	424.248
Tl 190.794	42.1126	34.7472	30.8661
V 292.401	106.807	106.580	107.193
Zn 206.200	118.171	118.427	112.632

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.9079	ppb	0.3145	0.6	1311.63
Al 308.215	5358.59	ppb	12.1910	0.2	9303.29
As 188.980	108.801	ppb	5.1034	4.7	27.6727
B 249.678	217.346	ppb	1.5581	0.7	1370.62
Ba 389.178	101.693	ppb	3.0981	3.0	491.245
Be 313.042	56.3330	ppb	0.1109	0.2	43139.4
Ca 370.602	5303	ppb	7.997	0.2	7548
Cd 226.502	54.4414	ppb	0.5408	1.0	632.241
Co 228.615	52.8293	ppb	0.7317	1.4	169.675
Cr 267.716	106.383	ppb	0.6777	0.6	1555.13
Cu 324.754	110.618	ppb	1.1522	1.0	3360.34
Fe 271.441	5351.49	ppb	19.4766	0.4	2944.17
K 766.491	8624.26	ppb	13.4685	0.2	146839
Mg 279.078	5346.01	ppb	12.5348	0.2	6530.95
Mn 257.610	531.925	ppb	0.7867	0.1	36509.1
Mo 202.032	110.256	ppb	1.7964	1.6	155.725
Na 330.237	5636.44	ppb	201.953	3.6	165.613
Ni 231.604	106.862	ppb	1.3478	1.3	102.190
Pb 220.353	510.498	ppb	2.5478	0.5	190.209
Sb 206.834	49.9182	ppb	2.2150	4.4	21.8673
Se 196.026	118.321	ppb	6.8882	5.8	26.0225
Si 288.158	26.8597	ppb	1.6078	6.0	730.150
Sn 189.925	116.336	ppb	0.0771	0.1	25.1253
Sr 216.596	104.501	ppb	1.9652	1.9	257.842
Ti 334.941	425.182	ppb	0.8099	0.2	32076.7
Tl 190.794	35.9086	ppb	5.7125	15.9	5.8439
V 292.401	106.860	ppb	0.3101	0.3	857.609
Zn 206.200	116.410	ppb	3.2745	2.8	60.1270

680-166873-B-1-A (Samp)

4/8/2019, 9:21:51 PM

Rack 2, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	3.2640u	3.6703u	2.8636u
Al 308.215	310071	309506	309800
As 188.980	29.8361	29.6043	25.0316
B 249.678	39.1282u	38.8032u	38.2889u
Ba 389.178	413.512	410.940	414.693
Be 313.042	9.0816	9.0935	9.0785
Ca 370.602	3093	3088	3072

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	8.0199	7.0162	7.5760
Co 228.615	211.855	211.797	213.859
Cr 267.716	132.458	131.490	131.135
Cu 324.754	267.524	268.007	266.285
Fe 271.441	772326	770759	772202
K 766.491	2283.28	2275.05	2283.02
Mg 279.078	2480.01	2476.58	2481.95
Mn 257.610	11567.0	11545.5	11593.9
Mo 202.032	3.5574u	6.5361	6.2563
Na 330.237	1748.70u	1472.23u	1970.93u
Ni 231.604	28.6940	30.5465	34.4945
Pb 220.353	40.0867	49.9530	43.1641
Sb 206.834	-20.5452	-16.0998	-11.1878
Se 196.026	-4.2440u	-4.4720u	-7.2847u
Si 288.158	1843.60	1834.14	1840.11
Sn 189.925	17.6441	19.4181	21.8828
Sr 216.596	13.5480	9.3434	11.6249
Ti 334.941	21445.9	21372.4	21443.0
Tl 190.794	0.7371u	12.6195u	-8.4293u
V 292.401	2414.58	2410.89	2418.97
Zn 206.200	259.642	257.321	254.062

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	3.2659	ppb	0.4033	12.3	-92.2345
Al 308.215	309792	ppb	282.584	0.1	523875
As 188.980	28.1573	ppb	2.7095	9.6	4.6292
B 249.678	38.7401	ppb	0.4232	1.1	-513.190
Ba 389.178	413.048	ppb	1.9193	0.5	2185.59
Be 313.042	9.0845	ppb	0.0079	0.1	6660.65
Ca 370.602	3084	ppb	11.30	0.4	3816
Cd 226.502	7.5374	ppb	0.5030	6.7	1034.56
Co 228.615	212.504	ppb	1.1738	0.6	819.359
Cr 267.716	131.694	ppb	0.6849	0.5	2001.59
Cu 324.754	267.272	ppb	0.8882	0.3	7550.11
Fe 271.441	771762	ppb	870.946	0.1	417628
K 766.491	2280.45	ppb	4.6809	0.2	39000.3
Mg 279.078	2479.51	ppb	2.7176	0.1	2886.20
Mn 257.610	11568.8	ppb	24.2468	0.2	793740
Mo 202.032	5.4499	ppb	1.6449	30.2	2.4258
Na 330.237	1730.62	ppb	249.838	14.4	-128.496
Ni 231.604	31.2450	ppb	2.9627	9.5	27.8033
Pb 220.353	44.4012	ppb	5.0482	11.4	17.7325
Sb 206.834	-15.9443	ppb	4.6806	29.4	12.6933
Se 196.026	-5.3336	ppb	1.6936	31.8	2.0768
Si 288.158	1839.28	ppb	4.7870	0.3	9283.95
Sn 189.925	19.6483	ppb	2.1287	10.8	3.4000
Sr 216.596	11.5055	ppb	2.1049	18.3	106.422
Ti 334.941	21420.5	ppb	41.6097	0.2	1616647
Tl 190.794	1.6424	ppb	10.5536	642.6	-15.0248
V 292.401	2414.81	ppb	4.0452	0.2	19879.0
Zn 206.200	257.008	ppb	2.8033	1.1	135.982

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 9:26:16 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	492.855	497.141	497.783
Al 308.215	10276.5	10267.5	10263.5
As 188.980	536.739	547.932	531.230
B 249.678	526.365	528.551	533.388
Ba 389.178	484.644	480.685	491.709
Be 313.042	534.630	533.715	533.711
Ca 370.602	10108	10088	10109
Cd 226.502	510.934	512.118	512.341
Co 228.615	514.129	514.113	514.555
Cr 267.716	498.469	497.703	497.376
Cu 324.754	507.050	510.163	512.159
Fe 271.441	10218.0	10226.4	10240.8
K 766.491	10002.3	10007.8	9986.46
Mg 279.078	10311.3	10300.5	10307.2
Mn 257.610	508.191	507.023	507.830
Mo 202.032	511.626	508.357	513.793
Na 330.237	10540.2	10628.8	10594.7
Ni 231.604	513.912	510.375	514.102
Pb 220.353	505.453	501.162	512.069
Sb 206.834	501.566	512.778	508.082
Se 196.026	535.777	529.044	518.090
Si 288.158	5073.63	5043.02	5044.23
Sn 189.925	492.082	508.842	514.228
Sr 216.596	505.504	501.234	504.632
Ti 334.941	511.890	508.657	508.308
Tl 190.794	506.357	495.447	512.088
V 292.401	512.968	510.008	511.248
Zn 206.200	1057.31	1058.28	1049.37

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	495.927	ppb	2.6791	0.5	13273.7	99.18530
Al 308.215	10269.2	ppb	6.6722	0.1	17615.0	102.69186
As 188.980	538.634	ppb	8.5105	1.6	130.702	107.72672
B 249.678	529.435	ppb	3.5938	0.7	3367.71	105.88695
Ba 389.178	485.679	ppb	5.5841	1.1	2449.17	97.13588
Be 313.042	534.018	ppb	0.5294	0.1	412571	106.80367
Ca 370.602	10101	ppb	11.73	0.1	14358	101.01471
Cd 226.502	511.798	ppb	0.7563	0.1	5873.79	102.35951
Co 228.615	514.265	ppb	0.2505	0.0	1707.11	102.85309
Cr 267.716	497.849	ppb	0.5605	0.1	7234.99	99.56988
Cu 324.754	509.791	ppb	2.5749	0.5	13772.0	101.95815
Fe 271.441	10228.4	ppb	11.5313	0.1	5605.73	102.23282
K 766.491	9998.87	ppb	11.0857	0.1	170207	99.98869
Mg 279.078	10306.4	ppb	5.4680	0.1	12569.3	103.06354
Mn 257.610	507.682	ppb	0.5982	0.1	34866.5	101.53631
Mo 202.032	511.259	ppb	2.7364	0.5	712.583	102.25177
Na 330.237	10587.9	ppb	44.6906	0.4	276.027	105.87935
Ni 231.604	512.796	ppb	2.0993	0.4	500.561	102.55924
Pb 220.353	506.228	ppb	5.4945	1.1	188.450	101.24565
Sb 206.834	507.475	ppb	5.6308	1.1	166.936	101.49508
Se 196.026	527.637	ppb	8.9270	1.7	100.774	105.52743
Si 288.158	5053.63	ppb	17.3332	0.3	22159.2	101.07254

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	505.051	ppb	11.5495	2.3	112.464	101.01012
Sr 216.596	503.790	ppb	2.2560	0.4	1228.93	100.75801
Ti 334.941	509.618	ppb	1.9747	0.4	38460.6	101.92367
Tl 190.794	504.631	ppb	8.4539	1.7	114.934	100.92611
V 292.401	511.408	ppb	1.4863	0.3	4144.49	102.28162
Zn 206.200	1054.98	ppb	4.8894	0.5	555.664	105.49839

Cont Calib Blank (CCB) 4/8/2019, 9:30:40 PM Rack S, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.8733	0.4289	0.8362
Al 308.215	3.1716	0.3514	6.4368
As 188.980	-0.4070u	-1.8804u	-1.5842u
B 249.678	16.0512	13.6425	12.9119
Ba 389.178	-1.6642u	0.5124	-3.7594u
Be 313.042	0.0134	0.0224	0.0117
Ca 370.602	3.780	1.974	-5.192u
Cd 226.502	-0.0723u	0.2874	0.3276
Co 228.615	-0.6278u	1.0782	-1.6143u
Cr 267.716	0.1288	-0.2221u	-0.0540u
Cu 324.754	2.6353	0.9265	0.6667
Fe 271.441	13.7743	7.2848	-5.3523u
K 766.491	0.7862	2.0385	-1.2770u
Mg 279.078	4.4660	4.0888	6.4182
Mn 257.610	0.0689	0.2231	0.1026
Mo 202.032	1.2622	1.8202	0.4215
Na 330.237	179.293	-77.6777u	71.3303
Ni 231.604	1.9843	2.0808	3.7237
Pb 220.353	-6.3893u	-2.9873u	6.1327
Sb 206.834	-2.4762u	7.0571	-8.3133u
Se 196.026	-9.7986u	-9.5169u	-0.0465u
Si 288.158	9.8820	12.0383	10.8760
Sn 189.925	-4.2017u	8.5490	4.9304
Sr 216.596	-0.0297u	1.8651	0.7693
Ti 334.941	0.6050	0.8025	0.5818
Tl 190.794	-4.6966u	-8.4364u	-3.0882u
V 292.401	-0.4153u	0.5294	1.3105
Zn 206.200	0.0624	0.0854	0.7817

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	1.0461	ppb	0.7447	71.2	-28.2148	1.04614
Al 308.215	3.3200	ppb	3.0454	91.7	249.123	3.31996
As 188.980	-1.2905	ppb	0.7793	60.4	0.9239	-1.29053
B 249.678	14.2019	ppb	1.6427	11.6	72.7327	14.20187
Ba 389.178	-1.6371	ppb	2.1360	130.5	-39.3891	-1.63706
Be 313.042	0.0158	ppb	0.0058	36.6	-412.617	0.01581
Ca 370.602	0.1876	ppb	4.745	2528.9	9.450	0.18765
Cd 226.502	0.1809	ppb	0.2202	121.7	4.4998	0.18091
Co 228.615	-0.3880	ppb	1.3622	351.1	-9.6737	-0.38798
Cr 267.716	-0.0491	ppb	0.1755	357.5	9.6207	-0.04909
Cu 324.754	1.4095	ppb	1.0695	75.9	511.211	1.40948
Fe 271.441	5.2356	ppb	9.7266	185.8	48.6409	5.23559
K 766.491	0.5159	ppb	1.6742	324.5	243.485	0.51591

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	4.9910	ppb	1.2503	25.1	34.3439	4.99101
Mn 257.610	0.1315	ppb	0.0811	61.7	31.4584	0.13153
Mo 202.032	1.1680	ppb	0.7041	60.3	4.2775	1.16798
Na 330.237	57.6486	ppb	129.031	223.8	33.8909	57.64856
Ni 231.604	2.5962	ppb	0.9776	37.7	-0.1834	2.59625
Pb 220.353	-1.0813	ppb	6.4749	598.8	1.2637	-1.08129
Sb 206.834	-1.2441	ppb	7.7589	623.6	5.4516	-1.24412
Se 196.026	-6.4540	ppb	5.5509	86.0	3.1983	-6.45401
Si 288.158	10.9321	ppb	1.0792	9.9	622.654	10.93211
Sn 189.925	3.0926	ppb	6.5710	212.5	-0.3195	3.09257
Sr 216.596	0.8682	ppb	0.9513	109.6	5.4659	0.86823
Ti 334.941	0.6631	ppb	0.1213	18.3	24.9045	0.66307
Tl 190.794	-5.4071	ppb	2.7439	50.7	-3.7883	-5.40706
V 292.401	0.4749	ppb	0.8642	182.0	-7.9505	0.47487
Zn 206.200	0.3098	ppb	0.4088	131.9	-1.1496	0.30985

680-166873-B-1-Asd^5 (Samp) 4/8/2019, 9:35:03 PM

Rack 2, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0701u	0.7822u	0.7564u
Al 308.215	65345.7	65446.0	65333.4
As 188.980	9.9996	9.0097	4.6949
B 249.678	12.0247u	10.9510u	10.2549u
Ba 389.178	84.6986	87.8018	88.0406
Be 313.042	1.8949	1.9190	1.9316
Ca 370.602	681.8	682.7	682.5
Cd 226.502	0.8688	0.4704	1.1372
Co 228.615	44.2548	45.9445	46.1833
Cr 267.716	28.7519	28.5549	28.1022
Cu 324.754	57.1316	57.0862	56.6775
Fe 271.441	166358	165779	166333
K 766.491	487.448	489.210	489.146
Mg 279.078	533.907	542.416	543.764
Mn 257.610	2537.73	2542.95	2542.15
Mo 202.032	2.6195	1.1058u	3.8144
Na 330.237	252.752u	528.822u	661.926u
Ni 231.604	6.5908	9.2661	7.4566
Pb 220.353	15.7511	12.0730	8.8880
Sb 206.834	-6.9336	-8.8019u	-5.9571
Se 196.026	-4.3382u	-12.5467u	-11.9740u
Si 288.158	510.720	509.338	509.750
Sn 189.925	17.3478	3.7351	5.6511
Sr 216.596	3.3556	1.2324	3.7463
Ti 334.941	4662.16	4673.75	4680.53
Tl 190.794	9.5979u	11.8060u	-4.6855u
V 292.401	517.347	519.460	518.142
Zn 206.200	57.0032	58.1774	57.3549

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4895	ppb	0.4848	99.0	-69.7853
Al 308.215	65375.0	ppb	61.7658	0.1	110745
As 188.980	7.9014	ppb	2.8206	35.7	2.3630
B 249.678	11.0769	ppb	0.8916	8.0	-107.308

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	86.8470	ppb	1.8644	2.1	435.588
Be 313.042	1.9151	ppb	0.0187	1.0	1069.17
Ca 370.602	682.3	ppb	0.4666	0.1	856.6
Cd 226.502	0.8255	ppb	0.3355	40.6	215.407
Co 228.615	45.4609	ppb	1.0513	2.3	169.261
Cr 267.716	28.4697	ppb	0.3332	1.2	440.831
Cu 324.754	56.9651	ppb	0.2501	0.4	1982.76
Fe 271.441	166157	ppb	327.630	0.2	89949.1
K 766.491	488.601	ppb	0.9992	0.2	8540.50
Mg 279.078	540.029	ppb	5.3445	1.0	650.887
Mn 257.610	2540.94	ppb	2.8130	0.1	174350
Mo 202.032	2.5133	ppb	1.3574	54.0	4.4675
Na 330.237	481.167	ppb	208.708	43.4	-0.0444
Ni 231.604	7.7712	ppb	1.3651	17.6	4.8662
Pb 220.353	12.2373	ppb	3.4345	28.1	6.1104
Sb 206.834	-7.2309	ppb	1.4455	20.0	6.1214
Se 196.026	-9.6196	ppb	4.5828	47.6	2.3392
Si 288.158	509.936	ppb	0.7095	0.1	2937.36
Sn 189.925	8.9113	ppb	7.3687	82.7	0.9879
Sr 216.596	2.7781	ppb	1.3528	48.7	26.2714
Ti 334.941	4672.15	ppb	9.2865	0.2	352597
Tl 190.794	5.5728	ppb	8.9523	160.6	-3.9957
V 292.401	518.316	ppb	1.0669	0.2	4257.84
Zn 206.200	57.5118	ppb	0.6026	1.0	29.3967

680-166873-B-1-Apds (Samp) 4/8/2019, 9:39:27 PM Rack 2, Tube 42

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	54.0336	52.4821	53.1533
Al 308.215	310812	311193	310761
As 188.980	131.858	114.522	121.447
B 249.678	231.670	232.331	233.381
Ba 389.178	509.091	507.352	502.779
Be 313.042	59.9227	59.9357	59.8669
Ca 370.602	7672	7707	7668
Cd 226.502	57.7706	57.6105	57.3400
Co 228.615	255.869	261.292	257.013
Cr 267.716	225.596	225.851	226.422
Cu 324.754	364.231	362.160	363.573
Fe 271.441	764337	763990	763520
K 766.491	11080.3	11089.9	11056.6
Mg 279.078	7219.23	7232.66	7241.36
Mn 257.610	11893.0	11871.0	11888.8
Mo 202.032	100.295	105.708	107.223
Na 330.237	7096.52u	7058.05u	6636.97u
Ni 231.604	123.562	120.815	128.029
Pb 220.353	509.514	504.651	506.150
Sb 206.834	35.7277	36.9251	20.2672
Se 196.026	76.8658	101.534	97.4858
Si 288.158	1986.57	1994.15	1987.61
Sn 189.925	118.633	115.010	114.834
Sr 216.596	104.864	107.332	104.270
Ti 334.941	21480.8	21488.8	21469.9

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	32.5351u	18.7887u	44.2922u
V 292.401	2473.44	2474.57	2478.91
Zn 206.200	353.090	354.402	350.684

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.2230	ppb	0.7781	1.5	1251.87
Al 308.215	310922	ppb	236.084	0.1	525787
As 188.980	122.609	ppb	8.7262	7.1	27.6082
B 249.678	232.461	ppb	0.8628	0.4	734.887
Ba 389.178	506.407	ppb	3.2603	0.6	2663.41
Be 313.042	59.9084	ppb	0.0366	0.1	45963.8
Ca 370.602	7682	ppb	21.17	0.3	10361
Cd 226.502	57.5737	ppb	0.2176	0.4	1600.44
Co 228.615	258.058	ppb	2.8589	1.1	971.617
Cr 267.716	225.956	ppb	0.4226	0.2	3369.32
Cu 324.754	363.321	ppb	1.0578	0.3	10054.5
Fe 271.441	763949	ppb	409.923	0.1	413403
K 766.491	11075.6	ppb	17.1588	0.2	188510
Mg 279.078	7231.08	ppb	11.1528	0.2	8667.77
Mn 257.610	11884.3	ppb	11.7133	0.1	815375
Mo 202.032	104.409	ppb	3.6424	3.5	139.918
Na 330.237	6930.52	ppb	254.944	3.7	-3.0894
Ni 231.604	124.135	ppb	3.6410	2.9	119.010
Pb 220.353	506.772	ppb	2.4908	0.5	188.498
Sb 206.834	30.9733	ppb	9.2911	30.0	27.5833
Se 196.026	91.9619	ppb	13.2293	14.4	19.8958
Si 288.158	1989.44	ppb	4.1105	0.2	9946.48
Sn 189.925	116.159	ppb	2.1442	1.8	25.0850
Sr 216.596	105.489	ppb	1.6236	1.5	334.284
Ti 334.941	21479.8	ppb	9.4657	0.0	1621140
Tl 190.794	31.8720	ppb	12.7647	40.0	-7.7992
V 292.401	2475.64	ppb	2.8887	0.1	20370.5
Zn 206.200	352.725	ppb	1.8856	0.5	186.475

680-166873-B-1-B MS (Samp) 4/8/2019, 9:43:51 PM Rack 2, Tube 43

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.1150	52.0054	51.1626
Al 308.215	340597	340120	340198
As 188.980	125.590	121.451	127.917
B 249.678	224.420	224.082	223.635
Ba 389.178	706.250	705.892	706.858
Be 313.042	59.8765	59.8638	59.9028
Ca 370.602	7489	7465	7448
Cd 226.502	57.7420	56.9747	57.4969
Co 228.615	412.974	413.608	412.820
Cr 267.716	242.760	241.479	241.845
Cu 324.754	436.908	435.988	440.454
Fe 271.441	787014	787050	786509
K 766.491	11084.3	11091.0	11092.4
Mg 279.078	7313.07	7312.64	7293.79
Mn 257.610	16497.4	16525.2	16521.0
Mo 202.032	103.640	102.918	102.074

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	6857.95u	6633.56u	6504.74u
Ni 231.604	153.478	153.465	151.182
Pb 220.353	506.895	510.565	520.077
Sb 206.834	27.7404	11.3592	22.4350
Se 196.026	73.1149	90.8458	86.4709
Si 288.158	2495.13	2498.05	2496.21
Sn 189.925	122.820	111.410	106.966
Sr 216.596	103.582	107.529	105.281
Ti 334.941	21831.8	21856.0	21794.9
Tl 190.794	38.6780u	25.7894u	48.8449u
V 292.401	2530.39	2530.24	2528.59
Zn 206.200	513.124	502.920	518.748

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.4277	ppb	0.5009	1.0	1207.43
Al 308.215	340305	ppb	255.729	0.1	575446
As 188.980	124.986	ppb	3.2748	2.6	28.0267
B 249.678	224.045	ppb	0.3937	0.2	659.553
Ba 389.178	706.333	ppb	0.4882	0.1	3683.37
Be 313.042	59.8810	ppb	0.0199	0.0	45944.1
Ca 370.602	7467	ppb	20.70	0.3	10088
Cd 226.502	57.4045	ppb	0.3919	0.7	1626.45
Co 228.615	413.134	ppb	0.4172	0.1	1490.71
Cr 267.716	242.028	ppb	0.6601	0.3	3610.35
Cu 324.754	437.783	ppb	2.3580	0.5	11999.0
Fe 271.441	786858	ppb	302.334	0.0	425805
K 766.491	11089.3	ppb	4.3397	0.0	188742
Mg 279.078	7306.50	ppb	11.0078	0.2	8711.69
Mn 257.610	16514.5	ppb	15.0213	0.1	1132780
Mo 202.032	102.877	ppb	0.7836	0.8	137.569
Na 330.237	6665.42	ppb	178.749	2.7	-14.6459
Ni 231.604	152.708	ppb	1.3220	0.9	146.957
Pb 220.353	512.513	ppb	6.8035	1.3	190.767
Sb 206.834	20.5115	ppb	8.3583	40.7	24.6530
Se 196.026	83.4772	ppb	9.2368	11.1	18.7002
Si 288.158	2496.46	ppb	1.4783	0.1	12112.1
Sn 189.925	113.732	ppb	8.1783	7.2	24.5397
Sr 216.596	105.464	ppb	1.9798	1.9	336.288
Ti 334.941	21827.6	ppb	30.7454	0.1	1647386
Tl 190.794	37.7708	ppb	11.5545	30.6	-5.8505
V 292.401	2529.74	ppb	0.9999	0.0	20815.7
Zn 206.200	511.597	ppb	8.0237	1.6	270.426

680-166873-B-1-C MSD (Samp) 4/8/2019, 9:48:15 PM

Rack 2, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	48.9236	50.0704	52.2983
Al 308.215	340213	341432	340507
As 188.980	127.312	123.698	128.367
B 249.678	229.654	228.284	231.062
Ba 389.178	263.521	261.704	255.407
Be 313.042	59.3223	59.2001	59.3228
Ca 370.602	6913	6928	6945

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	58.8165	57.4825	58.7932
Co 228.615	85.1917	84.6815	85.6395
Cr 267.716	308.445	308.629	311.491
Cu 324.754	388.871	390.126	393.610
Fe 271.441	993041x	991197x	994396x
K 766.491	10394.8	10368.0	10364.1
Mg 279.078	6744.11	6737.70	6737.97
Mn 257.610	2149.97	2146.86	2154.04
Mo 202.032	92.4870	95.7486	95.1937
Na 330.237	6659.10u	6841.61u	6557.34u
Ni 231.604	113.100	113.456	112.637
Pb 220.353	458.581	460.080	446.057
Sb 206.834	18.9661	30.7328	19.1799
Se 196.026	75.9581	104.173	84.5307
Si 288.158	1911.18	1901.33	1914.17
Sn 189.925	113.024	113.462	103.635
Sr 216.596	99.8757	97.3484	97.1809
Ti 334.941	31915.7x	31884.2x	31934.6x
Tl 190.794	38.0091u	38.3547u	52.7421u
V 292.401	3227.36	3227.18	3231.40
Zn 206.200	373.660	377.737	374.001

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.4308b	ppb	1.7160	3.4	1114.64
Al 308.215	340717b	ppb	635.856	0.2	576164
As 188.980	126.459b	ppb	2.4484	1.9	27.5512
B 249.678	229.666b	ppb	1.3892	0.6	497.696
Ba 389.178	260.211b	ppb	4.2585	1.6	1444.87
Be 313.042	59.2818b	ppb	0.0707	0.1	45497.0
Ca 370.602	6928b	ppb	15.75	0.2	9023
Cd 226.502	58.3641b	ppb	0.7635	1.3	1885.44
Co 228.615	85.1709b	ppb	0.4793	0.6	455.144
Cr 267.716	309.521b	ppb	1.7080	0.6	4590.46
Cu 324.754	390.869b	ppb	2.4553	0.6	10804.0
Fe 271.441	992878xb	ppb	1605.57	0.2	537261
K 766.491	10375.6b	ppb	16.7069	0.2	176611
Mg 279.078	6739.93b	ppb	3.6272	0.1	8154.72
Mn 257.610	2150.29b	ppb	3.6011	0.2	148411
Mo 202.032	94.4764b	ppb	1.7451	1.8	123.817
Na 330.237	6686.02b	ppb	144.035	2.2	-100.844
Ni 231.604	113.064b	ppb	0.4105	0.4	108.261
Pb 220.353	454.906b	ppb	7.7004	1.7	168.312
Sb 206.834	22.9596b	ppb	6.7327	29.3	28.6463
Se 196.026	88.2205b	ppb	14.4647	16.4	17.6212
Si 288.158	1908.89b	ppb	6.7184	0.4	10036.8
Sn 189.925	110.040b	ppb	5.5517	5.0	23.7101
Sr 216.596	98.1350b	ppb	1.5098	1.5	338.605
Ti 334.941	31911.5xb	ppb	25.4579	0.1	2408448
Tl 190.794	43.0353b	ppb	8.4081	19.5	-11.8171
V 292.401	3228.64b	ppb	2.3836	0.1	26584.4
Zn 206.200	375.132b	ppb	2.2622	0.6	198.744

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166873-B-2-A (Samp) **4/8/2019, 9:52:39 PM** **Rack 2, Tube 45****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1736u	1.7323u	0.8746u
Al 308.215	294122	295741	294584
As 188.980	12.8891	2.5433u	12.3847
B 249.678	25.0156u	24.6382u	23.1397u
Ba 389.178	1273.24	1276.90	1282.13
Be 313.042	5.7872	5.7984	5.7662
Ca 370.602	2440	2455	2449
Cd 226.502	2.8602	3.4649	3.5838
Co 228.615	164.099	164.117	160.907
Cr 267.716	28.4417	27.4701	27.7648
Cu 324.754	315.513	313.751	312.139
Fe 271.441	375399	376055	376043
K 766.491	16592.4	16622.6	16589.5
Mg 279.078	12696.6	12735.4	12693.0
Mn 257.610	9703.52	9707.77	9706.96
Mo 202.032	0.5794u	3.7385	2.7695
Na 330.237	1203.17u	1524.16u	1577.55u
Ni 231.604	54.5741	52.2402	54.7766
Pb 220.353	37.2239	32.7284	36.1204
Sb 206.834	-16.3660	5.3143	-3.7082
Se 196.026	-3.0789u	-7.1973u	-7.8029u
Si 288.158	1962.87	1960.02	1960.92
Sn 189.925	20.6834	8.3162	9.1951
Sr 216.596	9.6994	8.5224	13.2953
Ti 334.941	9135.29	9187.38	9150.29
Tl 190.794	-2.3458u	-7.3893u	0.9234u
V 292.401	1009.90	1012.70	1010.50
Zn 206.200	271.369	267.120	271.497

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9268	ppb	0.7806	84.2	-83.8074
Al 308.215	294816	ppb	833.953	0.3	498523
As 188.980	9.2724	ppb	5.8330	62.9	1.7652
B 249.678	24.2645	ppb	0.9922	4.1	-225.407
Ba 389.178	1277.43	ppb	4.4643	0.3	6530.55
Be 313.042	5.7839	ppb	0.0163	0.3	4078.47
Ca 370.602	2448	ppb	7.655	0.3	3235
Cd 226.502	3.3030	ppb	0.3880	11.7	507.061
Co 228.615	163.041	ppb	1.8482	1.1	585.577
Cr 267.716	27.8922	ppb	0.4982	1.8	459.529
Cu 324.754	313.801	ppb	1.6879	0.5	8709.10
Fe 271.441	375832	ppb	375.384	0.1	203402
K 766.491	16601.5	ppb	18.3217	0.1	282445
Mg 279.078	12708.3	ppb	23.4816	0.2	15359.1
Mn 257.610	9706.08	ppb	2.2533	0.0	665707
Mo 202.032	2.3625	ppb	1.6184	68.5	2.1544
Na 330.237	1434.96	ppb	202.506	14.1	-22.9578
Ni 231.604	53.8636	ppb	1.4095	2.6	50.0745
Pb 220.353	35.3576	ppb	2.3428	6.6	14.4835
Sb 206.834	-4.9200	ppb	10.8908	221.4	10.0162
Se 196.026	-6.0264	ppb	2.5705	42.7	3.0000
Si 288.158	1961.27	ppb	1.4572	0.1	9288.88

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	12.7316	ppb	6.9005	54.2	1.8462
Sr 216.596	10.5057	ppb	2.4865	23.7	65.4614
Ti 334.941	9157.65	ppb	26.8123	0.3	691162
Tl 190.794	-2.9372	ppb	4.1878	142.6	-8.6738
V 292.401	1011.04	ppb	1.4740	0.1	8319.48
Zn 206.200	269.996	ppb	2.4909	0.9	142.068

680-166873-B-4-A (Samp) 4/8/2019, 9:57:02 PM Rack 2, Tube 46

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0177u	1.2088	0.4450u
Al 308.215	140863	140772	140907
As 188.980	0.9516u	3.9625	-1.4684u
B 249.678	9.9848u	10.1365u	8.2486u
Ba 389.178	919.861	918.604	917.148
Be 313.042	4.3281	4.3231	4.3230
Ca 370.602	780.4	789.6	794.2
Cd 226.502	1.7351	1.3840	1.1615
Co 228.615	43.6340	41.1112	41.1409
Cr 267.716	55.7767	55.8819	55.0204
Cu 324.754	124.062	122.333	123.021
Fe 271.441	123100	123167	123139
K 766.491	55205.6x	55144.4x	55341.2x
Mg 279.078	37156.4	37127.2	37135.8
Mn 257.610	1641.37	1639.91	1642.87
Mo 202.032	3.7856	2.7932	2.6059
Na 330.237	598.692u	711.755u	765.071u
Ni 231.604	31.9792	36.2307	31.2948
Pb 220.353	99.7953	95.8897	94.5936
Sb 206.834	-9.8978u	-3.1430	-1.2284
Se 196.026	-0.4595u	12.3372	4.2934
Si 288.158	2621.62	2619.06	2628.44
Sn 189.925	15.0442	26.7098	18.4766
Sr 216.596	12.5279	10.2358	9.1510
Ti 334.941	13889.2	13897.5	13864.2
Tl 190.794	3.7728u	16.2765	-14.7462u
V 292.401	227.729	227.879	227.531
Zn 206.200	468.373	464.945	466.579

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5454b	ppb	0.6194	113.6	-72.5241
Al 308.215	140847b	ppb	68.7068	0.0	238288
As 188.980	1.1486b	ppb	2.7208	236.9	0.9093
B 249.678	9.4567b	ppb	1.0489	11.1	-76.3824
Ba 389.178	918.538b	ppb	1.3575	0.1	4687.41
Be 313.042	4.3247b	ppb	0.0029	0.1	2927.84
Ca 370.602	788.1b	ppb	6.991	0.9	1210
Cd 226.502	1.4269b	ppb	0.2892	20.3	170.782
Co 228.615	41.9620b	ppb	1.4480	3.5	216.089
Cr 267.716	55.5597b	ppb	0.4700	0.8	835.552
Cu 324.754	123.139b	ppb	0.8700	0.7	3702.86
Fe 271.441	123136b	ppb	33.7237	0.0	66672.4
K 766.491	55230.4xb	ppb	100.690	0.2	939102

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	37139.8b	ppb	15.0212	0.0	45204.7
Mn 257.610	1641.38b	ppb	1.4794	0.1	112903
Mo 202.032	3.0616b	ppb	0.6340	20.7	5.6830
Na 330.237	691.839b	ppb	84.9588	12.3	-70.9343
Ni 231.604	33.1682b	ppb	2.6742	8.1	29.8125
Pb 220.353	96.7595b	ppb	2.7077	2.8	35.7194
Sb 206.834	-4.7564b	ppb	4.5543	95.8	6.3118
Se 196.026	5.3904b	ppb	6.4685	120.0	5.1315
Si 288.158	2623.04b	ppb	4.8464	0.2	12297.3
Sn 189.925	20.0769b	ppb	5.9952	29.9	3.4966
Sr 216.596	10.6382b	ppb	1.7240	16.2	41.2275
Ti 334.941	13883.6b	ppb	17.3221	0.1	1047899
Tl 190.794	1.7677b	ppb	15.6082	883.0	-4.2518
V 292.401	227.713b	ppb	0.1743	0.1	1903.41
Zn 206.200	466.632b	ppb	1.7149	0.4	245.380

680-166873-B-5-A (Samp)

4/8/2019, 10:01:26 PM

Rack 2, Tube 47

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6990u	-0.2667u	-0.6365u
Al 308.215	110410	110141	110430
As 188.980	-0.6727u	0.4462u	4.3766
B 249.678	6.9164u	4.8727u	6.1328u
Ba 389.178	435.628	438.069	437.615
Be 313.042	2.1658	2.1608	2.1843
Ca 370.602	756.9	759.1	770.7
Cd 226.502	0.4933	1.1103	0.3419
Co 228.615	17.6233	16.5761	17.8495
Cr 267.716	30.1078	29.3421	29.3006
Cu 324.754	64.2875	62.7601	61.9391
Fe 271.441	69192.1	68912.8	68902.9
K 766.491	25273.5	25144.8	25211.3
Mg 279.078	17248.1	17240.8	17236.4
Mn 257.610	560.741	558.776	559.563
Mo 202.032	-0.5105u	1.8682	-0.2275u
Na 330.237	501.169u	-85.3694u	638.580u
Ni 231.604	16.0489	20.1238	22.6821
Pb 220.353	40.5049	36.2602	40.0938
Sb 206.834	4.7514	0.6496	-3.5587u
Se 196.026	-5.4439u	9.7101	-12.2197u
Si 288.158	2602.54	2594.46	2589.72
Sn 189.925	7.0160	13.6025	18.4803
Sr 216.596	6.4584	6.8805	6.3080
Ti 334.941	6284.12	6263.55	6269.09
Tl 190.794	0.1114u	-13.6425u	1.9318u
V 292.401	119.604	119.466	117.509
Zn 206.200	213.732	213.651	215.710

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5341	ppb	0.2337	43.8	-86.9846
Al 308.215	110327	ppb	160.856	0.1	186704
As 188.980	1.3834	ppb	2.6519	191.7	1.2564
B 249.678	5.9740	ppb	1.0311	17.3	-46.5246

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	437.104	ppb	1.2982	0.3	2215.49
Be 313.042	2.1703	ppb	0.0124	0.6	1259.55
Ca 370.602	762.2	ppb	7.391	1.0	1107
Cd 226.502	0.6485	ppb	0.4070	62.8	96.4146
Co 228.615	17.3496	ppb	0.6794	3.9	87.4443
Cr 267.716	29.5835	ppb	0.4545	1.5	449.039
Cu 324.754	62.9956	ppb	1.1918	1.9	2126.96
Fe 271.441	69002.6	ppb	164.174	0.2	37381.5
K 766.491	25209.9	ppb	64.3354	0.3	428780
Mg 279.078	17241.8	ppb	5.9179	0.0	20995.0
Mn 257.610	559.693	ppb	0.9890	0.2	38563.2
Mo 202.032	0.3768	ppb	1.2994	344.9	2.4940
Na 330.237	351.460	ppb	384.494	109.4	-13.8967
Ni 231.604	19.6183	ppb	3.3454	17.1	16.5290
Pb 220.353	38.9530	ppb	2.3411	6.0	15.1917
Sb 206.834	0.6141	ppb	4.1552	676.7	7.1356
Se 196.026	-2.6512	ppb	11.2285	423.5	3.7310
Si 288.158	2595.57	ppb	6.4817	0.2	11861.8
Sn 189.925	13.0329	ppb	5.7533	44.1	1.9139
Sr 216.596	6.5490	ppb	0.2968	4.5	26.0186
Ti 334.941	6272.25	ppb	10.6419	0.2	473400
Tl 190.794	-3.8664	ppb	8.5151	220.2	-4.7051
V 292.401	118.860	ppb	1.1718	1.0	984.974
Zn 206.200	214.364	ppb	1.1661	0.5	112.038

680-166873-B-6-A (Samp)

4/8/2019, 10:05:51 PM

Rack 2, Tube 48

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5329u	0.5824u	0.2658u
Al 308.215	74471.3	74621.4	74590.0
As 188.980	2.5727u	1.9162u	4.7176u
B 249.678	11.5365u	12.4788u	11.5227u
Ba 389.178	278.252	277.257	275.583
Be 313.042	1.9902	1.9807	1.9968
Ca 370.602	96.59	90.35	91.19
Cd 226.502	1.9269	2.4205	1.9920
Co 228.615	147.701	147.253	146.855
Cr 267.716	9.8493	10.3522	9.4408
Cu 324.754	66.7600	66.1271	65.3126
Fe 271.441	259281	259766	259764
K 766.491	802.964	803.504	801.057
Mg 279.078	1440.57	1448.79	1455.79
Mn 257.610	16292.5	16341.4	16382.3
Mo 202.032	0.9613u	2.9745	3.0114
Na 330.237	673.718u	733.039u	273.806u
Ni 231.604	22.1004	24.4432	24.2481
Pb 220.353	116.780	118.776	104.994
Sb 206.834	-1.8393	-9.4571	-11.8714
Se 196.026	-2.5365	-10.7203u	6.7035
Si 288.158	2354.25	2357.91	2365.86
Sn 189.925	21.6300	15.1362	14.7393
Sr 216.596	1.4612	1.7666	-0.2527
Ti 334.941	2364.17	2369.48	2370.01

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-7.3973u	-7.5676u	4.4302u
V 292.401	390.956	391.312	389.996
Zn 206.200	374.310	373.665	370.440

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4604	ppb	0.1703	37.0	-60.8259
Al 308.215	74560.9	ppb	79.1559	0.1	126269
As 188.980	3.0688	ppb	1.4651	47.7	0.7292
B 249.678	11.8460	ppb	0.5481	4.6	-192.674
Ba 389.178	277.031	ppb	1.3484	0.5	1417.03
Be 313.042	1.9892	ppb	0.0081	0.4	1121.14
Ca 370.602	92.71	ppb	3.383	3.6	21.77
Cd 226.502	2.1131	ppb	0.2682	12.7	345.186
Co 228.615	147.270	ppb	0.4229	0.3	492.736
Cr 267.716	9.8808	ppb	0.4565	4.6	194.775
Cu 324.754	66.0666	ppb	0.7256	1.1	2235.30
Fe 271.441	259604	ppb	279.322	0.1	140513
K 766.491	802.508	ppb	1.2856	0.2	13876.6
Mg 279.078	1448.39	ppb	7.6180	0.5	1627.56
Mn 257.610	16338.7	ppb	44.9376	0.3	1120159
Mo 202.032	2.3157	ppb	1.1731	50.7	3.3044
Na 330.237	560.188	ppb	249.781	44.6	13.2449
Ni 231.604	23.5972	ppb	1.3000	5.5	20.3365
Pb 220.353	113.517	ppb	7.4484	6.6	44.7867
Sb 206.834	-7.7226	ppb	5.2361	67.8	7.3416
Se 196.026	-2.1844	ppb	8.7173	399.1	4.6674
Si 288.158	2359.34	ppb	5.9369	0.3	10694.6
Sn 189.925	17.1685	ppb	3.8689	22.5	2.8431
Sr 216.596	0.9917	ppb	1.0884	109.8	30.9591
Ti 334.941	2367.88	ppb	3.2273	0.1	178690
Tl 190.794	-3.5116	ppb	6.8783	195.9	-5.1751
V 292.401	390.755	ppb	0.6812	0.2	3210.06
Zn 206.200	372.805	ppb	2.0737	0.6	196.134

680-166873-B-7-A (Samp)

4/8/2019, 10:10:15 PM

Rack 2, Tube 49

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5958u	2.6279	0.9129u
Al 308.215	128096	127859	127928
As 188.980	12.4632	9.4782	10.0413
B 249.678	9.1564u	10.2473u	10.7433u
Ba 389.178	300.017	301.622	301.428
Be 313.042	1.4343	1.4262	1.4152
Ca 370.602	40.86u	48.29u	40.53u
Cd 226.502	1.5533	1.1257	1.2355
Co 228.615	19.0601	18.4541	16.6337
Cr 267.716	9.3074	10.5560	9.6449
Cu 324.754	45.6162	45.4242	46.2755
Fe 271.441	225177	225014	225274
K 766.491	5640.50	5638.32	5657.88
Mg 279.078	5547.71	5534.38	5522.49
Mn 257.610	2189.68	2186.80	2190.37
Mo 202.032	2.0257	-2.6008u	0.9680u

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	231.063u	474.733u	556.011u
Ni 231.604	9.1609	4.9343	5.7617
Pb 220.353	19.5348	21.0968	28.1785
Sb 206.834	-9.8385	-10.1090	-6.0079
Se 196.026	-2.9868u	-16.5404u	-0.3299u
Si 288.158	2958.47	2943.70	2942.76
Sn 189.925	9.2151	21.3853	11.6719
Sr 216.596	-1.2940	-0.6178	2.0448
Ti 334.941	2869.31	2866.56	2869.20
Tl 190.794	-5.5498u	-17.7539u	5.1253u
V 292.401	264.270	261.966	262.704
Zn 206.200	116.039	112.600	110.263

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.3789	ppb	1.0933	79.3	-54.3343
Al 308.215	127961	ppb	121.860	0.1	216512
As 188.980	10.6609	ppb	1.5860	14.9	2.8500
B 249.678	10.0490	ppb	0.8118	8.1	-170.994
Ba 389.178	301.022	ppb	0.8764	0.3	1537.22
Be 313.042	1.4252	ppb	0.0096	0.7	685.968
Ca 370.602	43.23	ppb	4.391	10.2	-170.7
Cd 226.502	1.3048	ppb	0.2221	17.0	295.689
Co 228.615	18.0493	ppb	1.2629	7.0	65.3287
Cr 267.716	9.8361	ppb	0.6459	6.6	173.807
Cu 324.754	45.7720	ppb	0.4465	1.0	1701.47
Fe 271.441	225155	ppb	131.246	0.1	121868
K 766.491	5645.56	ppb	10.7162	0.2	96204.3
Mg 279.078	5534.86	ppb	12.6162	0.2	6724.25
Mn 257.610	2188.95	ppb	1.8905	0.1	150246
Mo 202.032	0.1310	ppb	2.4242	1851.1	0.6210
Na 330.237	420.602	ppb	169.102	40.2	9.9223
Ni 231.604	6.6190	ppb	2.2399	33.8	3.7674
Pb 220.353	22.9367	ppb	4.6062	20.1	10.3166
Sb 206.834	-8.6518	ppb	2.2937	26.5	6.5297
Se 196.026	-6.6190	ppb	8.6942	131.4	2.6722
Si 288.158	2948.31	ppb	8.8120	0.3	13215.9
Sn 189.925	14.0908	ppb	6.4356	45.7	2.1516
Sr 216.596	0.0443	ppb	1.7651	3981.1	25.3687
Ti 334.941	2868.36	ppb	1.5574	0.1	216472
Tl 190.794	-6.0595	ppb	11.4481	188.9	-8.0905
V 292.401	262.980	ppb	1.1764	0.4	2162.94
Zn 206.200	112.967	ppb	2.9056	2.6	58.8212

680-166873-B-8-A (Samp)

4/8/2019, 10:14:38 PM

Rack 2, Tube 50

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0092u	-0.1225u	0.2497u
Al 308.215	73603.8	73718.5	73643.7
As 188.980	1.2821u	5.3535	16.1814
B 249.678	9.2613u	9.0252u	8.5923u
Ba 389.178	231.022	227.342	226.890
Be 313.042	1.5044	1.5149	1.5064
Ca 370.602	103.8u	100.6u	101.0u

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	1.0878	2.0218	1.2984
Co 228.615	29.0553	29.3526	29.5573
Cr 267.716	12.9653	12.2574	12.7992
Cu 324.754	31.7246	31.7119	30.6091
Fe 271.441	201953	202056	201816
K 766.491	3674.24	3674.00	3677.69
Mg 279.078	2904.66	2914.85	2906.76
Mn 257.610	3608.90	3617.68	3610.03
Mo 202.032	1.9405	0.6225u	2.2856
Na 330.237	500.952u	956.543u	603.408u
Ni 231.604	5.3069	4.4384	6.3543
Pb 220.353	34.8503	38.8407	32.3505
Sb 206.834	-3.2388	9.5170	-9.5009
Se 196.026	1.3697u	-17.7992u	-7.9082u
Si 288.158	2777.19	2784.97	2785.84
Sn 189.925	2.3515	17.4917	12.8884
Sr 216.596	1.4525	2.1386	0.0609
Ti 334.941	2776.01	2780.29	2772.84
Tl 190.794	0.9986u	4.1556u	11.2268u
V 292.401	240.359	241.720	243.705
Zn 206.200	74.6120	75.0456	80.6932

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0393	ppb	0.1908	485.0	-84.2921
Al 308.215	73655.3	ppb	58.2077	0.1	124734
As 188.980	7.6057	ppb	7.7007	101.3	2.1353
B 249.678	8.9596	ppb	0.3393	3.8	-155.552
Ba 389.178	228.418	ppb	2.2665	1.0	1162.51
Be 313.042	1.5086	ppb	0.0056	0.4	747.907
Ca 370.602	101.8	ppb	1.731	1.7	-38.21
Cd 226.502	1.4693	ppb	0.4899	33.3	267.346
Co 228.615	29.3217	ppb	0.2524	0.9	102.849
Cr 267.716	12.6739	ppb	0.3702	2.9	214.979
Cu 324.754	31.3485	ppb	0.6403	2.0	1321.93
Fe 271.441	201942	ppb	120.476	0.1	109309
K 766.491	3675.31	ppb	2.0630	0.1	62711.7
Mg 279.078	2908.75	ppb	5.3798	0.2	3523.33
Mn 257.610	3612.20	ppb	4.7769	0.1	247782
Mo 202.032	1.6162	ppb	0.8777	54.3	2.9120
Na 330.237	686.968	ppb	239.013	34.8	18.4425
Ni 231.604	5.3665	ppb	0.9594	17.9	2.5209
Pb 220.353	35.3472	ppb	3.2735	9.3	15.0544
Sb 206.834	-1.0742	ppb	9.6920	902.2	8.5707
Se 196.026	-8.1126	ppb	9.5861	118.2	2.6012
Si 288.158	2782.67	ppb	4.7620	0.2	12509.4
Sn 189.925	10.9105	ppb	7.7614	71.1	1.4370
Sr 216.596	1.2173	ppb	1.0586	87.0	25.9682
Ti 334.941	2776.38	ppb	3.7408	0.1	209524
Tl 190.794	5.4603	ppb	5.2375	95.9	-4.6310
V 292.401	241.928	ppb	1.6826	0.7	1989.02
Zn 206.200	76.7836	ppb	3.3928	4.4	39.6596

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Verif (CCV) 4/8/2019, 10:19:04 PM Rack S, Tube 10

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	499.079	497.370	498.475
Al 308.215	10278.7	10281.5	10266.5
As 188.980	544.347	549.200	545.168
B 249.678	525.134	530.617	533.503
Ba 389.178	487.326	490.224	486.068
Be 313.042	534.815	535.704	535.906
Ca 370.602	10095	10096	10089
Cd 226.502	512.098	511.586	512.291
Co 228.615	516.184	514.852	512.250
Cr 267.716	500.482	503.011	501.757
Cu 324.754	511.819	510.796	506.600
Fe 271.441	10237.3	10236.7	10275.8
K 766.491	9971.65	9978.25	9976.73
Mg 279.078	10315.7	10352.1	10312.5
Mn 257.610	508.094	508.132	508.237
Mo 202.032	506.593	513.292	511.285
Na 330.237	11258.4	10398.6	10695.8
Ni 231.604	509.243	516.914	509.742
Pb 220.353	490.873	502.993	498.578
Sb 206.834	504.798	502.864	504.744
Se 196.026	524.526	545.645	545.619
Si 288.158	5057.81	5056.52	5038.63
Sn 189.925	506.685	493.092	516.498
Sr 216.596	500.196	502.612	503.552
Ti 334.941	506.833	507.014	506.724
Tl 190.794	512.732	502.243	501.958
V 292.401	511.832	509.123	511.074
Zn 206.200	1052.25	1043.13	1049.62

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	498.308	ppb	0.8667	0.2	13337.7	99.66162
Al 308.215	10275.6	ppb	8.0128	0.1	17625.8	102.75588
As 188.980	546.239	ppb	2.5974	0.5	132.535	109.24772
B 249.678	529.751	ppb	4.2507	0.8	3369.73	105.95027
Ba 389.178	487.873	ppb	2.1312	0.4	2460.33	97.57457
Be 313.042	535.475	ppb	0.5805	0.1	413698	107.09508
Ca 370.602	10093	ppb	3.622	0.0	14347	100.93381
Cd 226.502	511.992	ppb	0.3641	0.1	5876.02	102.39830
Co 228.615	514.429	ppb	2.0011	0.4	1707.66	102.88574
Cr 267.716	501.750	ppb	1.2646	0.3	7291.59	100.34999
Cu 324.754	509.738	ppb	2.7653	0.5	13770.6	101.94765
Fe 271.441	10249.9	ppb	22.4307	0.2	5617.36	102.44795
K 766.491	9975.54	ppb	3.4538	0.0	169810	99.75543
Mg 279.078	10326.8	ppb	21.9551	0.2	12594.2	103.26772
Mn 257.610	508.154	ppb	0.0743	0.0	34899.0	101.63084
Mo 202.032	510.390	ppb	3.4381	0.7	711.377	102.07803
Na 330.237	10784.3	ppb	436.644	4.0	280.918	107.84264
Ni 231.604	511.966	ppb	4.2920	0.8	499.746	102.39327
Pb 220.353	497.481	ppb	6.1339	1.2	185.220	99.49627
Sb 206.834	504.135	ppb	1.1013	0.2	165.891	100.82706
Se 196.026	538.597	ppb	12.1858	2.3	102.775	107.71935
Si 288.158	5050.99	ppb	10.7221	0.2	22147.4	101.01978

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	505.425	ppb	11.7539	2.3	112.548	101.08496
Sr 216.596	502.120	ppb	1.7314	0.3	1224.88	100.42406
Ti 334.941	506.857	ppb	0.1468	0.0	38252.2	101.37142
Tl 190.794	505.644	ppb	6.1398	1.2	115.170	101.12883
V 292.401	510.676	ppb	1.3975	0.3	4138.59	102.13528
Zn 206.200	1048.33	ppb	4.6937	0.4	552.150	104.83345

Cont Calib Blank (CCB) 4/8/2019, 10:23:28 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0682	-0.7410u	1.0550
Al 308.215	2.6541	-0.4592u	-0.7320u
As 188.980	-3.8118u	-3.0151u	-1.2976u
B 249.678	15.6194	13.6032	12.2400
Ba 389.178	-4.0645u	-1.3346u	2.9403
Be 313.042	0.0381	0.0377	0.0363
Ca 370.602	6.661	13.59	7.185
Cd 226.502	-0.3787u	-0.2366u	0.2627
Co 228.615	-0.0297u	-0.2483u	-0.4264u
Cr 267.716	0.3130	0.9070	0.0303
Cu 324.754	1.2194	0.1411	2.2181
Fe 271.441	-2.9481u	2.7180	1.9768
K 766.491	0.3553	0.1961	2.2007
Mg 279.078	1.5531	1.4295	1.0372
Mn 257.610	0.1965	0.2070	0.2219
Mo 202.032	0.8591	0.8736	3.4426
Na 330.237	118.295	157.257	132.692
Ni 231.604	1.3543	-1.9972u	0.3499
Pb 220.353	-5.0666u	-0.2487u	-0.5306u
Sb 206.834	-0.9779u	-1.2116u	-4.5914u
Se 196.026	5.1645	-9.6850u	-6.0649u
Si 288.158	11.1118	12.0860	11.3058
Sn 189.925	-1.6478u	5.3691	5.2306
Sr 216.596	0.4844	0.1635	-1.2440u
Ti 334.941	0.7487	0.4678	0.7150
Tl 190.794	0.0967	1.5161	0.8566
V 292.401	0.8440	0.0522	-0.2721u
Zn 206.200	2.1657	4.4561	-0.7648u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.4607	ppb	1.0407	225.9	-43.9507	0.46072
Al 308.215	0.4876	ppb	1.8812	385.8	244.326	0.48761
As 188.980	-2.7082	ppb	1.2849	47.4	0.5278	-2.70816
B 249.678	13.8209	ppb	1.7002	12.3	70.2971	13.82086
Ba 389.178	-0.8196	ppb	3.5307	430.8	-35.2324	-0.81961
Be 313.042	0.0374	ppb	0.0010	2.6	-395.923	0.03739
Ca 370.602	9.144	ppb	3.856	42.2	22.18	9.14418
Cd 226.502	-0.1175	ppb	0.3369	286.6	1.0724	-0.11755
Co 228.615	-0.2348	ppb	0.1987	84.6	-9.1591	-0.23481
Cr 267.716	0.4167	ppb	0.4475	107.4	16.3809	0.41674
Cu 324.754	1.1929	ppb	1.0388	87.1	505.558	1.19288
Fe 271.441	0.5822	ppb	3.0798	529.0	46.1484	0.58223
K 766.491	0.9174	ppb	1.1142	121.5	250.309	0.91738

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Mg 279.078	1.3399	ppb	0.2694	20.1	29.8989	1.33994
Mn 257.610	0.2085	ppb	0.0128	6.1	36.7325	0.20847
Mo 202.032	1.7251	ppb	1.4874	86.2	5.0514	1.72512
Na 330.237	136.081	ppb	19.7006	14.5	35.8042	136.08125
Ni 231.604	-0.0977	ppb	1.7200	1761.1	-2.8299	-0.09766
Pb 220.353	-1.9486	ppb	2.7039	138.8	0.9433	-1.94862
Sb 206.834	-2.2603	ppb	2.0222	89.5	5.1310	-2.26031
Se 196.026	-3.5285	ppb	7.7429	219.4	3.7327	-3.52847
Si 288.158	11.5012	ppb	0.5157	4.5	624.709	11.50123
Sn 189.925	2.9840	ppb	4.0118	134.4	-0.3438	2.98397
Sr 216.596	-0.1987	ppb	0.9194	462.7	2.8681	-0.19869
Ti 334.941	0.6438	ppb	0.1534	23.8	23.4525	0.64385
Tl 190.794	0.8231	ppb	0.7103	86.3	-2.3388	0.82313
V 292.401	0.2080	ppb	0.5741	276.0	-10.1151	0.20802
Zn 206.200	1.9523	ppb	2.6170	134.0	-0.2820	1.95229

680-166873-B-9-A (Samp)

4/8/2019, 10:27:51 PM

Rack 2, Tube 51

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4637u	-0.1396u	0.1980u
Al 308.215	96705.5	96769.3	96583.2
As 188.980	15.1369	0.1058u	7.9208
B 249.678	9.8541u	10.9549u	10.6416u
Ba 389.178	528.228	530.663	526.082
Be 313.042	1.7653	1.7626	1.7194
Ca 370.602	143.6	150.6	149.6
Cd 226.502	0.4706	0.9476	1.7596
Co 228.615	90.3222	89.6927	90.5013
Cr 267.716	7.5508	8.0554	7.6333
Cu 324.754	49.7511	50.1784	50.3865
Fe 271.441	152890	152993	152691
K 766.491	14471.3	14485.5	14515.9
Mg 279.078	11176.4	11174.1	11163.6
Mn 257.610	8885.44	8898.41	8864.81
Mo 202.032	6.4531	8.2655	9.2277
Na 330.237	605.020u	1027.48u	676.516u
Ni 231.604	24.0918	25.5235	22.8514
Pb 220.353	59.6651	65.4491	70.4563
Sb 206.834	6.5874	4.8934	-7.6387u
Se 196.026	-11.6770u	6.5189	-11.4983u
Si 288.158	2488.26	2486.60	2484.98
Sn 189.925	19.2853	16.8415	23.3560
Sr 216.596	2.4894	1.3611	2.0240
Ti 334.941	4155.83	4152.51	4140.85
Tl 190.794	0.4371u	-9.7435u	2.0363u
V 292.401	166.128	168.272	166.924
Zn 206.200	295.692	292.378	303.774

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1740	ppb	0.3023	173.7	-65.5817
Al 308.215	96686.0	ppb	94.5593	0.1	163653
As 188.980	7.7212	ppb	7.5175	97.4	2.3837
B 249.678	10.4835	ppb	0.5672	5.4	-98.3771

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	528.324	ppb	2.2921	0.4	2686.84
Be 313.042	1.7491	ppb	0.0257	1.5	932.294
Ca 370.602	147.9	ppb	3.788	2.6	186.1
Cd 226.502	1.0592	ppb	0.6517	61.5	203.238
Co 228.615	90.1721	ppb	0.4247	0.5	315.433
Cr 267.716	7.7465	ppb	0.2707	3.5	147.776
Cu 324.754	50.1054	ppb	0.3239	0.6	1803.77
Fe 271.441	152858	ppb	153.424	0.1	82754.7
K 766.491	14490.9	ppb	22.7995	0.2	246567
Mg 279.078	11171.4	ppb	6.8437	0.1	13530.0
Mn 257.610	8882.89	ppb	16.9433	0.2	609085
Mo 202.032	7.9821	ppb	1.4089	17.7	12.2398
Na 330.237	769.673	ppb	226.114	29.4	9.1396
Ni 231.604	24.1556	ppb	1.3372	5.5	20.9299
Pb 220.353	65.1902	ppb	5.4003	8.3	25.8933
Sb 206.834	1.2807	ppb	7.7707	606.8	8.5644
Se 196.026	-5.5522	ppb	10.4542	188.3	3.7019
Si 288.158	2486.62	ppb	1.6375	0.1	11311.0
Sn 189.925	19.8276	ppb	3.2909	16.6	3.4406
Sr 216.596	1.9582	ppb	0.5671	29.0	22.8764
Ti 334.941	4149.73	ppb	7.8679	0.2	313193
Tl 190.794	-2.4234	ppb	6.3896	263.7	-4.3377
V 292.401	167.108	ppb	1.0837	0.6	1377.64
Zn 206.200	297.282	ppb	5.8620	2.0	156.021

680-166873-B-11-A (Samp)

4/8/2019, 10:32:15 PM

Rack 2, Tube 52

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9082u	0.6604u	1.9703u
Al 308.215	144861	145308	145242
As 188.980	21.1139	11.1166	17.8455
B 249.678	25.0112u	25.1529u	24.8592u
Ba 389.178	272.250	276.599	276.296
Be 313.042	4.0887	4.0607	4.0795
Ca 370.602	356.2	356.4	363.2
Cd 226.502	4.2724	3.0711	3.3351
Co 228.615	185.438	181.980	185.923
Cr 267.716	106.667	107.387	107.727
Cu 324.754	158.850	158.297	157.703
Fe 271.441	425025	425849	426938
K 766.491	8759.03	8800.92	8792.49
Mg 279.078	9537.23	9549.02	9565.96
Mn 257.610	8966.04	8967.97	8967.50
Mo 202.032	4.0446	1.5431u	3.3688
Na 330.237	1188.70u	997.518u	1128.06u
Ni 231.604	83.0071	81.0845	85.1038
Pb 220.353	38.9024	33.9935	21.9247
Sb 206.834	-12.6880	-12.4445	-6.7660
Se 196.026	-5.5587u	-13.2729u	-12.1198u
Si 288.158	2507.18	2509.61	2515.90
Sn 189.925	21.8078	7.3596	18.2722
Sr 216.596	2.4451	1.0420	3.0197
Ti 334.941	12287.9	12318.0	12354.1

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	10.4258u	10.2054u	-5.7393u
V 292.401	1024.85	1025.73	1029.77
Zn 206.200	266.194	265.347	268.561

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1796	ppb	0.6959	59.0	-89.5815
Al 308.215	145137	ppb	241.387	0.2	245563
As 188.980	16.6920	ppb	5.0975	30.5	3.2902
B 249.678	25.0078	ppb	0.1469	0.6	-268.311
Ba 389.178	275.048	ppb	2.4283	0.9	1438.09
Be 313.042	4.0763	ppb	0.0143	0.4	2751.88
Ca 370.602	358.6	ppb	3.981	1.1	241.6
Cd 226.502	3.5595	ppb	0.6313	17.7	564.381
Co 228.615	184.447	ppb	2.1504	1.2	675.789
Cr 267.716	107.260	ppb	0.5415	0.5	1615.06
Cu 324.754	158.283	ppb	0.5738	0.4	4662.05
Fe 271.441	425937	ppb	959.503	0.2	230512
K 766.491	8784.14	ppb	22.1565	0.3	149557
Mg 279.078	9550.74	ppb	14.4404	0.2	11547.7
Mn 257.610	8967.17	ppb	1.0039	0.0	615117
Mo 202.032	2.9855	ppb	1.2940	43.3	2.5387
Na 330.237	1104.76	ppb	97.6982	8.8	-58.0565
Ni 231.604	83.0651	ppb	2.0103	2.4	78.7154
Pb 220.353	31.6068	ppb	8.7368	27.6	13.2802
Sb 206.834	-10.6328	ppb	3.3510	31.5	9.1167
Se 196.026	-10.3171	ppb	4.1610	40.3	1.9961
Si 288.158	2510.90	ppb	4.4966	0.2	11754.8
Sn 189.925	15.8132	ppb	7.5314	47.6	2.5385
Sr 216.596	2.1689	ppb	1.0174	46.9	49.8009
Ti 334.941	12320.0	ppb	33.1799	0.3	929825
Tl 190.794	4.9640	ppb	9.2700	186.7	-8.0058
V 292.401	1026.78	ppb	2.6230	0.3	8460.11
Zn 206.200	266.701	ppb	1.6660	0.6	140.389

680-166873-B-12-A (Samp)

4/8/2019, 10:36:38 PM

Rack 2, Tube 53

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.2133	0.9099u	0.9864u
Al 308.215	119279	119257	119415
As 188.980	6.3041	14.4090	18.3420
B 249.678	15.4265u	14.2954u	14.7897u
Ba 389.178	293.983	297.742	301.972
Be 313.042	4.6187	4.6191	4.6300
Ca 370.602	112.7u	116.1u	110.0u
Cd 226.502	1.8268	1.7312	1.4913
Co 228.615	45.7162	46.3942	45.4855
Cr 267.716	38.3907	38.0949	38.4041
Cu 324.754	119.715	119.592	119.258
Fe 271.441	204772	204752	204696
K 766.491	10236.1	10223.4	10252.4
Mg 279.078	14041.1	14025.7	14019.7
Mn 257.610	3065.99	3060.66	3056.81
Mo 202.032	2.1467	0.9179u	0.5144u

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	835.365u	877.820u	567.186u
Ni 231.604	13.5680	15.4279	16.4303
Pb 220.353	16.7232	25.7846	27.7872
Sb 206.834	1.7665	14.9375	19.6625
Se 196.026	-19.2819u	-3.3866u	2.8603
Si 288.158	2578.21	2568.12	2576.99
Sn 189.925	23.9473	17.7380	22.9705
Sr 216.596	4.1918	0.5925	3.8013
Ti 334.941	3680.97	3674.55	3674.66
Tl 190.794	-16.4695u	-14.7907u	-6.5461u
V 292.401	296.984	295.579	295.137
Zn 206.200	211.444	213.340	213.977

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.0365	ppb	0.1578	15.2	-59.6411
Al 308.215	119317	ppb	85.7620	0.1	201904
As 188.980	13.0184	ppb	6.1383	47.2	3.5240
B 249.678	14.8372	ppb	0.5670	3.8	-120.420
Ba 389.178	297.899	ppb	3.9969	1.3	1525.05
Be 313.042	4.6226	ppb	0.0064	0.1	3159.16
Ca 370.602	112.9	ppb	3.075	2.7	-17.83
Cd 226.502	1.6831	ppb	0.1728	10.3	274.461
Co 228.615	45.8653	ppb	0.4723	1.0	163.647
Cr 267.716	38.2966	ppb	0.1748	0.5	586.801
Cu 324.754	119.522	ppb	0.2366	0.2	3620.89
Fe 271.441	204740	ppb	39.0770	0.0	110824
K 766.491	10237.3	ppb	14.5323	0.1	174259
Mg 279.078	14028.8	ppb	11.0134	0.1	17058.7
Mn 257.610	3061.15	ppb	4.6105	0.2	210058
Mo 202.032	1.1930	ppb	0.8502	71.3	2.2908
Na 330.237	760.123	ppb	168.432	22.2	11.5510
Ni 231.604	15.1420	ppb	1.4524	9.6	12.1151
Pb 220.353	23.4316	ppb	5.8953	25.2	10.3823
Sb 206.834	12.1222	ppb	9.2743	76.5	12.8185
Se 196.026	-6.6027	ppb	11.4160	172.9	2.8184
Si 288.158	2574.44	ppb	5.5075	0.2	11663.6
Sn 189.925	21.5520	ppb	3.3389	15.5	3.8280
Sr 216.596	2.8619	ppb	1.9750	69.0	30.2264
Ti 334.941	3676.73	ppb	3.6728	0.1	277501
Tl 190.794	-12.6021	ppb	5.3114	42.1	-8.9812
V 292.401	295.900	ppb	0.9645	0.3	2433.87
Zn 206.200	212.920	ppb	1.3178	0.6	111.556

680-166738-D-1-B (Samp)

4/8/2019, 10:41:02 PM

Rack 2, Tube 54

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	8.9743	8.0006	8.7887
Al 308.215	152003	152067	151752
As 188.980	96.6393	97.7900	95.7093
B 249.678	36.5695u	36.1398u	34.2281u
Ba 389.178	1769.58	1770.24	1766.68
Be 313.042	11.4813	11.4681	11.4529
Ca 370.602	30033	30000	29935

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	5.8023	6.3038	5.4179
Co 228.615	262.325	262.542	265.023
Cr 267.716	281.249	281.331	280.089
Cu 324.754	375.067	368.372	366.605
Fe 271.441	327843	327118	327308
K 766.491	12542.2	12569.6	12588.4
Mg 279.078	32719.8	32668.2	32662.7
Mn 257.610	10806.7	10780.9	10773.2
Mo 202.032	11.1770	11.6556	13.0850
Na 330.237	2767.19	2930.92	3024.53
Ni 231.604	270.228	272.880	270.346
Pb 220.353	783.414	768.856	789.630
Sb 206.834	-12.2005	-0.5178	-3.1270
Se 196.026	0.4293	-3.8947u	12.2881
Si 288.158	2525.04	2523.97	2528.51
Sn 189.925	49.6497	44.3510	40.3072
Sr 216.596	224.586	225.618	224.148
Ti 334.941	3858.06	3856.62	3850.11
Tl 190.794	-14.4599u	-7.1417u	-1.7986u
V 292.401	474.720	472.705	474.893
Zn 206.200	1862.61	1866.56	1859.07

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	8.5879	ppb	0.5170	6.0	135.584
Al 308.215	151941	ppb	166.695	0.1	257046
As 188.980	96.7129	ppb	1.0423	1.1	23.4476
B 249.678	35.6458	ppb	1.2464	3.5	-105.476
Ba 389.178	1768.83	ppb	1.8926	0.1	9037.88
Be 313.042	11.4674	ppb	0.0142	0.1	8459.25
Ca 370.602	29989	ppb	49.84	0.2	42341
Cd 226.502	5.8413	ppb	0.4443	7.6	473.110
Co 228.615	263.297	ppb	1.4990	0.6	887.991
Cr 267.716	280.889	ppb	0.6946	0.2	4125.64
Cu 324.754	370.015	ppb	4.4635	1.2	10170.1
Fe 271.441	327423	ppb	375.945	0.1	177213
K 766.491	12566.7	ppb	23.2247	0.2	213858
Mg 279.078	32683.6	ppb	31.5094	0.1	39693.0
Mn 257.610	10786.9	ppb	17.5485	0.2	739758
Mo 202.032	11.9725	ppb	0.9927	8.3	16.0480
Na 330.237	2907.55	ppb	130.255	4.5	40.4714
Ni 231.604	271.151	ppb	1.4984	0.6	263.416
Pb 220.353	780.633	ppb	10.6621	1.4	290.804
Sb 206.834	-5.2818	ppb	6.1322	116.1	9.6675
Se 196.026	2.9409	ppb	8.3787	284.9	4.8871
Si 288.158	2525.84	ppb	2.3768	0.1	11467.7
Sn 189.925	44.7693	ppb	4.6853	10.5	9.0447
Sr 216.596	224.784	ppb	0.7551	0.3	583.624
Ti 334.941	3854.93	ppb	4.2368	0.1	290993
Tl 190.794	-7.8000	ppb	6.3563	81.5	-8.6859
V 292.401	474.106	ppb	1.2161	0.3	3896.31
Zn 206.200	1862.75	ppb	3.7439	0.2	983.086

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

190-19277-A-1-A (Samp) **4/8/2019, 10:45:26 PM** **Rack 2, Tube 55****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.1721	1.1946	0.4349
Al 308.215	11.2541	14.0780	16.3823
As 188.980	5.8350	-2.6916u	-2.9078u
B 249.678	390.121	388.902	393.223
Ba 389.178	-2.1598u	-1.4077u	-2.5260u
Be 313.042	-0.0179u	-0.0206u	-0.0330u
Ca 370.602	1629	1627	1613
Cd 226.502	0.3593	-0.1260u	-0.4094u
Co 228.615	0.7227u	-0.9291u	-0.9222u
Cr 267.716	1.1783	1.2052	1.5469
Cu 324.754	75.5310	74.9940	75.6139
Fe 271.441	219.619	200.584	203.327
K 766.491	31.4838	32.3810	31.4387
Mg 279.078	177.635	162.247	173.303
Mn 257.610	2.5506	2.2790	2.2948
Mo 202.032	403.392	399.354	398.137
Na 330.237	44.2230u	203.223u	20.0559u
Ni 231.604	2.8377	1.8464	2.4500
Pb 220.353	18.3428	15.3434	6.5860
Sb 206.834	-6.9202u	-5.3209u	-2.1183u
Se 196.026	-1.5846u	-2.2122u	-9.1112u
Si 288.158	95.8596	95.6051	94.3160
Sn 189.925	26.3482	44.1361	36.8287
Sr 216.596	2.2710	1.4331u	0.5227u
Ti 334.941	2.8149	2.8188	2.6206
Tl 190.794	-0.5401u	-10.2861u	-3.1159u
V 292.401	0.6010u	-0.3750u	0.6661u
Zn 206.200	1519.24	1523.38	1517.78

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6005	ppb	0.5310	88.4	-40.2293
Al 308.215	13.9048	ppb	2.5685	18.5	271.427
As 188.980	0.0785	ppb	4.9864	6349.6	1.2304
B 249.678	390.749	ppb	2.2278	0.6	2487.83
Ba 389.178	-2.0312	ppb	0.5701	28.1	-40.7891
Be 313.042	-0.0238	ppb	0.0081	33.8	-468.469
Ca 370.602	1623	ppb	8.552	0.5	2314
Cd 226.502	-0.0587	ppb	0.3887	662.0	1.9974
Co 228.615	-0.3762	ppb	0.9517	253.0	-12.7054
Cr 267.716	1.3102	ppb	0.2055	15.7	29.3564
Cu 324.754	75.3796	ppb	0.3365	0.4	2445.54
Fe 271.441	207.843	ppb	10.2898	5.0	158.406
K 766.491	31.7679	ppb	0.5315	1.7	774.740
Mg 279.078	171.062	ppb	7.9350	4.6	236.504
Mn 257.610	2.3748	ppb	0.1524	6.4	185.888
Mo 202.032	400.294	ppb	2.7509	0.7	558.630
Na 330.237	89.1672	ppb	99.5114	111.6	18.6204
Ni 231.604	2.3780	ppb	0.4996	21.0	-0.3970
Pb 220.353	13.4241	ppb	6.1089	45.5	6.5198
Sb 206.834	-4.7865	ppb	2.4452	51.1	4.3175
Se 196.026	-4.3027	ppb	4.1761	97.1	3.5909
Si 288.158	95.2603	ppb	0.8276	0.9	1032.45

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	35.7710	ppb	8.9410	25.0	7.0229
Sr 216.596	1.4090	ppb	0.8744	62.1	2.8907
Ti 334.941	2.7515	ppb	0.1133	4.1	182.904
Tl 190.794	-4.6474	ppb	5.0503	108.7	-3.7092
V 292.401	0.2974	ppb	0.5832	196.1	-31.7243
Zn 206.200	1520.13	ppb	2.9067	0.2	801.587

x (Samp) 4/8/2019, 10:49:50 PM Rack 2, Tube 56
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	10.4675	10.1349	11.0428
Al 308.215	209.428	211.255	213.482
As 188.980	27.3962	20.8163	19.5355
B 249.678	112.868	113.823	111.262
Ba 389.178	11.9133	6.9554	6.1969
Be 313.042	4.2146	4.2097	4.2392
Ca 370.602	518.1	502.4	512.1
Cd 226.502	5.2303	5.3461	5.1284
Co 228.615	9.9247	10.2246	8.9293
Cr 267.716	10.3922	10.5355	10.1585
Cu 324.754	22.3433	22.8397	21.8142
Fe 271.441	37.5893	68.2323	56.7135
K 766.491	966.553	960.099	963.098
Mg 279.078	518.951	509.090	516.693
Mn 257.610	11.3503	11.3019	11.3847
Mo 202.032	11.1105	12.2042	12.5996
Na 330.237	1042.31	1068.50	998.803
Ni 231.604	40.6045	40.5931	44.2935
Pb 220.353	9.4541	19.3075	13.8846
Sb 206.834	11.2489	27.0469	26.0841
Se 196.026	8.3302	12.0132	23.1075
Si 288.158	20.5370	18.9745	17.0976
Sn 189.925	55.0705	53.0672	47.5754
Sr 216.596	10.5459	10.5142	10.3505
Ti 334.941	10.6059	10.6272	10.1700
Tl 190.794	22.1731	22.2117	8.4944
V 292.401	10.2277	10.5596	10.0073
Zn 206.200	20.9824	24.1309	21.3705

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.5484	ppb	0.4594	4.4	227.221
Al 308.215	211.389	ppb	2.0304	1.0	601.085
As 188.980	22.5827	ppb	4.2175	18.7	6.6571
B 249.678	112.651	ppb	1.2942	1.1	704.170
Ba 389.178	8.3552	ppb	3.1046	37.2	11.8500
Be 313.042	4.2212	ppb	0.0158	0.4	2839.41
Ca 370.602	510.9	ppb	7.874	1.5	735.0
Cd 226.502	5.2349	ppb	0.1089	2.1	62.4186
Co 228.615	9.6929	ppb	0.6780	7.0	23.9438
Cr 267.716	10.3621	ppb	0.1903	1.8	160.698
Cu 324.754	22.3324	ppb	0.5128	2.3	1056.82
Fe 271.441	54.1784	ppb	15.4780	28.6	75.6482
K 766.491	963.250	ppb	3.2299	0.3	16609.1

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	514.911	ppb	5.1663	1.0	655.009
Mn 257.610	11.3456	ppb	0.0416	0.4	801.883
Mo 202.032	11.9714	ppb	0.7713	6.4	19.2808
Na 330.237	1036.54	ppb	35.2052	3.4	57.5284
Ni 231.604	41.8304	ppb	2.1332	5.1	38.3463
Pb 220.353	14.2154	ppb	4.9350	34.7	6.9097
Sb 206.834	21.4600	ppb	8.8561	41.3	12.6249
Se 196.026	14.4836	ppb	7.6922	53.1	7.0238
Si 288.158	18.8697	ppb	1.7221	9.1	661.525
Sn 189.925	51.9044	ppb	3.8805	7.5	10.6479
Sr 216.596	10.4702	ppb	0.1048	1.0	28.6885
Ti 334.941	10.4677	ppb	0.2580	2.5	766.026
Tl 190.794	17.6264	ppb	7.9085	44.9	1.5742
V 292.401	10.2649	ppb	0.2780	2.7	71.5479
Zn 206.200	22.1612	ppb	1.7168	7.7	10.3867

x (Samp) 4/8/2019, 10:54:13 PM Rack 2, Tube 57
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	10.7413	8.8488	10.1664
Al 308.215	197.389	200.172	205.283
As 188.980	13.9948	24.9158	17.3813
B 249.678	107.868	108.812	108.539
Ba 389.178	10.1119	6.1395	8.9309
Be 313.042	4.1096	4.0961	4.1122
Ca 370.602	502.3	492.2	498.6
Cd 226.502	5.1461	5.0532	4.7306
Co 228.615	7.8230	9.5039	10.9218
Cr 267.716	10.0830	9.9614	10.0653
Cu 324.754	22.8045	23.0644	21.1914
Fe 271.441	42.6318	57.0498	60.8178
K 766.491	950.250	954.151	956.519
Mg 279.078	502.427	506.596	499.222
Mn 257.610	10.8840	10.8832	10.8878
Mo 202.032	12.3680	10.8966	10.8364
Na 330.237	1118.35	1042.43	973.654
Ni 231.604	40.3115	38.4401	38.9771
Pb 220.353	14.0060	22.9986	12.3611
Sb 206.834	11.9000	14.5355	12.1638
Se 196.026	18.7692	8.3366	16.3559
Si 288.158	19.9233	18.0126	13.8553
Sn 189.925	50.2108	58.8614	63.0645
Sr 216.596	8.9928	8.0321	8.9217
Ti 334.941	10.1785	10.0656	9.9503
Tl 190.794	0.9064	20.5886	22.5698
V 292.401	10.3299	11.2163	10.0480
Zn 206.200	25.8611	21.8234	21.2913

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	9.9188	ppb	0.9702	9.8	210.300
Al 308.215	200.948	ppb	4.0040	2.0	583.432
As 188.980	18.7640	ppb	5.5902	29.8	5.7209
B 249.678	108.406	ppb	0.4857	0.4	676.949

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	8.3941	ppb	2.0399	24.3	12.0379
Be 313.042	4.1060	ppb	0.0087	0.2	2750.43
Ca 370.602	497.7	ppb	5.095	1.0	716.3
Cd 226.502	4.9766	ppb	0.2181	4.4	59.4537
Co 228.615	9.4162	ppb	1.5512	16.5	23.0320
Cr 267.716	10.0365	ppb	0.0657	0.7	155.973
Cu 324.754	22.3534	ppb	1.0147	4.5	1057.34
Fe 271.441	53.4998	ppb	9.5987	17.9	75.2671
K 766.491	953.640	ppb	3.1655	0.3	16445.7
Mg 279.078	502.748	ppb	3.6975	0.7	640.208
Mn 257.610	10.8850	ppb	0.0025	0.0	770.270
Mo 202.032	11.3670	ppb	0.8674	7.6	18.4412
Na 330.237	1044.81	ppb	72.3780	6.9	57.7319
Ni 231.604	39.2429	ppb	0.9636	2.5	35.8050
Pb 220.353	16.4553	ppb	5.7261	34.8	7.7377
Sb 206.834	12.8664	ppb	1.4515	11.3	9.9189
Se 196.026	14.4872	ppb	5.4616	37.7	7.0244
Si 288.158	17.2637	ppb	3.1026	18.0	654.581
Sn 189.925	57.3789	ppb	6.5538	11.4	11.8780
Sr 216.596	8.6489	ppb	0.5353	6.2	24.2627
Ti 334.941	10.0648	ppb	0.1141	1.1	735.597
Tl 190.794	14.6883	ppb	11.9765	81.5	0.8913
V 292.401	10.5314	ppb	0.6097	5.8	73.8284
Zn 206.200	22.9919	ppb	2.4990	10.9	10.8254

Cont Calib Verif (CCV)

4/8/2019, 10:58:39 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	501.446	496.336	496.780
Al 308.215	10288.2	10293.0	10288.3
As 188.980	540.846	554.880	542.723
B 249.678	533.475	535.647	539.294
Ba 389.178	479.804	481.102	484.774
Be 313.042	536.754	535.114	535.652
Ca 370.602	10120	10089	10112
Cd 226.502	514.375	511.164	511.789
Co 228.615	515.871	509.911	511.503
Cr 267.716	503.061	500.091	500.089
Cu 324.754	517.677	510.006	513.312
Fe 271.441	10230.3	10179.8	10173.6
K 766.491	9995.20	9958.41	9963.06
Mg 279.078	10357.1	10315.0	10342.2
Mn 257.610	507.806	506.068	506.937
Mo 202.032	515.026	512.469	510.951
Na 330.237	10513.0	10517.2	10582.7
Ni 231.604	515.695	512.212	519.177
Pb 220.353	493.420	500.257	505.093
Sb 206.834	514.097	513.856	510.916
Se 196.026	527.865	547.255	534.940
Si 288.158	5056.87	5030.07	5032.90
Sn 189.925	496.836	518.483	504.559
Sr 216.596	504.368	500.859	502.419
Ti 334.941	504.337	503.604	504.683

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	506.561	511.729	507.927
V 292.401	510.056	509.781	508.572
Zn 206.200	1056.74	1060.56	1057.58

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	498.187	ppb	2.8310	0.6	13334.5	99.63743
Al 308.215	10289.9	ppb	2.7195	0.0	17649.9	102.89864
As 188.980	546.150	ppb	7.6188	1.4	132.480	109.22993
B 249.678	536.139	ppb	2.9404	0.5	3410.74	107.22771
Ba 389.178	481.893	ppb	2.5777	0.5	2429.93	96.37859
Be 313.042	535.840	ppb	0.8356	0.2	413979	107.16799
Ca 370.602	10107	ppb	15.91	0.2	14366	101.07226
Cd 226.502	512.443	ppb	1.7025	0.3	5881.13	102.48855
Co 228.615	512.428	ppb	3.0859	0.6	1700.97	102.48568
Cr 267.716	501.081	ppb	1.7156	0.3	7281.87	100.21611
Cu 324.754	513.665	ppb	3.8476	0.7	13873.0	102.73305
Fe 271.441	10194.6	ppb	31.1394	0.3	5587.36	101.89475
K 766.491	9972.22	ppb	20.0324	0.2	169754	99.72224
Mg 279.078	10338.1	ppb	21.3648	0.2	12607.9	103.38077
Mn 257.610	506.937	ppb	0.8689	0.2	34815.5	101.38742
Mo 202.032	512.815	ppb	2.0597	0.4	714.746	102.56307
Na 330.237	10537.6	ppb	39.0991	0.4	274.783	105.37600
Ni 231.604	515.695	ppb	3.4825	0.7	503.409	103.13894
Pb 220.353	499.590	ppb	5.8648	1.2	185.999	99.91801
Sb 206.834	512.956	ppb	1.7711	0.3	168.666	102.59122
Se 196.026	536.687	ppb	9.8124	1.8	102.427	107.33738
Si 288.158	5039.95	ppb	14.7241	0.3	22100.5	100.79894
Sn 189.925	506.626	ppb	10.9702	2.2	112.818	101.32516
Sr 216.596	502.549	ppb	1.7577	0.3	1225.90	100.50972
Ti 334.941	504.208	ppb	0.5509	0.1	38052.3	100.84166
Tl 190.794	508.739	ppb	2.6777	0.5	115.889	101.74781
V 292.401	509.469	ppb	0.7895	0.2	4128.65	101.89390
Zn 206.200	1058.29	ppb	2.0046	0.2	557.410	105.82919

Cont Calib Blank (CCB) 4/8/2019, 11:03:03 PM Rack S, Tube 1

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4909	0.0023	0.4509
Al 308.215	5.3408	-0.6545u	-0.5460u
As 188.980	4.3756	2.4116	-1.8037u
B 249.678	15.8686	14.6132	14.2963
Ba 389.178	-4.1202u	0.8728	-2.2447u
Be 313.042	0.0436	0.0081	0.0113
Ca 370.602	9.932	0.9305	8.305
Cd 226.502	0.6711	-0.3855u	-0.0635u
Co 228.615	-0.1296u	-1.6714u	0.4244
Cr 267.716	0.4095	-0.0622u	-0.5778u
Cu 324.754	1.0451	1.3023	1.0559
Fe 271.441	-3.4598u	1.3448	-3.0202u
K 766.491	-0.3861u	-0.3992u	0.7740
Mg 279.078	-6.0990u	1.4170	-1.2213u
Mn 257.610	0.1300	0.2638	0.0599
Mo 202.032	3.4717	0.9385	2.2754

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	-125.560u	-108.973u	128.253
Ni 231.604	5.2613	2.1943	-0.1009u
Pb 220.353	-4.8069u	7.1072	-4.2571u
Sb 206.834	2.6860	-7.7570u	2.8973
Se 196.026	6.3494	-2.9620u	-7.1437u
Si 288.158	11.9317	11.2531	11.3312
Sn 189.925	11.5897	5.0115	1.9927
Sr 216.596	1.0262	-0.2036u	-0.3888u
Ti 334.941	0.3391	0.3183	0.3146
Tl 190.794	-20.1452u	4.5150	1.5833
V 292.401	0.5686	-0.0510u	1.2835
Zn 206.200	2.1554	2.2025	3.5669

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.3147	ppb	0.2713	86.2	-47.8713	0.31473
Al 308.215	1.3801	ppb	3.4305	248.6	245.858	1.38008
As 188.980	1.6612	ppb	3.1573	190.1	1.6463	1.66118
B 249.678	14.9260	ppb	0.8315	5.6	77.3836	14.92600
Ba 389.178	-1.8307	ppb	2.5221	137.8	-40.3774	-1.83072
Be 313.042	0.0210	ppb	0.0196	93.4	-408.656	0.02101
Ca 370.602	6.389	ppb	4.797	75.1	18.26	6.38913
Cd 226.502	0.0740	ppb	0.5416	731.6	3.2686	0.07403
Co 228.615	-0.4589	ppb	1.0860	236.7	-9.9198	-0.45886
Cr 267.716	-0.0768	ppb	0.4938	642.7	9.2177	-0.07683
Cu 324.754	1.1344	ppb	0.1455	12.8	504.052	1.13444
Fe 271.441	-1.7117	ppb	2.6561	155.2	44.8912	-1.71174
K 766.491	-0.0037	ppb	0.6736	17998.9	234.651	-0.00374
Mg 279.078	-1.9678	ppb	3.8132	193.8	25.8721	-1.96777
Mn 257.610	0.1512	ppb	0.1036	68.5	32.7858	0.15122
Mo 202.032	2.2285	ppb	1.2672	56.9	5.7505	2.22853
Na 330.237	-35.4268	ppb	141.993	400.8	31.5979	-35.42675
Ni 231.604	2.4516	ppb	2.6904	109.7	-0.3256	2.45157
Pb 220.353	-0.6523	ppb	6.7255	1031.1	1.4220	-0.65226
Sb 206.834	-0.7245	ppb	6.0912	840.7	5.6147	-0.72454
Se 196.026	-1.2521	ppb	6.9072	551.6	4.1485	-1.25210
Si 288.158	11.5053	ppb	0.3713	3.2	625.267	11.50535
Sn 189.925	6.1979	ppb	4.9073	79.2	0.3783	6.19795
Sr 216.596	0.1446	ppb	0.7691	531.9	3.6903	0.14460
Ti 334.941	0.3240	ppb	0.0132	4.1	-0.6992	0.32399
Tl 190.794	-4.6823	ppb	13.4712	287.7	-3.6197	-4.68229
V 292.401	0.6004	ppb	0.6678	111.2	-6.9730	0.60038
Zn 206.200	2.6416	ppb	0.8017	30.3	0.0821	2.64160

MB 680-565127/1-A (Samp) 4/8/2019, 11:07:26 PM Rack 3, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2043	0.4631	-0.0953u
Al 308.215	-4.3144u	4.0947	-7.5113u
As 188.980	-2.7502u	4.4420	-4.1753u
B 249.678	5.3335	4.2455	2.7746
Ba 389.178	-2.4548u	-3.5577u	-3.1139u
Be 313.042	-0.0534u	-0.0624u	-0.0428u
Ca 370.602	1.150	-0.7488u	0.2695

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	-0.1969u	-0.0691u	-0.0332u
Co 228.615	-0.6173u	-0.7740u	0.2814
Cr 267.716	0.0688	-0.0384u	0.2755
Cu 324.754	1.1144	2.1344	1.0460
Fe 271.441	2.7142	3.4311	6.1155
K 766.491	1.5552	0.4635	0.5991
Mg 279.078	2.4697	-9.4103u	-1.6053u
Mn 257.610	0.2567	0.1111	0.2557
Mo 202.032	0.3635	1.7083	1.7864
Na 330.237	30.8311	9.8578	204.319
Ni 231.604	0.5634	-2.6559u	-1.7088u
Pb 220.353	-1.4600u	8.4653	3.5412
Sb 206.834	6.1762	-1.3344u	-0.9547u
Se 196.026	-5.2898u	8.5066	-13.8476u
Si 288.158	11.3812	12.8801	11.6422
Sn 189.925	-3.1389u	5.2236	0.9429
Sr 216.596	2.4199	0.8097	0.8419
Ti 334.941	0.2163	0.0452	0.2381
Tl 190.794	-9.3423u	-8.0206u	0.0627
V 292.401	1.7914	-0.3143u	0.6893
Zn 206.200	4.3498	-1.1752u	-0.1229u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1907	ppb	0.2794	146.5	-51.2070
Al 308.215	-2.5770	ppb	5.9949	232.6	239.158
As 188.980	-0.8278	ppb	4.6191	558.0	1.0206
B 249.678	4.1179	ppb	1.2842	31.2	8.0582
Ba 389.178	-3.0421	ppb	0.5549	18.2	-46.5404
Be 313.042	-0.0529	ppb	0.0098	18.6	-465.730
Ca 370.602	0.2236	ppb	0.9503	425.0	9.505
Cd 226.502	-0.0997	ppb	0.0861	86.3	1.2776
Co 228.615	-0.3700	ppb	0.5695	153.9	-9.6133
Cr 267.716	0.1020	ppb	0.1595	156.4	11.8124
Cu 324.754	1.4316	ppb	0.6096	42.6	511.780
Fe 271.441	4.0869	ppb	1.7930	43.9	48.0404
K 766.491	0.8726	ppb	0.5950	68.2	249.548
Mg 279.078	-2.8486	ppb	6.0368	211.9	24.7998
Mn 257.610	0.2079	ppb	0.0838	40.3	36.6613
Mo 202.032	1.2861	ppb	0.7999	62.2	4.4415
Na 330.237	81.6694	ppb	106.734	130.7	34.4577
Ni 231.604	-1.2671	ppb	1.6545	130.6	-3.9785
Pb 220.353	3.5155	ppb	4.9627	141.2	2.9621
Sb 206.834	1.2957	ppb	4.2309	326.5	6.2507
Se 196.026	-3.5436	ppb	11.2790	318.3	3.7300
Si 288.158	11.9678	ppb	0.8008	6.7	626.618
Sn 189.925	1.0092	ppb	4.1816	414.4	-0.7876
Sr 216.596	1.3572	ppb	0.9205	67.8	6.6722
Ti 334.941	0.1665	ppb	0.1056	63.4	-12.5880
Tl 190.794	-5.7667	ppb	5.0915	88.3	-3.8715
V 292.401	0.7221	ppb	1.0532	145.9	-5.9059
Zn 206.200	1.0172	ppb	2.9337	288.4	-0.7759

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

LCS 680-565127/2-A (Samp) 4/8/2019, 11:11:51 PM Rack 3, Tube 2

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	49.9090	49.9266	49.3129
Al 308.215	4840.36	4862.80	4859.91
As 188.980	97.5046	103.674	99.7557
B 249.678	202.402	203.945	204.145
Ba 389.178	94.9621	93.0626	89.6839
Be 313.042	51.2403	51.3689	51.3783
Ca 370.602	4747	4764	4768
Cd 226.502	49.6682	50.1359	50.0822
Co 228.615	47.9783	49.2344	51.3056
Cr 267.716	95.3319	96.3669	96.8684
Cu 324.754	98.0527	99.7225	98.2888
Fe 271.441	4819.33	4808.82	4836.06
K 766.491	7798.90	7805.61	7801.71
Mg 279.078	4895.52	4901.51	4895.01
Mn 257.610	482.078	482.712	482.398
Mo 202.032	98.4987	94.6252	95.8614
Na 330.237	5217.63	4894.59	5138.19
Ni 231.604	100.374	96.5849	99.1409
Pb 220.353	460.449	459.341	483.424
Sb 206.834	50.9827	51.4895	46.2293
Se 196.026	106.616	108.961	107.706
Si 288.158	2.5617	5.8202	5.1426
Sn 189.925	94.3013	106.202	94.8701
Sr 216.596	93.8294	98.0559	93.6008
Ti 334.941	382.679	383.173	383.618
Tl 190.794	31.7960	35.1306	43.3105
V 292.401	95.4266	96.7429	96.3017
Zn 206.200	103.356	106.172	106.018

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.7162	ppb	0.3493	0.7	1279.66
Al 308.215	4854.36	ppb	12.2085	0.3	8450.72
As 188.980	100.311	ppb	3.1220	3.1	25.5837
B 249.678	203.498	ppb	0.9539	0.5	1282.30
Ba 389.178	92.5695	ppb	2.6734	2.9	444.398
Be 313.042	51.3291	ppb	0.0771	0.2	39270.0
Ca 370.602	4760	ppb	11.13	0.2	6776
Cd 226.502	49.9621	ppb	0.2559	0.5	580.318
Co 228.615	49.5061	ppb	1.6802	3.4	158.441
Cr 267.716	96.1891	ppb	0.7835	0.8	1407.10
Cu 324.754	98.6880	ppb	0.9037	0.9	3049.08
Fe 271.441	4821.40	ppb	13.7372	0.3	2657.16
K 766.491	7802.07	ppb	3.3704	0.0	132863
Mg 279.078	4897.35	ppb	3.6164	0.1	5985.27
Mn 257.610	482.396	ppb	0.3169	0.1	33111.9
Mo 202.032	96.3284	ppb	1.9785	2.1	136.388
Na 330.237	5083.47	ppb	168.326	3.3	152.560
Ni 231.604	98.6999	ppb	1.9327	2.0	94.1761
Pb 220.353	467.738	ppb	13.5957	2.9	174.417
Sb 206.834	49.5672	ppb	2.9018	5.9	21.7274
Se 196.026	107.761	ppb	1.1734	1.1	24.0907
Si 288.158	4.5082	ppb	1.7194	38.1	630.436

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	98.4578	ppb	6.7127	6.8	21.1081
Sr 216.596	95.1620	ppb	2.5088	2.6	235.136
Ti 334.941	383.157	ppb	0.4701	0.1	28903.9
Tl 190.794	36.7457	ppb	5.9247	16.1	6.0382
V 292.401	96.1571	ppb	0.6700	0.7	770.690
Zn 206.200	105.182	ppb	1.5829	1.5	54.2010

680-166830-A-11-D (Samp) **4/8/2019, 11:16:15 PM** **Rack 3, Tube 3**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	1.1230	0.8776	0.3509
Al 308.215	709.111	705.310	706.289
As 188.980	9.9028	-1.1690u	4.1763
B 249.678	45.8940	45.8190	43.8398
Ba 389.178	51.0684	47.1078	50.8103
Be 313.042	-0.0067	0.0008	-0.0103
Ca 370.602	103664	103966	103872
Cd 226.502	-0.4116	0.3399	0.1377
Co 228.615	-0.1688u	-0.3715u	2.3473
Cr 267.716	1.9028	2.4739	2.5963
Cu 324.754	2.7059	1.9660	2.3265
Fe 271.441	15953.2	15993.4	15998.5
K 766.491	6274.07	6294.30	6292.37
Mg 279.078	18911.8	18917.1	18954.8
Mn 257.610	256.272	256.753	256.394
Mo 202.032	-1.0020u	-1.6600u	-0.1406u
Na 330.237	34934.7	34637.6	35029.3
Ni 231.604	15.1262	17.6844	11.6254
Pb 220.353	-3.0524u	2.3477	-11.1436u
Sb 206.834	0.6037	-1.8220u	-4.2639u
Se 196.026	-7.6902u	1.0520	-13.6538u
Si 288.158	19833.3	19854.6	19856.7
Sn 189.925	0.3162	0.6636	1.1923
Sr 216.596	1244.79	1246.60	1249.36
Ti 334.941	0.7166	0.7088	0.8474
Tl 190.794	-22.9104u	9.0478	-8.1005u
V 292.401	-0.0696	1.0814	0.9271
Zn 206.200	7.5906	8.5814	11.0437

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7838	ppb	0.3945	50.3	-40.9527
Al 308.215	706.903	ppb	1.9736	0.3	1438.61
As 188.980	4.3034	ppb	5.5370	128.7	2.1907
B 249.678	45.1843	ppb	1.1649	2.6	256.033
Ba 389.178	49.6622	ppb	2.2159	4.5	238.790
Be 313.042	-0.0054	ppb	0.0057	104.5	-415.818
Ca 370.602	103834	ppb	154.4	0.1	147458
Cd 226.502	0.0220	ppb	0.3889	1767.0	22.2458
Co 228.615	0.6023	ppb	1.5146	251.4	-6.6617
Cr 267.716	2.3244	ppb	0.3701	15.9	45.7219
Cu 324.754	2.3328	ppb	0.3700	15.9	537.739
Fe 271.441	15981.7	ppb	24.8482	0.2	8692.79
K 766.491	6286.91	ppb	11.1617	0.2	107107

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	18927.9	ppb	23.4318	0.1	23069.7
Mn 257.610	256.473	ppb	0.2503	0.1	17670.4
Mo 202.032	-0.9342	ppb	0.7620	81.6	1.2027
Na 330.237	34867.2	ppb	204.392	0.6	885.078
Ni 231.604	14.8120	ppb	3.0417	20.5	11.8145
Pb 220.353	-3.9494	ppb	6.7902	171.9	0.2736
Sb 206.834	-1.8274	ppb	2.4338	133.2	5.5129
Se 196.026	-6.7640	ppb	7.3965	109.4	3.1157
Si 288.158	19848.2	ppb	12.9726	0.1	84858.4
Sn 189.925	0.7241	ppb	0.4412	60.9	-0.8486
Sr 216.596	1246.92	ppb	2.2994	0.2	3052.88
Ti 334.941	0.7576	ppb	0.0778	10.3	74.3802
Tl 190.794	-7.3210	ppb	15.9933	218.5	-4.5120
V 292.401	0.6463	ppb	0.6248	96.7	-5.6652
Zn 206.200	9.0719	ppb	1.7780	19.6	3.5109

680-166830-A-11-Dsd (Samp) 4/8/2019, 11:20:40 PM Rack 3, Tube 4
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1320u	0.6195	-0.0686u
Al 308.215	137.662	132.909	136.993
As 188.980	-0.7527u	-6.4517u	-6.2389u
B 249.678	10.4373	9.6271	9.9643
Ba 389.178	12.6980	10.3588	6.6899
Be 313.042	-0.0259u	-0.0232u	-0.0546u
Ca 370.602	20436	20466	20468
Cd 226.502	-0.3219	0.3514	0.1508
Co 228.615	0.9732	1.5276	0.1683
Cr 267.716	0.9407	0.5099	1.2359
Cu 324.754	1.2307	0.6949	2.7762
Fe 271.441	3179.50	3191.29	3155.12
K 766.491	1135.79	1134.56	1133.77
Mg 279.078	3719.63	3718.86	3721.97
Mn 257.610	50.5734	50.5294	50.6713
Mo 202.032	2.2051	1.2487	0.4701
Na 330.237	6908.40	6859.59	6625.67
Ni 231.604	2.6545	5.4241	3.7863
Pb 220.353	-0.3925u	-0.3889u	3.7891
Sb 206.834	-11.9937u	-13.3886u	-0.5614u
Se 196.026	8.4054	-4.6769u	-10.1819u
Si 288.158	3936.44	3935.67	3940.47
Sn 189.925	5.9267	-2.7163u	4.4474
Sr 216.596	243.263	244.964	242.211
Ti 334.941	0.2985	0.1641	0.2504
Tl 190.794	-8.7665u	0.2262u	0.3240
V 292.401	0.7581	-0.2732u	0.0119
Zn 206.200	2.8669	0.9752	1.7630

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1396	ppb	0.4168	298.5	-53.6980
Al 308.215	135.855	ppb	2.5730	1.9	473.192
As 188.980	-4.4811	ppb	3.2306	72.1	0.1032
B 249.678	10.0096	ppb	0.4070	4.1	42.7882

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	9.9155	ppb	3.0285	30.5	22.7617
Be 313.042	-0.0346	ppb	0.0174	50.4	-448.996
Ca 370.602	20456	ppb	17.97	0.1	29058
Cd 226.502	0.0601	ppb	0.3457	575.1	6.9892
Co 228.615	0.8897	ppb	0.6835	76.8	-5.4743
Cr 267.716	0.8955	ppb	0.3651	40.8	23.6540
Cu 324.754	1.5673	ppb	1.0807	69.0	515.819
Fe 271.441	3175.30	ppb	18.4460	0.6	1763.87
K 766.491	1134.71	ppb	1.0170	0.1	19523.7
Mg 279.078	3720.15	ppb	1.6167	0.0	4556.90
Mn 257.610	50.5914	ppb	0.0726	0.1	3503.59
Mo 202.032	1.3080	ppb	0.8690	66.4	4.4413
Na 330.237	6797.89	ppb	151.127	2.2	198.692
Ni 231.604	3.9550	ppb	1.3925	35.2	1.1501
Pb 220.353	1.0026	ppb	2.4132	240.7	2.0471
Sb 206.834	-8.6479	ppb	7.0378	81.4	3.1686
Se 196.026	-2.1511	ppb	9.5476	443.8	3.9791
Si 288.158	3937.53	ppb	2.5728	0.1	17296.2
Sn 189.925	2.5526	ppb	4.6225	181.1	-0.4402
Sr 216.596	243.479	ppb	1.3891	0.6	598.817
Ti 334.941	0.2377	ppb	0.0681	28.6	1.1138
Tl 190.794	-2.7388	ppb	5.2204	190.6	-3.2227
V 292.401	0.1656	ppb	0.5325	321.6	-10.3429
Zn 206.200	1.8684	ppb	0.9503	50.9	-0.3201

680-166830-A-11-Dpds (Samp) 4/8/2019, 11:25:04 PM Rack 3, Tube 5

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	52.8542	51.4628	52.1857
Al 308.215	5881.30	5864.69	5866.96
As 188.980	110.500	110.105	113.690
B 249.678	260.736	261.471	263.749
Ba 389.178	152.216	150.931	148.768
Be 313.042	54.4127	54.3855	54.2447
Ca 370.602	106613	106570	106478
Cd 226.502	52.8529	52.1825	52.7653
Co 228.615	55.0423	53.2181	55.2429
Cr 267.716	104.616	105.049	105.016
Cu 324.754	107.226	107.998	106.655
Fe 271.441	20732.8	20722.9	20714.2
K 766.491	15352.2	15316.9	15309.0
Mg 279.078	23770.5	23745.7	23667.4
Mn 257.610	762.478	763.188	761.570
Mo 202.032	102.666	103.751	106.433
Na 330.237	40039.1	40158.5	40217.8
Ni 231.604	118.804	114.549	119.330
Pb 220.353	505.151	509.039	498.935
Sb 206.834	61.6709	56.3575	51.0271
Se 196.026	100.176	102.829	123.970
Si 288.158	19626.1	19419.4	19576.5
Sn 189.925	105.733	116.010	111.467
Sr 216.596	1321.17	1320.21	1321.49
Ti 334.941	405.132	405.662	405.319

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	23.3241	32.0469	32.3190
V 292.401	103.257	101.789	102.079
Zn 206.200	118.349	110.628	111.725

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.1676	ppb	0.6959	1.3	1339.97
Al 308.215	5870.98	ppb	9.0045	0.2	10169.5
As 188.980	111.432	ppb	1.9661	1.8	28.2760
B 249.678	261.986	ppb	1.5710	0.6	1642.09
Ba 389.178	150.638	ppb	1.7426	1.2	756.932
Be 313.042	54.3476	ppb	0.0902	0.2	41616.9
Ca 370.602	106554	ppb	69.08	0.1	151328
Cd 226.502	52.6002	ppb	0.3644	0.7	630.009
Co 228.615	54.5011	ppb	1.1156	2.0	174.879
Cr 267.716	104.893	ppb	0.2410	0.2	1535.09
Cu 324.754	107.293	ppb	0.6736	0.6	3276.00
Fe 271.441	20723.3	ppb	9.3150	0.0	11261.2
K 766.491	15326.0	ppb	23.0310	0.2	260764
Mg 279.078	23727.9	ppb	53.8182	0.2	28907.8
Mn 257.610	762.412	ppb	0.8106	0.1	52373.6
Mo 202.032	104.283	ppb	1.9390	1.9	147.281
Na 330.237	40138.5	ppb	91.0089	0.2	1009.58
Ni 231.604	117.561	ppb	2.6217	2.2	112.699
Pb 220.353	504.375	ppb	5.0965	1.0	188.016
Sb 206.834	56.3518	ppb	5.3219	9.4	24.1233
Se 196.026	108.992	ppb	13.0396	12.0	24.2919
Si 288.158	19540.7	ppb	107.945	0.6	83591.2
Sn 189.925	111.070	ppb	5.1503	4.6	23.9449
Sr 216.596	1320.96	ppb	0.6694	0.1	3232.90
Ti 334.941	405.371	ppb	0.2685	0.1	30622.6
Tl 190.794	29.2300	ppb	5.1164	17.5	4.0184
V 292.401	102.375	ppb	0.7772	0.8	821.870
Zn 206.200	113.567	ppb	4.1775	3.7	58.6585

680-166830-A-11-E MS (Samp) 4/8/2019, 11:29:28 PM Rack 3, Tube 6

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.3753	50.9651	51.4239
Al 308.215	5582.90	5542.61	5569.41
As 188.980	87.3913	106.034	110.561
B 249.678	250.859	251.833	251.579
Ba 389.178	140.997	144.574	140.186
Be 313.042	51.3173	51.2609	51.2293
Ca 370.602	103186	103042	103048
Cd 226.502	49.2703	49.3811	49.6321
Co 228.615	50.5806	49.7922	49.0265
Cr 267.716	99.5702	98.9086	99.9077
Cu 324.754	102.212	102.117	101.988
Fe 271.441	19923.7	19919.4	19847.9
K 766.491	14740.3	14697.4	14691.3
Mg 279.078	22890.4	22859.8	22858.3
Mn 257.610	726.419	725.161	724.169
Mo 202.032	96.5451	95.3080	99.0836

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	38580.9	38567.7	39124.4
Ni 231.604	108.712	107.595	113.755
Pb 220.353	472.738	487.158	477.748
Sb 206.834	46.2845	51.4684	54.7442
Se 196.026	106.194	106.995	110.058
Si 288.158	18990.2	18939.7	18968.8
Sn 189.925	98.1653	105.865	108.487
Sr 216.596	1276.77	1276.37	1275.76
Ti 334.941	381.851	381.602	381.001
Tl 190.794	14.4318	24.3775	20.7602
V 292.401	96.8016	97.6602	97.5398
Zn 206.200	107.930	104.257	106.450

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.2547	ppb	0.2520	0.5	1315.66
Al 308.215	5564.97	ppb	20.5106	0.4	9652.11
As 188.980	101.329	ppb	12.2805	12.1	25.8329
B 249.678	251.424	ppb	0.5050	0.2	1575.15
Ba 389.178	141.919	ppb	2.3350	1.6	711.786
Be 313.042	51.2692	ppb	0.0446	0.1	39236.0
Ca 370.602	103092	ppb	81.27	0.1	146411
Cd 226.502	49.4278	ppb	0.1854	0.4	592.671
Co 228.615	49.7998	ppb	0.7771	1.6	159.122
Cr 267.716	99.4622	ppb	0.5082	0.5	1456.16
Cu 324.754	102.106	ppb	0.1123	0.1	3140.52
Fe 271.441	19897.0	ppb	42.5601	0.2	10813.9
K 766.491	14709.7	ppb	26.7267	0.2	250286
Mg 279.078	22869.5	ppb	18.1330	0.1	27863.2
Mn 257.610	725.249	ppb	1.1278	0.2	49822.8
Mo 202.032	96.9789	ppb	1.9248	2.0	137.145
Na 330.237	38757.6	ppb	317.660	0.8	976.093
Ni 231.604	110.021	ppb	3.2820	3.0	105.296
Pb 220.353	479.215	ppb	7.3211	1.5	178.723
Sb 206.834	50.8324	ppb	4.2655	8.4	22.3591
Se 196.026	107.749	ppb	2.0394	1.9	24.0641
Si 288.158	18966.2	ppb	25.3545	0.1	81149.0
Sn 189.925	104.172	ppb	5.3648	5.1	22.3950
Sr 216.596	1276.30	ppb	0.5092	0.0	3123.77
Ti 334.941	381.484	ppb	0.4372	0.1	28817.9
Tl 190.794	19.8565	ppb	5.0340	25.4	1.8469
V 292.401	97.3339	ppb	0.4649	0.5	781.056
Zn 206.200	106.212	ppb	1.8480	1.7	54.7754

680-166830-A-11-F MS (Samp) 4/8/2019, 11:33:53 PM Rack 3, Tube 7

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	49.9328	50.4473	50.7849
Al 308.215	5503.19	5484.90	5498.21
As 188.980	107.044	105.708	114.504
B 249.678	246.745	252.450	247.709
Ba 389.178	141.081	139.688	141.984
Be 313.042	50.7394	50.7696	50.8435
Ca 370.602	99280	99344	99479

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	48.8679	49.1527	49.2674
Co 228.615	50.4503	50.2823	50.9605
Cr 267.716	98.8296	97.5861	98.7503
Cu 324.754	101.230	98.5310	100.863
Fe 271.441	19304.1	19314.4	19323.4
K 766.491	14420.2	14419.5	14417.2
Mg 279.078	22117.5	22138.3	22199.6
Mn 257.610	709.974	711.728	712.449
Mo 202.032	97.8100	98.2021	95.4667
Na 330.237	37245.3	37577.1	37531.9
Ni 231.604	104.943	110.434	110.744
Pb 220.353	458.427	463.581	450.543
Sb 206.834	47.2130	50.8685	37.7149
Se 196.026	99.7720	91.3832	116.486
Si 288.158	17701.1	17716.4	17752.6
Sn 189.925	105.911	104.996	102.856
Sr 216.596	1229.79	1228.87	1232.61
Ti 334.941	377.313	376.718	377.515
Tl 190.794	47.6739	40.5585	39.4179
V 292.401	94.9870	95.3084	95.5682
Zn 206.200	110.020	101.840	112.999

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.3883	ppb	0.4291	0.9	1292.59
Al 308.215	5495.43	ppb	9.4551	0.2	9534.55
As 188.980	109.085	ppb	4.7399	4.3	27.6399
B 249.678	248.968	ppb	3.0536	1.2	1560.00
Ba 389.178	140.918	ppb	1.1564	0.8	706.038
Be 313.042	50.7842	ppb	0.0536	0.1	38860.3
Ca 370.602	99368	ppb	101.7	0.1	141123
Cd 226.502	49.0960	ppb	0.2057	0.4	588.103
Co 228.615	50.5644	ppb	0.3532	0.7	161.646
Cr 267.716	98.3887	ppb	0.6961	0.7	1440.52
Cu 324.754	100.208	ppb	1.4641	1.5	3090.98
Fe 271.441	19314.0	ppb	9.6813	0.1	10498.4
K 766.491	14418.9	ppb	1.5722	0.0	245344
Mg 279.078	22151.8	ppb	42.6470	0.2	26989.6
Mn 257.610	711.384	ppb	1.2727	0.2	48869.7
Mo 202.032	97.1596	ppb	1.4791	1.5	137.402
Na 330.237	37451.4	ppb	179.965	0.5	944.170
Ni 231.604	108.707	ppb	3.2632	3.0	104.005
Pb 220.353	457.517	ppb	6.5668	1.4	170.704
Sb 206.834	45.2654	ppb	6.7896	15.0	20.5956
Se 196.026	102.547	ppb	12.7796	12.5	23.1145
Si 288.158	17723.3	ppb	26.4394	0.1	75871.4
Sn 189.925	104.588	ppb	1.5679	1.5	22.4882
Sr 216.596	1230.42	ppb	1.9457	0.2	3011.56
Ti 334.941	377.182	ppb	0.4146	0.1	28491.6
Tl 190.794	42.5501	ppb	4.4739	10.5	7.1347
V 292.401	95.2879	ppb	0.2912	0.3	764.178
Zn 206.200	108.286	ppb	5.7778	5.3	55.8696

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166627-D-9-B (Samp) **4/8/2019, 11:38:17 PM** **Rack 3, Tube 8****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7030	-0.3513u	1.4144
Al 308.215	89.0619	89.9957	89.8244
As 188.980	0.1296	-1.2029u	0.7686
B 249.678	20.2268	19.5514	17.5735
Ba 389.178	34.6165	34.3157	34.5218
Be 313.042	-0.0482u	-0.0408u	-0.0435u
Ca 370.602	13135	13143	13090
Cd 226.502	0.4396	-0.2105u	0.3925
Co 228.615	0.0402	0.9455	0.8096
Cr 267.716	1.2828	0.8803	1.3561
Cu 324.754	2.8313	2.1561	3.0596
Fe 271.441	211.904	216.298	203.493
K 766.491	2223.22	2222.50	2224.40
Mg 279.078	8489.74	8506.11	8480.91
Mn 257.610	34.2406	33.9123	33.9139
Mo 202.032	-0.7930u	2.6598	1.4313
Na 330.237	16387.1	16460.7	16205.7
Ni 231.604	6.4598	4.2343	6.6979
Pb 220.353	-1.1146u	6.2602	11.5254
Sb 206.834	7.2362	3.0420	-0.4753u
Se 196.026	4.1953	7.8600	2.6343
Si 288.158	5961.83	5953.55	5938.39
Sn 189.925	0.0046	-5.5821u	-0.6849u
Sr 216.596	83.5118	80.6107	81.7332
Ti 334.941	2.5845	2.5425	2.4648
Tl 190.794	2.8828	-9.9727u	-13.8026u
V 292.401	0.2476	0.5314	0.7443
Zn 206.200	8.7208	2.3820	6.7542

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5887	ppb	0.8884	150.9	-40.7623
Al 308.215	89.6273	ppb	0.4971	0.6	394.996
As 188.980	-0.1016	ppb	1.0059	990.0	1.2166
B 249.678	19.1173	ppb	1.3789	7.2	104.066
Ba 389.178	34.4847	ppb	0.1538	0.4	151.039
Be 313.042	-0.0442	ppb	0.0037	8.5	-458.002
Ca 370.602	13123	ppb	28.64	0.2	18647
Cd 226.502	0.2072	ppb	0.3625	174.9	5.0607
Co 228.615	0.5984	ppb	0.4882	81.6	-6.3719
Cr 267.716	1.1731	ppb	0.2562	21.8	27.4939
Cu 324.754	2.6823	ppb	0.4698	17.5	544.433
Fe 271.441	210.565	ppb	6.5071	3.1	159.791
K 766.491	2223.37	ppb	0.9607	0.0	38030.0
Mg 279.078	8492.25	ppb	12.7907	0.2	10366.9
Mn 257.610	34.0223	ppb	0.1891	0.6	2380.98
Mo 202.032	1.0994	ppb	1.7501	159.2	4.1802
Na 330.237	16351.2	ppb	131.281	0.8	432.573
Ni 231.604	5.7973	ppb	1.3589	23.4	2.9600
Pb 220.353	5.5570	ppb	6.3492	114.3	3.7179
Sb 206.834	3.2676	ppb	3.8607	118.2	6.8760
Se 196.026	4.8965	ppb	2.6825	54.8	5.2742
Si 288.158	5951.26	ppb	11.8905	0.2	25846.7

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	-2.0875	ppb	3.0461	145.9	-1.4819
Sr 216.596	81.9519	ppb	1.4629	1.8	203.674
Ti 334.941	2.5306	ppb	0.0607	2.4	184.825
Tl 190.794	-6.9642	ppb	8.7401	125.5	-4.1472
V 292.401	0.5078	ppb	0.2492	49.1	-7.6983
Zn 206.200	5.9523	ppb	3.2446	54.5	1.8307

680-166830-A-4-B (Samp) 4/8/2019, 11:42:42 PM Rack 3, Tube 9

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.1862	-0.0102u	0.2961
Al 308.215	1633.81	1645.90	1638.02
As 188.980	-0.0288u	0.5997	11.2591
B 249.678	36.5611	39.3933	37.6484
Ba 389.178	20.0696	18.4189	22.6811
Be 313.042	0.0424	0.0335	0.0024
Ca 370.602	62526	62618	62531
Cd 226.502	-0.0464	0.2533	-0.6157
Co 228.615	-0.0599u	2.6040	2.4807
Cr 267.716	2.4603	3.0064	3.2965
Cu 324.754	1.9405	2.0302	3.4811
Fe 271.441	9738.88	9749.35	9755.08
K 766.491	4944.09	4918.19	4953.30
Mg 279.078	19713.4	19720.0	19751.1
Mn 257.610	129.756	130.103	129.912
Mo 202.032	-1.1228u	0.5261	0.1767
Na 330.237	19596.3	19192.7	19632.1
Ni 231.604	42.4675	38.7908	43.0280
Pb 220.353	0.9978	-8.4165u	-4.7582u
Sb 206.834	3.9708	1.2209	-3.3411u
Se 196.026	10.0751	-7.7707u	-5.1910u
Si 288.158	20460.7	20520.5	20518.7
Sn 189.925	-3.9233u	-1.7690u	2.6939
Sr 216.596	1091.36	1095.33	1090.43
Ti 334.941	0.7091	0.6574	0.6661
Tl 190.794	-12.3950u	-1.3037u	-2.3159u
V 292.401	1.1887	1.6330	1.0767
Zn 206.200	66.1996	65.9381	63.1293

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4907	ppb	0.6215	126.6	-47.5872
Al 308.215	1639.24	ppb	6.1391	0.4	3014.14
As 188.980	3.9433	ppb	6.3435	160.9	2.1392
B 249.678	37.8676	ppb	1.4288	3.8	215.158
Ba 389.178	20.3898	ppb	2.1491	10.5	89.6559
Be 313.042	0.0261	ppb	0.0210	80.3	-396.663
Ca 370.602	62559	ppb	51.70	0.1	88845
Cd 226.502	-0.1363	ppb	0.4414	324.0	12.8327
Co 228.615	1.6750	ppb	1.5037	89.8	-2.9605
Cr 267.716	2.9211	ppb	0.4246	14.5	53.6888
Cu 324.754	2.4839	ppb	0.8647	34.8	540.705
Fe 271.441	9747.77	ppb	8.2148	0.1	5319.96
K 766.491	4938.53	ppb	18.2007	0.4	84185.3

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	19728.2	ppb	20.1423	0.1	24044.9
Mn 257.610	129.924	ppb	0.1737	0.1	8994.84
Mo 202.032	-0.1400	ppb	0.8689	620.5	2.3665
Na 330.237	19473.7	ppb	244.022	1.3	508.019
Ni 231.604	41.4287	ppb	2.3017	5.6	37.9584
Pb 220.353	-4.0590	ppb	4.7459	116.9	0.2009
Sb 206.834	0.6169	ppb	3.6932	598.7	6.1897
Se 196.026	-0.9622	ppb	9.6452	1002.4	4.1833
Si 288.158	20500.0	ppb	34.0168	0.2	87626.5
Sn 189.925	-0.9995	ppb	3.3751	337.7	-1.2372
Sr 216.596	1092.37	ppb	2.5993	0.2	2674.40
Ti 334.941	0.6775	ppb	0.0277	4.1	70.4827
Tl 190.794	-5.3382	ppb	6.1323	114.9	-3.9461
V 292.401	1.2995	ppb	0.2942	22.6	-0.6211
Zn 206.200	65.0890	ppb	1.7022	2.6	33.0842

680-166627-D-10-B (Samp)

4/8/2019, 11:47:06 PM

Rack 3, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3703u	-0.0311u	0.0879
Al 308.215	48.9810	57.9506	63.2441
As 188.980	-0.9777u	-2.8183u	-2.3323u
B 249.678	12.5924	13.5617	13.6134
Ba 389.178	39.0098	31.4980	35.6035
Be 313.042	-0.0511u	-0.0393u	-0.0479u
Ca 370.602	13027	13057	13050
Cd 226.502	-0.3071u	-0.3244u	0.1537
Co 228.615	-1.4614u	0.9746	1.5318
Cr 267.716	0.5708	1.5836	0.7987
Cu 324.754	2.7510	3.4526	1.8291
Fe 271.441	164.287	143.835	149.452
K 766.491	2225.03	2225.85	2221.33
Mg 279.078	8449.75	8461.76	8459.38
Mn 257.610	31.3527	31.1795	31.3242
Mo 202.032	-1.0596u	0.3459	0.3321
Na 330.237	15944.3	16056.0	15742.2
Ni 231.604	1.0723	4.1947	5.1340
Pb 220.353	-4.9668u	-2.7310u	-8.1262u
Sb 206.834	-6.5982u	-0.2640u	3.5234
Se 196.026	8.7842	5.7090	-11.3051u
Si 288.158	5798.72	5812.74	5807.39
Sn 189.925	-2.4051u	5.6142	4.8087
Sr 216.596	80.9286	81.6127	82.7178
Ti 334.941	1.1065	1.1557	1.1199
Tl 190.794	-2.1085u	-17.5642u	-0.0644u
V 292.401	0.1550	-0.3962u	1.4885
Zn 206.200	2.5047	3.7846	0.7093

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1045	ppb	0.2377	227.5	-59.3948
Al 308.215	56.7253	ppb	7.2101	12.7	339.368
As 188.980	-2.0428	ppb	0.9539	46.7	0.7288
B 249.678	13.2558	ppb	0.5751	4.3	66.5327

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	35.3704	ppb	3.7614	10.6	155.510
Be 313.042	-0.0461	ppb	0.0061	13.2	-459.372
Ca 370.602	13045	ppb	15.65	0.1	18536
Cd 226.502	-0.1592	ppb	0.2712	170.3	0.7856
Co 228.615	0.3483	ppb	1.5919	457.0	-7.2034
Cr 267.716	0.9844	ppb	0.5313	54.0	24.7445
Cu 324.754	2.6776	ppb	0.8142	30.4	544.275
Fe 271.441	152.524	ppb	10.5670	6.9	128.368
K 766.491	2224.07	ppb	2.4067	0.1	38041.9
Mg 279.078	8456.97	ppb	6.3579	0.1	10324.0
Mn 257.610	31.2854	ppb	0.0929	0.3	2193.24
Mo 202.032	-0.1272	ppb	0.8075	634.9	2.4773
Na 330.237	15914.2	ppb	159.061	1.0	421.935
Ni 231.604	3.4670	ppb	2.1264	61.3	0.6713
Pb 220.353	-5.2747	ppb	2.7107	51.4	-0.2835
Sb 206.834	-1.1129	ppb	5.1139	459.5	5.4962
Se 196.026	1.0627	ppb	10.8206	1018.2	4.5738
Si 288.158	5806.28	ppb	7.0740	0.1	25231.6
Sn 189.925	2.6726	ppb	4.4158	165.2	-0.4124
Sr 216.596	81.7530	ppb	0.9028	1.1	203.202
Ti 334.941	1.1274	ppb	0.0254	2.3	78.8677
Tl 190.794	-6.5790	ppb	9.5682	145.4	-4.0566
V 292.401	0.4158	ppb	0.9690	233.1	-8.3664
Zn 206.200	2.3328	ppb	1.5448	66.2	-0.0811

Cont Calib Verif (CCV)

4/8/2019, 11:51:32 PM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.891	498.583	498.253
Al 308.215	10324.5	10320.0	10325.2
As 188.980	525.303	544.561	543.244
B 249.678	535.041	537.862	538.881
Ba 389.178	484.728	478.498	484.202
Be 313.042	540.299	538.928	537.427
Ca 370.602	10162	10153	10129
Cd 226.502	514.875	512.157	512.281
Co 228.615	516.842	516.421	514.618
Cr 267.716	502.598	500.506	499.955
Cu 324.754	508.411	511.500	509.559
Fe 271.441	10246.6	10217.4	10201.6
K 766.491	10041.6	10028.7	10040.3
Mg 279.078	10388.5	10374.4	10387.5
Mn 257.610	509.289	509.502	508.818
Mo 202.032	510.250	508.308	511.586
Na 330.237	11090.6	11132.6	10823.7
Ni 231.604	516.926	514.876	509.736
Pb 220.353	494.263	500.280	500.009
Sb 206.834	513.467	514.511	514.063
Se 196.026	560.927	556.765	540.140
Si 288.158	5134.39	5119.75	5100.14
Sn 189.925	496.363	498.834	500.090
Sr 216.596	503.204	501.195	501.925
Ti 334.941	506.499	504.948	503.702

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	510.457	513.967	498.999
V 292.401	510.275	510.777	510.607
Zn 206.200	1070.94	1068.47	1066.53

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	499.242	ppb	1.4371	0.3	13362.8	99.84843
Al 308.215	10323.2	ppb	2.8266	0.0	17706.3	103.23222
As 188.980	537.703	ppb	10.7584	2.0	130.421	107.54053
B 249.678	537.261	ppb	1.9892	0.4	3417.90	107.45222
Ba 389.178	482.476	ppb	3.4551	0.7	2432.94	96.49523
Be 313.042	538.885	ppb	1.4368	0.3	416334	107.77694
Ca 370.602	10148	ppb	16.71	0.2	14424	101.47824
Cd 226.502	513.104	ppb	1.5349	0.3	5888.76	102.62087
Co 228.615	515.961	ppb	1.1816	0.2	1712.76	103.19210
Cr 267.716	501.020	ppb	1.3945	0.3	7280.99	100.20398
Cu 324.754	509.823	ppb	1.5617	0.3	13772.8	101.96468
Fe 271.441	10221.9	ppb	22.8204	0.2	5602.27	102.16766
K 766.491	10036.9	ppb	7.1260	0.1	170853	100.36868
Mg 279.078	10383.5	ppb	7.8713	0.1	12663.2	103.83457
Mn 257.610	509.203	ppb	0.3501	0.1	34971.0	101.84055
Mo 202.032	510.048	ppb	1.6483	0.3	710.901	102.00955
Na 330.237	11015.6	ppb	167.530	1.5	286.365	110.15642Q
Ni 231.604	513.846	ppb	3.7040	0.7	501.591	102.76920
Pb 220.353	498.184	ppb	3.3984	0.7	185.479	99.63675
Sb 206.834	514.014	ppb	0.5238	0.1	169.005	102.80275
Se 196.026	552.611	ppb	10.9989	2.0	105.336	110.52218Q
Si 288.158	5118.10	ppb	17.1845	0.3	22431.7	102.36192
Sn 189.925	498.429	ppb	1.8961	0.4	110.976	99.68587
Sr 216.596	502.108	ppb	1.0171	0.2	1224.83	100.42161
Ti 334.941	505.050	ppb	1.4012	0.3	38115.9	101.00996
Tl 190.794	507.808	ppb	7.8276	1.5	115.673	101.56152
V 292.401	510.553	ppb	0.2557	0.1	4137.46	102.11058
Zn 206.200	1068.65	ppb	2.2107	0.2	562.878	106.86475

Cont Calib Blank (CCB) 4/8/2019, 11:55:57 PM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1858u	0.3231	0.4153
Al 308.215	-1.0258u	8.2449	-1.2013u
As 188.980	5.4978	-1.0714u	5.6409
B 249.678	14.9731	14.9051	12.7708
Ba 389.178	-1.9041u	-1.9030u	0.8921
Be 313.042	0.0283	0.0304	0.0068
Ca 370.602	14.97	8.091	8.573
Cd 226.502	0.0535	-0.4653u	0.0050
Co 228.615	-0.7970u	-0.4145u	0.2394
Cr 267.716	-0.7078u	0.1013	0.5863
Cu 324.754	0.9456	2.5766	1.4313
Fe 271.441	6.8003	4.7017	3.6917
K 766.491	0.9070	0.0825	0.3559
Mg 279.078	-0.3286u	3.7839	5.4933
Mn 257.610	0.0309	0.1357	0.0444
Mo 202.032	1.1673	0.3473	2.6447

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	17.0712	359.059	29.6646
Ni 231.604	-1.1369u	0.3920	2.7408
Pb 220.353	-10.5996u	-5.6699u	-1.8584u
Sb 206.834	3.6629	-8.1724u	-1.8210u
Se 196.026	15.4764	6.5655	-15.6496u
Si 288.158	13.9754	11.8431	16.2169
Sn 189.925	7.8680	12.8832	-5.7491u
Sr 216.596	0.6909	0.6838	-1.0638u
Ti 334.941	0.1057	0.3609	0.4014
Tl 190.794	-4.0130u	-12.0824u	-7.9721u
V 292.401	0.5747	0.1194	0.0600
Zn 206.200	3.1110	0.6698	-1.8654u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1842	ppb	0.3237	175.7	-51.3866	0.18420
Al 308.215	2.0059	ppb	5.4038	269.4	246.903	2.00590
As 188.980	3.3558	ppb	3.8347	114.3	2.0462	3.35576
B 249.678	14.2163	ppb	1.2524	8.8	72.8190	14.21634
Ba 389.178	-0.9717	ppb	1.6140	166.1	-36.0040	-0.97168
Be 313.042	0.0218	ppb	0.0130	59.7	-407.992	0.02185
Ca 370.602	10.54	ppb	3.837	36.4	24.14	10.54323
Cd 226.502	-0.1356	ppb	0.2865	211.3	0.8849	-0.13560
Co 228.615	-0.3240	ppb	0.5241	161.8	-9.4653	-0.32402
Cr 267.716	-0.0067	ppb	0.6538	9732.3	10.2369	-0.00672
Cu 324.754	1.6512	ppb	0.8374	50.7	517.521	1.65116
Fe 271.441	5.0646	ppb	1.5858	31.3	48.5452	5.06458
K 766.491	0.4484	ppb	0.4200	93.6	242.338	0.44845
Mg 279.078	2.9829	ppb	2.9925	100.3	31.8996	2.98287
Mn 257.610	0.0703	ppb	0.0570	81.1	27.2629	0.07033
Mo 202.032	1.3864	ppb	1.1643	84.0	4.5809	1.38644
Na 330.237	135.265	ppb	193.914	143.4	35.7892	135.26492
Ni 231.604	0.6653	ppb	1.9532	293.6	-2.0800	0.66532
Pb 220.353	-6.0426	ppb	4.3825	72.5	-0.5693	-6.04260Z
Sb 206.834	-2.1102	ppb	5.9229	280.7	5.1788	-2.11015
Se 196.026	2.1307	ppb	16.0299	752.3	4.7664	2.13075
Si 288.158	14.0118	ppb	2.1871	15.6	635.531	14.01178
Sn 189.925	5.0007	ppb	9.6414	192.8	0.1093	5.00073
Sr 216.596	0.1037	ppb	1.0110	975.4	3.5992	0.10365
Ti 334.941	0.2893	ppb	0.1603	55.4	-3.3053	0.28934
Tl 190.794	-8.0225	ppb	4.0349	50.3	-4.3970	-8.02252
V 292.401	0.2514	ppb	0.2816	112.0	-9.8101	0.25137
Zn 206.200	0.6384	ppb	2.4883	389.8	-0.9760	0.63843

680-166627-D-8-B (Samp)

4/9/2019, 12:00:20 AM

Rack 3, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1105u	-0.9620u	1.2370
Al 308.215	57.8279	49.8238	54.2400
As 188.980	0.2940	1.9084	-2.2690u
B 249.678	14.5669	13.3174	13.7542
Ba 389.178	31.9626	30.2145	30.1759
Be 313.042	-0.0309u	-0.0361u	-0.0606u
Ca 370.602	12380	12385	12388

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	-0.4540u	0.6595	0.1221
Co 228.615	-1.5792u	-1.6329u	-1.6310u
Cr 267.716	0.5209	0.2103	1.0258
Cu 324.754	2.4773	2.7198	2.7336
Fe 271.441	134.725	146.465	144.807
K 766.491	2098.48	2098.96	2097.89
Mg 279.078	8043.22	8050.38	8036.63
Mn 257.610	29.7149	29.7057	29.4678
Mo 202.032	1.0856	-1.2202u	2.9950
Na 330.237	15100.3	14960.3	15481.8
Ni 231.604	4.2806	7.1715	3.9161
Pb 220.353	2.1421	2.3321	-0.0007
Sb 206.834	-13.0368u	11.2945	-0.5734u
Se 196.026	25.4538	-3.5849u	-5.7849u
Si 288.158	5520.55	5526.05	5527.04
Sn 189.925	-2.3757u	-5.2490u	7.7765
Sr 216.596	77.0856	75.9536	76.7681
Ti 334.941	1.1913	1.1511	1.2367
Tl 190.794	-8.3852u	4.1778	-9.0117u
V 292.401	-0.0015u	-0.1872u	0.5906
Zn 206.200	7.1848	4.7211	6.2464

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2785	ppb	1.3146	472.0	-64.0556
Al 308.215	53.9639	ppb	4.0092	7.4	334.711
As 188.980	-0.0222	ppb	2.1065	9491.9	1.2260
B 249.678	13.8795	ppb	0.6341	4.6	70.5284
Ba 389.178	30.7843	ppb	1.0206	3.3	131.865
Be 313.042	-0.0425	ppb	0.0159	37.3	-456.773
Ca 370.602	12384	ppb	3.889	0.0	17598
Cd 226.502	0.1092	ppb	0.5569	510.0	3.8630
Co 228.615	-1.6144	ppb	0.0305	1.9	-13.7630
Cr 267.716	0.5857	ppb	0.4116	70.3	18.9559
Cu 324.754	2.6435	ppb	0.1442	5.5	543.411
Fe 271.441	141.999	ppb	6.3536	4.5	122.607
K 766.491	2098.45	ppb	0.5375	0.0	35906.4
Mg 279.078	8043.41	ppb	6.8759	0.1	9820.48
Mn 257.610	29.6295	ppb	0.1401	0.5	2078.46
Mo 202.032	0.9535	ppb	2.1107	221.4	3.9782
Na 330.237	15180.8	ppb	269.931	1.8	403.944
Ni 231.604	5.1227	ppb	1.7836	34.8	2.2988
Pb 220.353	1.4912	ppb	1.2955	86.9	2.2160
Sb 206.834	-0.7719	ppb	12.1669	1576.2	5.6026
Se 196.026	5.3614	ppb	17.4353	325.2	5.3589
Si 288.158	5524.55	ppb	3.4938	0.1	24035.0
Sn 189.925	0.0506	ppb	6.8433	13529.0	-1.0016
Sr 216.596	76.6024	ppb	0.5839	0.8	190.599
Ti 334.941	1.1930	ppb	0.0428	3.6	82.8943
Tl 190.794	-4.4064	ppb	7.4407	168.9	-3.5526
V 292.401	0.1340	ppb	0.4062	303.3	-10.7477
Zn 206.200	6.0508	ppb	1.2434	20.5	1.8828

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166627-E-7-B (Samp) **4/9/2019, 12:04:45 AM** **Rack 3, Tube 12****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7078	0.0066u	0.9375
Al 308.215	2064.09	2076.98	2071.69
As 188.980	7.4654	1.2309	5.2380
B 249.678	14.3087	13.0674	12.5002
Ba 389.178	59.6827	61.0527	59.1871
Be 313.042	0.1017	0.1199	0.1033
Ca 370.602	7742	7773	7748
Cd 226.502	-0.2457	-0.0461	0.3443
Co 228.615	12.3675	12.8979	13.4424
Cr 267.716	11.6911	12.2970	11.9363
Cu 324.754	5.3065	4.9596	4.8885
Fe 271.441	12375.4	12338.4	12370.1
K 766.491	935.351	933.376	933.777
Mg 279.078	5223.79	5216.39	5228.62
Mn 257.610	826.104	827.446	827.430
Mo 202.032	3.5363	0.4488	1.4781
Na 330.237	12348.6	12397.6	12592.2
Ni 231.604	22.6518	22.9119	23.2222
Pb 220.353	4.3671	2.6544	-5.3024u
Sb 206.834	-11.0319u	-5.4283u	-3.3575u
Se 196.026	-13.4222u	-5.2680u	-7.7537u
Si 288.158	10919.4	10916.2	10939.6
Sn 189.925	8.4027	-4.7159u	11.8036
Sr 216.596	32.6984	35.9592	34.1940
Ti 334.941	89.6407	89.7789	89.7266
Tl 190.794	-7.2660u	-6.4390u	-3.5359u
V 292.401	4.8003	3.7460	5.8207
Zn 206.200	26.4636	27.8620	27.0992

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5506	ppb	0.4849	88.1	-42.3728
Al 308.215	2070.92	ppb	6.4779	0.3	3743.84
As 188.980	4.6448	ppb	3.1593	68.0	2.3013
B 249.678	13.2921	ppb	0.9249	7.0	54.9827
Ba 389.178	59.9742	ppb	0.9664	1.6	279.858
Be 313.042	0.1083	ppb	0.0101	9.3	-340.650
Ca 370.602	7754	ppb	16.38	0.2	11016
Cd 226.502	0.0175	ppb	0.3001	1715.7	17.7495
Co 228.615	12.9026	ppb	0.5375	4.2	34.9941
Cr 267.716	11.9748	ppb	0.3047	2.5	186.166
Cu 324.754	5.0516	ppb	0.2236	4.4	608.077
Fe 271.441	12361.3	ppb	20.0470	0.2	6734.55
K 766.491	934.168	ppb	1.0441	0.1	16114.7
Mg 279.078	5222.93	ppb	6.1599	0.1	6378.95
Mn 257.610	826.993	ppb	0.7704	0.1	56733.9
Mo 202.032	1.8210	ppb	1.5721	86.3	5.0643
Na 330.237	12446.2	ppb	128.825	1.0	335.611
Ni 231.604	22.9286	ppb	0.2855	1.2	19.7779
Pb 220.353	0.5730	ppb	5.1598	900.4	1.9403
Sb 206.834	-6.6059	ppb	3.9704	60.1	3.9721
Se 196.026	-8.8146	ppb	4.1793	47.4	2.8044
Si 288.158	10925.1	ppb	12.7073	0.1	46972.2

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	5.1634	ppb	8.7231	168.9	0.1469
Sr 216.596	34.2839	ppb	1.6322	4.8	88.2668
Ti 334.941	89.7154	ppb	0.0698	0.1	6757.59
Tl 190.794	-5.7470	ppb	1.9590	34.1	-3.9459
V 292.401	4.7890	ppb	1.0374	21.7	28.0584
Zn 206.200	27.1416	ppb	0.7002	2.6	13.0421

680-166830-A-6-B (Samp) 4/9/2019, 12:09:09 AM Rack 3, Tube 13

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2919u	0.0976	-0.4640u
Al 308.215	8511.03	8506.50	8481.96
As 188.980	2.2715	7.2887	4.2345
B 249.678	27.9477	28.0138	27.4279
Ba 389.178	25.5422	27.0728	25.8228
Be 313.042	0.1855	0.1925	0.1911
Ca 370.602	6267	6270	6250
Cd 226.502	-0.0775	0.3869	-0.0149
Co 228.615	-0.2884u	2.7206	-0.4206u
Cr 267.716	10.4741	10.4809	10.5468
Cu 324.754	2.6637	1.7427	2.7376
Fe 271.441	4660.82	4662.40	4651.32
K 766.491	1985.41	1992.11	1993.94
Mg 279.078	1238.82	1250.19	1247.25
Mn 257.610	47.9086	47.8609	47.5365
Mo 202.032	1.6507	0.4329	3.0681
Na 330.237	34256.8	33850.2	34696.8
Ni 231.604	5.1166	1.1481	2.2941
Pb 220.353	5.3639	5.4273	-0.9522u
Sb 206.834	-7.2436u	1.8856	1.7755
Se 196.026	-6.9864u	3.2936	-1.1446u
Si 288.158	17130.2	17136.5	17126.8
Sn 189.925	8.6046	2.5500	7.8094
Sr 216.596	77.0346	79.6981	78.3407
Ti 334.941	59.7506	59.7861	59.1340
Tl 190.794	-12.3520u	-14.5052u	-5.7630u
V 292.401	12.8508	12.2154	11.8082
Zn 206.200	9.9394	5.6481	5.6329

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2194	ppb	0.2877	131.1	-63.1587
Al 308.215	8499.83	ppb	15.6430	0.2	14608.9
As 188.980	4.5982	ppb	2.5283	55.0	2.3625
B 249.678	27.7965	ppb	0.3209	1.2	155.459
Ba 389.178	26.1459	ppb	0.8149	3.1	103.561
Be 313.042	0.1897	ppb	0.0037	1.9	-278.218
Ca 370.602	6262	ppb	10.88	0.2	8898
Cd 226.502	0.0982	ppb	0.2520	256.7	9.4438
Co 228.615	0.6705	ppb	1.7766	265.0	-5.8608
Cr 267.716	10.5006	ppb	0.0402	0.4	163.300
Cu 324.754	2.3813	ppb	0.5543	23.3	537.212
Fe 271.441	4658.18	ppb	5.9920	0.1	2566.24
K 766.491	1990.49	ppb	4.4925	0.2	34071.2

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1245.42	ppb	5.9037	0.5	1542.60
Mn 257.610	47.7687	ppb	0.2024	0.4	3303.95
Mo 202.032	1.7172	ppb	1.3188	76.8	4.9938
Na 330.237	34267.9	ppb	423.395	1.2	870.417
Ni 231.604	2.8529	ppb	2.0424	71.6	0.0686
Pb 220.353	3.2796	ppb	3.6650	111.8	2.8615
Sb 206.834	-1.1942	ppb	5.2392	438.7	5.5567
Se 196.026	-1.6125	ppb	5.1560	319.8	4.0727
Si 288.158	17131.2	ppb	4.9311	0.0	73324.0
Sn 189.925	6.3213	ppb	3.2902	52.0	0.4090
Sr 216.596	78.3578	ppb	1.3318	1.7	195.335
Ti 334.941	59.5569	ppb	0.3666	0.6	4472.07
Tl 190.794	-10.8734	ppb	4.5548	41.9	-5.1425
V 292.401	12.2915	ppb	0.5254	4.3	89.0367
Zn 206.200	7.0735	ppb	2.4820	35.1	2.4273

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Rack 3, Tube 14

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.3329	0.1601u	0.4823
Al 308.215	463.388	472.193	472.439
As 188.980	-4.3309u	4.0922	11.5829
B 249.678	32.3600	33.9347	33.2882
Ba 389.178	63.0472	66.6148	69.2630
Be 313.042	-0.0606u	-0.0223u	-0.0623u
Ca 370.602	125554	125483	125734
Cd 226.502	0.3129	0.2447	0.1789
Co 228.615	1.7923	0.3575	1.2574
Cr 267.716	1.8950	2.8122	2.8288
Cu 324.754	2.4577	1.8832	2.1386
Fe 271.441	9364.29	9318.56	9398.87
K 766.491	5579.16	5577.78	5594.81
Mg 279.078	15785.8	15780.6	15815.9
Mn 257.610	83.5944	83.4415	83.6338
Mo 202.032	1.9993	1.8157	2.3913
Na 330.237	20576.9	20692.2	19974.5
Ni 231.604	15.9002	16.7654	19.2216
Pb 220.353	12.5589	-5.4728u	-5.2069u
Sb 206.834	-1.1988u	-6.0868u	9.3782
Se 196.026	-9.5001u	-0.9482u	-1.9785u
Si 288.158	18660.9	18627.6	18701.3
Sn 189.925	8.1204	7.4456	4.2782
Sr 216.596	1229.46	1229.19	1227.85
Ti 334.941	0.3130	0.2391	0.0848
Tl 190.794	4.3418	-10.0054u	-15.1706u
V 292.401	1.2701	0.9290	-0.4458u
Zn 206.200	13.8820	14.6325	15.7113

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6584	ppb	0.6059	92.0	-43.4606
Al 308.215	469.340	ppb	5.1561	1.1	1036.97
As 188.980	3.7814	ppb	7.9615	210.5	2.1153
B 249.678	33.1943	ppb	0.7916	2.4	185.544

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	66.3083	ppb	3.1192	4.7	319.995
Be 313.042	-0.0484	ppb	0.0226	46.7	-445.329
Ca 370.602	125590	ppb	129.4	0.1	178365
Cd 226.502	0.2455	ppb	0.0670	27.3	16.6878
Co 228.615	1.1357	ppb	0.7251	63.8	-4.7750
Cr 267.716	2.5120	ppb	0.5344	21.3	47.6680
Cu 324.754	2.1598	ppb	0.2879	13.3	532.234
Fe 271.441	9360.58	ppb	40.2813	0.4	5110.44
K 766.491	5583.91	ppb	9.4577	0.2	95156.3
Mg 279.078	15794.1	ppb	19.0401	0.1	19256.0
Mn 257.610	83.5566	ppb	0.1016	0.1	5804.42
Mo 202.032	2.0688	ppb	0.2940	14.2	5.4380
Na 330.237	20414.5	ppb	385.416	1.9	531.590
Ni 231.604	17.2958	ppb	1.7231	10.0	14.2539
Pb 220.353	0.6264	ppb	10.3347	1649.9	1.9314
Sb 206.834	0.6975	ppb	7.9049	1133.2	6.2084
Se 196.026	-4.1423	ppb	4.6685	112.7	3.5994
Si 288.158	18663.3	ppb	36.9252	0.2	79827.3
Sn 189.925	6.6147	ppb	2.0514	31.0	0.4737
Sr 216.596	1228.83	ppb	0.8618	0.1	3008.00
Ti 334.941	0.2123	ppb	0.1165	54.8	26.3967
Tl 190.794	-6.9447	ppb	10.1098	145.6	-4.3226
V 292.401	0.5845	ppb	0.9084	155.4	-6.6429
Zn 206.200	14.7419	ppb	0.9195	6.2	6.4915

680-166830-A-12-B (Samp) 4/9/2019, 12:17:59 AM Rack 3, Tube 15

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5090u	0.5500	-1.5276u
Al 308.215	117.314	119.039	113.403
As 188.980	4.7799	5.2082	7.5816
B 249.678	59.6470	58.9725	59.9670
Ba 389.178	41.6423	43.2742	45.7558
Be 313.042	-0.0030	-0.0059	-0.0012
Ca 370.602	104865	105016	104774
Cd 226.502	-0.1474	-0.1251	-0.3529
Co 228.615	-1.0947u	-1.1147u	1.2053
Cr 267.716	2.1798	1.9253	2.2357
Cu 324.754	2.0194	1.6147	0.8823
Fe 271.441	24446.0	24557.2	24490.1
K 766.491	4566.63	4572.65	4554.63
Mg 279.078	8447.20	8490.41	8484.07
Mn 257.610	839.478	843.039	840.460
Mo 202.032	0.9253	2.0664	0.6527
Na 330.237	95971.7	95539.8	95667.9
Ni 231.604	1.0208	2.9895	1.0490
Pb 220.353	6.6108	-9.1934u	-11.1030u
Sb 206.834	3.9632	11.3999	-8.9151u
Se 196.026	-3.2637u	1.1145	-6.7482u
Si 288.158	11508.0	11559.5	11514.4
Sn 189.925	-2.2751u	6.9305	8.2646
Sr 216.596	1438.04	1449.08	1443.59
Ti 334.941	0.8393	1.0300	1.0075

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Label	Replicates Concentration		
Tl 190.794	-13.1853u	-22.2558u	5.2380
V 292.401	2.5548	1.6406	1.2351
Zn 206.200	1.9943	3.0539	6.2645

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4955	ppb	1.0388	209.6	-76.2256
Al 308.215	116.585	ppb	2.8876	2.5	441.243
As 188.980	5.8565	ppb	1.5092	25.8	2.5968
B 249.678	59.5288	ppb	0.5077	0.9	339.847
Ba 389.178	43.5574	ppb	2.0713	4.8	200.732
Be 313.042	-0.0034	ppb	0.0023	69.9	-416.780
Ca 370.602	104885	ppb	122.4	0.1	148946
Cd 226.502	-0.2085	ppb	0.1256	60.2	29.8143
Co 228.615	-0.3347	ppb	1.3337	398.5	-9.9761
Cr 267.716	2.1136	ppb	0.1654	7.8	44.3329
Cu 324.754	1.5055	ppb	0.5764	38.3	517.517
Fe 271.441	24497.8	ppb	55.9665	0.2	13300.4
K 766.491	4564.64	ppb	9.1758	0.2	77829.5
Mg 279.078	8473.89	ppb	23.3317	0.3	10337.1
Mn 257.610	840.993	ppb	1.8391	0.2	57709.3
Mo 202.032	1.2148	ppb	0.7500	61.7	4.1051
Na 330.237	95726.5	ppb	221.832	0.2	2374.26
Ni 231.604	1.6865	ppb	1.1286	66.9	-1.0774
Pb 220.353	-4.5619	ppb	9.7228	213.1	0.1080
Sb 206.834	2.1493	ppb	10.2783	478.2	6.8923
Se 196.026	-2.9658	ppb	3.9398	132.8	3.8365
Si 288.158	11527.3	ppb	28.0542	0.2	49525.0
Sn 189.925	4.3066	ppb	5.7389	133.3	-0.0384
Sr 216.596	1443.57	ppb	5.5191	0.4	3534.43
Ti 334.941	0.9590	ppb	0.1042	10.9	64.6677
Tl 190.794	-10.0677	ppb	14.0095	139.2	-5.2062
V 292.401	1.8102	ppb	0.6760	37.3	4.0049
Zn 206.200	3.7709	ppb	2.2236	59.0	0.7290

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4/9/2019, 12:22:23 AM

Rack 3, Tube 16

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2505u	0.0613	-0.3258u
Al 308.215	6538.38	6554.20	6567.75
As 188.980	3.6737	9.4908	-1.9648u
B 249.678	35.2341	36.2143	34.4450
Ba 389.178	80.0650	82.7517	81.8400
Be 313.042	0.1736	0.1852	0.1834
Ca 370.602	14650	14657	14675
Cd 226.502	0.1256	0.4638	-0.2989
Co 228.615	3.7280	2.5517	4.4499
Cr 267.716	-0.4226u	0.4816	0.6686
Cu 324.754	3.7514	1.7342	3.8418
Fe 271.441	2908.45	2886.47	2883.16
K 766.491	4803.04	4812.12	4814.14
Mg 279.078	3804.91	3817.07	3823.47
Mn 257.610	70.3361	70.3907	70.3099
Mo 202.032	-1.0149u	2.6065	0.1995

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	4272.66	4335.02	4778.39
Ni 231.604	5.0318	2.5006	2.1799
Pb 220.353	4.1053	-3.3037u	6.2129
Sb 206.834	6.7435	-5.4790u	-4.5591u
Se 196.026	-0.8471u	-3.2549u	-15.1928u
Si 288.158	3090.86	3091.39	3102.86
Sn 189.925	4.9898	-2.7185u	-2.3664u
Sr 216.596	89.9510	90.5936	88.7244
Ti 334.941	0.6371	0.5594	0.6913
Tl 190.794	-5.8631u	-15.5213u	-9.2409u
V 292.401	0.8576	0.0130	-0.0444u
Zn 206.200	24.8164	28.8359	28.1599

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1716	ppb	0.2052	119.6	-61.5596
Al 308.215	6553.45	ppb	14.6972	0.2	11319.1
As 188.980	3.7333	ppb	5.7280	153.4	2.1586
B 249.678	35.2978	ppb	0.8864	2.5	205.265
Ba 389.178	81.5522	ppb	1.3663	1.7	387.083
Be 313.042	0.1807	ppb	0.0063	3.5	-282.978
Ca 370.602	14661	ppb	12.64	0.1	20828
Cd 226.502	0.0969	ppb	0.3822	394.6	7.2984
Co 228.615	3.5765	ppb	0.9582	26.8	3.5109
Cr 267.716	0.2425	ppb	0.5835	240.6	14.1937
Cu 324.754	3.1091	ppb	1.1916	38.3	555.958
Fe 271.441	2892.69	ppb	13.7431	0.5	1611.10
K 766.491	4809.77	ppb	5.9116	0.1	81996.5
Mg 279.078	3815.15	ppb	9.4293	0.2	4671.25
Mn 257.610	70.3456	ppb	0.0412	0.1	4857.81
Mo 202.032	0.5970	ppb	1.8431	308.7	3.4565
Na 330.237	4462.02	ppb	275.747	6.2	141.283
Ni 231.604	3.2374	ppb	1.5622	48.3	0.4440
Pb 220.353	2.3382	ppb	4.9983	213.8	2.5211
Sb 206.834	-1.0982	ppb	6.8066	619.8	5.5412
Se 196.026	-6.4316	ppb	7.6823	119.4	3.1999
Si 288.158	3095.03	ppb	6.7820	0.2	13718.1
Sn 189.925	-0.0317	ppb	4.3523	13726.6	-1.0211
Sr 216.596	89.7563	ppb	0.9497	1.1	223.038
Ti 334.941	0.6293	ppb	0.0663	10.5	31.0273
Tl 190.794	-10.2084	ppb	4.9012	48.0	-4.9488
V 292.401	0.2754	ppb	0.5050	183.4	-9.3950
Zn 206.200	27.2707	ppb	2.1523	7.9	13.0965

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Rack 3, Tube 17

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3695u	-0.2093u	-0.2796u
Al 308.215	800.864	804.403	805.702
As 188.980	9.2800	5.9945	4.8931
B 249.678	50.8275	50.0949	50.5861
Ba 389.178	19.6727	19.4748	21.6378
Be 313.042	0.0114	0.0087	0.0222
Ca 370.602	73188	73043	73051

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.0159	-0.1696	0.3702
Co 228.615	3.1424	1.1463	2.1479
Cr 267.716	6.0807	5.9168	6.7715
Cu 324.754	2.8318	2.4706	2.8852
Fe 271.441	33600.9	33607.5	33601.6
K 766.491	12906.9	12914.7	12905.6
Mg 279.078	19650.0	19724.8	19680.3
Mn 257.610	509.014	510.360	508.505
Mo 202.032	1.8887	2.1677	0.9272
Na 330.237	52259.1	52079.6	52479.4
Ni 231.604	31.6220	37.0788	36.8644
Pb 220.353	-7.3039u	8.1157	-5.5472u
Sb 206.834	-4.2434u	-4.1716u	3.2670
Se 196.026	-10.2845u	-0.6521u	-2.0567u
Si 288.158	19784.3	19806.1	19778.9
Sn 189.925	4.1190	8.9586	0.6936
Sr 216.596	833.386	835.298	836.172
Ti 334.941	0.8612	0.7419	0.8328
Tl 190.794	1.2860u	-1.6636u	-16.6960u
V 292.401	3.3424	1.9722	1.3517
Zn 206.200	16.0502	17.5055	12.9657

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2861	ppb	0.0803	28.1	-71.0086
Al 308.215	803.656	ppb	2.5041	0.3	1602.66
As 188.980	6.7225	ppb	2.2823	33.9	2.7167
B 249.678	50.5028	ppb	0.3734	0.7	273.195
Ba 389.178	20.2617	ppb	1.1958	5.9	92.4786
Be 313.042	0.0141	ppb	0.0072	51.0	-406.420
Ca 370.602	73094	ppb	81.46	0.1	103779
Cd 226.502	0.0722	ppb	0.2743	380.0	44.2477
Co 228.615	2.1455	ppb	0.9980	46.5	-1.8772
Cr 267.716	6.2563	ppb	0.4536	7.3	104.456
Cu 324.754	2.7292	ppb	0.2256	8.3	550.838
Fe 271.441	33603.3	ppb	3.6009	0.0	18227.1
K 766.491	12909.1	ppb	4.8966	0.0	219677
Mg 279.078	19685.0	ppb	37.6159	0.2	23989.1
Mn 257.610	509.293	ppb	0.9584	0.2	35012.1
Mo 202.032	1.6612	ppb	0.6507	39.2	4.6370
Na 330.237	52272.7	ppb	200.218	0.4	1310.31
Ni 231.604	35.1884	ppb	3.0904	8.8	31.8285
Pb 220.353	-1.5784	ppb	8.4412	534.8	1.2255
Sb 206.834	-1.7160	ppb	4.3155	251.5	5.8208
Se 196.026	-4.3311	ppb	5.2034	120.1	3.5288
Si 288.158	19789.8	ppb	14.4339	0.1	84611.1
Sn 189.925	4.5904	ppb	4.1526	90.5	0.0216
Sr 216.596	834.952	ppb	1.4247	0.2	2047.47
Ti 334.941	0.8120	ppb	0.0623	7.7	79.9053
Tl 190.794	-5.6912	ppb	9.6439	169.5	-4.4462
V 292.401	2.2221	ppb	1.0186	45.8	7.8781
Zn 206.200	15.5071	ppb	2.3181	14.9	6.9446

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166830-A-5-B (Samp) 4/9/2019, 12:31:12 AM Rack 3, Tube 18

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0679	0.6992	0.3720
Al 308.215	85.3040	84.9244	83.8364
As 188.980	6.4682	4.6914	-3.3065u
B 249.678	24.4167	24.5527	24.6093
Ba 389.178	36.2399	36.2657	36.2299
Be 313.042	-0.0558u	-0.0635u	-0.0505u
Ca 370.602	6677	6695	6682
Cd 226.502	0.2347	0.5275	-0.1229
Co 228.615	-0.4447u	-0.2985u	-1.5508u
Cr 267.716	0.6641	1.0127	-0.1446u
Cu 324.754	2.1148	1.2256	1.4713
Fe 271.441	4842.29	4862.05	4865.98
K 766.491	1719.90	1718.16	1715.64
Mg 279.078	1365.58	1351.27	1357.31
Mn 257.610	59.3177	59.4150	59.2102
Mo 202.032	0.4529	1.0620	1.5802
Na 330.237	39975.6	39825.9	40075.9
Ni 231.604	0.9685	0.2802	0.6229
Pb 220.353	-4.4629u	5.8154	3.0401
Sb 206.834	2.5977	2.5738	8.1115
Se 196.026	0.7633	11.6017	8.7759
Si 288.158	5929.79	5945.48	5922.25
Sn 189.925	-0.5519u	9.4080	-3.3352u
Sr 216.596	59.4618	57.5632	57.9615
Ti 334.941	0.7040	0.5894	0.7520
Tl 190.794	-4.8359u	-13.2421u	-6.8120u
V 292.401	0.5245	0.4857	0.5684
Zn 206.200	2.1032	1.7038	-0.1894u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3797	ppb	0.3157	83.1	-46.9802
Al 308.215	84.6883	ppb	0.7618	0.9	386.766
As 188.980	2.6177	ppb	5.2069	198.9	1.8741
B 249.678	24.5262	ppb	0.0990	0.4	134.280
Ba 389.178	36.2452	ppb	0.0184	0.1	155.032
Be 313.042	-0.0566	ppb	0.0065	11.5	-469.420
Ca 370.602	6685	ppb	9.612	0.1	9497
Cd 226.502	0.2131	ppb	0.3257	152.9	10.7302
Co 228.615	-0.7647	ppb	0.6847	89.5	-11.0212
Cr 267.716	0.5107	ppb	0.5937	116.2	18.3659
Cu 324.754	1.6039	ppb	0.4592	28.6	517.025
Fe 271.441	4856.78	ppb	12.6926	0.3	2673.56
K 766.491	1717.90	ppb	2.1407	0.1	29437.4
Mg 279.078	1358.05	ppb	7.1840	0.5	1681.07
Mn 257.610	59.3143	ppb	0.1025	0.2	4095.03
Mo 202.032	1.0317	ppb	0.5643	54.7	4.0412
Na 330.237	39959.2	ppb	125.807	0.3	1010.22
Ni 231.604	0.6238	ppb	0.3442	55.2	-2.1205
Pb 220.353	1.4642	ppb	5.3173	363.2	2.2249
Sb 206.834	4.4276	ppb	3.1903	72.1	7.3119
Se 196.026	7.0470	ppb	5.6223	79.8	5.6549
Si 288.158	5932.51	ppb	11.8497	0.2	25767.6

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.8403	ppb	6.6999	364.1	-0.5974
Sr 216.596	58.3288	ppb	1.0012	1.7	146.409
Ti 334.941	0.6818	ppb	0.0836	12.3	28.6406
Tl 190.794	-8.2967	ppb	4.3953	53.0	-4.5490
V 292.401	0.5262	ppb	0.0414	7.9	-7.3460
Zn 206.200	1.2058	ppb	1.2247	101.6	-0.6665

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Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0981	-0.8911u	-0.2156u
Al 308.215	608.257	614.988	615.487
As 188.980	-0.5363u	4.6533	11.7828
B 249.678	13.8591	15.5172	16.1096
Ba 389.178	13.5136	16.7886	15.1888
Be 313.042	-0.0358u	-0.0551u	-0.0572u
Ca 370.602	25290	25263	25249
Cd 226.502	-0.1142u	0.1587	0.0338
Co 228.615	-0.2426u	-0.2980u	-1.1168u
Cr 267.716	1.8263	0.9370	2.3139
Cu 324.754	2.3470	3.0570	2.4811
Fe 271.441	68.7568	72.9893	64.6239
K 766.491	4269.77	4264.78	4273.60
Mg 279.078	422.404	415.303	418.871
Mn 257.610	1.7733	1.7068	1.5486
Mo 202.032	3.4719	5.1010	2.1899
Na 330.237	40708.6	40817.2	40514.4
Ni 231.604	5.4562	6.1738	3.4988
Pb 220.353	-1.0680u	-5.0269u	6.7860
Sb 206.834	-2.1279u	15.0592	2.4361
Se 196.026	2.6394	-7.6362u	0.0864
Si 288.158	4800.35	4804.98	4796.47
Sn 189.925	5.1319	0.9040	4.0949
Sr 216.596	190.258	189.560	191.400
Ti 334.941	3.5226	3.3177	3.3495
Tl 190.794	-1.5927u	-6.6232u	-2.1112u
V 292.401	5.6837	7.2072	5.9959
Zn 206.200	10.0891	8.0683	10.4108

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3362	ppb	0.5055	150.4	-65.9029
Al 308.215	612.911	ppb	4.0377	0.7	1279.50
As 188.980	5.2999	ppb	6.1849	116.7	2.5094
B 249.678	15.1620	ppb	1.1665	7.7	78.8463
Ba 389.178	15.1637	ppb	1.6377	10.8	46.3855
Be 313.042	-0.0494	ppb	0.0118	23.8	-461.202
Ca 370.602	25267	ppb	20.89	0.1	35895
Cd 226.502	0.0261	ppb	0.1366	523.7	2.7487
Co 228.615	-0.5524	ppb	0.4895	88.6	-10.2243
Cr 267.716	1.6924	ppb	0.6981	41.3	35.0892
Cu 324.754	2.6284	ppb	0.3772	14.4	543.006
Fe 271.441	68.7900	ppb	4.1828	6.1	83.0613
K 766.491	4269.38	ppb	4.4240	0.1	72810.4

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	418.859	ppb	3.5509	0.8	538.090
Mn 257.610	1.6762	ppb	0.1154	6.9	138.727
Mo 202.032	3.5876	ppb	1.4590	40.7	7.6369
Na 330.237	40680.1	ppb	153.418	0.4	1027.96
Ni 231.604	5.0429	ppb	1.3845	27.5	2.2197
Pb 220.353	0.2304	ppb	6.0125	2609.6	1.7458
Sb 206.834	5.1225	ppb	8.9029	173.8	7.4594
Se 196.026	-1.6368	ppb	5.3502	326.9	4.0782
Si 288.158	4800.60	ppb	4.2636	0.1	20961.5
Sn 189.925	3.3769	ppb	2.2035	65.3	-0.2520
Sr 216.596	190.406	ppb	0.9287	0.5	468.752
Ti 334.941	3.3966	ppb	0.1103	3.2	231.378
Tl 190.794	-3.4424	ppb	2.7669	80.4	-3.3310
V 292.401	6.2956	ppb	0.8048	12.8	39.5045
Zn 206.200	9.5227	ppb	1.2698	13.3	3.7159

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Rack 3, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8574	-0.1180u	0.9839
Al 308.215	493.472	498.265	499.660
As 188.980	12.2157	-1.6878u	-1.1912u
B 249.678	56.9444	57.6126	58.1298
Ba 389.178	79.3440	78.1880	75.0735
Be 313.042	0.0158	-0.0086	0.0116
Ca 370.602	157732	157453	157561
Cd 226.502	-0.4212	0.0678	0.6315
Co 228.615	0.7632	1.0278	-0.0129u
Cr 267.716	5.3777	5.5324	4.9269
Cu 324.754	2.3376	1.9702	2.1819
Fe 271.441	26669.7	26600.5	26665.0
K 766.491	7681.55	7684.52	7693.16
Mg 279.078	21883.0	21846.1	21843.2
Mn 257.610	1053.43	1051.49	1052.35
Mo 202.032	0.3217	0.2543	1.3397
Na 330.237	53851.1	54215.6	53337.5
Ni 231.604	31.6204	26.8006	33.3959
Pb 220.353	-1.9357u	-2.3012u	-6.7082u
Sb 206.834	-6.6116u	15.7422	-2.6309u
Se 196.026	2.1522	-3.4284u	6.4373
Si 288.158	21694.6	21633.9	21657.0
Sn 189.925	20.1706	0.2254	9.8383
Sr 216.596	2020.98	2015.73	2021.49
Ti 334.941	1.7884	1.7310	1.5368
Tl 190.794	-20.0188u	-20.7063u	-4.6060u
V 292.401	0.2176	1.8807	1.1923
Zn 206.200	11.8097	10.3726	13.0634

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5744	ppb	0.6030	105.0	-49.1263
Al 308.215	497.132	ppb	3.2460	0.7	1084.41
As 188.980	3.1123	ppb	7.8878	253.4	1.9293
B 249.678	57.5623	ppb	0.5943	1.0	325.137

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	77.5352	ppb	2.2088	2.8	384.423
Be 313.042	0.0062	ppb	0.0130	208.6	-400.098
Ca 370.602	157582	ppb	140.5	0.1	223788
Cd 226.502	0.0927	ppb	0.5268	568.4	36.0470
Co 228.615	0.5927	ppb	0.5409	91.3	-6.9069
Cr 267.716	5.2790	ppb	0.3146	6.0	90.4939
Cu 324.754	2.1632	ppb	0.1844	8.5	534.991
Fe 271.441	26645.1	ppb	38.6791	0.1	14462.2
K 766.491	7686.41	ppb	6.0295	0.1	130897
Mg 279.078	21857.4	ppb	22.2140	0.1	26628.9
Mn 257.610	1052.42	ppb	0.9757	0.1	72245.0
Mo 202.032	0.6386	ppb	0.6082	95.2	3.2837
Na 330.237	53801.4	ppb	441.143	0.8	1348.02
Ni 231.604	30.6056	ppb	3.4128	11.2	27.3281
Pb 220.353	-3.6484	ppb	2.6562	72.8	0.4627
Sb 206.834	2.1666	ppb	11.9241	550.4	6.9378
Se 196.026	1.7204	ppb	4.9470	287.6	4.7052
Si 288.158	21661.9	ppb	30.6414	0.1	92560.4
Sn 189.925	10.0781	ppb	9.9747	99.0	1.2548
Sr 216.596	2019.40	ppb	3.1902	0.2	4942.14
Ti 334.941	1.6854	ppb	0.1319	7.8	150.721
Tl 190.794	-15.1104	ppb	9.1035	60.2	-6.3797
V 292.401	1.0968	ppb	0.8356	76.2	-1.5845
Zn 206.200	11.7486	ppb	1.3465	11.5	4.9454

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.590	501.396	505.154
Al 308.215	10363.3	10363.3	10350.5
As 188.980	541.254	551.144	547.825
B 249.678	536.635	542.232	544.213
Ba 389.178	481.262	481.863	478.320
Be 313.042	542.363	543.416	542.846
Ca 370.602	10157	10162	10155
Cd 226.502	515.711	515.637	513.845
Co 228.615	515.101	518.008	513.360
Cr 267.716	503.809	502.445	501.485
Cu 324.754	508.986	517.419	516.756
Fe 271.441	10216.7	10235.3	10203.5
K 766.491	10061.0	10042.2	10042.0
Mg 279.078	10413.1	10435.5	10439.1
Mn 257.610	508.705	509.160	509.286
Mo 202.032	506.209	513.873	512.609
Na 330.237	11225.1	10961.8	11087.5
Ni 231.604	517.191	519.839	513.992
Pb 220.353	497.610	502.479	493.928
Sb 206.834	511.246	512.605	504.042
Se 196.026	528.724	526.024	540.485
Si 288.158	5152.04	5141.29	5126.54
Sn 189.925	504.605	512.815	522.328
Sr 216.596	497.124	504.544	501.345
Ti 334.941	504.011	504.983	504.109

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Label	Replicates Concentration		
Tl 190.794	509.669	509.972	507.042
V 292.401	511.950	512.482	511.227
Zn 206.200	1067.05	1076.01	1077.03

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	502.380	ppb	2.4358	0.5	13447.2	100.47602
Al 308.215	10359.1	ppb	7.3753	0.1	17766.9	103.59062
As 188.980	546.741	ppb	5.0334	0.9	132.637	109.34819
B 249.678	541.027	ppb	3.9301	0.7	3442.06	108.20536
Ba 389.178	480.482	ppb	1.8962	0.4	2422.84	96.09636
Be 313.042	542.875	ppb	0.5268	0.1	419420	108.57497
Ca 370.602	10158	ppb	3.590	0.0	14439	101.58021
Cd 226.502	515.064	ppb	1.0565	0.2	5911.19	103.01286
Co 228.615	515.490	ppb	2.3482	0.5	1711.17	103.09792
Cr 267.716	502.580	ppb	1.1680	0.2	7303.62	100.51591
Cu 324.754	514.387	ppb	4.6891	0.9	13891.8	102.87740
Fe 271.441	10218.5	ppb	15.9569	0.2	5600.47	102.13409
K 766.491	10048.4	ppb	10.9072	0.1	171048	100.48393
Mg 279.078	10429.2	ppb	14.0757	0.1	12718.9	104.29248
Mn 257.610	509.051	ppb	0.3058	0.1	34960.7	101.81015
Mo 202.032	510.897	ppb	4.1088	0.8	712.080	102.17935
Na 330.237	11091.5	ppb	131.689	1.2	288.192	110.91501Q
Ni 231.604	517.008	ppb	2.9279	0.6	504.696	103.40153
Pb 220.353	498.006	ppb	4.2892	0.9	185.413	99.60116
Sb 206.834	509.298	ppb	4.6024	0.9	167.520	101.85954
Se 196.026	531.744	ppb	7.6889	1.4	101.524	106.34886
Si 288.158	5139.95	ppb	12.8018	0.2	22526.0	102.79908
Sn 189.925	513.249	ppb	8.8696	1.7	114.306	102.64986
Sr 216.596	501.004	ppb	3.7219	0.7	1222.10	100.20085
Ti 334.941	504.368	ppb	0.5352	0.1	38064.6	100.87357
Tl 190.794	508.894	ppb	1.6110	0.3	115.926	101.77888
V 292.401	511.886	ppb	0.6302	0.1	4148.31	102.37727
Zn 206.200	1073.36	ppb	5.4878	0.5	565.369	107.33630

Cont Calib Blank (CCB) 4/9/2019, 12:48:52 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4862	-0.3637u	0.1920
Al 308.215	4.5768	1.0576	-3.5520u
As 188.980	2.5333	-0.9463u	-2.2765u
B 249.678	16.6190	15.4548	11.2312
Ba 389.178	-4.7055u	-4.5413u	-3.2324u
Be 313.042	0.0050	0.0210	0.0027
Ca 370.602	13.69	8.392	1.651
Cd 226.502	-0.0428u	0.2762	0.3231
Co 228.615	0.3382	-0.3934u	1.4989
Cr 267.716	-0.0574u	0.6340	-0.1840u
Cu 324.754	1.9648	2.8471	1.6865
Fe 271.441	12.4778	-4.9424u	6.3817
K 766.491	0.6993	-0.5309u	-0.1389u
Mg 279.078	-3.7274u	3.4604	10.5997
Mn 257.610	0.1972	0.1367	0.1698
Mo 202.032	3.1679	2.1974	1.3273

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Label	Replicates Concentration		
Na 330.237	362.552	341.278	130.821
Ni 231.604	1.4505	-0.1266u	0.7170
Pb 220.353	-5.4335u	-11.1211u	-0.3432u
Sb 206.834	-3.9323u	-12.5164u	-11.1488u
Se 196.026	-7.6104u	7.4850	-6.1309u
Si 288.158	16.1249	13.4641	13.4446
Sn 189.925	9.1585	-3.9186u	-3.0117u
Sr 216.596	-0.8433u	0.8475	1.3483
Ti 334.941	0.2282	0.4417	0.3337
Tl 190.794	-5.7188u	1.2506	-4.0905u
V 292.401	0.1210	-0.1981u	0.2899
Zn 206.200	1.5231	2.0552	2.5889

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.1048	ppb	0.4316	411.8	-53.5202	0.10482
Al 308.215	0.6941	ppb	4.0766	587.3	244.684	0.69414
As 188.980	-0.2298	ppb	2.4836	1080.8	1.1383	-0.22980
B 249.678	14.4350	ppb	2.8350	19.6	74.2220	14.43500
Ba 389.178	-4.1598	ppb	0.8073	19.4	-52.2160	-4.15976
Be 313.042	0.0096	ppb	0.0100	104.2	-417.529	0.00956
Ca 370.602	7.910	ppb	6.033	76.3	20.40	7.91018
Cd 226.502	0.1855	ppb	0.1991	107.3	4.5600	0.18552
Co 228.615	0.4812	ppb	0.9542	198.3	-6.7816	0.48122
Cr 267.716	0.1309	ppb	0.4403	336.5	12.2338	0.13085
Cu 324.754	2.1661	ppb	0.6059	28.0	530.956	2.16615
Fe 271.441	4.6390	ppb	8.8399	190.6	48.3740	4.63903
K 766.491	0.0098	ppb	0.6284	6390.5	234.882	0.00983
Mg 279.078	3.4442	ppb	7.1636	208.0	32.4605	3.44422
Mn 257.610	0.1679	ppb	0.0303	18.0	33.9491	0.16791
Mo 202.032	2.2309	ppb	0.9207	41.3	5.7538	2.23087
Na 330.237	278.217	ppb	128.091	46.0	39.2701	278.21704
Ni 231.604	0.6803	ppb	0.7892	116.0	-2.0663	0.68029
Pb 220.353	-5.6326	ppb	5.3917	95.7	-0.4181	-5.63258Z
Sb 206.834	-9.1992	ppb	4.6122	50.1	2.9464	-9.19917
Se 196.026	-2.0854	ppb	8.3212	399.0	3.9963	-2.08544
Si 288.158	14.3445	ppb	1.5419	10.7	636.914	14.34451
Sn 189.925	0.7428	ppb	7.3024	983.1	-0.8474	0.74276
Sr 216.596	0.4508	ppb	1.1484	254.7	4.4433	0.45083
Ti 334.941	0.3345	ppb	0.1067	31.9	0.1043	0.33455
Tl 190.794	-2.8529	ppb	3.6458	127.8	-3.1943	-2.85288
V 292.401	0.0709	ppb	0.2478	349.4	-11.3153	0.07093
Zn 206.200	2.0557	ppb	0.5329	25.9	-0.2275	2.05574

680-166627-D-5-B (Samp)

4/9/2019, 12:53:15 AM

Rack 3, Tube 21

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2596	0.9220	0.2193
Al 308.215	9.0174	8.8399	13.2745
As 188.980	4.1455	-2.1279u	6.7120
B 249.678	13.6190	13.0340	12.2476
Ba 389.178	59.6170	55.0148	57.4833
Be 313.042	0.0234	0.0549	0.0260
Ca 370.602	13677	13695	13660

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.2099	0.2804	0.5997
Co 228.615	-0.9269u	0.8150	1.1581
Cr 267.716	3.4538	3.6572	3.2377
Cu 324.754	2.0312	2.2172	2.2836
Fe 271.441	3.3929	-0.2815u	3.6461
K 766.491	1713.30	1709.43	1710.63
Mg 279.078	7657.17	7630.24	7639.21
Mn 257.610	26.4508	26.4991	26.5202
Mo 202.032	1.7893	1.2550	-1.5417u
Na 330.237	23782.1	23865.0	23705.6
Ni 231.604	33.6886	35.3783	36.1592
Pb 220.353	-2.1762u	2.1977	-1.4740u
Sb 206.834	-7.4483u	-4.4676u	-2.7523u
Se 196.026	5.3430	-1.8471u	-7.0009u
Si 288.158	7384.45	7346.03	7381.41
Sn 189.925	-2.9792u	5.8618	8.3261
Sr 216.596	89.0590	90.1173	90.5961
Ti 334.941	-0.1095	-0.0509	-0.0031
Tl 190.794	-13.4936u	0.8967	-5.9029u
V 292.401	-0.1370u	0.8045	-0.8180u
Zn 206.200	50.5601	48.5429	49.1338

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4669	ppb	0.3946	84.5	-44.0318
Al 308.215	10.3773	ppb	2.5107	24.2	261.031
As 188.980	2.9099	ppb	4.5477	156.3	1.9385
B 249.678	12.9669	ppb	0.6882	5.3	64.8144
Ba 389.178	57.3717	ppb	2.3031	4.0	266.727
Be 313.042	0.0348	ppb	0.0175	50.3	-397.114
Ca 370.602	13678	ppb	17.44	0.1	19435
Cd 226.502	0.3633	ppb	0.2078	57.2	6.5791
Co 228.615	0.3487	ppb	1.1180	320.6	-7.2100
Cr 267.716	3.4496	ppb	0.2098	6.1	60.5364
Cu 324.754	2.1773	ppb	0.1308	6.0	531.224
Fe 271.441	2.2525	ppb	2.1982	97.6	47.0704
K 766.491	1711.12	ppb	1.9792	0.1	29322.2
Mg 279.078	7642.21	ppb	13.7118	0.2	9332.07
Mn 257.610	26.4900	ppb	0.0356	0.1	1861.92
Mo 202.032	0.5009	ppb	1.7890	357.2	3.3510
Na 330.237	23784.2	ppb	79.7165	0.3	614.056
Ni 231.604	35.0753	ppb	1.2628	3.6	31.7187
Pb 220.353	-0.4842	ppb	2.3490	485.2	1.4858
Sb 206.834	-4.8894	ppb	2.3762	48.6	4.3096
Se 196.026	-1.1683	ppb	6.1999	530.7	4.1663
Si 288.158	7370.63	ppb	21.3576	0.3	31874.1
Sn 189.925	3.7362	ppb	5.9448	159.1	-0.1728
Sr 216.596	89.9241	ppb	0.7865	0.9	223.041
Ti 334.941	-0.0545	ppb	0.0533	97.8	-12.3364
Tl 190.794	-6.1666	ppb	7.1988	116.7	-3.9590
V 292.401	-0.0502	ppb	0.8147	1623.7	-12.2962
Zn 206.200	49.4123	ppb	1.0371	2.1	24.7835

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166627-D-7-B (Samp) **4/9/2019, 12:57:40 AM** **Rack 3, Tube 22****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1813u	0.1553	0.6708
Al 308.215	9.4157	6.4639	10.8608
As 188.980	-2.3352u	-2.1559u	-3.0938u
B 249.678	11.3533	12.9099	14.0926
Ba 389.178	44.9260	45.4874	43.3471
Be 313.042	-0.0371u	-0.0486u	-0.0530u
Ca 370.602	7819	7794	7823
Cd 226.502	0.8967	-0.2384	-0.2077
Co 228.615	11.9433	11.5870	10.4601
Cr 267.716	0.1191	0.4394	-0.2610u
Cu 324.754	2.4219	3.2232	2.3695
Fe 271.441	9877.50	9893.78	9900.39
K 766.491	697.694	696.415	696.919
Mg 279.078	4833.98	4828.68	4843.34
Mn 257.610	785.808	786.227	787.412
Mo 202.032	1.8442	0.8155	2.8177
Na 330.237	12631.6	12090.4	12384.5
Ni 231.604	14.1399	14.6989	16.2960
Pb 220.353	-0.5702u	-1.6416u	-7.3891u
Sb 206.834	-3.1290u	1.8222	-4.3052u
Se 196.026	-3.5563u	-8.9284u	6.7316
Si 288.158	8493.88	8516.29	8528.57
Sn 189.925	6.5555	0.2327	-0.5846u
Sr 216.596	31.5479	33.6804	33.7505
Ti 334.941	0.0601	0.2092	0.0887
Tl 190.794	-5.0219u	-3.5601u	5.9988
V 292.401	0.5311	-0.0356	-0.1542u
Zn 206.200	23.6038	22.6329	22.8712

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2150	ppb	0.4292	199.6	-50.9811
Al 308.215	8.9135	ppb	2.2411	25.1	258.822
As 188.980	-2.5283	ppb	0.4979	19.7	0.5368
B 249.678	12.7853	ppb	1.3739	10.7	54.1012
Ba 389.178	44.5869	ppb	1.1097	2.5	200.942
Be 313.042	-0.0462	ppb	0.0082	17.8	-460.269
Ca 370.602	7812	ppb	15.26	0.2	11100
Cd 226.502	0.1502	ppb	0.6467	430.5	16.2197
Co 228.615	11.3301	ppb	0.7742	6.8	29.2327
Cr 267.716	0.0992	ppb	0.3506	353.6	13.5729
Cu 324.754	2.6715	ppb	0.4785	17.9	545.657
Fe 271.441	9890.56	ppb	11.7797	0.1	5397.65
K 766.491	697.009	ppb	0.6443	0.1	12083.3
Mg 279.078	4835.34	ppb	7.4220	0.2	5907.80
Mn 257.610	786.482	ppb	0.8321	0.1	53953.3
Mo 202.032	1.8258	ppb	1.0012	54.8	5.0953
Na 330.237	12368.8	ppb	270.937	2.2	334.577
Ni 231.604	15.0449	ppb	1.1189	7.4	12.0351
Pb 220.353	-3.2003	ppb	3.6670	114.6	0.5529
Sb 206.834	-1.8707	ppb	3.2517	173.8	5.4034
Se 196.026	-1.9177	ppb	7.9576	415.0	4.0681
Si 288.158	8512.91	ppb	17.5903	0.2	36725.1

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	2.0679	ppb	3.9079	189.0	-0.5486
Sr 216.596	32.9929	ppb	1.2519	3.8	84.9096
Ti 334.941	0.1193	ppb	0.0791	66.3	-5.3877
Tl 190.794	-0.8611	ppb	5.9856	695.1	-2.7686
V 292.401	0.1138	ppb	0.3663	321.9	-10.4371
Zn 206.200	23.0359	ppb	0.5060	2.2	10.8746

680-166627-D-3-B (Samp) 4/9/2019, 1:02:04 AM Rack 3, Tube 23

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5844	-0.3125u	-0.0290u
Al 308.215	8.8824	8.9412	6.6131
As 188.980	-1.6387u	-0.2138	5.0749
B 249.678	8.2173	8.2958	8.4480
Ba 389.178	89.7701	90.0167	88.8161
Be 313.042	-0.0090u	0.0004u	0.0048
Ca 370.602	14429	14433	14409
Cd 226.502	0.0777	0.4000	0.6600
Co 228.615	3.5530	2.1238	3.3291
Cr 267.716	0.5198	-0.0696u	0.5613
Cu 324.754	2.8644	1.8587	2.0459
Fe 271.441	266.668	255.883	269.493
K 766.491	2985.77	2987.23	2985.80
Mg 279.078	6516.37	6520.01	6491.05
Mn 257.610	116.067	115.903	115.917
Mo 202.032	1.8398	0.2715	2.2495
Na 330.237	61669.0	61058.9	61758.8
Ni 231.604	30.4776	27.5535	27.3866
Pb 220.353	1.7148	-7.4418u	6.1404
Sb 206.834	-1.5968u	-0.4500u	-0.8716u
Se 196.026	1.3881	1.3457	2.7262
Si 288.158	4625.24	4633.49	4621.52
Sn 189.925	8.4250	4.4873	-0.3035u
Sr 216.596	79.4970	78.3165	78.5750
Ti 334.941	-0.1741	-0.0095	-0.1476
Tl 190.794	-4.3610u	-6.7446u	-17.8729u
V 292.401	0.7189	0.8663	0.4718
Zn 206.200	45.1494	49.7275	50.8000

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0810	ppb	0.4585	566.1	-54.2641
Al 308.215	8.1456	ppb	1.3275	16.3	257.283
As 188.980	1.0741	ppb	3.5372	329.3	1.5216
B 249.678	8.3204	ppb	0.1173	1.4	34.7624
Ba 389.178	89.5343	ppb	0.6341	0.7	429.420
Be 313.042	-0.0013	ppb	0.0071	552.2	-426.530
Ca 370.602	14424	ppb	12.66	0.1	20495
Cd 226.502	0.3792	ppb	0.2917	76.9	7.0131
Co 228.615	3.0020	ppb	0.7687	25.6	1.6360
Cr 267.716	0.3372	ppb	0.3529	104.7	15.6941
Cu 324.754	2.2563	ppb	0.5349	23.7	533.321
Fe 271.441	264.015	ppb	7.1827	2.7	188.819
K 766.491	2986.27	ppb	0.8310	0.0	50998.6

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6509.14	ppb	15.7777	0.2	7951.79
Mn 257.610	115.962	ppb	0.0912	0.1	7991.46
Mo 202.032	1.4536	ppb	1.0440	71.8	4.6716
Na 330.237	61495.6	ppb	380.805	0.6	1536.99
Ni 231.604	28.4725	ppb	1.7385	6.1	25.2310
Pb 220.353	0.1378	ppb	6.9270	5027.7	1.7202
Sb 206.834	-0.9728	ppb	0.5801	59.6	5.5409
Se 196.026	1.8200	ppb	0.7851	43.1	4.7195
Si 288.158	4626.75	ppb	6.1238	0.1	20222.5
Sn 189.925	4.2029	ppb	4.3712	104.0	-0.0646
Sr 216.596	78.7962	ppb	0.6206	0.8	195.888
Ti 334.941	-0.1104	ppb	0.0884	80.0	-19.8499
Tl 190.794	-9.6595	ppb	7.2122	74.7	-4.7570
V 292.401	0.6857	ppb	0.1993	29.1	-6.2974
Zn 206.200	48.5590	ppb	3.0011	6.2	24.3349

MB 680-565354/1-A (Samp) 4/9/2019, 1:06:29 AM Rack 3, Tube 24
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.7169	-0.8569u	-0.7183u
Al 308.215	-0.2242u	-2.5694u	3.1420
As 188.980	7.0524	-3.7548u	3.7593
B 249.678	1.4349	0.9184	0.2022
Ba 389.178	-2.8549u	-3.6522u	-0.6597u
Be 313.042	-0.0632u	-0.0861u	-0.0732u
Ca 370.602	3.919	7.080	1.834
Cd 226.502	-0.4055u	0.0321	-0.2677u
Co 228.615	-0.5936u	-0.1169u	0.5637
Cr 267.716	-0.1467u	-0.0920u	0.0953
Cu 324.754	2.2466	2.9836	1.9523
Fe 271.441	-2.3475u	-2.0940u	-2.5741u
K 766.491	1.4550	1.9722	1.8058
Mg 279.078	-4.4275u	-5.8862u	-5.2647u
Mn 257.610	0.0865	0.0512	0.1513
Mo 202.032	-0.0043u	-1.7322u	0.8564
Na 330.237	73.9398	143.303	-240.813u
Ni 231.604	0.5348	-0.2501u	-2.2467u
Pb 220.353	0.6592	-1.9918u	-7.0443u
Sb 206.834	-13.7296u	11.6140	-6.5914u
Se 196.026	8.2172	-1.8990u	-5.5919u
Si 288.158	20.8555	18.7090	20.2611
Sn 189.925	8.5689	-4.1037u	7.7566
Sr 216.596	1.8833	-1.5651u	-1.3236u
Ti 334.941	0.2459	-0.1833u	-0.1300u
Tl 190.794	-2.9278u	-9.4263u	10.4992
V 292.401	0.4354	0.7156	0.4795
Zn 206.200	4.3356	0.5208	1.2664

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2861	ppb	0.8714	304.6	-64.0296
Al 308.215	0.1162	ppb	2.8709	2471.6	243.694
As 188.980	2.3523	ppb	5.5393	235.5	1.7826
B 249.678	0.8518	ppb	0.6190	72.7	-12.8893

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-2.3889	ppb	1.5497	64.9	-43.2218
Be 313.042	-0.0742	ppb	0.0115	15.5	-482.116
Ca 370.602	4.278	ppb	2.641	61.7	15.26
Cd 226.502	-0.2137	ppb	0.2237	104.7	-0.0290
Co 228.615	-0.0489	ppb	0.5817	1188.8	-8.5362
Cr 267.716	-0.0478	ppb	0.1269	265.7	9.6389
Cu 324.754	2.3942	ppb	0.5312	22.2	536.865
Fe 271.441	-2.3385	ppb	0.2402	10.3	44.5629
K 766.491	1.7443	ppb	0.2640	15.1	264.366
Mg 279.078	-5.1928	ppb	0.7320	14.1	21.9461
Mn 257.610	0.0963	ppb	0.0508	52.7	29.0044
Mo 202.032	-0.2934	ppb	1.3183	449.4	2.2479
Na 330.237	-7.8565	ppb	204.706	2605.5	32.2789
Ni 231.604	-0.6540	ppb	1.4341	219.3	-3.3763
Pb 220.353	-2.7923	ppb	3.9136	140.2	0.6319
Sb 206.834	-2.9023	ppb	13.0683	450.3	4.9294
Se 196.026	0.2421	ppb	7.1492	2953.2	4.4215
Si 288.158	19.9418	ppb	1.1083	5.6	660.459
Sn 189.925	4.0739	ppb	7.0937	174.1	-0.0990
Sr 216.596	-0.3351	ppb	1.9250	574.4	2.5434
Ti 334.941	-0.0225	ppb	0.2339	1041.0	-26.8548
Tl 190.794	-0.6183	ppb	10.1616	1643.5	-2.6739
V 292.401	0.5435	ppb	0.1507	27.7	-7.3259
Zn 206.200	2.0409	ppb	2.0219	99.1	-0.2354

LCS 680-565354/2-A (Samp) 4/9/2019, 1:10:54 AM Rack 3, Tube 25

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.5641	51.9859	52.8334
Al 308.215	5130.32	5129.70	5150.99
As 188.980	100.773	106.621	106.760
B 249.678	214.986	217.866	216.684
Ba 389.178	98.8781	99.9737	99.9586
Be 313.042	54.8197	54.8059	54.7637
Ca 370.602	5028	5021	5016
Cd 226.502	52.2929	52.3678	51.7751
Co 228.615	50.2329	51.5136	51.9073
Cr 267.716	101.631	101.825	101.026
Cu 324.754	104.744	106.577	103.790
Fe 271.441	5053.60	5069.53	5076.06
K 766.491	8063.54	8076.67	8077.36
Mg 279.078	5179.11	5188.14	5183.03
Mn 257.610	508.546	509.340	508.788
Mo 202.032	105.958	105.298	103.409
Na 330.237	5781.87	5201.41	5762.41
Ni 231.604	104.020	103.523	106.316
Pb 220.353	506.664	497.891	492.512
Sb 206.834	60.3232	44.8346	50.0871
Se 196.026	110.891	112.200	125.576
Si 288.158	11.6403	8.7734	8.8764
Sn 189.925	106.530	116.097	92.7788
Sr 216.596	101.892	100.224	99.4680
Ti 334.941	401.326	401.748	401.662

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	38.4913	50.2457	37.4173
V 292.401	102.180	100.189	99.9169
Zn 206.200	108.306	107.426	111.851

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.4611	ppb	0.4331	0.8	1353.43
Al 308.215	5137.00	ppb	12.1189	0.2	8928.59
As 188.980	104.718	ppb	3.4173	3.3	26.6412
B 249.678	216.512	ppb	1.4476	0.7	1365.53
Ba 389.178	99.6035	ppb	0.6283	0.6	480.442
Be 313.042	54.7964	ppb	0.0292	0.1	41951.3
Ca 370.602	5021	ppb	6.244	0.1	7147
Cd 226.502	52.1452	ppb	0.3227	0.6	605.620
Co 228.615	51.2179	ppb	0.8755	1.7	164.207
Cr 267.716	101.494	ppb	0.4167	0.4	1484.13
Cu 324.754	105.037	ppb	1.4166	1.3	3214.75
Fe 271.441	5066.40	ppb	11.5532	0.2	2789.83
K 766.491	8072.52	ppb	7.7850	0.1	137460
Mg 279.078	5183.43	ppb	4.5282	0.1	6333.27
Mn 257.610	508.891	ppb	0.4070	0.1	34929.3
Mo 202.032	104.888	ppb	1.3230	1.3	148.273
Na 330.237	5581.90	ppb	329.654	5.9	164.538
Ni 231.604	104.620	ppb	1.4895	1.4	99.9894
Pb 220.353	499.022	ppb	7.1434	1.4	185.972
Sb 206.834	51.7483	ppb	7.8768	15.2	22.4294
Se 196.026	116.223	ppb	8.1269	7.0	25.6380
Si 288.158	9.7634	ppb	1.6263	16.7	655.396
Sn 189.925	105.135	ppb	11.7217	11.1	22.6085
Sr 216.596	100.528	ppb	1.2401	1.2	248.176
Ti 334.941	401.579	ppb	0.2231	0.1	30294.9
Tl 190.794	42.0515	ppb	7.1167	16.9	7.2727
V 292.401	100.762	ppb	1.2358	1.2	807.962
Zn 206.200	109.194	ppb	2.3421	2.1	56.3179

680-166886-A-2-D (Samp)

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Rack 3, Tube 26

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4696	0.0844	0.0369
Al 308.215	213.304	216.113	221.105
As 188.980	-3.3240u	4.4493	0.6760
B 249.678	31.3660	30.9982	29.0925
Ba 389.178	47.0084	48.5142	47.7126
Be 313.042	-0.0285u	-0.0650u	-0.0392u
Ca 370.602	7653	7630	7633
Cd 226.502	-0.1337	-0.0589	0.4663
Co 228.615	-0.1047u	0.2494	-0.4727u
Cr 267.716	0.8217	1.2322	0.9810
Cu 324.754	4.7329	4.0675	5.0555
Fe 271.441	1572.79	1588.55	1588.95
K 766.491	1535.98	1531.84	1532.54
Mg 279.078	1661.90	1665.10	1663.46
Mn 257.610	46.1191	45.6925	45.8040
Mo 202.032	-0.3820u	1.9564	1.7221

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	4542.51	4737.51	4619.68
Ni 231.604	1.8619	3.0842	0.9281
Pb 220.353	4.1924	9.3211	8.3622
Sb 206.834	0.5657	-1.7557u	-7.4243u
Se 196.026	2.5381	-7.5798u	1.9380
Si 288.158	2687.57	2683.75	2690.83
Sn 189.925	-12.1887u	1.1645	-3.7125u
Sr 216.596	35.5388	36.0927	37.1973
Ti 334.941	4.7892	4.8692	4.7737
Tl 190.794	-13.6174u	7.6106	-3.2937u
V 292.401	1.4577	0.8647	1.9822
Zn 206.200	31.2462	26.0285	29.3759

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1970	ppb	0.2373	120.5	-51.3313
Al 308.215	216.840	ppb	3.9513	1.8	610.041
As 188.980	0.6004	ppb	3.8872	647.4	1.3471
B 249.678	30.4856	ppb	1.2203	4.0	175.667
Ba 389.178	47.7450	ppb	0.7534	1.6	213.271
Be 313.042	-0.0442	ppb	0.0188	42.5	-458.172
Ca 370.602	7638	ppb	12.22	0.2	10856
Cd 226.502	0.0912	ppb	0.3270	358.4	5.3957
Co 228.615	-0.1093	ppb	0.3611	330.3	-8.7441
Cr 267.716	1.0116	ppb	0.2070	20.5	25.2085
Cu 324.754	4.6186	ppb	0.5038	10.9	595.113
Fe 271.441	1583.43	ppb	9.2159	0.6	902.543
K 766.491	1533.45	ppb	2.2129	0.1	26302.1
Mg 279.078	1663.49	ppb	1.5984	0.1	2053.03
Mn 257.610	45.8719	ppb	0.2212	0.5	3172.86
Mo 202.032	1.0988	ppb	1.2878	117.2	4.1661
Na 330.237	4633.24	ppb	98.2009	2.1	145.483
Ni 231.604	1.9581	ppb	1.0812	55.2	-0.8105
Pb 220.353	7.2919	ppb	2.7267	37.4	4.3641
Sb 206.834	-2.8715	ppb	4.1102	143.1	4.9629
Se 196.026	-1.0346	ppb	5.6762	548.6	4.1876
Si 288.158	2687.38	ppb	3.5434	0.1	11987.7
Sn 189.925	-4.9122	ppb	6.7569	137.6	-2.1176
Sr 216.596	36.2762	ppb	0.8444	2.3	92.1775
Ti 334.941	4.8107	ppb	0.0512	1.1	341.623
Tl 190.794	-3.1002	ppb	10.6154	342.4	-3.2744
V 292.401	1.4349	ppb	0.5591	39.0	0.0220
Zn 206.200	28.8835	ppb	2.6435	9.2	13.9456

680-166886-A-2-Dsd^5 (Samp) 4/9/2019, 1:19:44 AM

Rack 3, Tube 27

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1225	-0.3515u	0.0476
Al 308.215	47.0291	43.0245	43.4941
As 188.980	4.8729	-5.1150u	-5.4066u
B 249.678	8.2994	8.1683	8.1940
Ba 389.178	6.8743	8.2201	7.3448
Be 313.042	-0.0686u	-0.0877u	-0.0423u
Ca 370.602	1670	1685	1662

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.1934	0.3515	0.4423
Co 228.615	0.0648	-1.3099u	0.2891
Cr 267.716	-0.0161u	0.4854	0.1029
Cu 324.754	1.7820	2.2700	2.6731
Fe 271.441	355.409	334.716	356.426
K 766.491	318.375	319.139	315.288
Mg 279.078	362.918	360.241	365.906
Mn 257.610	9.9077	9.9222	9.8413
Mo 202.032	-1.1627u	-0.6639u	0.0986
Na 330.237	969.888	778.704	931.539
Ni 231.604	0.4845	1.4229	2.6286
Pb 220.353	-7.5323u	5.6180	2.3538
Sb 206.834	-8.4211u	-9.7429u	-6.2610u
Se 196.026	-15.2386u	0.2659	1.1481
Si 288.158	597.209	598.491	594.286
Sn 189.925	-3.5229u	-0.1081u	2.5629
Sr 216.596	8.2064	6.9017	9.1710
Ti 334.941	0.9100	1.1560	1.0017
Tl 190.794	-11.5080u	0.7797	-10.2118u
V 292.401	0.6665	-0.9806u	0.7643
Zn 206.200	7.6511	6.4383	6.2739

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0604	ppb	0.2548	421.5	-58.0194
Al 308.215	44.5159	ppb	2.1891	4.9	318.736
As 188.980	-1.8829	ppb	5.8525	310.8	0.7783
B 249.678	8.2206	ppb	0.0695	0.8	34.0458
Ba 389.178	7.4797	ppb	0.6830	9.1	7.3020
Be 313.042	-0.0662	ppb	0.0228	34.4	-475.797
Ca 370.602	1672	ppb	11.52	0.7	2384
Cd 226.502	0.3291	ppb	0.1260	38.3	6.6035
Co 228.615	-0.3186	ppb	0.8657	271.7	-9.4371
Cr 267.716	0.1907	ppb	0.2620	137.4	13.1431
Cu 324.754	2.2417	ppb	0.4462	19.9	532.946
Fe 271.441	348.851	ppb	12.2511	3.5	234.553
K 766.491	317.601	ppb	2.0391	0.6	5633.64
Mg 279.078	363.022	ppb	2.8337	0.8	470.132
Mn 257.610	9.8904	ppb	0.0431	0.4	701.691
Mo 202.032	-0.5760	ppb	0.6352	110.3	1.8520
Na 330.237	893.377	ppb	101.144	11.3	54.2644
Ni 231.604	1.5120	ppb	1.0748	71.1	-1.2484
Pb 220.353	0.1465	ppb	6.8473	4674.7	1.7191
Sb 206.834	-8.1417	ppb	1.7577	21.6	3.2842
Se 196.026	-4.6082	ppb	9.2167	200.0	3.5353
Si 288.158	596.662	ppb	2.1556	0.4	3109.37
Sn 189.925	-0.3560	ppb	3.0505	856.8	-1.0942
Sr 216.596	8.0930	ppb	1.1389	14.1	23.1767
Ti 334.941	1.0225	ppb	0.1243	12.2	52.8290
Tl 190.794	-6.9800	ppb	6.7513	96.7	-4.1589
V 292.401	0.1501	ppb	0.9804	653.4	-10.5338
Zn 206.200	6.7878	ppb	0.7522	11.1	2.2726

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166886-A-2-Dpds (Samp) 4/9/2019, 1:24:09 AM Rack 3, Tube 28**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.8768	51.9839	50.2591
Al 308.215	5268.88	5264.62	5253.24
As 188.980	103.921	105.946	102.709
B 249.678	237.376	238.970	238.068
Ba 389.178	150.182	149.347	150.375
Be 313.042	53.6959	53.7915	53.7350
Ca 370.602	13008	13009	13003
Cd 226.502	51.4366	50.9875	51.8740
Co 228.615	50.2895	52.7689	51.4162
Cr 267.716	99.4264	100.010	100.616
Cu 324.754	107.721	105.244	105.926
Fe 271.441	6668.31	6643.02	6641.52
K 766.491	9640.56	9633.70	9599.55
Mg 279.078	6825.79	6824.97	6807.35
Mn 257.610	547.254	548.244	547.999
Mo 202.032	101.661	101.569	101.498
Na 330.237	10329.8	10433.3	10301.5
Ni 231.604	103.103	106.844	104.053
Pb 220.353	483.304	493.741	490.442
Sb 206.834	40.3630	41.5172	57.2842
Se 196.026	110.451	121.923	94.9364
Si 288.158	2868.31	2871.61	2871.60
Sn 189.925	102.336	93.4521	94.9683
Sr 216.596	135.038	136.064	135.580
Ti 334.941	396.758	397.746	398.413
Tl 190.794	33.3935	45.9915	29.1009
V 292.401	101.218	101.165	99.9281
Zn 206.200	142.880	141.459	137.079

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.3732	ppb	0.9664	1.9	1323.88
Al 308.215	5262.24	ppb	8.0843	0.2	9140.26
As 188.980	104.192	ppb	1.6353	1.6	26.5044
B 249.678	238.138	ppb	0.7992	0.3	1502.72
Ba 389.178	149.968	ppb	0.5464	0.4	738.076
Be 313.042	53.7408	ppb	0.0480	0.1	41135.9
Ca 370.602	13006	ppb	2.995	0.0	18486
Cd 226.502	51.4327	ppb	0.4433	0.9	599.407
Co 228.615	51.4915	ppb	1.2414	2.4	165.097
Cr 267.716	100.017	ppb	0.5948	0.6	1462.90
Cu 324.754	106.297	ppb	1.2793	1.2	3247.79
Fe 271.441	6650.95	ppb	15.0551	0.2	3647.16
K 766.491	9624.60	ppb	21.9662	0.2	163844
Mg 279.078	6819.37	ppb	10.4195	0.2	8324.57
Mn 257.610	547.832	ppb	0.5156	0.1	37604.5
Mo 202.032	101.576	ppb	0.0819	0.1	143.658
Na 330.237	10354.9	ppb	69.3683	0.7	280.982
Ni 231.604	104.667	ppb	1.9447	1.9	100.035
Pb 220.353	489.162	ppb	5.3348	1.1	182.338
Sb 206.834	46.3881	ppb	9.4539	20.4	20.7618
Se 196.026	109.103	ppb	13.5437	12.4	24.3362
Si 288.158	2870.51	ppb	1.9050	0.1	12801.6

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	96.9189	ppb	4.7524	4.9	20.7628
Sr 216.596	135.561	ppb	0.5129	0.4	333.999
Ti 334.941	397.639	ppb	0.8324	0.2	30001.2
Tl 190.794	36.1620	ppb	8.7790	24.3	5.8788
V 292.401	100.770	ppb	0.7300	0.7	808.313
Zn 206.200	140.472	ppb	3.0237	2.2	72.8424

680-166886-A-2-E MS (Samp) 4/9/2019, 1:28:34 AM Rack 3, Tube 29

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	50.7475	51.4531	51.0641
Al 308.215	5251.30	5260.69	5251.99
As 188.980	106.128	109.263	102.369
B 249.678	243.739	244.111	243.336
Ba 389.178	143.557	144.923	142.663
Be 313.042	53.5761	53.7945	53.6057
Ca 370.602	12635	12700	12670
Cd 226.502	50.9457	51.5698	50.9563
Co 228.615	51.2579	49.9861	51.3994
Cr 267.716	98.7449	99.5968	99.0225
Cu 324.754	106.516	105.668	106.693
Fe 271.441	6559.31	6601.03	6564.30
K 766.491	9565.77	9561.67	9537.48
Mg 279.078	6733.25	6744.27	6730.50
Mn 257.610	543.483	544.471	544.052
Mo 202.032	101.673	100.975	102.314
Na 330.237	10066.0	10035.7	9866.98
Ni 231.604	102.128	101.995	102.087
Pb 220.353	483.456	479.117	500.449
Sb 206.834	52.1648	42.6904	51.6608
Se 196.026	114.989	115.625	128.725
Si 288.158	2759.75	2765.31	2761.77
Sn 189.925	108.390	99.7036	105.538
Sr 216.596	136.470	134.751	135.595
Ti 334.941	395.136	395.758	395.503
Tl 190.794	31.4319	37.9140	29.2514
V 292.401	101.169	101.225	101.176
Zn 206.200	133.406	140.708	126.946

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.0882	ppb	0.3534	0.7	1316.23
Al 308.215	5254.66	ppb	5.2350	0.1	9127.44
As 188.980	105.920	ppb	3.4520	3.3	26.9646
B 249.678	243.729	ppb	0.3876	0.2	1538.65
Ba 389.178	143.714	ppb	1.1385	0.8	706.198
Be 313.042	53.6588	ppb	0.1185	0.2	41072.5
Ca 370.602	12668	ppb	32.89	0.3	18006
Cd 226.502	51.1573	ppb	0.3573	0.7	596.158
Co 228.615	50.8811	ppb	0.7783	1.5	163.049
Cr 267.716	99.1214	ppb	0.4345	0.4	1449.88
Cu 324.754	106.292	ppb	0.5480	0.5	3247.65
Fe 271.441	6574.88	ppb	22.7848	0.3	3605.99
K 766.491	9554.97	ppb	15.2889	0.2	162661

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	6736.01	ppb	7.2841	0.1	8223.11
Mn 257.610	544.002	ppb	0.4958	0.1	37341.6
Mo 202.032	101.654	ppb	0.6696	0.7	143.767
Na 330.237	9989.58	ppb	107.255	1.1	272.141
Ni 231.604	102.070	ppb	0.0679	0.1	97.4853
Pb 220.353	487.674	ppb	11.2743	2.3	181.788
Sb 206.834	48.8387	ppb	5.3305	10.9	21.5313
Se 196.026	119.780	ppb	7.7532	6.5	26.2863
Si 288.158	2762.28	ppb	2.8143	0.1	12342.3
Sn 189.925	104.544	ppb	4.4277	4.2	22.4760
Sr 216.596	135.605	ppb	0.8593	0.6	334.113
Ti 334.941	395.466	ppb	0.3129	0.1	29837.0
Tl 190.794	32.8658	ppb	4.5058	13.7	5.1130
V 292.401	101.190	ppb	0.0306	0.0	811.764
Zn 206.200	133.687	ppb	6.8852	5.2	69.2587

680-166886-A-2-F MSD (Samp) 4/9/2019, 1:32:59 AM

Rack 3, Tube 30

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.8071	50.1201	50.0551
Al 308.215	5198.27	5201.81	5195.29
As 188.980	111.247	108.239	106.825
B 249.678	237.749	236.606	240.954
Ba 389.178	138.899	141.878	140.219
Be 313.042	52.7072	52.6175	52.6415
Ca 370.602	12110	12119	12121
Cd 226.502	50.8156	50.8171	50.5015
Co 228.615	50.2135	49.3013	50.6587
Cr 267.716	98.3273	98.5459	97.7672
Cu 324.754	104.355	103.622	102.963
Fe 271.441	6418.23	6402.28	6414.14
K 766.491	9383.56	9397.65	9403.25
Mg 279.078	6592.35	6552.57	6587.99
Mn 257.610	532.063	533.084	532.519
Mo 202.032	99.7278	99.7840	99.0816
Na 330.237	9223.38	9408.93	9637.08
Ni 231.604	99.1401	100.891	99.9879
Pb 220.353	478.625	484.141	475.782
Sb 206.834	52.2182	53.7862	37.6360
Se 196.026	98.2335	101.027	109.190
Si 288.158	2653.69	2651.62	2652.94
Sn 189.925	93.1976	99.1980	97.1009
Sr 216.596	131.019	132.460	129.830
Ti 334.941	390.087	389.962	389.150
Tl 190.794	48.3620	42.0196	34.2080
V 292.401	100.130	97.9959	99.1103
Zn 206.200	133.490	129.664	131.790

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.6608	ppb	0.9933	2.0	1304.76
Al 308.215	5198.46	ppb	3.2636	0.1	9032.39
As 188.980	108.770	ppb	2.2582	2.1	27.6298
B 249.678	238.436	ppb	2.2539	0.9	1504.86

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	140.332	ppb	1.4929	1.1	688.848
Be 313.042	52.6554	ppb	0.0464	0.1	40296.5
Ca 370.602	12117	ppb	5.894	0.0	17223
Cd 226.502	50.7114	ppb	0.1818	0.4	590.863
Co 228.615	50.0578	ppb	0.6920	1.4	160.280
Cr 267.716	98.2135	ppb	0.4016	0.4	1436.68
Cu 324.754	103.647	ppb	0.6964	0.7	3178.64
Fe 271.441	6411.55	ppb	8.2860	0.1	3517.56
K 766.491	9394.82	ppb	10.1485	0.1	159938
Mg 279.078	6577.63	ppb	21.8170	0.3	8030.42
Mn 257.610	532.556	ppb	0.5117	0.1	36556.3
Mo 202.032	99.5311	ppb	0.3903	0.4	140.820
Na 330.237	9423.13	ppb	207.213	2.2	258.349
Ni 231.604	100.006	ppb	0.8754	0.9	95.4586
Pb 220.353	479.516	ppb	4.2499	0.9	178.774
Sb 206.834	47.8801	ppb	8.9063	18.6	21.2241
Se 196.026	102.817	ppb	5.6936	5.5	23.1872
Si 288.158	2652.75	ppb	1.0475	0.0	11876.7
Sn 189.925	96.4988	ppb	3.0452	3.2	20.6683
Sr 216.596	131.103	ppb	1.3172	1.0	323.118
Ti 334.941	389.733	ppb	0.5085	0.1	29403.9
Tl 190.794	41.5299	ppb	7.0897	17.1	7.1286
V 292.401	99.0789	ppb	1.0676	1.1	794.568
Zn 206.200	131.648	ppb	1.9170	1.5	68.1822

Cont Calib Verif (CCV)

4/9/2019, 1:37:24 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.680	496.415	499.730
Al 308.215	10360.2	10389.0	10373.5
As 188.980	555.156	550.019	554.372
B 249.678	548.505	550.187	551.840
Ba 389.178	475.259	475.496	481.278
Be 313.042	543.245	543.781	543.350
Ca 370.602	10134	10141	10131
Cd 226.502	515.434	514.769	516.253
Co 228.615	513.833	516.261	516.198
Cr 267.716	500.997	501.220	501.632
Cu 324.754	513.314	509.928	514.515
Fe 271.441	10219.3	10242.2	10243.2
K 766.491	10090.0	10088.5	10074.8
Mg 279.078	10449.3	10458.2	10430.6
Mn 257.610	509.114	509.419	509.738
Mo 202.032	509.848	513.711	514.559
Na 330.237	10878.4	10661.7	11291.4
Ni 231.604	518.526	510.072	516.791
Pb 220.353	495.718	497.327	491.262
Sb 206.834	500.865	515.559	513.024
Se 196.026	551.340	542.849	528.295
Si 288.158	5101.82	5100.28	5093.57
Sn 189.925	515.313	506.721	517.024
Sr 216.596	499.585	500.090	504.325
Ti 334.941	501.432	501.956	502.187

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	506.560	500.668	518.601
V 292.401	509.099	509.909	510.871
Zn 206.200	1078.00	1075.30	1083.68

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	498.941	ppb	2.2393	0.4	13354.8	99.78830
Al 308.215	10374.3	ppb	14.3918	0.1	17792.5	103.74257
As 188.980	553.183	ppb	2.7676	0.5	134.231	110.63651Q
B 249.678	550.177	ppb	1.6675	0.3	3500.74	110.03545Q
Ba 389.178	477.344	ppb	3.4087	0.7	2406.90	95.46886
Be 313.042	543.458	ppb	0.2842	0.1	419871	108.69169
Ca 370.602	10135	ppb	5.192	0.1	14406	101.35056
Cd 226.502	515.485	ppb	0.7433	0.1	5916.02	103.09698
Co 228.615	515.431	ppb	1.3836	0.3	1710.95	103.08616
Cr 267.716	501.283	ppb	0.3222	0.1	7284.81	100.25655
Cu 324.754	512.586	ppb	2.3787	0.5	13844.9	102.51714
Fe 271.441	10234.9	ppb	13.5375	0.1	5609.35	102.29778
K 766.491	10084.4	ppb	8.3756	0.1	171661	100.84425
Mg 279.078	10446.0	ppb	14.0854	0.1	12739.3	104.46008
Mn 257.610	509.424	ppb	0.3124	0.1	34986.4	101.88474
Mo 202.032	512.706	ppb	2.5110	0.5	714.594	102.54124
Na 330.237	10943.8	ppb	319.890	2.9	284.509	109.43831
Ni 231.604	515.130	ppb	4.4654	0.9	502.851	103.02594
Pb 220.353	494.769	ppb	3.1419	0.6	184.217	98.95375
Sb 206.834	509.816	ppb	7.8547	1.5	167.683	101.96323
Se 196.026	540.828	ppb	11.6548	2.2	103.183	108.16561
Si 288.158	5098.56	ppb	4.3858	0.1	22350.3	101.97121
Sn 189.925	513.019	ppb	5.5208	1.1	114.254	102.60387
Sr 216.596	501.333	ppb	2.6031	0.5	1222.90	100.26665
Ti 334.941	501.858	ppb	0.3868	0.1	37875.2	100.37168
Tl 190.794	508.610	ppb	9.1405	1.8	115.859	101.72196
V 292.401	509.960	ppb	0.8870	0.2	4132.46	101.99194
Zn 206.200	1078.99	ppb	4.2787	0.4	568.342	107.89905

Cont Calib Blank (CCB) 4/9/2019, 1:41:49 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0126u	-0.0618u	0.2640
Al 308.215	-0.1483u	2.3679	11.2923
As 188.980	-2.0670u	-4.2081u	-4.1492u
B 249.678	19.1778	16.5452	13.4361
Ba 389.178	-0.8554u	-2.0956u	-2.3720u
Be 313.042	0.0365	0.0207	0.0089
Ca 370.602	4.644	4.565	18.69
Cd 226.502	0.5933	0.1599	-0.1109u
Co 228.615	-0.2031u	1.1280	1.1662
Cr 267.716	0.1789	0.3489	0.4153
Cu 324.754	3.4906	2.0322	2.3826
Fe 271.441	-5.4798u	22.9016	-1.9996u
K 766.491	2.1227	1.1783	3.9698
Mg 279.078	3.1143	2.3722	1.6739
Mn 257.610	0.1886	0.1735	0.1323
Mo 202.032	-1.8288u	-1.1893u	1.2694

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	142.402	23.1853	-166.404u
Ni 231.604	2.1953	0.4533	0.0359
Pb 220.353	3.1706	-0.5750u	-2.5844u
Sb 206.834	-3.2149u	-5.2494u	5.7354
Se 196.026	-3.1070u	-1.5619u	-3.5722u
Si 288.158	17.6959	14.3499	15.6325
Sn 189.925	-4.3299u	-13.8719u	-2.9621u
Sr 216.596	0.8165	-0.2996u	0.2463
Ti 334.941	0.1816	0.2446	0.4622
Tl 190.794	1.7696	-4.8008u	-15.6534u
V 292.401	-0.2883u	0.0874	-0.3699u
Zn 206.200	0.6897	2.1411	0.9890

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.0632	ppb	0.1756	277.8	-54.6362	0.06321
Al 308.215	4.5039	ppb	6.0120	133.5	251.094	4.50394
As 188.980	-3.4748	ppb	1.2195	35.1	0.3927	-3.47477
B 249.678	16.3864	ppb	2.8741	17.5	86.7459	16.38636
Ba 389.178	-1.7743	ppb	0.8077	45.5	-40.0899	-1.77434
Be 313.042	0.0220	ppb	0.0139	62.9	-407.721	0.02203
Ca 370.602	9.298	ppb	8.130	87.4	22.38	9.29846
Cd 226.502	0.2141	ppb	0.3553	165.9	4.8784	0.21408
Co 228.615	0.6970	ppb	0.7798	111.9	-6.0424	0.69704
Cr 267.716	0.3144	ppb	0.1219	38.8	14.8946	0.31436
Cu 324.754	2.6351	ppb	0.7613	28.9	543.148	2.63515
Fe 271.441	5.1407	ppb	15.4795	301.1	48.6364	5.14073
K 766.491	2.4236	ppb	1.4199	58.6	275.914	2.42361
Mg 279.078	2.3868	ppb	0.7203	30.2	31.1725	2.38677
Mn 257.610	0.1648	ppb	0.0291	17.7	33.7290	0.16477
Mo 202.032	-0.5829	ppb	1.6357	280.6	1.8457	-0.58291
Na 330.237	-0.2721	ppb	155.734	57224.6	32.4666	-0.27215
Ni 231.604	0.8948	ppb	1.1454	128.0	-1.8554	0.89482
Pb 220.353	0.0038	ppb	2.9208	77670.9	1.6648	0.00376
Sb 206.834	-0.9096	ppb	5.8440	642.4	5.5564	-0.90964
Se 196.026	-2.7470	ppb	1.0524	38.3	3.8754	-2.74702
Si 288.158	15.8928	ppb	1.6881	10.6	643.103	15.89279
Sn 189.925	-7.0546	ppb	5.9434	84.2	-2.5994	-7.05464
Sr 216.596	0.2544	ppb	0.5581	219.4	3.9873	0.25437
Ti 334.941	0.2961	ppb	0.1472	49.7	-2.7899	0.29615
Tl 190.794	-6.2282	ppb	8.7988	141.3	-3.9787	-6.22822
V 292.401	-0.1902	ppb	0.2439	128.2	-13.3159	-0.19025
Zn 206.200	1.2733	ppb	0.7663	60.2	-0.6407	1.27325

680-166839-A-1-B (Samp)

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Rack 3, Tube 31

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8037	0.9184	-0.0861u
Al 308.215	1341.92	1350.82	1346.93
As 188.980	-1.0305u	-2.6045u	3.4847
B 249.678	15.7405	15.8838	16.0328
Ba 389.178	34.2982	35.1288	36.3522
Be 313.042	0.4073	0.4347	0.4376
Ca 370.602	6849	6858	6842

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.5573	0.3689	-0.2372u
Co 228.615	4.2541	4.3561	3.7175
Cr 267.716	0.3416	0.8193	0.5367
Cu 324.754	127.703	126.605	127.202
Fe 271.441	71.8982	67.5260	67.0001
K 766.491	1275.28	1274.67	1273.59
Mg 279.078	3621.19	3629.10	3635.23
Mn 257.610	25.6367	25.6470	25.7360
Mo 202.032	0.1134	0.3883	1.6534
Na 330.237	33419.5	34125.8	34001.9
Ni 231.604	6.8465	4.5370	4.1828
Pb 220.353	-5.2591u	10.7688	-1.7945u
Sb 206.834	-5.4732u	13.9650	-7.4628u
Se 196.026	-8.1621u	2.3373	1.8410
Si 288.158	4139.05	4138.88	4148.61
Sn 189.925	6.0535	6.5388	5.2553
Sr 216.596	36.0005	36.3536	37.0684
Ti 334.941	0.3003	0.3442	0.2932
Tl 190.794	15.0424	-0.3578u	-6.9159u
V 292.401	0.5878	0.0957	0.4121
Zn 206.200	26.3584	21.8831	27.7642

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5453	ppb	0.5498	100.8	-41.7674
Al 308.215	1346.56	ppb	4.4607	0.3	2519.22
As 188.980	-0.0501	ppb	3.1608	6303.8	1.1821
B 249.678	15.8857	ppb	0.1462	0.9	83.4726
Ba 389.178	35.2597	ppb	1.0332	2.9	151.118
Be 313.042	0.4266	ppb	0.0167	3.9	-95.3957
Ca 370.602	6850	ppb	7.952	0.1	9737
Cd 226.502	0.2296	ppb	0.4152	180.8	5.1442
Co 228.615	4.1092	ppb	0.3431	8.3	5.3362
Cr 267.716	0.5658	ppb	0.2402	42.4	18.7509
Cu 324.754	127.170	ppb	0.5498	0.4	3790.02
Fe 271.441	68.8081	ppb	2.6890	3.9	83.2460
K 766.491	1274.51	ppb	0.8570	0.1	21900.3
Mg 279.078	3628.51	ppb	7.0401	0.2	4445.34
Mn 257.610	25.6733	ppb	0.0546	0.2	1793.50
Mo 202.032	0.7183	ppb	0.8213	114.3	3.6524
Na 330.237	33849.1	ppb	377.158	1.1	860.639
Ni 231.604	5.1888	ppb	1.4465	27.9	2.3598
Pb 220.353	1.2384	ppb	8.4334	681.0	2.1176
Sb 206.834	0.3430	ppb	11.8389	3451.8	5.9532
Se 196.026	-1.3279	ppb	5.9238	446.1	4.1368
Si 288.158	4142.18	ppb	5.5701	0.1	18165.5
Sn 189.925	5.9492	ppb	0.6481	10.9	0.3253
Sr 216.596	36.4741	ppb	0.5441	1.5	92.5039
Ti 334.941	0.3126	ppb	0.0276	8.8	6.0735
Tl 190.794	2.5896	ppb	11.2720	435.3	-1.9227
V 292.401	0.3652	ppb	0.2494	68.3	-8.8799
Zn 206.200	25.3352	ppb	3.0711	12.1	12.0682

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166839-A-2-B (Samp) **4/9/2019, 1:50:37 AM** **Rack 3, Tube 32****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7903	-0.2118u	0.0479
Al 308.215	20.5716	20.8016	18.1814
As 188.980	-3.4419u	-3.7992u	5.0796
B 249.678	13.2817	12.9740	13.8595
Ba 389.178	23.9052	24.9059	28.2057
Be 313.042	0.1708	0.1542	0.1610
Ca 370.602	10044	10066	10047
Cd 226.502	0.6626	0.0466	0.6206
Co 228.615	0.6107	0.0374	0.5727
Cr 267.716	-0.5572u	0.8026	0.6616
Cu 324.754	1984.29	1982.39	1972.74
Fe 271.441	5.6388	30.9488	-9.1108u
K 766.491	2835.92	2849.60	2841.80
Mg 279.078	2873.61	2896.72	2877.14
Mn 257.610	52.5735	52.6387	52.6252
Mo 202.032	-0.6480u	2.5928	1.1205
Na 330.237	246533x	247414x	247892x
Ni 231.604	4.4494	6.8102	5.9190
Pb 220.353	-2.0763u	0.4745	-0.8234u
Sb 206.834	8.3211	0.5584	0.6143
Se 196.026	6.1084	11.9794	4.8619
Si 288.158	3143.77	3149.95	3138.12
Sn 189.925	6.8428	5.2994	5.3573
Sr 216.596	40.2588	38.6970	39.5066
Ti 334.941	-0.0172	-0.0358u	-0.1004u
Tl 190.794	-10.0573u	-7.2494u	-11.4340u
V 292.401	0.2644	0.7632	0.4705
Zn 206.200	22.4372	20.5129	19.5599

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2088b	ppb	0.5201	249.0	-50.7595
Al 308.215	19.8515b	ppb	1.4509	7.3	277.055
As 188.980	-0.7205b	ppb	5.0262	697.6	1.0834
B 249.678	13.3717b	ppb	0.4496	3.4	67.4137
Ba 389.178	25.6723b	ppb	2.2503	8.8	101.763
Be 313.042	0.1620b	ppb	0.0084	5.2	-308.698
Ca 370.602	10052b	ppb	12.14	0.1	14287
Cd 226.502	0.4433b	ppb	0.3441	77.6	7.1271
Co 228.615	0.4070b	ppb	0.3206	78.8	-7.0189
Cr 267.716	0.3023b	ppb	0.7477	247.3	15.9941
Cu 324.754	1979.81b	ppb	6.1911	0.3	52091.8
Fe 271.441	9.1590b	ppb	20.2605	221.2	50.8100
K 766.491	2842.44b	ppb	6.8639	0.2	48553.6
Mg 279.078	2882.49b	ppb	12.4495	0.4	3537.08
Mn 257.610	52.6125b	ppb	0.0344	0.1	3637.42
Mo 202.032	1.0217b	ppb	1.6227	158.8	4.0744
Na 330.237	247280xb	ppb	689.765	0.3	6084.11
Ni 231.604	5.7262b	ppb	1.1921	20.8	2.8903
Pb 220.353	-0.8084b	ppb	1.2754	157.8	1.3671
Sb 206.834	3.1646b	ppb	4.4657	141.1	6.8404
Se 196.026	7.6499b	ppb	3.8009	49.7	5.7794
Si 288.158	3143.94b	ppb	5.9179	0.2	13926.6

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	5.8332b	ppb	0.8748	15.0	0.3178
Sr 216.596	39.4875b	ppb	0.7811	2.0	99.8565
Ti 334.941	-0.0511b	ppb	0.0436	85.3	-27.1553
Tl 190.794	-9.5802b	ppb	2.1327	22.3	-4.7473
V 292.401	0.4994b	ppb	0.2507	50.2	-8.2330
Zn 206.200	20.8367b	ppb	1.4658	7.0	9.6921

680-166906-C-1-B (Samp) 4/9/2019, 1:55:02 AM Rack 3, Tube 33

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1729u	1.3726	0.6977
Al 308.215	15482.1	15464.9	15467.2
As 188.980	-6.1631u	0.4005	-6.0948u
B 249.678	18.5018	18.3620	17.3175
Ba 389.178	4.3656	-4.4667u	-6.2087u
Be 313.042	-0.0556u	-0.0295u	-0.0199u
Ca 370.602	10284	10299	10283
Cd 226.502	-0.2827u	0.3244	-0.4836u
Co 228.615	0.0605	-1.1302	-0.9990
Cr 267.716	21.5558	22.1875	21.5604
Cu 324.754	6.6362	6.3539	5.9329
Fe 271.441	310.017	302.288	301.211
K 766.491	413128x	411470x	413311x
Mg 279.078	2672.68	2673.62	2670.22
Mn 257.610	30.9069	30.9948	30.8670
Mo 202.032	3.9385	1.9834	2.7444
Na 330.237	31721.2	31720.8	31996.3
Ni 231.604	20.9583	24.5053	23.6466
Pb 220.353	2.2781	2.1074	-1.8122u
Sb 206.834	-15.6365u	-6.7115u	-1.7823u
Se 196.026	13.1876	14.2040	-5.1920u
Si 288.158	8975.42	8944.54	8928.61
Sn 189.925	3.6433	5.9831	-18.8493u
Sr 216.596	39.9074	40.8513	38.8908
Ti 334.941	1606.43	1604.41	1606.48
Tl 190.794	-1.5267u	2.0461	0.2179
V 292.401	4.2069	4.4172	4.5535
Zn 206.200	58.5394	59.2047	56.5996

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6325b	ppb	0.7748	122.5	-41.0478
Al 308.215	15471.4b	ppb	9.3332	0.1	26390.7
As 188.980	-3.9525b	ppb	3.7699	95.4	0.2290
B 249.678	18.0605b	ppb	0.6472	3.6	97.6540
Ba 389.178	-2.1032b	ppb	5.6695	269.6	-39.6000
Be 313.042	-0.0350b	ppb	0.0185	52.8	-459.499
Ca 370.602	10289b	ppb	8.653	0.1	14649
Cd 226.502	-0.1473b	ppb	0.4206	285.6	1.2369
Co 228.615	-0.6896b	ppb	0.6529	94.7	-0.5069
Cr 267.716	21.7679b	ppb	0.3634	1.7	327.357
Cu 324.754	6.3077b	ppb	0.3539	5.6	638.950
Fe 271.441	304.505b	ppb	4.8037	1.6	210.721
K 766.491	412636xb	ppb	1014.35	0.2	7014681

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	2672.17b	ppb	1.7584	0.1	3278.54
Mn 257.610	30.9229b	ppb	0.0654	0.2	2172.33
Mo 202.032	2.8888b	ppb	0.9855	34.1	6.6640
Na 330.237	31812.8b	ppb	158.947	0.5	797.579
Ni 231.604	23.0367b	ppb	1.8505	8.0	19.8944
Pb 220.353	0.8578b	ppb	2.3139	269.8	1.7283
Sb 206.834	-8.0434b	ppb	7.0225	87.3	3.3563
Se 196.026	7.3999b	ppb	10.9167	147.5	5.7309
Si 288.158	8949.53b	ppb	23.8015	0.3	38646.3
Sn 189.925	-3.0743b	ppb	13.7115	446.0	-1.7023
Sr 216.596	39.8831b	ppb	0.9805	2.5	100.776
Ti 334.941	1605.77b	ppb	1.1830	0.1	121173
Tl 190.794	0.2458b	ppb	1.7866	727.0	-2.4711
V 292.401	4.3926b	ppb	0.1746	4.0	28.8423
Zn 206.200	58.1146b	ppb	1.3535	2.3	29.3708

MB 680-565360/1-A (Samp) 4/9/2019, 1:59:27 AM Rack 3, Tube 34
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6618	-0.7039u	-0.1287u
Al 308.215	-6.7846u	2.1314	-0.1850u
As 188.980	-3.9061u	1.7759	-1.5674u
B 249.678	2.0200	2.4151	-0.1402u
Ba 389.178	-5.8872u	-3.2468u	-3.7829u
Be 313.042	-0.0671u	-0.0640u	-0.0597u
Ca 370.602	-3.649u	-2.755u	5.057
Cd 226.502	-0.4943u	0.0160	-0.2489u
Co 228.615	-0.8211u	0.0838	-1.0334u
Cr 267.716	-0.1468u	0.3919	0.3091
Cu 324.754	0.7444	1.3182	1.4813
Fe 271.441	-3.7360u	-5.0374u	-4.7816u
K 766.491	18.4150	17.3500	14.6994
Mg 279.078	-4.8710u	-5.4585u	-7.2041u
Mn 257.610	-0.1062u	-0.0588u	-0.1168u
Mo 202.032	1.0743	0.5881	-0.6253u
Na 330.237	241.270	223.647	-11.4805u
Ni 231.604	0.4908	0.1258	0.6618
Pb 220.353	-6.7533u	-3.7359u	0.2235
Sb 206.834	-2.0430u	-2.5236u	4.2851
Se 196.026	-7.8138u	-1.3255u	8.9425
Si 288.158	21.2321	18.2362	15.2114
Sn 189.925	5.3619	4.6917	3.5562
Sr 216.596	-1.0704u	1.3030	1.4168
Ti 334.941	0.5366	0.4014	0.4100
Tl 190.794	-3.6042u	5.0552	-12.8249u
V 292.401	1.3704	-0.1205u	0.2347
Zn 206.200	3.4774	4.0591	1.7693

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0569	ppb	0.6857	1204.2	-57.8649
Al 308.215	-1.6128	ppb	4.6263	286.9	240.781
As 188.980	-1.2325	ppb	2.8558	231.7	0.8974
B 249.678	1.4316	ppb	1.3755	96.1	-9.1624

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	-4.3056	ppb	1.3957	32.4	-52.9716
Be 313.042	-0.0636	ppb	0.0037	5.9	-474.008
Ca 370.602	-0.4492	ppb	4.789	1066.3	8.564
Cd 226.502	-0.2424	ppb	0.2552	105.3	-0.3677
Co 228.615	-0.5902	ppb	0.5933	100.5	-10.3442
Cr 267.716	0.1848	ppb	0.2901	157.0	13.0123
Cu 324.754	1.1813	ppb	0.3870	32.8	505.249
Fe 271.441	-4.5183	ppb	0.6895	15.3	43.3542
K 766.491	16.8215	ppb	1.9133	11.4	520.664
Mg 279.078	-5.8445	ppb	1.2135	20.8	21.1545
Mn 257.610	-0.0939	ppb	0.0309	32.9	15.9555
Mo 202.032	0.3457	ppb	0.8753	253.2	3.1356
Na 330.237	151.146	ppb	141.114	93.4	36.1425
Ni 231.604	0.4261	ppb	0.2738	64.2	-2.3148
Pb 220.353	-3.4219	ppb	3.4990	102.3	0.3992
Sb 206.834	-0.0938	ppb	3.7999	4050.1	5.8132
Se 196.026	-0.0656	ppb	8.4489	12881.8	4.3653
Si 288.158	18.2266	ppb	3.0103	16.5	653.325
Sn 189.925	4.5366	ppb	0.9128	20.1	0.0050
Sr 216.596	0.5498	ppb	1.4043	255.4	4.6993
Ti 334.941	0.4494	ppb	0.0757	16.8	8.7476
Tl 190.794	-3.7913	ppb	8.9415	235.8	-3.4121
V 292.401	0.4949	ppb	0.7788	157.4	-7.7492
Zn 206.200	3.1019	ppb	1.1902	38.4	0.3251

LCS 680-565360/2-A (Samp) 4/9/2019, 2:03:52 AM Rack 3, Tube 35

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	101.849	101.295	100.625
Al 308.215	10109.9	10102.4	10125.0
As 188.980	202.329	196.363	203.768
B 249.678	465.360	465.819	468.594
Ba 389.178	188.146	187.931	188.834
Be 313.042	105.269	105.212	105.446
Ca 370.602	10039	10057	10038
Cd 226.502	100.961	100.520	100.474
Co 228.615	101.271	100.701	100.158
Cr 267.716	193.630	194.268	193.964
Cu 324.754	200.038	199.285	200.798
Fe 271.441	9755.64	9776.66	9764.35
K 766.491	18576.9	18531.3	18596.2
Mg 279.078	9982.39	9960.14	9976.46
Mn 257.610	979.096	976.840	979.107
Mo 202.032	201.339	200.121	196.521
Na 330.237	141537x	142152x	140890x
Ni 231.604	200.663	202.982	200.902
Pb 220.353	953.785	948.229	956.008
Sb 206.834	90.0144	106.442	99.2976
Se 196.026	215.810	204.240	212.231
Si 288.158	17.0521	14.7514	13.0132
Sn 189.925	202.007	187.936	191.166
Sr 216.596	193.679	193.900	194.322
Ti 334.941	771.552	771.951	773.487

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	79.4260	68.5025	82.7749
V 292.401	195.276	195.774	196.144
Zn 206.200	207.198	209.486	212.986

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	101.256b	ppb	0.6131	0.6	2664.68
Al 308.215	10112.5b	ppb	11.5291	0.1	17340.4
As 188.980	200.820b	ppb	3.9267	2.0	50.0008
B 249.678	466.591b	ppb	1.7496	0.4	2965.08
Ba 389.178	188.304b	ppb	0.4718	0.3	936.136
Be 313.042	105.309b	ppb	0.1220	0.1	81009.0
Ca 370.602	10045b	ppb	10.75	0.1	14287
Cd 226.502	100.652b	ppb	0.2689	0.3	1166.52
Co 228.615	100.710b	ppb	0.5567	0.6	330.932
Cr 267.716	193.954b	ppb	0.3191	0.2	2827.40
Cu 324.754	200.041b	ppb	0.7563	0.4	5693.27
Fe 271.441	9765.55b	ppb	10.5610	0.1	5335.03
K 766.491	18568.1b	ppb	33.3427	0.2	315876
Mg 279.078	9973.00b	ppb	11.5217	0.1	12159.1
Mn 257.610	978.348b	ppb	1.3062	0.1	67131.1
Mo 202.032	199.327b	ppb	2.5051	1.3	279.383
Na 330.237	141526xb	ppb	631.483	0.4	3487.39
Ni 231.604	201.516b	ppb	1.2754	0.6	195.127
Pb 220.353	952.674b	ppb	4.0065	0.4	353.522
Sb 206.834	98.5847b	ppb	8.2370	8.4	37.4457
Se 196.026	210.761b	ppb	5.9236	2.8	42.9352
Si 288.158	14.9389b	ppb	2.0260	13.6	711.006
Sn 189.925	193.703b	ppb	7.3708	3.8	42.5202
Sr 216.596	193.967b	ppb	0.3267	0.2	475.755
Ti 334.941	772.330b	ppb	1.0218	0.1	58284.9
Tl 190.794	76.9011b	ppb	7.4637	9.7	15.4001
V 292.401	195.731b	ppb	0.4357	0.2	1580.55
Zn 206.200	209.890b	ppb	2.9149	1.4	109.464

LB 680-565108/1-B (Samp)

4/9/2019, 2:08:17 AM

Rack 3, Tube 36

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2659	0.0190	-0.0050u
Al 308.215	4.9719	7.5841	6.8726
As 188.980	-2.2407u	6.0175	-1.2655u
B 249.678	66.1874	63.9094	65.3220
Ba 389.178	-1.0306u	-2.5245u	1.6954
Be 313.042	-0.0619u	-0.0632u	-0.0608u
Ca 370.602	420.7	419.5	419.3
Cd 226.502	0.0697	0.2911	-0.4238u
Co 228.615	0.2621	-0.5005u	0.1074
Cr 267.716	0.2990	0.4640	0.2353
Cu 324.754	2.0088	2.5588	2.1919
Fe 271.441	-14.0232u	-12.8331u	-2.0705u
K 766.491	92.8611	91.0527	88.4765
Mg 279.078	69.6923	68.7590	67.6511
Mn 257.610	-0.0256u	0.0687	0.1823
Mo 202.032	1.9608	0.0538	-1.0727u

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	130309x	131425x	132283x
Ni 231.604	-0.7457u	2.7686	4.1156
Pb 220.353	9.5060	-5.7922u	-1.5557u
Sb 206.834	1.2481	3.6154	-7.7990u
Se 196.026	-4.4705u	14.0221	-3.4084u
Si 288.158	23.2765	21.4934	23.4210
Sn 189.925	-4.3278u	6.9976	5.1283
Sr 216.596	0.2946	0.7318	-0.0813u
Ti 334.941	-0.0113u	0.2120	0.1469
Tl 190.794	-11.8864u	3.9384	1.0442
V 292.401	1.7368	0.3558	0.0158u
Zn 206.200	5.8474	2.6029	3.8040

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0933b	ppb	0.1500	160.8	-53.8276
Al 308.215	6.4762b	ppb	1.3504	20.9	254.456
As 188.980	0.8371b	ppb	4.5128	539.1	1.4098
B 249.678	65.1396b	ppb	1.1499	1.8	399.483
Ba 389.178	-0.6199b	ppb	2.1397	345.2	-34.1704
Be 313.042	-0.0619b	ppb	0.0012	2.0	-478.329
Ca 370.602	419.8b	ppb	0.7961	0.2	605.5
Cd 226.502	-0.0210b	ppb	0.3660	1741.4	1.9595
Co 228.615	-0.0437b	ppb	0.4031	923.0	-8.5243
Cr 267.716	0.3328b	ppb	0.1181	35.5	15.8006
Cu 324.754	2.2532b	ppb	0.2801	12.4	533.198
Fe 271.441	-9.6423b	ppb	6.5843	68.3	40.6306
K 766.491	90.7968b	ppb	2.2035	2.4	1778.18
Mg 279.078	68.7008b	ppb	1.0218	1.5	111.907
Mn 257.610	0.0751b	ppb	0.1041	138.5	27.5768
Mo 202.032	0.3140b	ppb	1.5334	488.4	3.0915
Na 330.237	131339xb	ppb	989.613	0.8	3246.79
Ni 231.604	2.0462b	ppb	2.5099	122.7	-0.7243
Pb 220.353	0.7194b	ppb	7.8988	1098.0	1.9289
Sb 206.834	-0.9785b	ppb	6.0242	615.7	5.5353
Se 196.026	2.0477b	ppb	10.3837	507.1	4.7513
Si 288.158	22.7303b	ppb	1.0736	4.7	672.564
Sn 189.925	2.5993b	ppb	6.0715	233.6	-0.4188
Sr 216.596	0.3150b	ppb	0.4070	129.2	4.1208
Ti 334.941	0.1159b	ppb	0.1148	99.1	-18.7546
Tl 190.794	-2.3013b	ppb	8.4262	366.2	-3.0651
V 292.401	0.7028b	ppb	0.9115	129.7	-6.3510
Zn 206.200	4.0848b	ppb	1.6404	40.2	0.8441

680-166891-A-1-B (Samp)

4/9/2019, 2:12:42 AM

Rack 3, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4923	0.1516	0.3168
Al 308.215	13.3584	15.8819	13.1520
As 188.980	5.8888	-2.1723u	2.2468
B 249.678	49.0202	47.7417	48.6139
Ba 389.178	-1.7987u	-5.4809u	-3.6099u
Be 313.042	0.0126u	-0.0321u	-0.0324u
Ca 370.602	130.5	126.1	141.5

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	-0.4677u	0.7195	-0.7012u
Co 228.615	-1.8122u	-1.4063u	-0.1978u
Cr 267.716	5.4446	6.9540	6.5640
Cu 324.754	23.5306	24.4029	24.3512
Fe 271.441	3.2070	6.5777	-5.2609u
K 766.491	6417.06	6420.70	6424.23
Mg 279.078	121.824	127.044	124.183
Mn 257.610	0.0658	0.2806	0.0326
Mo 202.032	1.4935	2.5032	2.9752
Na 330.237	817418x	832904x	844929x
Ni 231.604	1.4826	-4.2565u	2.3276
Pb 220.353	8.4988	-0.6645u	-2.1453u
Sb 206.834	2.0661	2.7918	-0.0411
Se 196.026	-9.1087u	5.4463	2.3345
Si 288.158	410.374	410.974	409.703
Sn 189.925	5.8681	0.3648	0.9967
Sr 216.596	1.6954	-1.4958u	1.5948
Ti 334.941	0.6941	0.6143	0.5016
Tl 190.794	-7.5326u	0.4654	-2.9288u
V 292.401	1.1421	0.4127	0.4666
Zn 206.200	2.7413	1.0027	2.5666

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3202b	ppb	0.1704	53.2	-47.7264
Al 308.215	14.1308b	ppb	1.5200	10.8	267.410
As 188.980	1.9877b	ppb	4.0368	203.1	1.6889
B 249.678	48.4586b	ppb	0.6532	1.3	292.475
Ba 389.178	-3.6298b	ppb	1.8412	50.7	-49.4244
Be 313.042	-0.0173b	ppb	0.0259	149.4	-474.269
Ca 370.602	132.7b	ppb	7.933	6.0	197.6
Cd 226.502	-0.1498b	ppb	0.7619	508.6	-0.5813
Co 228.615	-1.1388b	ppb	0.8398	73.7	-12.1830
Cr 267.716	6.3208b	ppb	0.7835	12.4	106.106
Cu 324.754	24.0949b	ppb	0.4894	2.0	1102.68
Fe 271.441	1.5079b	ppb	6.0995	404.5	46.6147
K 766.491	6420.67b	ppb	3.5815	0.1	109380
Mg 279.078	124.350b	ppb	2.6136	2.1	179.657
Mn 257.610	0.1263b	ppb	0.1346	106.6	30.2583
Mo 202.032	2.3240b	ppb	0.7569	32.6	5.8831
Na 330.237	831750xb	ppb	13791.9	1.7	20388.5
Ni 231.604	-0.1488b	ppb	3.5824	2407.8	-2.8794
Pb 220.353	1.8963b	ppb	5.7656	304.0	2.3640
Sb 206.834	1.6056b	ppb	1.4715	91.7	6.3660
Se 196.026	-0.4426b	ppb	7.6646	1731.7	4.2964
Si 288.158	410.351b	ppb	0.6357	0.2	2319.00
Sn 189.925	2.4099b	ppb	3.0115	125.0	-0.4004
Sr 216.596	0.5982b	ppb	1.8141	303.3	4.7993
Ti 334.941	0.6033b	ppb	0.0967	16.0	4.8289
Tl 190.794	-3.3320b	ppb	4.0142	120.5	-3.3060
V 292.401	0.6738b	ppb	0.4065	60.3	-8.3053
Zn 206.200	2.1035b	ppb	0.9573	45.5	-0.2068

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166891-A-1-Bsd^5 (Samp) 4/9/2019, 2:17:07 AM Rack 3, Tube 38**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.1046u	-0.1201u	-0.0484u
Al 308.215	0.4889	5.1752	4.3800
As 188.980	4.9798	-1.2393u	3.2451
B 249.678	11.7180	12.6872	12.2437
Ba 389.178	1.2089	0.8441	-1.3647u
Be 313.042	-0.0718u	-0.0575u	-0.0691u
Ca 370.602	26.53	28.91	27.06
Cd 226.502	-0.5629u	0.2732	-0.1877u
Co 228.615	-1.0024u	-0.9209u	-1.4339u
Cr 267.716	2.0038	1.0996	1.4916
Cu 324.754	7.2433	7.1883	6.9457
Fe 271.441	-11.5441u	-8.2396u	-12.2283u
K 766.491	968.742	968.602	968.237
Mg 279.078	30.6768	27.5439	26.4536
Mn 257.610	-0.0320u	-0.0375u	-0.0698u
Mo 202.032	2.4204	1.6165	3.1076
Na 330.237	141465x	141162x	140342x
Ni 231.604	2.4117	0.7331	1.0771
Pb 220.353	3.9353	13.5458	1.2592
Sb 206.834	-5.9285u	4.1283	-13.0623u
Se 196.026	11.2985	8.7029	1.6415
Si 288.158	91.5420	89.6577	95.6578
Sn 189.925	7.6379	-1.0309u	6.8203
Sr 216.596	0.7703	-0.1583u	-0.2522u
Ti 334.941	0.3081	0.1232	0.1353
Tl 190.794	-2.6963u	-4.2803u	-6.5546u
V 292.401	0.4348	0.6173	0.8147
Zn 206.200	3.2733	1.9557	-2.5753u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0910b	ppb	0.0378	41.5	-58.7792
Al 308.215	3.3481b	ppb	2.5078	74.9	249.190
As 188.980	2.3285b	ppb	3.2093	137.8	1.7969
B 249.678	12.2163b	ppb	0.4852	4.0	60.0126
Ba 389.178	0.2294b	ppb	1.3925	606.9	-29.8793
Be 313.042	-0.0661b	ppb	0.0076	11.5	-482.149
Ca 370.602	27.50b	ppb	1.251	4.5	48.25
Cd 226.502	-0.1592b	ppb	0.4188	263.1	0.3696
Co 228.615	-1.1191b	ppb	0.2757	24.6	-12.1241
Cr 267.716	1.5317b	ppb	0.4534	29.6	33.2428
Cu 324.754	7.1258b	ppb	0.1584	2.2	660.260
Fe 271.441	-10.6707b	ppb	2.1330	20.0	40.0112
K 766.491	968.527b	ppb	0.2607	0.0	16698.8
Mg 279.078	28.2248b	ppb	2.1924	7.8	62.6312
Mn 257.610	-0.0464b	ppb	0.0204	44.0	19.1119
Mo 202.032	2.3815b	ppb	0.7464	31.3	5.9631
Na 330.237	140990xb	ppb	580.697	0.4	3483.01
Ni 231.604	1.4073b	ppb	0.8867	63.0	-1.3508
Pb 220.353	6.2468b	ppb	6.4612	103.4	3.9709
Sb 206.834	-4.9542b	ppb	8.6366	174.3	4.2857
Se 196.026	7.2143b	ppb	4.9976	69.3	5.6951
Si 288.158	92.2858b	ppb	3.0685	3.3	967.876

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	4.4758b	ppb	4.7864	106.9	0.0036
Sr 216.596	0.1199b	ppb	0.5652	471.3	3.6222
Ti 334.941	0.1889b	ppb	0.1034	54.8	-13.5131
Tl 190.794	-4.5104b	ppb	1.9394	43.0	-3.5799
V 292.401	0.6223b	ppb	0.1900	30.5	-7.1417
Zn 206.200	0.8846b	ppb	3.0679	346.8	-0.8469

680-166891-A-1-Bpds (Samp) 4/9/2019, 2:21:33 AM Rack 3, Tube 39

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	53.8150	53.7893	53.1701
Al 308.215	5480.54	5444.32	5450.28
As 188.980	106.776	110.723	122.714
B 249.678	258.610	261.908	262.220
Ba 389.178	100.094	97.6459	100.116
Be 313.042	53.6339	53.3720	53.2910
Ca 370.602	5127	5117	5112
Cd 226.502	52.6846	51.6534	51.2159
Co 228.615	51.4849	48.6285	50.0874
Cr 267.716	107.771	107.585	106.973
Cu 324.754	128.230	128.180	128.860
Fe 271.441	5074.55	5029.10	5008.99
K 766.491	19734.7	19660.9	19614.9
Mg 279.078	5227.20	5224.79	5215.90
Mn 257.610	506.258	504.799	503.981
Mo 202.032	105.632	106.049	102.600
Na 330.237	868216x	875081x	861674x
Ni 231.604	105.196	101.555	102.465
Pb 220.353	488.013	497.965	497.824
Sb 206.834	36.0005	49.7290	64.5076
Se 196.026	120.567	120.061	90.3054
Si 288.158	422.076	420.901	417.322
Sn 189.925	100.460	109.814	109.514
Sr 216.596	103.014	98.7237	104.413
Ti 334.941	405.711	403.879	402.871
Tl 190.794	34.4919	28.4465	26.2373
V 292.401	103.573	103.781	102.796
Zn 206.200	111.696	110.009	107.694

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.5914b	ppb	0.3651	0.7	1383.80
Al 308.215	5458.38b	ppb	19.4254	0.4	9471.79
As 188.980	113.404b	ppb	8.3003	7.3	28.8070
B 249.678	260.913b	ppb	2.0003	0.8	1650.36
Ba 389.178	99.2852b	ppb	1.4197	1.4	478.854
Be 313.042	53.4323b	ppb	0.1792	0.3	40858.9
Ca 370.602	5119b	ppb	7.467	0.1	7286
Cd 226.502	51.8513b	ppb	0.7541	1.5	600.900
Co 228.615	50.0669b	ppb	1.4283	2.9	160.400
Cr 267.716	107.443b	ppb	0.4172	0.4	1574.66
Cu 324.754	128.423b	ppb	0.3791	0.3	3824.46
Fe 271.441	5037.55b	ppb	33.5840	0.7	2774.19
K 766.491	19670.2b	ppb	60.4344	0.3	334611

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5222.63b	ppb	5.9477	0.1	6380.97
Mn 257.610	505.013b	ppb	1.1536	0.2	34662.3
Mo 202.032	104.761b	ppb	1.8824	1.8	148.096
Na 330.237	868324xb	ppb	6704.05	0.8	21279.0
Ni 231.604	103.072b	ppb	1.8949	1.8	98.4695
Pb 220.353	494.601b	ppb	5.7058	1.2	184.337
Sb 206.834	50.0790b	ppb	14.2568	28.5	21.9210
Se 196.026	110.311b	ppb	17.3274	15.7	24.5579
Si 288.158	420.100b	ppb	2.4763	0.6	2397.67
Sn 189.925	106.596b	ppb	5.3164	5.0	23.0118
Sr 216.596	102.050b	ppb	2.9647	2.9	251.900
Ti 334.941	404.154b	ppb	1.4400	0.4	30472.9
Tl 190.794	29.7252b	ppb	4.2733	14.4	4.4057
V 292.401	103.383b	ppb	0.5193	0.5	827.448
Zn 206.200	109.800b	ppb	2.0087	1.8	56.6326

680-166891-A-1-C MS (Samp) 4/9/2019, 2:25:58 AM

Rack 3, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	2.7685	3.0917	3.1310
Al 308.215	6.6641	5.2789	-0.0829
As 188.980	313.404	302.570	315.386
B 249.678	345.652	346.631	348.090
Ba 389.178	282.290	282.383	282.691
Be 313.042	152.639	152.771	152.547
Ca 370.602	101.0	97.87	85.73
Cd 226.502	146.801	145.842	146.260
Co 228.615	146.343	146.053	144.387
Cr 267.716	145.918	147.110	146.427
Cu 324.754	163.992	165.226	164.227
Fe 271.441	283.216	298.247	282.130
K 766.491	4847.03	4822.75	4783.56
Mg 279.078	110.476	102.728	95.6098
Mn 257.610	144.020	144.501	143.690
Mo 202.032	149.096	149.134	148.855
Na 330.237	626037x	608485x	624081x
Ni 231.604	150.432	150.192	145.785
Pb 220.353	144.027	129.955	135.710
Sb 206.834	144.289	148.216	148.127
Se 196.026	296.638	296.220	299.338
Si 288.158	609.960	605.065	602.945
Sn 189.925	301.495	296.321	292.443
Sr 216.596	142.897	144.620	145.419
Ti 334.941	144.639	144.714	144.834
Tl 190.794	287.300	278.058	289.006
V 292.401	143.221	143.305	144.289
Zn 206.200	159.292	157.053	156.719

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.9971b	ppb	0.1990	6.6	24.0367
Al 308.215	3.9534b	ppb	3.5635	90.1	254.724
As 188.980	310.453b	ppb	6.8989	2.2	75.8811
B 249.678	346.791b	ppb	1.2266	0.4	2205.79

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	282.455b	ppb	0.2098	0.1	1405.61
Be 313.042	152.652b	ppb	0.1123	0.1	117605
Ca 370.602	94.87b	ppb	8.074	8.5	148.4
Cd 226.502	146.301b	ppb	0.4805	0.3	1676.50
Co 228.615	145.594b	ppb	1.0559	0.7	477.297
Cr 267.716	146.485b	ppb	0.5981	0.4	2138.88
Cu 324.754	164.482b	ppb	0.6548	0.4	4764.25
Fe 271.441	287.864b	ppb	9.0079	3.1	208.919
K 766.491	4817.78b	ppb	32.0278	0.7	82132.7
Mg 279.078	102.938b	ppb	7.4355	7.2	152.258
Mn 257.610	144.070b	ppb	0.4079	0.3	9899.44
Mo 202.032	149.028b	ppb	0.1509	0.1	209.621
Na 330.237	619535xb	ppb	9618.73	1.6	15191.9
Ni 231.604	148.803b	ppb	2.6162	1.8	143.314
Pb 220.353	136.564b	ppb	7.0748	5.2	52.0472
Sb 206.834	146.877b	ppb	2.2422	1.5	52.4459
Se 196.026	297.399b	ppb	1.6927	0.6	58.7143
Si 288.158	605.990b	ppb	3.5977	0.6	3196.31
Sn 189.925	296.753b	ppb	4.5414	1.5	65.7155
Sr 216.596	144.312b	ppb	1.2891	0.9	354.136
Ti 334.941	144.729b	ppb	0.0983	0.1	10886.4
Tl 190.794	284.788b	ppb	5.8903	2.1	63.7874
V 292.401	143.605b	ppb	0.5942	0.4	1153.40
Zn 206.200	157.688b	ppb	1.3992	0.9	81.8959

Cont Calib Verif (CCV)

4/9/2019, 2:30:24 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.992	500.344	499.598
Al 308.215	10424.0	10406.9	10432.0
As 188.980	555.062	547.474	556.032
B 249.678	552.859	556.221	559.100
Ba 389.178	478.956	475.305	476.599
Be 313.042	546.523	546.007	548.261
Ca 370.602	10135	10140	10159
Cd 226.502	515.545	517.748	517.071
Co 228.615	519.447	513.625	514.992
Cr 267.716	501.125	500.061	502.052
Cu 324.754	516.236	519.071	519.872
Fe 271.441	10216.8	10213.5	10225.1
K 766.491	10105.6	10119.7	10141.0
Mg 279.078	10483.7	10487.3	10485.6
Mn 257.610	510.257	509.574	510.570
Mo 202.032	514.340	509.564	513.858
Na 330.237	11268.4	11152.3	11296.6
Ni 231.604	516.878	516.803	520.928
Pb 220.353	495.004	498.980	497.234
Sb 206.834	510.553	508.593	523.353
Se 196.026	563.506	549.874	569.327
Si 288.158	5107.53	5095.38	5111.16
Sn 189.925	505.867	514.153	515.132
Sr 216.596	500.627	501.825	504.457
Ti 334.941	500.158	500.075	501.126

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	504.345	500.121	501.229
V 292.401	508.457	509.762	510.277
Zn 206.200	1081.36	1079.57	1082.28

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	500.311	ppb	0.6976	0.1	13391.6	100.06223
Al 308.215	10421.0	ppb	12.8094	0.1	17871.5	104.20981
As 188.980	552.856	ppb	4.6857	0.8	134.214	110.57121Q
B 249.678	556.060	ppb	3.1240	0.6	3538.49	111.21198Q
Ba 389.178	476.953	ppb	1.8511	0.4	2404.95	95.39070
Be 313.042	546.930	ppb	1.1807	0.2	422557	109.38605
Ca 370.602	10145	ppb	12.42	0.1	14419	101.44595
Cd 226.502	516.788	ppb	1.1283	0.2	5930.92	103.35756
Co 228.615	516.022	ppb	3.0443	0.6	1712.92	103.20432
Cr 267.716	501.079	ppb	0.9966	0.2	7281.86	100.21586
Cu 324.754	518.393	ppb	1.9101	0.4	13996.3	103.67857
Fe 271.441	10218.5	ppb	6.0070	0.1	5600.49	102.13367
K 766.491	10122.1	ppb	17.8324	0.2	172302	101.22121
Mg 279.078	10485.5	ppb	1.8133	0.0	12787.4	104.85523
Mn 257.610	510.133	ppb	0.5090	0.1	35035.1	102.02670
Mo 202.032	512.587	ppb	2.6295	0.5	714.429	102.51744
Na 330.237	11239.1	ppb	76.4701	0.7	291.707	112.39104Q
Ni 231.604	518.203	ppb	2.3600	0.5	505.869	103.64058
Pb 220.353	497.073	ppb	1.9927	0.4	185.068	99.41454
Sb 206.834	514.166	ppb	8.0160	1.6	169.052	102.83327
Se 196.026	560.902	ppb	9.9843	1.8	106.850	112.18044Q
Si 288.158	5104.69	ppb	8.2620	0.2	22375.4	102.09384
Sn 189.925	511.717	ppb	5.0899	1.0	113.962	102.34344
Sr 216.596	502.303	ppb	1.9592	0.4	1225.27	100.46065
Ti 334.941	500.453	ppb	0.5842	0.1	37769.3	100.09058
Tl 190.794	501.898	ppb	2.1899	0.4	114.299	100.37965
V 292.401	509.499	ppb	0.9380	0.2	4128.73	101.89973
Zn 206.200	1081.07	ppb	1.3743	0.1	569.441	108.10719

Cont Calib Blank (CCB) 4/9/2019, 2:34:49 AM Rack S, Tube 1
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8119u	0.0960	-0.1661u
Al 308.215	8.4062	2.2514	9.6949
As 188.980	-1.0084u	3.4296	-2.9228u
B 249.678	18.1001	16.6238	15.4975
Ba 389.178	-0.8177u	-0.9662u	-4.4812u
Be 313.042	0.0080	0.0054	0.0040
Ca 370.602	5.806	13.28	13.75
Cd 226.502	0.1975	-0.2131u	0.4968
Co 228.615	0.8157	-1.5140u	0.9836
Cr 267.716	-0.2000u	0.5360	-0.2912u
Cu 324.754	3.2385	2.8544	2.9906
Fe 271.441	-3.1552u	9.1895	11.2461
K 766.491	2.8022	3.4698	2.6535
Mg 279.078	10.2133	3.9910	8.6292
Mn 257.610	0.2016	0.1400	0.2655
Mo 202.032	3.3074	1.7134	4.8189

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	227.852	58.8751	520.545
Ni 231.604	2.1600	2.8215	-0.5902u
Pb 220.353	-3.9995u	6.4334	-14.7887u
Sb 206.834	-10.7685u	-10.2334u	3.4401
Se 196.026	3.5299	-6.3074u	3.7525
Si 288.158	17.3324	15.7920	15.0265
Sn 189.925	-0.7502u	5.4802	1.7122
Sr 216.596	-0.9015u	0.8601	0.3251
Ti 334.941	0.5194	0.5153	0.7375
Tl 190.794	-6.2037u	-8.5361u	-9.9342u
V 292.401	-0.6862u	-0.1774u	1.4164
Zn 206.200	1.5295	1.2916	4.3126

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2940	ppb	0.4672	158.9	-64.2398	-0.29401
Al 308.215	6.7842	ppb	3.9780	58.6	254.996	6.78418
As 188.980	-0.1672	ppb	3.2587	1948.9	1.1995	-0.16720
B 249.678	16.7405	ppb	1.3052	7.8	89.0180	16.74048
Ba 389.178	-2.0884	ppb	2.0735	99.3	-41.6792	-2.08838
Be 313.042	0.0058	ppb	0.0021	35.7	-420.500	0.00578
Ca 370.602	10.94	ppb	4.456	40.7	24.73	10.94495
Cd 226.502	0.1604	ppb	0.3564	222.1	4.2632	0.16044
Co 228.615	0.0951	ppb	1.3961	1467.8	-8.0770	0.09512
Cr 267.716	0.0149	ppb	0.4535	3036.0	10.5506	0.01494
Cu 324.754	3.0278	ppb	0.1947	6.4	553.431	3.02781
Fe 271.441	5.7601	ppb	7.7891	135.2	48.9590	5.76014
K 766.491	2.9752	ppb	0.4347	14.6	285.290	2.97517
Mg 279.078	7.6112	ppb	3.2337	42.5	37.5322	7.61119
Mn 257.610	0.2024	ppb	0.0627	31.0	36.3223	0.20235
Mo 202.032	3.2799	ppb	1.5529	47.3	7.2108	3.27988
Na 330.237	269.091	ppb	233.582	86.8	39.0484	269.09073
Ni 231.604	1.4638	ppb	1.8093	123.6	-1.2963	1.46377
Pb 220.353	-4.1183	ppb	10.6115	257.7	0.1411	-4.11828
Sb 206.834	-5.8539	ppb	8.0533	137.6	3.9996	-5.85392
Se 196.026	0.3250	ppb	5.7449	1767.7	4.4366	0.32498
Si 288.158	16.0503	ppb	1.1744	7.3	644.651	16.05027
Sn 189.925	2.1474	ppb	3.1379	146.1	-0.5318	2.14741
Sr 216.596	0.0946	ppb	0.9031	955.1	3.5581	0.09456
Ti 334.941	0.5908	ppb	0.1271	21.5	19.4534	0.59077
Tl 190.794	-8.2247	ppb	1.8846	22.9	-4.4438	-8.22467
V 292.401	0.1843	ppb	1.0970	595.3	-10.4375	0.18426
Zn 206.200	2.3779	ppb	1.6797	70.6	-0.0573	2.37791

680-166891-A-1-D MSD (Samp) 4/9/2019, 2:39:13 AM

Rack 3, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	2.6987	2.8108	3.2122
Al 308.215	16.4445	15.4480	8.1134
As 188.980	300.252	298.511	288.987
B 249.678	330.430	333.161	333.366
Ba 389.178	265.717	270.863	271.021
Be 313.042	146.662	147.044	146.759
Ca 370.602	88.67	92.56	104.2

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	140.332	140.505	140.729
Co 228.615	142.246	139.864	140.623
Cr 267.716	140.971	140.617	141.499
Cu 324.754	159.572	158.352	158.106
Fe 271.441	253.685	273.600	261.012
K 766.491	4679.36	4693.17	4693.48
Mg 279.078	95.9314	99.3936	101.602
Mn 257.610	138.060	138.124	138.504
Mo 202.032	142.117	143.575	144.133
Na 330.237	606808x	593696x	614012x
Ni 231.604	139.022	141.152	138.666
Pb 220.353	129.278	140.662	134.839
Sb 206.834	140.283	143.289	149.336
Se 196.026	296.140	299.593	293.217
Si 288.158	589.412	590.651	589.706
Sn 189.925	280.779	281.759	271.239
Sr 216.596	138.669	137.003	133.179
Ti 334.941	138.389	138.645	138.679
Tl 190.794	273.612	267.327	274.190
V 292.401	137.862	137.771	138.472
Zn 206.200	151.474	153.999	147.644

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.9072b	ppb	0.2700	9.3	21.6335
Al 308.215	13.3353b	ppb	4.5496	34.1	270.398
As 188.980	295.917b	ppb	6.0641	2.0	72.4151
B 249.678	332.319b	ppb	1.6389	0.5	2112.98
Ba 389.178	269.200b	ppb	3.0177	1.1	1338.20
Be 313.042	146.821b	ppb	0.1986	0.1	113096
Ca 370.602	95.14b	ppb	8.069	8.5	148.6
Cd 226.502	140.522b	ppb	0.1992	0.1	1610.34
Co 228.615	140.911b	ppb	1.2168	0.9	461.683
Cr 267.716	141.029b	ppb	0.4436	0.3	2059.65
Cu 324.754	158.677b	ppb	0.7850	0.5	4612.84
Fe 271.441	262.766b	ppb	10.0730	3.8	195.097
K 766.491	4688.67b	ppb	8.0649	0.2	79937.9
Mg 279.078	98.9758b	ppb	2.8585	2.9	147.486
Mn 257.610	138.229b	ppb	0.2401	0.2	9498.98
Mo 202.032	143.275b	ppb	1.0409	0.7	201.631
Na 330.237	604839xb	ppb	10299.9	1.7	14832.4
Ni 231.604	139.613b	ppb	1.3446	1.0	134.291
Pb 220.353	134.926b	ppb	5.6926	4.2	51.4449
Sb 206.834	144.303b	ppb	4.6106	3.2	51.6213
Se 196.026	296.317b	ppb	3.1919	1.1	58.5161
Si 288.158	589.923b	ppb	0.6474	0.1	3125.66
Sn 189.925	277.926b	ppb	5.8117	2.1	61.4841
Sr 216.596	136.284b	ppb	2.8151	2.1	334.605
Ti 334.941	138.571b	ppb	0.1587	0.1	10421.9
Tl 190.794	271.710b	ppb	3.8065	1.4	60.7432
V 292.401	138.035b	ppb	0.3810	0.3	1108.23
Zn 206.200	151.039b	ppb	3.2001	2.1	78.3870

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166891-A-2-B (Samp) **4/9/2019, 2:43:38 AM** **Rack 3, Tube 42****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	2.6403	1.4775	3.4785
Al 308.215	12667.9	12730.8	12712.7
As 188.980	8.6252	7.7127	3.4830
B 249.678	106.270	106.279	106.436
Ba 389.178	2.5169	4.4947	0.9824
Be 313.042	-0.0169u	-0.0477u	-0.0446u
Ca 370.602	7030	7041	7034
Cd 226.502	0.5654	0.2034	0.7848
Co 228.615	20.6148	23.7401	20.4927
Cr 267.716	130.453	130.780	130.240
Cu 324.754	57799.1x	57845.8x	57012.1x
Fe 271.441	2544.74	2557.66	2533.94
K 766.491	442.959	445.526	446.897
Mg 279.078	2115.15	2110.67	2100.87
Mn 257.610	489.594	490.013	489.710
Mo 202.032	3.2487	4.7174	5.6598
Na 330.237	7090.44	7529.24	7643.72
Ni 231.604	16961.3x	16785.3x	16950.0x
Pb 220.353	20.0341	22.3312	16.6479
Sb 206.834	2.1435	-0.0339	-4.0243u
Se 196.026	-9.0642u	3.7170	-0.3062u
Si 288.158	548.809	543.786	543.375
Sn 189.925	4.8201	11.3584	0.9661
Sr 216.596	105.295	106.576	104.593
Ti 334.941	2.1024	2.0483	2.1257
Tl 190.794	-1.8977u	-13.7276u	6.4893
V 292.401	12.1322	12.7417	11.3937
Zn 206.200	180.400	177.824	175.138

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.5321b	ppb	1.0049	39.7	12.0373
Al 308.215	12703.8b	ppb	32.3638	0.3	21713.6
As 188.980	6.6070b	ppb	2.7436	41.5	2.8190
B 249.678	106.328b	ppb	0.0933	0.1	661.221
Ba 389.178	2.6647b	ppb	1.7608	66.1	-15.4722
Be 313.042	-0.0364b	ppb	0.0169	46.5	-448.783
Ca 370.602	7035b	ppb	5.215	0.1	10003
Cd 226.502	0.5179b	ppb	0.2936	56.7	11.8760
Co 228.615	21.6159b	ppb	1.8406	8.5	63.7885
Cr 267.716	130.491b	ppb	0.2720	0.2	1904.59
Cu 324.754	57552.3xb	ppb	468.420	0.8	1500973
Fe 271.441	2545.45b	ppb	11.8763	0.5	1424.18
K 766.491	445.127b	ppb	1.9993	0.4	7801.48
Mg 279.078	2108.90b	ppb	7.3038	0.3	2589.02
Mn 257.610	489.773b	ppb	0.2166	0.0	33602.2
Mo 202.032	4.5420b	ppb	1.2151	26.8	8.9376
Na 330.237	7421.13b	ppb	292.056	3.9	212.098
Ni 231.604	16898.9xb	ppb	98.5198	0.6	16596.3
Pb 220.353	19.6711b	ppb	2.8590	14.5	8.9265
Sb 206.834	-0.6383b	ppb	3.1280	490.1	5.9348
Se 196.026	-1.8845b	ppb	6.5351	346.8	4.0699
Si 288.158	545.324b	ppb	3.0254	0.6	2892.60

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	5.7149b	ppb	5.2536	91.9	0.2704
Sr 216.596	105.488b	ppb	1.0059	1.0	199.432
Ti 334.941	2.0921b	ppb	0.0397	1.9	137.566
Tl 190.794	-3.0454b	ppb	10.1572	333.5	-3.1787
V 292.401	12.0892b	ppb	0.6750	5.6	85.1491
Zn 206.200	177.787b	ppb	2.6308	1.5	92.5266

680-166891-A-3-B (Samp) 4/9/2019, 2:48:04 AM Rack 3, Tube 43

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	2.0269	2.1018	2.3984
Al 308.215	13.4755	5.7529	8.7883
As 188.980	2.5023	-2.6221u	3.1187
B 249.678	36.9285	36.2487	35.6123
Ba 389.178	62.1370	57.3590	63.8289
Be 313.042	-0.0847u	-0.0651u	-0.0424u
Ca 370.602	2639	2621	2645
Cd 226.502	5.9545	5.8773	5.3833
Co 228.615	-1.2987u	0.3724	-3.3331u
Cr 267.716	4.7390	4.9884	4.4942
Cu 324.754	25.1167	25.8970	26.1425
Fe 271.441	48.0965	50.0719	50.5747
K 766.491	159262x	159076x	159396x
Mg 279.078	83.9696	87.0895	78.4384
Mn 257.610	0.5093	0.4449	0.3200
Mo 202.032	49.6184	46.9851	50.1526
Na 330.237	45879.9	44438.8	45089.9
Ni 231.604	4.5809	2.0987	3.1664
Pb 220.353	24.3493	37.7324	33.2057
Sb 206.834	52.8912	57.3280	58.1971
Se 196.026	-2.3200u	-13.0461u	5.2074
Si 288.158	10341.8	10333.2	10326.5
Sn 189.925	3.7438	-3.9843u	3.4705
Sr 216.596	20.2085	19.4939	18.7671
Ti 334.941	0.0446	-0.0271u	0.0429
Tl 190.794	-10.3292u	-4.5530u	1.6806
V 292.401	0.6482	0.4259	0.1804u
Zn 206.200	8.2207	8.5661	6.3165

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	2.1757b	ppb	0.1965	9.0	2.0930
Al 308.215	9.3389b	ppb	3.8906	41.7	259.825
As 188.980	0.9996b	ppb	3.1516	315.3	1.4540
B 249.678	36.2631b	ppb	0.6582	1.8	214.378
Ba 389.178	61.1083b	ppb	3.3554	5.5	279.802
Be 313.042	-0.0641b	ppb	0.0212	33.1	-482.227
Ca 370.602	2635b	ppb	12.09	0.5	3751
Cd 226.502	5.7384b	ppb	0.3099	5.4	68.0962
Co 228.615	-1.4198b	ppb	1.8557	130.7	-13.4516
Cr 267.716	4.7405b	ppb	0.2471	5.2	79.3405
Cu 324.754	25.7187b	ppb	0.5356	2.1	1145.69
Fe 271.441	49.5810b	ppb	1.3100	2.6	72.6077
K 766.491	159245xb	ppb	160.706	0.1	2707251

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	83.1658b	ppb	4.3812	5.3	129.514
Mn 257.610	0.4247b	ppb	0.0963	22.7	51.7570
Mo 202.032	48.9187b	ppb	1.6957	3.5	70.5991
Na 330.237	45136.2b	ppb	721.662	1.6	1137.05
Ni 231.604	3.2820b	ppb	1.2452	37.9	0.4910
Pb 220.353	31.7625b	ppb	6.8073	21.4	13.3862
Sb 206.834	56.1388b	ppb	2.8459	5.1	23.5283
Se 196.026	-3.3862b	ppb	9.1734	270.9	3.7586
Si 288.158	10333.8b	ppb	7.6680	0.1	44462.8
Sn 189.925	1.0767b	ppb	4.3851	407.3	-0.7685
Sr 216.596	19.4898b	ppb	0.7207	3.7	50.5171
Ti 334.941	0.0201b	ppb	0.0409	203.5	-24.3046
Tl 190.794	-4.4005b	ppb	6.0063	136.5	-3.5665
V 292.401	0.4182b	ppb	0.2340	56.0	-11.2415
Zn 206.200	7.7011b	ppb	1.2115	15.7	2.7520

680-166891-A-4-B (Samp)

4/9/2019, 2:52:29 AM

Rack 3, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4742u	-0.4949u	1.3385
Al 308.215	17.7317	18.3264	13.0747
As 188.980	3.0234	-0.0671	10.4786
B 249.678	126.278	127.076	127.332
Ba 389.178	223.744	223.306	222.287
Be 313.042	-0.0440u	-0.0261u	-0.0444u
Ca 370.602	2701	2707	2695
Cd 226.502	18.3518	19.2076	19.7856
Co 228.615	-0.8400u	-0.5935u	0.7406
Cr 267.716	24.2225	23.8839	24.0570
Cu 324.754	60.1636	62.2618	61.2873
Fe 271.441	19.1410	15.5872	1.8354
K 766.491	192929x	192883x	193325x
Mg 279.078	46.2932	48.4386	45.9209
Mn 257.610	0.5685	0.5537	0.6617
Mo 202.032	222.906	220.756	221.343
Na 330.237	64007.6	62328.7	64639.4
Ni 231.604	1.2738	2.8572	2.7788
Pb 220.353	338.597	336.210	340.742
Sb 206.834	412.045	406.122	401.610
Se 196.026	-1.5349u	-1.5379u	-9.3666u
Si 288.158	8489.21	8507.66	8518.84
Sn 189.925	12.5398	2.5256	-3.3723u
Sr 216.596	27.9404	27.8355	26.5267
Ti 334.941	0.0931	-0.0206u	-0.0835u
Tl 190.794	-11.6731u	5.7790	-5.3999u
V 292.401	0.8270u	1.4829u	0.8767u
Zn 206.200	7.2331	9.7343	6.4235

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1231b	ppb	1.0526	854.8	-53.1021
Al 308.215	16.3776b	ppb	2.8758	17.6	273.661
As 188.980	4.4783b	ppb	5.4213	121.1	2.3158
B 249.678	126.896b	ppb	0.5497	0.4	795.795

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	223.112b	ppb	0.7476	0.3	1103.78
Be 313.042	-0.0381b	ppb	0.0105	27.4	-474.846
Ca 370.602	2701b	ppb	5.982	0.2	3845
Cd 226.502	19.1150b	ppb	0.7214	3.8	221.146
Co 228.615	-0.2310b	ppb	0.8504	368.2	-10.8091
Cr 267.716	24.0545b	ppb	0.1693	0.7	359.667
Cu 324.754	61.2375b	ppb	1.0500	1.7	2074.24
Fe 271.441	12.1879b	ppb	9.1399	75.0	52.4971
K 766.491	193045xb	ppb	243.191	0.1	3281835
Mg 279.078	46.8842b	ppb	1.3590	2.9	85.3397
Mn 257.610	0.5947b	ppb	0.0586	9.8	63.2456
Mo 202.032	221.668b	ppb	1.1112	0.5	310.535
Na 330.237	63658.6b	ppb	1194.23	1.9	1590.36
Ni 231.604	2.3033b	ppb	0.8924	38.7	-0.4710
Pb 220.353	338.516b	ppb	2.2671	0.7	126.672
Sb 206.834	406.592b	ppb	5.2330	1.3	133.918
Se 196.026	-4.1465b	ppb	4.5208	109.0	3.6198
Si 288.158	8505.23b	ppb	14.9612	0.2	36719.8
Sn 189.925	3.8977b	ppb	8.0443	206.4	-0.1330
Sr 216.596	27.4342b	ppb	0.7877	2.9	68.2262
Ti 334.941	-0.0037b	ppb	0.0895	2433.3	-26.5328
Tl 190.794	-3.7647b	ppb	8.8403	234.8	-3.4584
V 292.401	1.0622b	ppb	0.3652	34.4	-16.0601
Zn 206.200	7.7970b	ppb	1.7259	22.1	2.7924

680-166891-A-5-B (Samp)

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Rack 3, Tube 45

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0676	0.2250	-0.2876u
Al 308.215	13.8868	10.3460	11.1611
As 188.980	-2.8372u	-3.6611u	3.1040
B 249.678	17.8310	16.5241	16.3237
Ba 389.178	4.5437	3.5711	4.5270
Be 313.042	-0.0584u	-0.0808u	-0.0696u
Ca 370.602	1092	1090	1093
Cd 226.502	-0.6184u	0.5469	0.0878
Co 228.615	0.3249	-2.0254u	-0.4453u
Cr 267.716	-0.0431u	0.7325	-0.2487u
Cu 324.754	6.8025	6.2101	7.2316
Fe 271.441	-2.7233u	11.6060	-2.1292u
K 766.491	172957x	172689x	172751x
Mg 279.078	217.094	220.559	219.133
Mn 257.610	0.0588	0.3062	0.1774
Mo 202.032	0.8183	1.8989	2.0248
Na 330.237	39971.8	40311.4	39977.3
Ni 231.604	-0.0997u	3.2537	1.8726
Pb 220.353	8.7256	4.4876	-9.4976u
Sb 206.834	8.4382	-13.3637u	-4.2808u
Se 196.026	3.0217	-7.5869u	-3.8359u
Si 288.158	15706.4	15709.4	15690.8
Sn 189.925	6.6968	-1.9075u	-3.4806u
Sr 216.596	6.8668	7.8629	6.3403
Ti 334.941	1.1986	0.7343	0.8263

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-14.6542u	12.3567	4.1225
V 292.401	-0.5466u	-0.7309u	0.7576
Zn 206.200	17.8134	17.7284	18.2501

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3350b	ppb	0.6842	204.2	-47.3532
Al 308.215	11.7980b	ppb	1.8543	15.7	263.434
As 188.980	-1.1314b	ppb	3.6911	326.2	0.9108
B 249.678	16.8929b	ppb	0.8185	4.8	90.1874
Ba 389.178	4.2139b	ppb	0.5568	13.2	-9.4658
Be 313.042	-0.0696b	ppb	0.0112	16.0	-483.747
Ca 370.602	1092b	ppb	1.648	0.2	1559
Cd 226.502	0.0054b	ppb	0.5870	10786.2	2.4286
Co 228.615	-0.7153b	ppb	1.1982	167.5	-10.7270
Cr 267.716	0.1469b	ppb	0.5175	352.3	12.6605
Cu 324.754	6.7481b	ppb	0.5129	7.6	650.399
Fe 271.441	2.2512b	ppb	8.1069	360.1	47.0299
K 766.491	172799xb	ppb	140.285	0.1	2937661
Mg 279.078	218.928b	ppb	1.7416	0.8	294.801
Mn 257.610	0.1808b	ppb	0.1237	68.4	35.4534
Mo 202.032	1.5806b	ppb	0.6632	42.0	4.8508
Na 330.237	40086.8b	ppb	194.505	0.5	1013.37
Ni 231.604	1.6755b	ppb	1.6854	100.6	-1.0878
Pb 220.353	1.2385b	ppb	9.5362	770.0	2.1208
Sb 206.834	-3.0688b	ppb	10.9514	356.9	4.8766
Se 196.026	-2.8004b	ppb	5.3796	192.1	3.8657
Si 288.158	15702.2b	ppb	9.9892	0.1	67253.1
Sn 189.925	0.4362b	ppb	5.4786	1255.9	-0.9128
Sr 216.596	7.0233b	ppb	0.7733	11.0	20.5159
Ti 334.941	0.9197b	ppb	0.2458	26.7	44.0065
Tl 190.794	0.6083b	ppb	13.8441	2275.7	-2.3893
V 292.401	-0.1733b	ppb	0.8114	468.2	-13.3346
Zn 206.200	17.9306b	ppb	0.2799	1.6	8.1573

LB 680-565219/1-B (Samp) 4/9/2019, 3:01:20 AM Rack 3, Tube 46

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1372u	0.6891	0.4997
Al 308.215	4.5168	3.9137	-1.6911u
As 188.980	9.1795	-0.9793u	3.3215
B 249.678	20.0462	21.4983	22.2252
Ba 389.178	-3.3204u	2.4039	-4.9133u
Be 313.042	-0.0725u	-0.0678u	-0.0656u
Ca 370.602	121.0	112.6	118.7
Cd 226.502	-0.1137u	-0.0755u	-0.2744u
Co 228.615	0.1145	-0.1117u	-0.8617u
Cr 267.716	0.0759	0.2297	0.1466
Cu 324.754	2.5397	3.4558	2.0922
Fe 271.441	-13.4218u	13.2016	-8.4404u
K 766.491	39.9290	39.8936	38.0195
Mg 279.078	13.3732	18.9111	17.1549
Mn 257.610	0.1058	-0.0004u	0.0598
Mo 202.032	-0.7972u	0.3329	1.1686

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	124749x	124634x	123768x
Ni 231.604	0.4851	-0.9990u	1.3855
Pb 220.353	0.8293	4.8309	1.1006
Sb 206.834	1.3092	1.0876	8.7525
Se 196.026	5.7931	-0.8960u	-10.2056u
Si 288.158	25.5804	23.5638	17.2805
Sn 189.925	13.8752	1.7965	8.0750
Sr 216.596	2.5422	0.3448	1.0404
Ti 334.941	0.1152	0.0832	-0.0334u
Tl 190.794	-10.5728u	-4.6487u	-8.1302u
V 292.401	0.3648	0.5979	-0.2563u
Zn 206.200	2.8098	1.7062	5.5938

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3505b	ppb	0.4329	123.5	-46.9120
Al 308.215	2.2465b	ppb	3.4233	152.4	247.289
As 188.980	3.8406b	ppb	5.0992	132.8	2.1830
B 249.678	21.2566b	ppb	1.1095	5.2	117.991
Ba 389.178	-1.9433b	ppb	3.8480	198.0	-40.9387
Be 313.042	-0.0686b	ppb	0.0035	5.2	-483.187
Ca 370.602	117.4b	ppb	4.356	3.7	175.9
Cd 226.502	-0.1545b	ppb	0.1055	68.3	0.4578
Co 228.615	-0.2863b	ppb	0.5110	178.5	-9.3272
Cr 267.716	0.1507b	ppb	0.0770	51.1	13.1261
Cu 324.754	2.6959b	ppb	0.6951	25.8	544.730
Fe 271.441	-2.8869b	ppb	14.1539	490.3	44.2453
K 766.491	39.2807b	ppb	1.0924	2.8	902.452
Mg 279.078	16.4797b	ppb	2.8300	17.2	48.3310
Mn 257.610	0.0551b	ppb	0.0532	96.6	26.0634
Mo 202.032	0.2347b	ppb	0.9865	420.3	2.9814
Na 330.237	124384xb	ppb	536.532	0.4	3076.56
Ni 231.604	0.2906b	ppb	1.2041	414.4	-2.4482
Pb 220.353	2.2536b	ppb	2.2361	99.2	2.4962
Sb 206.834	3.7164b	ppb	4.3628	117.4	7.0139
Se 196.026	-1.7695b	ppb	8.0351	454.1	4.0540
Si 288.158	22.1416b	ppb	4.3288	19.6	670.058
Sn 189.925	7.9156b	ppb	6.0409	76.3	0.7750
Sr 216.596	1.3091b	ppb	1.1231	85.8	6.5591
Ti 334.941	0.0550b	ppb	0.0782	142.1	-23.3280
Tl 190.794	-7.7839b	ppb	2.9772	38.2	-4.3407
V 292.401	0.2354b	ppb	0.4415	187.5	-10.1041
Zn 206.200	3.3700b	ppb	2.0034	59.4	0.4666

680-166989-A-1-B (Samp)

4/9/2019, 3:05:45 AM

Rack 3, Tube 47

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2153	0.4544	0.5950
Al 308.215	11.0811	16.2819	12.1062
As 188.980	0.9841	8.3410	-4.7420u
B 249.678	3.7740	3.2684	1.9050
Ba 389.178	2.3922	3.6107	4.3738
Be 313.042	-0.0620u	-0.0581u	-0.0393u
Ca 370.602	632.1	636.6	621.2

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.0261	0.1807	0.0097u
Co 228.615	-0.2088u	0.5251	-0.0235u
Cr 267.716	0.7609	0.3978	0.5494
Cu 324.754	2.1720	2.1247	2.4094
Fe 271.441	2.1779	0.5389	-12.5111u
K 766.491	58.4274	59.2817	57.7535
Mg 279.078	162.408	153.878	160.937
Mn 257.610	4.3200	4.2134	4.2370
Mo 202.032	2.1607	-0.5204u	0.2864
Na 330.237	112780x	115571x	112986x
Ni 231.604	3.6913	-0.9729u	2.4185
Pb 220.353	-2.1035u	-5.9036u	3.8026
Sb 206.834	-9.2549u	-0.3590u	-2.9779u
Se 196.026	4.5567	10.2670	1.4288
Si 288.158	112.530	111.847	110.662
Sn 189.925	-5.7252u	7.7467	9.2635
Sr 216.596	3.1263	2.6802	3.1377
Ti 334.941	0.1119	0.0855	-0.1073u
Tl 190.794	-1.6171u	-12.4947u	-1.6014u
V 292.401	0.2872	0.5546	1.0774
Zn 206.200	1.3201	3.2320	1.2136

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4216b	ppb	0.1920	45.5	-44.9994
Al 308.215	13.1564b	ppb	2.7549	20.9	265.749
As 188.980	1.5277b	ppb	6.5584	429.3	1.6036
B 249.678	2.9825b	ppb	0.9667	32.4	0.7797
Ba 389.178	3.4589b	ppb	0.9995	28.9	-13.3540
Be 313.042	-0.0532b	ppb	0.0121	22.8	-470.755
Ca 370.602	629.9b	ppb	7.908	1.3	903.9
Cd 226.502	0.0722b	ppb	0.0943	130.7	3.0652
Co 228.615	0.0976b	ppb	0.3816	391.2	-8.0556
Cr 267.716	0.5694b	ppb	0.1824	32.0	19.1534
Cu 324.754	2.2354b	ppb	0.1526	6.8	532.740
Fe 271.441	-3.2648b	ppb	8.0494	246.6	44.0673
K 766.491	58.4875b	ppb	0.7659	1.3	1228.95
Mg 279.078	159.075b	ppb	4.5600	2.9	221.894
Mn 257.610	4.2568b	ppb	0.0560	1.3	314.534
Mo 202.032	0.6422b	ppb	1.3755	214.2	3.5474
Na 330.237	113779xb	ppb	1555.72	1.4	2817.06
Ni 231.604	1.7123b	ppb	2.4110	140.8	-1.0521
Pb 220.353	-1.4015b	ppb	4.8910	349.0	1.1456
Sb 206.834	-4.1973b	ppb	4.5716	108.9	4.5213
Se 196.026	5.4175b	ppb	4.4816	82.7	5.3672
Si 288.158	111.680b	ppb	0.9449	0.8	1049.99
Sn 189.925	3.7617b	ppb	8.2508	219.3	-0.1592
Sr 216.596	2.9814b	ppb	0.2609	8.8	10.6365
Ti 334.941	0.0300b	ppb	0.1197	398.5	-24.6850
Tl 190.794	-5.2377b	ppb	6.2847	120.0	-3.7476
V 292.401	0.6398b	ppb	0.4020	62.8	-6.8433
Zn 206.200	1.9219b	ppb	1.1358	59.1	-0.2982

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166989-A-1-C MS (Samp) 4/9/2019, 3:10:10 AM Rack 3, Tube 48**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	3.2670	3.0410	3.3977
Al 308.215	9.8260	8.8826	8.1041
As 188.980	323.274	327.780	321.403
B 249.678	315.138	315.453	319.112
Ba 389.178	289.066	286.236	287.776
Be 313.042	158.721	158.645	158.673
Ca 370.602	532.0	541.7	527.2
Cd 226.502	150.864	151.305	150.425
Co 228.615	149.016	148.761	150.242
Cr 267.716	145.068	146.037	144.364
Cu 324.754	152.374	151.372	151.125
Fe 271.441	304.709	290.175	295.695
K 766.491	45.6884	44.8309	46.9333
Mg 279.078	134.513	130.817	138.097
Mn 257.610	151.388	151.278	151.214
Mo 202.032	148.549	149.612	152.680
Na 330.237	93388.9	95045.6	93642.4
Ni 231.604	155.182	151.859	154.400
Pb 220.353	136.291	144.221	152.437
Sb 206.834	149.943	172.427	152.490
Se 196.026	319.778	335.203	331.068
Si 288.158	395.261	393.194	392.470
Sn 189.925	293.293	307.336	300.194
Sr 216.596	145.491	148.092	147.702
Ti 334.941	145.513	145.364	145.508
Tl 190.794	292.575	288.987	294.941
V 292.401	147.178	144.867	145.303
Zn 206.200	165.676	159.286	162.560

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	3.2352	ppb	0.1805	5.6	30.4408
Al 308.215	8.9376	ppb	0.8622	9.6	263.213
As 188.980	324.152	ppb	3.2778	1.0	79.2403
B 249.678	316.568	ppb	2.2090	0.7	2011.91
Ba 389.178	287.693	ppb	1.4165	0.5	1432.28
Be 313.042	158.680	ppb	0.0388	0.0	122289
Ca 370.602	533.6	ppb	7.413	1.4	771.6
Cd 226.502	150.865	ppb	0.4404	0.3	1729.58
Co 228.615	149.340	ppb	0.7916	0.5	489.789
Cr 267.716	145.157	ppb	0.8400	0.6	2117.06
Cu 324.754	151.624	ppb	0.6617	0.4	4429.04
Fe 271.441	296.860	ppb	7.3369	2.5	213.959
K 766.491	45.8175	ppb	1.0571	2.3	1013.57
Mg 279.078	134.476	ppb	3.6399	2.7	190.585
Mn 257.610	151.293	ppb	0.0884	0.1	10395.5
Mo 202.032	150.281	ppb	2.1449	1.4	211.360
Na 330.237	94025.6	ppb	892.372	0.9	2330.74
Ni 231.604	153.814	ppb	1.7375	1.1	148.233
Pb 220.353	144.316	ppb	8.0734	5.6	54.9104
Sb 206.834	158.287	ppb	12.3119	7.8	56.0323
Se 196.026	328.683	ppb	7.9842	2.4	64.4295
Si 288.158	393.642	ppb	1.4482	0.4	2294.56

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	300.274	ppb	7.0214	2.3	66.4611
Sr 216.596	147.095	ppb	1.4027	1.0	360.907
Ti 334.941	145.462	ppb	0.0845	0.1	10951.8
Tl 190.794	292.168	ppb	2.9980	1.0	65.5065
V 292.401	145.783	ppb	1.2281	0.8	1172.36
Zn 206.200	162.507	ppb	3.1950	2.0	84.4435

680-166989-A-1-D MSD (Samp) 4/9/2019, 3:14:36 AM Rack 3, Tube 49

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	3.3107	3.1194	3.2489
Al 308.215	15.3030	15.1629	7.0260
As 188.980	303.110	322.244	314.823
B 249.678	313.828	316.253	318.479
Ba 389.178	277.285	280.504	275.771
Be 313.042	154.367	154.732	154.816
Ca 370.602	509.1	525.8	505.0
Cd 226.502	147.211	147.078	147.004
Co 228.615	146.888	145.092	144.931
Cr 267.716	140.931	141.524	141.153
Cu 324.754	146.212	147.134	147.774
Fe 271.441	299.507	290.632	303.225
K 766.491	65.6290	64.6508	67.1059
Mg 279.078	134.687	125.703	127.296
Mn 257.610	147.378	147.712	147.918
Mo 202.032	146.997	146.372	145.875
Na 330.237	92235.9	92700.1	92691.8
Ni 231.604	144.354	147.794	150.310
Pb 220.353	137.617	144.057	138.199
Sb 206.834	154.787	168.791	150.018
Se 196.026	309.806	305.307	338.193
Si 288.158	381.236	384.112	384.704
Sn 189.925	279.750	290.567	282.962
Sr 216.596	145.127	142.087	145.478
Ti 334.941	142.153	141.720	142.038
Tl 190.794	275.937	284.701	278.399
V 292.401	142.837	143.438	141.338
Zn 206.200	158.424	159.528	157.602

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	3.2263	ppb	0.0976	3.0	30.2022
Al 308.215	12.4973	ppb	4.7388	37.9	269.108
As 188.980	313.393	ppb	9.6471	3.1	76.6495
B 249.678	316.186	ppb	2.3261	0.7	2009.47
Ba 389.178	277.853	ppb	2.4172	0.9	1382.24
Be 313.042	154.638	ppb	0.2390	0.2	119164
Ca 370.602	513.3	ppb	11.00	2.1	742.6
Cd 226.502	147.097	ppb	0.1048	0.1	1686.45
Co 228.615	145.637	ppb	1.0861	0.7	477.448
Cr 267.716	141.203	ppb	0.2996	0.2	2059.67
Cu 324.754	147.040	ppb	0.7853	0.5	4309.48
Fe 271.441	297.788	ppb	6.4700	2.2	214.272
K 766.491	65.7952	ppb	1.2360	1.9	1353.18

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	129.229	ppb	4.7936	3.7	184.230
Mn 257.610	147.669	ppb	0.2728	0.2	10147.0
Mo 202.032	146.414	ppb	0.5622	0.4	205.991
Na 330.237	92542.6	ppb	265.647	0.3	2294.51
Ni 231.604	147.486	ppb	2.9901	2.0	142.020
Pb 220.353	139.958	ppb	3.5621	2.5	53.3023
Sb 206.834	157.866	ppb	9.7578	6.2	55.8925
Se 196.026	317.769	ppb	17.8302	5.6	62.4355
Si 288.158	383.350	ppb	1.8547	0.5	2249.59
Sn 189.925	284.426	ppb	5.5555	2.0	62.9001
Sr 216.596	144.231	ppb	1.8648	1.3	353.975
Ti 334.941	141.970	ppb	0.2243	0.2	10688.3
Tl 190.794	279.679	ppb	4.5196	1.6	62.6002
V 292.401	142.537	ppb	1.0816	0.8	1146.08
Zn 206.200	158.518	ppb	0.9665	0.6	82.3381

680-166989-A-2-B (Samp)

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Rack 3, Tube 50

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3739	-0.3191u	0.3821
Al 308.215	84.5120	83.1638	86.3182
As 188.980	3.4099	7.9814	6.9401
B 249.678	48.4315	47.0447	46.7338
Ba 389.178	7.8972	9.9540	7.6147
Be 313.042	-0.0800u	-0.0415u	-0.0447u
Ca 370.602	2623	2627	2629
Cd 226.502	-0.1036u	-0.2701u	0.2498
Co 228.615	-1.1072u	2.2453	-0.4753u
Cr 267.716	0.0455	-0.0347	0.8279
Cu 324.754	3.1690	2.1641	2.7695
Fe 271.441	61.4415	39.7742	35.7537
K 766.491	117.382	117.190	115.960
Mg 279.078	70.6041	74.6144	76.7830
Mn 257.610	7.0961	7.1315	7.2535
Mo 202.032	3.5094	3.1965	-0.0106u
Na 330.237	123800x	120865x	123582x
Ni 231.604	2.4164	1.5241	0.2725
Pb 220.353	6.6524	9.7248	9.8379
Sb 206.834	-1.0719u	-1.9897u	-8.9211u
Se 196.026	0.6045	-3.6159u	-4.9883u
Si 288.158	497.992	496.236	493.791
Sn 189.925	6.0542	-5.9811u	6.0677
Sr 216.596	7.9693	7.0583	6.6250
Ti 334.941	1.5298	1.7494	1.4412
Tl 190.794	2.1008	0.4725	-8.9960u
V 292.401	1.3757	0.9220	1.4512
Zn 206.200	5.1244	3.8734	3.6251

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1456b	ppb	0.4025	276.3	-52.4339
Al 308.215	84.6647b	ppb	1.5828	1.9	386.621
As 188.980	6.1105b	ppb	2.3960	39.2	2.7156
B 249.678	47.4034b	ppb	0.9039	1.9	285.672

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	8.4887b	ppb	1.2769	15.0	12.1599
Be 313.042	-0.0554b	ppb	0.0213	38.5	-472.630
Ca 370.602	2626b	ppb	3.217	0.1	3739
Cd 226.502	-0.0413b	ppb	0.2655	642.7	1.8003
Co 228.615	0.2209b	ppb	1.7814	806.3	-7.6407
Cr 267.716	0.2796b	ppb	0.4766	170.5	14.9991
Cu 324.754	2.7009b	ppb	0.5060	18.7	544.892
Fe 271.441	45.6564b	ppb	13.8173	30.3	70.5416
K 766.491	116.844b	ppb	0.7717	0.7	2220.96
Mg 279.078	74.0005b	ppb	3.1349	4.2	118.280
Mn 257.610	7.1604b	ppb	0.0826	1.2	513.325
Mo 202.032	2.2318b	ppb	1.9482	87.3	5.7547
Na 330.237	122749xb	ppb	1635.28	1.3	3036.55
Ni 231.604	1.4043b	ppb	1.0770	76.7	-1.3546
Pb 220.353	8.7384b	ppb	1.8073	20.7	4.8914
Sb 206.834	-3.9942b	ppb	4.2914	107.4	4.5858
Se 196.026	-2.6666b	ppb	2.9148	109.3	3.8907
Si 288.158	496.007b	ppb	2.1098	0.4	2682.19
Sn 189.925	2.0469b	ppb	6.9525	339.7	-0.5437
Sr 216.596	7.2175b	ppb	0.6862	9.5	20.9865
Ti 334.941	1.5734b	ppb	0.1587	10.1	91.4279
Tl 190.794	-2.1409b	ppb	5.9923	279.9	-3.0275
V 292.401	1.2496b	ppb	0.2863	22.9	-1.9044
Zn 206.200	4.2076b	ppb	0.8036	19.1	0.9091

Cont Calib Verif (CCV)

4/9/2019, 3:23:28 AM

Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.873	500.081	495.782
Al 308.215	10384.8	10417.4	10418.5
As 188.980	567.060	548.004	556.887
B 249.678	547.426	551.469	556.195
Ba 389.178	473.689	470.894	475.430
Be 313.042	547.182	546.422	548.231
Ca 370.602	10153	10137	10161
Cd 226.502	516.170	516.497	517.126
Co 228.615	514.687	518.143	516.001
Cr 267.716	497.259	500.446	501.997
Cu 324.754	518.444	518.427	512.671
Fe 271.441	10186.7	10177.7	10216.6
K 766.491	10121.0	10117.5	10106.2
Mg 279.078	10503.9	10502.0	10519.4
Mn 257.610	510.693	509.647	511.220
Mo 202.032	511.274	515.330	511.428
Na 330.237	10879.5	11004.9	11417.1
Ni 231.604	517.159	520.170	514.043
Pb 220.353	492.457	493.423	509.095
Sb 206.834	518.894	518.263	504.047
Se 196.026	569.225	555.480	552.255
Si 288.158	5126.29	5099.82	5103.64
Sn 189.925	502.391	506.621	497.193
Sr 216.596	500.599	500.151	497.688
Ti 334.941	498.407	497.842	499.362

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	500.504	503.568	487.976
V 292.401	509.719	508.784	511.929
Zn 206.200	1085.17	1062.35	1079.01

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	498.912	ppb	2.7397	0.5	13354.0	99.78237
Al 308.215	10406.9	ppb	19.1776	0.2	17847.7	104.06895
As 188.980	557.317	ppb	9.5350	1.7	135.296	111.46336Q
B 249.678	551.697	ppb	4.3888	0.8	3510.50	110.33931Q
Ba 389.178	473.337	ppb	2.2883	0.5	2386.58	94.66747
Be 313.042	547.278	ppb	0.9085	0.2	422826	109.45567
Ca 370.602	10150	ppb	12.26	0.1	14427	101.50188
Cd 226.502	516.598	ppb	0.4858	0.1	5928.74	103.31953
Co 228.615	516.277	ppb	1.7446	0.3	1713.77	103.25539
Cr 267.716	499.901	ppb	2.4157	0.5	7264.76	99.98011
Cu 324.754	516.514	ppb	3.3285	0.6	13947.3	103.30278
Fe 271.441	10193.7	ppb	20.3609	0.2	5587.07	101.88565
K 766.491	10114.9	ppb	7.7718	0.1	172179	101.14890
Mg 279.078	10508.5	ppb	9.5728	0.1	12815.3	105.08455
Mn 257.610	510.520	ppb	0.8007	0.2	35061.7	102.10403
Mo 202.032	512.677	ppb	2.2987	0.4	714.553	102.53542
Na 330.237	11100.5	ppb	281.272	2.5	288.356	111.00496Q
Ni 231.604	517.124	ppb	3.0635	0.6	504.809	103.42474
Pb 220.353	498.325	ppb	9.3395	1.9	185.530	99.66499
Sb 206.834	513.735	ppb	8.3957	1.6	168.914	102.74691
Se 196.026	558.987	ppb	9.0120	1.6	106.500	111.79735Q
Si 288.158	5109.91	ppb	14.3072	0.3	22397.6	102.19828
Sn 189.925	502.068	ppb	4.7222	0.9	111.794	100.41363
Sr 216.596	499.479	ppb	1.5675	0.3	1218.36	99.89590
Ti 334.941	498.537	ppb	0.7684	0.2	37624.7	99.70745
Tl 190.794	497.349	ppb	8.2606	1.7	113.241	99.46984
V 292.401	510.144	ppb	1.6151	0.3	4134.01	102.02882
Zn 206.200	1075.51	ppb	11.8046	1.1	566.506	107.55137

Cont Calib Blank (CCB)

4/9/2019, 3:27:52 AM

Rack S, Tube 1

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9368	1.2111	-0.5684u
Al 308.215	8.9635	12.2866	8.1930
As 188.980	-2.3365u	3.0233	-1.9304u
B 249.678	17.6075	16.6417	12.8338
Ba 389.178	-0.6287u	-0.1881u	-5.7679u
Be 313.042	0.0117	0.0149	0.0197
Ca 370.602	8.933	5.053	14.57
Cd 226.502	0.4765	0.7374	-0.3276u
Co 228.615	-1.1422u	-0.5517u	-0.9595u
Cr 267.716	0.2694	0.9188	-0.2863u
Cu 324.754	1.5164	2.2077	1.3195
Fe 271.441	19.8309	-0.0237u	13.3881
K 766.491	3.9731	2.9401	4.6713
Mg 279.078	1.2956	12.2211	7.8854
Mn 257.610	0.1606	0.0659	0.2359
Mo 202.032	2.6208	0.3214	1.2173

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	500.078	463.933	129.159
Ni 231.604	-0.1170u	4.2166	0.4817
Pb 220.353	0.6215	-16.9535u	4.1327
Sb 206.834	-5.4468u	-2.7892u	1.0805
Se 196.026	-2.7981u	15.4086	-1.6737u
Si 288.158	19.1672	17.8788	17.3561
Sn 189.925	6.4234	2.9581	6.8114
Sr 216.596	0.5391	-0.5366u	0.7502
Ti 334.941	0.3139	0.3882	0.5053
Tl 190.794	4.5048	-2.5353u	-6.9267u
V 292.401	1.0157	0.1984	0.0543
Zn 206.200	5.2779	1.2228	1.5010

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.5265	ppb	0.9581	182.0	-42.1867	0.52650
Al 308.215	9.8144	ppb	2.1754	22.2	260.097	9.81437
As 188.980	-0.4145	ppb	2.9842	719.9	1.1094	-0.41451
B 249.678	15.6943	ppb	2.5239	16.1	82.3038	15.69434
Ba 389.178	-2.1949	ppb	3.1022	141.3	-42.2227	-2.19492
Be 313.042	0.0155	ppb	0.0040	25.9	-412.900	0.01546
Ca 370.602	9.520	ppb	4.787	50.3	22.69	9.51950
Cd 226.502	0.2954	ppb	0.5551	187.9	5.8136	0.29543
Co 228.615	-0.8845	ppb	0.3023	34.2	-11.3316	-0.88445
Cr 267.716	0.3006	ppb	0.6031	200.6	14.6962	0.30064
Cu 324.754	1.6812	ppb	0.4665	27.7	518.297	1.68122
Fe 271.441	11.0651	ppb	10.1291	91.5	51.7834	11.06510
K 766.491	3.8615	ppb	0.8710	22.6	300.357	3.86150
Mg 279.078	7.1340	ppb	5.5014	77.1	36.9509	7.13401
Mn 257.610	0.1541	ppb	0.0852	55.2	33.0163	0.15415
Mo 202.032	1.3865	ppb	1.1590	83.6	4.5810	1.38652
Na 330.237	364.390	ppb	204.516	56.1	41.3779	364.39008
Ni 231.604	1.5271	ppb	2.3483	153.8	-1.2334	1.52709
Pb 220.353	-4.0664	ppb	11.2978	277.8	0.1609	-4.06643
Sb 206.834	-2.3851	ppb	3.2823	137.6	5.0919	-2.38515
Se 196.026	3.6456	ppb	10.2025	279.9	5.0432	3.64561
Si 288.158	18.1340	ppb	0.9321	5.1	652.810	18.13404
Sn 189.925	5.3976	ppb	2.1216	39.3	0.1985	5.39763
Sr 216.596	0.2509	ppb	0.6901	275.1	3.9595	0.25090
Ti 334.941	0.4025	ppb	0.0965	24.0	5.2411	0.40247
Tl 190.794	-1.6524	ppb	5.7667	349.0	-2.9152	-1.65243
V 292.401	0.4228	ppb	0.5185	122.6	-8.3791	0.42279
Zn 206.200	2.6672	ppb	2.2652	84.9	0.0955	2.66723

680-166989-A-3-B (Samp)

4/9/2019, 3:32:16 AM

Rack 3, Tube 51

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.6506	0.4109	0.1767
Al 308.215	32.1009	28.6515	34.9542
As 188.980	-5.1246u	-4.5159u	-3.1560u
B 249.678	32.4044	31.8416	31.7132
Ba 389.178	4.8885	3.6185	1.5517
Be 313.042	-0.0447u	-0.0478u	-0.0441u
Ca 370.602	2140	2141	2157

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.0091u	-0.3551u	-0.3866u
Co 228.615	0.7619	-0.3996u	0.2262
Cr 267.716	0.1954	0.5410	-0.2672u
Cu 324.754	2.6177	2.5911	2.7870
Fe 271.441	-8.1186u	-12.5448u	-27.8342u
K 766.491	68.2665	67.0586	66.5314
Mg 279.078	33.9838	23.9555	34.2023
Mn 257.610	4.0706	4.1684	4.0585
Mo 202.032	0.8426	0.8787	-0.7701u
Na 330.237	110966x	113849x	113437x
Ni 231.604	1.9983	2.5419	3.2618
Pb 220.353	-5.4449u	-6.5943u	0.1740
Sb 206.834	1.0676	0.7935	-5.1716u
Se 196.026	0.5643	-9.6031u	4.5890
Si 288.158	272.213	269.446	272.805
Sn 189.925	12.4265	-3.0227u	-9.2346u
Sr 216.596	5.0543	4.9850	5.6159
Ti 334.941	0.1067	0.0720	0.1864
Tl 190.794	-10.6190u	-2.9125u	-3.6877u
V 292.401	0.5849	-0.3179u	-0.0183u
Zn 206.200	4.1838	0.6715	0.3461

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4128b	ppb	0.2370	57.4	-45.2495
Al 308.215	31.9022b	ppb	3.1560	9.9	297.410
As 188.980	-4.2655b	ppb	1.0079	23.6	0.1737
B 249.678	31.9864b	ppb	0.3676	1.1	186.826
Ba 389.178	3.3529b	ppb	1.6842	50.2	-13.9978
Be 313.042	-0.0455b	ppb	0.0020	4.4	-464.533
Ca 370.602	2146b	ppb	9.861	0.5	3057
Cd 226.502	-0.2442b	ppb	0.2199	90.1	-0.5632
Co 228.615	0.1962b	ppb	0.5813	296.3	-7.7173
Cr 267.716	0.1564b	ppb	0.4055	259.3	13.1558
Cu 324.754	2.6652b	ppb	0.1063	4.0	543.933
Fe 271.441	-16.1659b	ppb	10.3446	64.0	37.0870
K 766.491	67.2855b	ppb	0.8895	1.3	1378.51
Mg 279.078	30.7139b	ppb	5.8539	19.1	65.6179
Mn 257.610	4.0992b	ppb	0.0603	1.5	303.331
Mo 202.032	0.3170b	ppb	0.9417	297.0	3.0958
Na 330.237	112751xb	ppb	1559.33	1.4	2791.89
Ni 231.604	2.6006b	ppb	0.6338	24.4	-0.1795
Pb 220.353	-3.9551b	ppb	3.6217	91.6	0.2023
Sb 206.834	-1.1035b	ppb	3.5257	319.5	5.4954
Se 196.026	-1.4833b	ppb	7.3142	493.1	4.1067
Si 288.158	271.488b	ppb	1.7933	0.7	1728.36
Sn 189.925	0.0564b	ppb	11.1540	19786.6	-0.9918
Sr 216.596	5.2184b	ppb	0.3460	6.6	16.1100
Ti 334.941	0.1217b	ppb	0.0586	48.2	-18.0388
Tl 190.794	-5.7397b	ppb	4.2433	73.9	-3.8640
V 292.401	0.0829b	ppb	0.4598	554.7	-11.3447
Zn 206.200	1.7338b	ppb	2.1280	122.7	-0.3976

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166989-A-4-B (Samp) **4/9/2019, 3:36:41 AM** **Rack 3, Tube 52****Weight: 1** **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.0865u	-0.0311u	0.5519
Al 308.215	11.8753	20.1939	10.5398
As 188.980	4.6085	3.9719	-2.5694u
B 249.678	30.6898	30.8763	30.8950
Ba 389.178	13.4541	14.0414	15.5036
Be 313.042	-0.0660u	-0.0429u	-0.0566u
Ca 370.602	6146	6131	6127
Cd 226.502	0.2141	-0.3524u	-0.3543u
Co 228.615	0.7581	-0.4832u	-1.2943u
Cr 267.716	0.2323	0.1606	-0.3555u
Cu 324.754	2.7384	2.8754	2.5470
Fe 271.441	-0.8848u	9.6605	3.8166
K 766.491	79.9673	79.1534	79.7310
Mg 279.078	99.9687	104.023	103.314
Mn 257.610	4.5303	4.4674	4.5647
Mo 202.032	2.5230	2.5414	-0.0544u
Na 330.237	123039x	123847x	122505x
Ni 231.604	4.4109	3.7724	1.3927
Pb 220.353	0.5575	4.1906	-3.1781u
Sb 206.834	-11.8988u	8.7794	1.3828
Se 196.026	-6.4715u	4.8798	-8.2421u
Si 288.158	264.052	263.911	261.298
Sn 189.925	-1.4471u	6.4559	10.1607
Sr 216.596	12.5706	13.1119	13.6842
Ti 334.941	0.1205	0.1620	0.2324
Tl 190.794	-3.9809u	-10.3596u	-7.3786u
V 292.401	0.0818	0.4488	0.0568
Zn 206.200	15.2301	12.5635	15.4138

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1448b	ppb	0.3537	244.3	-52.4770
Al 308.215	14.2030b	ppb	5.2311	36.8	267.513
As 188.980	2.0037b	ppb	3.9732	198.3	1.7447
B 249.678	30.8204b	ppb	0.1135	0.4	179.338
Ba 389.178	14.3330b	ppb	1.0554	7.4	41.8966
Be 313.042	-0.0552b	ppb	0.0116	21.0	-471.935
Ca 370.602	6135b	ppb	9.702	0.2	8722
Cd 226.502	-0.1642b	ppb	0.3276	199.5	0.3476
Co 228.615	-0.3398b	ppb	1.0337	304.2	-9.5165
Cr 267.716	0.0125b	ppb	0.3207	2570.9	11.1194
Cu 324.754	2.7203b	ppb	0.1649	6.1	545.386
Fe 271.441	4.1974b	ppb	5.2830	125.9	48.0916
K 766.491	79.6172b	ppb	0.4187	0.5	1588.14
Mg 279.078	102.435b	ppb	2.1652	2.1	152.935
Mn 257.610	4.5208b	ppb	0.0493	1.1	332.456
Mo 202.032	1.6700b	ppb	1.4934	89.4	4.9749
Na 330.237	123130xb	ppb	675.515	0.5	3045.78
Ni 231.604	3.1920b	ppb	1.5906	49.8	0.4016
Pb 220.353	0.5234b	ppb	3.6845	704.0	1.8567
Sb 206.834	-0.5789b	ppb	10.4777	1810.0	5.6607
Se 196.026	-3.2779b	ppb	7.1201	217.2	3.7789
Si 288.158	263.087b	ppb	1.5508	0.6	1693.17

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	5.0565b	ppb	5.9290	117.3	0.1325
Sr 216.596	13.1222b	ppb	0.5569	4.2	35.4187
Ti 334.941	0.1716b	ppb	0.0566	33.0	-14.3108
Tl 190.794	-7.2397b	ppb	3.1916	44.1	-4.2134
V 292.401	0.1958b	ppb	0.2195	112.1	-10.5063
Zn 206.200	14.4025b	ppb	1.5952	11.1	6.2938

680-166989-A-5-B (Samp) 4/9/2019, 3:41:07 AM Rack 3, Tube 53

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1878u	0.5058	0.5601
Al 308.215	18.3702	11.2973	16.8028
As 188.980	3.2874	-2.4322u	4.2964
B 249.678	30.2727	31.1913	31.5442
Ba 389.178	13.2496	9.0523	11.1942
Be 313.042	-0.0510u	-0.0629u	-0.0528u
Ca 370.602	549.6	556.2	547.4
Cd 226.502	-0.2143u	0.1980	0.8514
Co 228.615	0.8116	0.5335	-0.9852u
Cr 267.716	-0.3005u	0.4526	-0.3912u
Cu 324.754	2.2007	2.9276	3.4653
Fe 271.441	5.6590	-6.8048u	0.6298
K 766.491	74.7263	76.7253	74.5153
Mg 279.078	66.3936	71.2072	68.2132
Mn 257.610	38.7433	38.8839	38.9771
Mo 202.032	0.6197	0.0661	1.6078
Na 330.237	121731x	122589x	122053x
Ni 231.604	0.7294	2.2827	5.0488
Pb 220.353	-5.6931u	-2.4180u	-0.7385u
Sb 206.834	9.4187	5.1746	-7.8654u
Se 196.026	-1.8618u	5.8830	9.6029
Si 288.158	83.5040	84.8746	82.6763
Sn 189.925	-0.3385u	0.7162	0.8371
Sr 216.596	2.0603	2.2425	5.0751
Ti 334.941	-0.0541u	-0.1810u	0.1851
Tl 190.794	-6.0807u	-17.9249u	-3.9891u
V 292.401	0.4532	-0.3025u	-0.4507u
Zn 206.200	4.6364	3.8255	3.5360

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2927b	ppb	0.4170	142.5	-48.4122
Al 308.215	15.4901b	ppb	3.7147	24.0	269.672
As 188.980	1.7172b	ppb	3.6287	211.3	1.6787
B 249.678	31.0028b	ppb	0.6564	2.1	180.506
Ba 389.178	11.1654b	ppb	2.0988	18.8	25.7594
Be 313.042	-0.0556b	ppb	0.0065	11.6	-472.974
Ca 370.602	551.0b	ppb	4.596	0.8	792.3
Cd 226.502	0.2784b	ppb	0.5374	193.0	5.4170
Co 228.615	0.1200b	ppb	0.9672	806.2	-7.9767
Cr 267.716	-0.0797b	ppb	0.4632	581.2	9.8224
Cu 324.754	2.8645b	ppb	0.6347	22.2	549.140
Fe 271.441	-0.1720b	ppb	6.2705	3645.7	45.7318
K 766.491	75.3223b	ppb	1.2196	1.6	1515.13

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	68.6047b	ppb	2.4306	3.5	111.430
Mn 257.610	38.8681b	ppb	0.1177	0.3	2686.70
Mo 202.032	0.7646b	ppb	0.7810	102.1	3.7173
Na 330.237	122124xb	ppb	433.330	0.4	3021.28
Ni 231.604	2.6870b	ppb	2.1879	81.4	-0.0946
Pb 220.353	-2.9499b	ppb	2.5197	85.4	0.5754
Sb 206.834	2.2426b	ppb	9.0074	401.6	6.5486
Se 196.026	4.5414b	ppb	5.8489	128.8	5.2103
Si 288.158	83.6850b	ppb	1.1102	1.3	930.806
Sn 189.925	0.4049b	ppb	0.6467	159.7	-0.9127
Sr 216.596	3.1260b	ppb	1.6905	54.1	10.9893
Ti 334.941	-0.0166b	ppb	0.1859	1117.1	-28.5806
Tl 190.794	-9.3316b	ppb	7.5152	80.5	-4.6927
V 292.401	-0.1000b	ppb	0.4848	484.7	-12.8870
Zn 206.200	3.9993b	ppb	0.5704	14.3	0.7992

680-167000-A-1-B (Samp)

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Rack 3, Tube 54

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4935	0.7081	0.1735
Al 308.215	34.3863	35.9717	42.6049
As 188.980	-4.1204u	7.1146	8.0323
B 249.678	30.8141	31.0506	30.6271
Ba 389.178	21.1028	21.7588	17.1295
Be 313.042	-0.0424u	-0.0466u	-0.0485u
Ca 370.602	8749	8733	8733
Cd 226.502	-0.3120u	0.0960	0.4188
Co 228.615	-0.4241u	1.6327	1.4067
Cr 267.716	0.3489	0.5623	0.5450
Cu 324.754	4.5823	4.5595	3.5181
Fe 271.441	20.1690	5.8408	-16.6404u
K 766.491	296.150	296.169	294.270
Mg 279.078	228.110	213.098	224.852
Mn 257.610	57.3846	57.5921	57.4233
Mo 202.032	0.3769	1.4851	1.0096
Na 330.237	124911x	126400x	125386x
Ni 231.604	7.1211	9.3380	7.8251
Pb 220.353	13.2036	3.5518	13.5392
Sb 206.834	-6.4050u	-4.9167u	-0.4839u
Se 196.026	-3.2312u	-2.1672u	-10.5943u
Si 288.158	450.515	449.328	448.954
Sn 189.925	4.1399	9.9443	6.6371
Sr 216.596	18.0529	17.3874	17.9989
Ti 334.941	-0.0518u	0.0252	0.1701
Tl 190.794	-5.7233u	-9.0492u	3.8853
V 292.401	-0.3218u	0.4999	-0.1160u
Zn 206.200	14.5615	10.6736	10.7323

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4584b	ppb	0.2690	58.7	-43.9685
Al 308.215	37.6543b	ppb	4.3600	11.6	307.134
As 188.980	3.6755b	ppb	6.7670	184.1	2.1205
B 249.678	30.8306b	ppb	0.2122	0.7	179.397

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	19.9970b	ppb	2.5049	12.5	70.7937
Be 313.042	-0.0458b	ppb	0.0031	6.9	-464.446
Ca 370.602	8739b	ppb	9.269	0.1	12421
Cd 226.502	0.0676b	ppb	0.3662	541.6	3.0077
Co 228.615	0.8717b	ppb	1.1279	129.4	-5.4712
Cr 267.716	0.4854b	ppb	0.1185	24.4	18.0638
Cu 324.754	4.2200b	ppb	0.6080	14.4	584.483
Fe 271.441	3.1231b	ppb	18.5546	594.1	47.5759
K 766.491	295.529b	ppb	1.0910	0.4	5258.45
Mg 279.078	222.020b	ppb	7.8970	3.6	298.030
Mn 257.610	57.4667b	ppb	0.1103	0.2	3962.08
Mo 202.032	0.9572b	ppb	0.5560	58.1	3.9848
Na 330.237	125566xb	ppb	760.149	0.6	3105.42
Ni 231.604	8.0947b	ppb	1.1328	14.0	5.2162
Pb 220.353	10.0982b	ppb	5.6718	56.2	5.3965
Sb 206.834	-3.9352b	ppb	3.0802	78.3	4.6048
Se 196.026	-5.3309b	ppb	4.5892	86.1	3.4087
Si 288.158	449.599b	ppb	0.8149	0.2	2485.20
Sn 189.925	6.9071b	ppb	2.9116	42.2	0.5485
Sr 216.596	17.8131b	ppb	0.3696	2.1	46.8645
Ti 334.941	0.0479b	ppb	0.1126	235.4	-23.4278
Tl 190.794	-3.6291b	ppb	6.7167	185.1	-3.3622
V 292.401	0.0207b	ppb	0.4275	2066.7	-11.9339
Zn 206.200	11.9891b	ppb	2.2279	18.6	5.0189

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	10.4128	11.2568	10.1849
Al 308.215	215.110	207.948	219.296
As 188.980	15.7305	23.3038	20.2562
B 249.678	107.920	106.969	109.286
Ba 389.178	8.8341	7.2517	6.3748
Be 313.042	4.2089	4.2211	4.1937
Ca 370.602	515.3	499.7	504.0
Cd 226.502	4.8870	5.0030	4.4990
Co 228.615	8.8660	9.9789	9.6442
Cr 267.716	10.0221	9.6301	10.7938
Cu 324.754	22.3810	23.2128	22.7212
Fe 271.441	30.2810	56.6045	56.0510
K 766.491	971.633	972.024	970.399
Mg 279.078	520.684	517.811	525.248
Mn 257.610	11.1411	11.1459	11.1821
Mo 202.032	11.2397	11.6411	11.5467
Na 330.237	1055.29	1310.08	1358.38
Ni 231.604	39.0888	41.9173	43.6358
Pb 220.353	14.5876	5.7423	7.5472
Sb 206.834	20.7465	17.0693	30.5846
Se 196.026	16.6599	6.4296	10.5343
Si 288.158	22.8516	22.1982	21.6336
Sn 189.925	51.0407	53.6616	36.6298
Sr 216.596	9.1720	8.8693	9.5099
Ti 334.941	9.9430	9.8387	9.8094

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Label	Replicates Concentration		
TI 190.794	35.2099	22.1622	0.0927
V 292.401	10.0409	9.7654	10.2639
Zn 206.200	22.6814	24.5693	24.4053

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.6182	ppb	0.5647	5.3	229.098
Al 308.215	214.118	ppb	5.7386	2.7	605.685
As 188.980	19.7635	ppb	3.8106	19.3	5.9472
B 249.678	108.058	ppb	1.1650	1.1	674.715
Ba 389.178	7.4869	ppb	1.2464	16.6	7.4387
Be 313.042	4.2079	ppb	0.0137	0.3	2829.13
Ca 370.602	506.3	ppb	8.008	1.6	728.6
Cd 226.502	4.7963	ppb	0.2640	5.5	57.3905
Co 228.615	9.4963	ppb	0.5710	6.0	23.2868
Cr 267.716	10.1487	ppb	0.5921	5.8	157.601
Cu 324.754	22.7716	ppb	0.4182	1.8	1068.27
Fe 271.441	47.6455	ppb	15.0406	31.6	72.0978
K 766.491	971.352	ppb	0.8482	0.1	16746.8
Mg 279.078	521.247	ppb	3.7504	0.7	662.724
Mn 257.610	11.1564	ppb	0.0224	0.2	788.919
Mo 202.032	11.4758	ppb	0.2099	1.8	18.5925
Na 330.237	1241.25	ppb	162.847	13.1	62.5313
Ni 231.604	41.5473	ppb	2.2960	5.5	38.0686
Pb 220.353	9.2924	ppb	4.6738	50.3	5.0910
Sb 206.834	22.8001	ppb	6.9878	30.6	13.0467
Se 196.026	11.2079	ppb	5.1483	45.9	6.4254
Si 288.158	22.2278	ppb	0.6095	2.7	675.587
Sn 189.925	47.1107	ppb	9.1708	19.5	9.5708
Sr 216.596	9.1838	ppb	0.3205	3.5	25.5499
Ti 334.941	9.8637	ppb	0.0702	0.7	720.460
TI 190.794	19.1550	ppb	17.7507	92.7	1.9296
V 292.401	10.0234	ppb	0.2497	2.5	69.5802
Zn 206.200	23.8854	ppb	1.0459	4.4	11.2973

x (Samp)

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Rack 3, Tube 56

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	10.2144	10.8333	10.6597
Al 308.215	210.771	211.076	210.950
As 188.980	19.1981	13.8681	24.7369
B 249.678	108.236	110.623	110.360
Ba 389.178	9.6173	4.9321	8.2421
Be 313.042	4.2128	4.1756	4.1767
Ca 370.602	509.3	488.8	503.2
Cd 226.502	4.8449	4.5642	4.6943
Co 228.615	11.0599	10.7208	9.8654
Cr 267.716	9.4301	10.5607	9.8870
Cu 324.754	22.7883	22.9635	23.4205
Fe 271.441	22.3144	34.9094	58.3895
K 766.491	966.739	973.249	971.304
Mg 279.078	511.427	519.589	509.162
Mn 257.610	11.2050	11.1110	11.0539
Mo 202.032	9.1658	11.4411	12.3443

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Label	Replicates Concentration		
Na 330.237	1035.42	1086.14	1149.24
Ni 231.604	41.9515	42.2502	40.7747
Pb 220.353	15.0255	14.2476	11.6426
Sb 206.834	18.4061	14.7855	18.3260
Se 196.026	26.2546	13.1970	19.1333
Si 288.158	23.2502	22.9838	22.5816
Sn 189.925	58.4586	39.4221	42.9639
Sr 216.596	9.3160	11.6000	10.4780
Ti 334.941	10.0146	9.7288	9.9197
Tl 190.794	18.0684	19.9322	16.3384
V 292.401	9.8494	9.7904	10.7771
Zn 206.200	20.2868	23.6870	25.6549

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	10.5691	ppb	0.3192	3.0	227.776
Al 308.215	210.933	ppb	0.1533	0.1	600.294
As 188.980	19.2677	ppb	5.4347	28.2	5.8475
B 249.678	109.740	ppb	1.3092	1.2	685.507
Ba 389.178	7.5972	ppb	2.4083	31.7	7.9921
Be 313.042	4.1884	ppb	0.0212	0.5	2814.12
Ca 370.602	500.4	ppb	10.50	2.1	720.2
Cd 226.502	4.7011	ppb	0.1405	3.0	56.2932
Co 228.615	10.5487	ppb	0.6155	5.8	26.8082
Cr 267.716	9.9592	ppb	0.5688	5.7	154.851
Cu 324.754	23.0574	ppb	0.3264	1.4	1075.70
Fe 271.441	38.5377	ppb	18.3092	47.5	67.2056
K 766.491	970.431	ppb	3.3417	0.3	16731.2
Mg 279.078	513.393	ppb	5.4844	1.1	653.162
Mn 257.610	11.1233	ppb	0.0763	0.7	786.630
Mo 202.032	10.9837	ppb	1.6379	14.9	17.9091
Na 330.237	1090.27	ppb	57.0229	5.2	58.8475
Ni 231.604	41.6588	ppb	0.7801	1.9	38.1774
Pb 220.353	13.6386	ppb	1.7718	13.0	6.6968
Sb 206.834	17.1726	ppb	2.0676	12.0	11.2736
Se 196.026	19.5283	ppb	6.5378	33.5	7.9453
Si 288.158	22.9385	ppb	0.3366	1.5	678.266
Sn 189.925	46.9482	ppb	10.1244	21.6	9.5343
Sr 216.596	10.4647	ppb	1.1421	10.9	28.6893
Ti 334.941	9.8877	ppb	0.1455	1.5	722.255
Tl 190.794	18.1130	ppb	1.7973	9.9	1.6880
V 292.401	10.1390	ppb	0.5534	5.5	70.5979
Zn 206.200	23.2096	ppb	2.7157	11.7	10.9406

Cont Calib Verif (CCV) 4/9/2019, 3:58:49 AM Rack S, Tube 10
Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	495.006	500.743	501.453
Al 308.215	10428.6	10440.3	10468.6
As 188.980	548.779	563.035	555.391
B 249.678	546.995	551.774	556.451
Ba 389.178	471.851	474.989	469.456
Be 313.042	547.310	549.280	549.945
Ca 370.602	10168	10177	10180

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	519.131	516.061	518.171
Co 228.615	516.136	512.863	520.002
Cr 267.716	501.142	499.597	502.383
Cu 324.754	515.925	518.641	517.675
Fe 271.441	10211.0	10161.7	10211.1
K 766.491	10125.9	10128.6	10142.4
Mg 279.078	10512.0	10543.7	10569.2
Mn 257.610	511.091	511.650	514.909
Mo 202.032	515.649	513.995	511.863
Na 330.237	11127.3	11264.1	10088.6
Ni 231.604	520.515	521.943	516.451
Pb 220.353	500.207	495.933	496.723
Sb 206.834	521.582	518.738	511.902
Se 196.026	571.630	548.768	562.842
Si 288.158	5096.85	5101.33	5113.23
Sn 189.925	515.668	509.267	510.658
Sr 216.596	497.967	498.108	502.046
Ti 334.941	496.727	496.980	498.573
Tl 190.794	492.601	485.860	501.631
V 292.401	510.161	510.013	511.677
Zn 206.200	1090.66	1082.14	1074.47

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	499.067	ppb	3.5351	0.7	13358.2	99.81349
Al 308.215	10445.8	ppb	20.5806	0.2	17913.5	104.45812
As 188.980	555.735	ppb	7.1346	1.3	134.923	111.14701Q
B 249.678	551.740	ppb	4.7283	0.9	3510.77	110.34800Q
Ba 389.178	472.098	ppb	2.7750	0.6	2380.31	94.41969
Be 313.042	548.845	ppb	1.3705	0.2	424037	109.76902
Ca 370.602	10175	ppb	5.974	0.1	14463	101.75140
Cd 226.502	517.788	ppb	1.5704	0.3	5942.38	103.55754
Co 228.615	516.334	ppb	3.5733	0.7	1713.94	103.26674
Cr 267.716	501.041	ppb	1.3960	0.3	7281.30	100.20811
Cu 324.754	517.414	ppb	1.3768	0.3	13970.8	103.48271
Fe 271.441	10194.6	ppb	28.4563	0.3	5587.58	101.89501
K 766.491	10132.3	ppb	8.8747	0.1	172475	101.32323
Mg 279.078	10541.6	ppb	28.6327	0.3	12855.7	105.41611
Mn 257.610	512.550	ppb	2.0615	0.4	35201.0	102.51003
Mo 202.032	513.836	ppb	1.8979	0.4	716.163	102.76713
Na 330.237	10826.7	ppb	642.855	5.9	281.570	108.26673
Ni 231.604	519.636	ppb	2.8493	0.5	507.277	103.92727
Pb 220.353	497.621	ppb	2.2738	0.5	185.270	99.52419
Sb 206.834	517.407	ppb	4.9751	1.0	170.075	103.48146
Se 196.026	561.080	ppb	11.5324	2.1	106.883	112.21600Q
Si 288.158	5103.81	ppb	8.4638	0.2	22372.5	102.07613
Sn 189.925	511.864	ppb	3.3665	0.7	113.995	102.37286
Sr 216.596	499.373	ppb	2.3154	0.5	1218.09	99.87468
Ti 334.941	497.426	ppb	1.0009	0.2	37541.0	99.48528
Tl 190.794	493.364	ppb	7.9131	1.6	112.314	98.67287
V 292.401	510.617	ppb	0.9207	0.2	4137.77	102.12343
Zn 206.200	1082.42	ppb	8.0956	0.7	570.154	108.24214

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Blank (CCB) 4/9/2019, 4:03:14 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.0681	0.8979	1.1243
Al 308.215	4.8915	0.1808	11.1239
As 188.980	5.6238	6.4647	0.1190
B 249.678	17.2109	14.8820	12.8085
Ba 389.178	-2.2773u	-2.0704u	-2.4070u
Be 313.042	0.0073	0.0221	0.0270
Ca 370.602	5.462	20.53	6.307
Cd 226.502	-0.2753u	0.6133	0.3818
Co 228.615	-0.1729u	-0.5324u	2.0468
Cr 267.716	0.5693	-0.2272u	0.1798
Cu 324.754	2.8849	3.3881	1.8365
Fe 271.441	15.0406	17.8744	19.5493
K 766.491	3.2422	2.8500	2.3581
Mg 279.078	3.3479	5.1590	0.6720
Mn 257.610	0.2478	0.1685	0.1229
Mo 202.032	1.8464	1.8627	1.7105
Na 330.237	499.410	87.6632	-45.5491u
Ni 231.604	3.7042	2.5110	-2.4727u
Pb 220.353	0.1440	4.3728	-3.9974u
Sb 206.834	11.5292	-0.3940u	4.0832
Se 196.026	-7.0139u	-3.0466u	-8.5424u
Si 288.158	19.3987	14.7152	18.1243
Sn 189.925	2.9417	2.8207	13.6604
Sr 216.596	-0.7736u	-1.4764u	1.1585
Ti 334.941	0.2659	0.7098	0.5960
Tl 190.794	-6.2412u	4.3663	-14.0239u
V 292.401	0.0865	-0.9670u	0.8699
Zn 206.200	0.2326	0.5070	-1.4725u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.6968	ppb	0.5561	79.8	-37.6045	0.69677
Al 308.215	5.3987	ppb	5.4892	101.7	252.630	5.39872
As 188.980	4.0692	ppb	3.4467	84.7	2.2273	4.06917
B 249.678	14.9671	ppb	2.2025	14.7	77.6342	14.96714
Ba 389.178	-2.2515	ppb	0.1698	7.5	-42.5146	-2.25155
Be 313.042	0.0188	ppb	0.0103	54.6	-410.321	0.01880
Ca 370.602	10.77	ppb	8.466	78.6	24.46	10.76666
Cd 226.502	0.2400	ppb	0.4610	192.1	5.1847	0.23995
Co 228.615	0.4471	ppb	1.3969	312.4	-6.8869	0.44715
Cr 267.716	0.1740	ppb	0.3983	229.0	12.8593	0.17395
Cu 324.754	2.7032	ppb	0.7916	29.3	544.943	2.70317
Fe 271.441	17.4881	ppb	2.2790	13.0	55.3221	17.48810
K 766.491	2.8168	ppb	0.4430	15.7	282.597	2.81677
Mg 279.078	3.0596	ppb	2.2574	73.8	31.9909	3.05962
Mn 257.610	0.1798	ppb	0.0632	35.2	34.7577	0.17975
Mo 202.032	1.8065	ppb	0.0836	4.6	5.1643	1.80652
Na 330.237	180.508	ppb	284.095	157.4	36.9059	180.50792
Ni 231.604	1.2475	ppb	3.2766	262.6	-1.5091	1.24753
Pb 220.353	0.1731	ppb	4.1852	2417.4	1.7270	0.17313
Sb 206.834	5.0728	ppb	6.0229	118.7	7.4403	5.07281
Se 196.026	-6.2010	ppb	2.8367	45.7	3.2445	-6.20098
Si 288.158	17.4127	ppb	2.4215	13.9	649.649	17.41275

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	6.4742	ppb	6.2237	96.1	0.4404	6.47424
Sr 216.596	-0.3638	ppb	1.3644	375.0	2.4631	-0.36381
Ti 334.941	0.5239	ppb	0.2305	44.0	14.3910	0.52392
Tl 190.794	-5.2996	ppb	9.2312	174.2	-3.7631	-5.29959
V 292.401	-0.0035	ppb	0.9217	26040.1	-11.8705	-0.00354
Zn 206.200	-0.2443	ppb	1.0724	439.0	-1.4422	-0.24430

MB 680-565357/1-A (Samp) **4/9/2019, 4:07:38 AM** **Rack 4, Tube 1**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.7937	-0.0798u	-0.2378u
Al 308.215	12.1192	-0.8484u	1.7614
As 188.980	-7.7723u	2.8698	6.2927
B 249.678	4.7626	5.2338	4.0319
Ba 389.178	-2.6696u	-0.7633u	-1.2891u
Be 313.042	-0.0780u	-0.0808u	-0.0919u
Ca 370.602	2.129	2.047	-0.5206u
Cd 226.502	0.1913	0.1726	-0.0252u
Co 228.615	-0.6081u	0.0746	-0.8918u
Cr 267.716	0.3483	0.0742	0.2745
Cu 324.754	2.0850	2.6782	0.7292
Fe 271.441	-11.6371u	-10.8665u	-3.8397u
K 766.491	2.2807	1.2167	0.5896
Mg 279.078	-1.5587u	-7.5867u	-4.5856u
Mn 257.610	-0.0549u	-0.1042u	0.0164
Mo 202.032	1.9488	0.8057	-0.2862u
Na 330.237	-138.855u	-52.4990u	-120.965u
Ni 231.604	1.7459	3.4726	2.1192
Pb 220.353	14.8859	-5.7193u	-7.7348u
Sb 206.834	-7.8429u	-3.9231u	-2.0796u
Se 196.026	-3.4733u	-6.5497u	6.2743
Si 288.158	11.6581	11.8997	13.5324
Sn 189.925	1.1661	-8.2003u	0.6664
Sr 216.596	0.6157	0.8733	0.1725
Ti 334.941	0.1642	0.0482	0.1101
Tl 190.794	-10.0205u	10.7627	-1.1255u
V 292.401	-0.2612u	0.3826	0.2670
Zn 206.200	0.0028	1.0101	-0.0689u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1587	ppb	0.5556	350.1	-52.0712
Al 308.215	4.3441	ppb	6.8588	157.9	250.836
As 188.980	0.4634	ppb	7.3348	1582.8	1.3066
B 249.678	4.6761	ppb	0.6056	13.0	11.6424
Ba 389.178	-1.5740	ppb	0.9846	62.6	-39.0796
Be 313.042	-0.0836	ppb	0.0074	8.8	-489.427
Ca 370.602	1.218	ppb	1.507	123.6	10.92
Cd 226.502	0.1129	ppb	0.1199	106.2	3.7081
Co 228.615	-0.4751	ppb	0.4968	104.6	-9.9610
Cr 267.716	0.2323	ppb	0.1419	61.1	13.7028
Cu 324.754	1.8308	ppb	0.9991	54.6	522.185
Fe 271.441	-8.7811	ppb	4.2967	48.9	41.0653
K 766.491	1.3623	ppb	0.8549	62.8	257.873

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	-4.5770	ppb	3.0140	65.9	22.6960
Mn 257.610	-0.0476	ppb	0.0606	127.4	19.1355
Mo 202.032	0.8228	ppb	1.1176	135.8	3.7982
Na 330.237	-104.106	ppb	45.5795	43.8	29.9251
Ni 231.604	2.4459	ppb	0.9085	37.1	-0.3312
Pb 220.353	0.4773	ppb	12.5189	2623.1	1.8397
Sb 206.834	-4.6152	ppb	2.9433	63.8	4.3895
Se 196.026	-1.2496	ppb	6.6949	535.8	4.1490
Si 288.158	12.3634	ppb	1.0196	8.2	628.325
Sn 189.925	-2.1226	ppb	5.2694	248.2	-1.4912
Sr 216.596	0.5538	ppb	0.3545	64.0	4.7029
Ti 334.941	0.1075	ppb	0.0580	54.0	-17.0475
Tl 190.794	-0.1278	ppb	10.4275	8161.1	-2.5601
V 292.401	0.1295	ppb	0.3432	265.1	-10.7370
Zn 206.200	0.3146	ppb	0.6033	191.8	-1.1471

LCS 680-565357/2-A (Samp) 4/9/2019, 4:12:04 AM Rack 4, Tube 2
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	50.9713	50.4617	50.4881
Al 308.215	5093.28	5069.04	5095.37
As 188.980	105.631	111.430	110.108
B 249.678	214.428	216.500	218.364
Ba 389.178	93.6532	93.4916	89.9536
Be 313.042	54.2989	54.1973	54.2202
Ca 370.602	4944	4946	4937
Cd 226.502	51.4018	51.7751	51.6068
Co 228.615	51.5683	54.0842	53.0044
Cr 267.716	99.3880	99.0103	99.5225
Cu 324.754	104.608	104.212	104.205
Fe 271.441	4975.03	4958.22	4986.89
K 766.491	8094.56	8110.64	8094.51
Mg 279.078	5141.12	5143.13	5153.11
Mn 257.610	503.564	501.949	502.878
Mo 202.032	101.307	103.572	104.950
Na 330.237	5635.75	5510.84	5197.61
Ni 231.604	103.743	102.601	104.704
Pb 220.353	483.737	498.749	483.999
Sb 206.834	52.0405	50.8199	46.7784
Se 196.026	116.546	95.9966	110.788
Si 288.158	9.3777	6.2343	7.7454
Sn 189.925	107.780	102.672	103.028
Sr 216.596	98.2333	97.9752	99.3537
Ti 334.941	391.199	390.138	390.816
Tl 190.794	28.1593	35.3919	40.0263
V 292.401	101.935	99.8087	100.914
Zn 206.200	109.281	105.356	106.755

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.6404	ppb	0.2869	0.6	1304.49
Al 308.215	5085.90	ppb	14.6332	0.3	8842.18
As 188.980	109.056	ppb	3.0391	2.8	27.7457
B 249.678	216.430	ppb	1.9689	0.9	1365.08

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	92.3661	ppb	2.0909	2.3	443.603
Be 313.042	54.2388	ppb	0.0533	0.1	41520.1
Ca 370.602	4942	ppb	4.877	0.1	7034
Cd 226.502	51.5946	ppb	0.1869	0.4	599.227
Co 228.615	52.8857	ppb	1.2621	2.4	169.737
Cr 267.716	99.3069	ppb	0.2655	0.3	1452.38
Cu 324.754	104.341	ppb	0.2307	0.2	3196.57
Fe 271.441	4973.38	ppb	14.4047	0.3	2739.56
K 766.491	8099.90	ppb	9.2957	0.1	137926
Mg 279.078	5145.79	ppb	6.4230	0.1	6287.50
Mn 257.610	502.797	ppb	0.8107	0.2	34511.3
Mo 202.032	103.276	ppb	1.8397	1.8	146.036
Na 330.237	5448.06	ppb	225.715	4.1	161.356
Ni 231.604	103.683	ppb	1.0531	1.0	99.0679
Pb 220.353	488.829	ppb	8.5924	1.8	182.206
Sb 206.834	49.8796	ppb	2.7542	5.5	21.8356
Se 196.026	107.777	ppb	10.6006	9.8	24.0950
Si 288.158	7.7858	ppb	1.5721	20.2	645.984
Sn 189.925	104.494	ppb	2.8517	2.7	22.4643
Sr 216.596	98.5207	ppb	0.7328	0.7	243.286
Ti 334.941	390.718	ppb	0.5373	0.1	29475.1
Tl 190.794	34.5258	ppb	5.9807	17.3	5.5233
V 292.401	100.886	ppb	1.0635	1.1	809.088
Zn 206.200	107.131	ppb	1.9894	1.9	55.2289

660-93603-B-1-D (Samp)

4/9/2019, 4:16:30 AM

Rack 4, Tube 3

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5949u	-0.3322u	0.3205
Al 308.215	27.2025	12.6399	23.3486
As 188.980	7.2970	12.4533	1.3088
B 249.678	28.3465	26.2451	26.2886
Ba 389.178	-0.9692u	1.8484	-0.3542
Be 313.042	-0.0698u	-0.0665u	-0.0468u
Ca 370.602	99232	99221	99332
Cd 226.502	0.3178	0.6105	0.8085
Co 228.615	0.9664	-1.7973u	-0.1010u
Cr 267.716	3.7394	4.3115	4.1039
Cu 324.754	94.1773	92.4743	92.4620
Fe 271.441	511.285	495.725	507.065
K 766.491	690.492	685.781	689.496
Mg 279.078	5553.08	5567.72	5556.28
Mn 257.610	19.2342	19.3362	19.1211
Mo 202.032	37.7258	36.7435	37.0545
Na 330.237	8821.08	9396.11	9193.11
Ni 231.604	13.2631	15.0964	15.3941
Pb 220.353	5.3050	2.7454	4.2855
Sb 206.834	8.8558	5.7151	-9.8604u
Se 196.026	1.7838	-2.7048u	1.2737
Si 288.158	6109.15	6100.34	6105.11
Sn 189.925	-9.3848u	15.4520	-5.8582u
Sr 216.596	923.295	924.359	925.062
Ti 334.941	0.3704	0.5979	0.2955

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-3.2569u	-9.8370u	-4.4132u
V 292.401	11.7590	11.2199	10.1000
Zn 206.200	955.773	961.124	962.342

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2022	ppb	0.4713	233.1	-64.4132
Al 308.215	21.0637	ppb	7.5454	35.8	279.766
As 188.980	7.0197	ppb	5.5774	79.5	2.9443
B 249.678	26.9601	ppb	1.2009	4.5	154.089
Ba 389.178	0.1750	ppb	1.4815	846.5	-25.6521
Be 313.042	-0.0611	ppb	0.0125	20.4	-460.126
Ca 370.602	99261	ppb	61.01	0.1	140983
Cd 226.502	0.5789	ppb	0.2469	42.6	9.6703
Co 228.615	-0.3106	ppb	1.3937	448.7	-9.7022
Cr 267.716	4.0516	ppb	0.2896	7.1	69.2051
Cu 324.754	93.0379	ppb	0.9868	1.1	2900.68
Fe 271.441	504.692	ppb	8.0469	1.6	318.942
K 766.491	688.590	ppb	2.4829	0.4	11940.1
Mg 279.078	5559.03	ppb	7.6985	0.1	6795.96
Mn 257.610	19.2305	ppb	0.1076	0.6	1358.51
Mo 202.032	37.1746	ppb	0.5020	1.4	54.2815
Na 330.237	9136.77	ppb	291.623	3.2	245.868
Ni 231.604	14.5845	ppb	1.1540	7.9	11.5922
Pb 220.353	4.1120	ppb	1.2886	31.3	3.1758
Sb 206.834	1.5702	ppb	10.0229	638.3	6.3506
Se 196.026	0.1176	ppb	2.4575	2090.1	4.3989
Si 288.158	6104.87	ppb	4.4117	0.1	26504.1
Sn 189.925	0.0697	ppb	13.4377	19288.1	-0.9979
Sr 216.596	924.239	ppb	0.8896	0.1	2262.23
Ti 334.941	0.4213	ppb	0.1575	37.4	19.1326
Tl 190.794	-5.8357	ppb	3.5131	60.2	-3.8996
V 292.401	11.0263	ppb	0.8463	7.7	76.4525
Zn 206.200	959.746	ppb	3.4947	0.4	505.602

660-93603-B-1-Dsd^5 (Samp) 4/9/2019, 4:20:57 AM Rack 4, Tube 4

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0732u	0.2001	0.0017u
Al 308.215	13.9074	10.6521	9.0076
As 188.980	-1.3388u	0.8811	3.1288
B 249.678	6.5512	6.8141	7.1321
Ba 389.178	-2.3663u	-4.3519u	1.8968
Be 313.042	-0.0895u	-0.0779u	-0.0811u
Ca 370.602	18494	18438	18434
Cd 226.502	-0.4893u	0.4144	0.1916
Co 228.615	0.6141	0.5326	0.0244
Cr 267.716	-0.0444u	0.6911	1.7025
Cu 324.754	18.5856	20.4447	20.5955
Fe 271.441	89.8146	99.6213	89.8518
K 766.491	117.955	118.594	118.989
Mg 279.078	1032.04	1027.71	1039.28
Mn 257.610	3.3749	3.4601	3.5456
Mo 202.032	7.0767	9.0621	7.2665

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	1465.93	1681.82	1776.23
Ni 231.604	4.1399	8.1340	3.1663
Pb 220.353	-2.0029u	1.4080	0.3878
Sb 206.834	7.2461	-6.0199u	5.1806
Se 196.026	1.6871	0.8331	17.0145
Si 288.158	1159.83	1156.74	1154.85
Sn 189.925	-7.5490u	-5.0450u	8.6310
Sr 216.596	172.875	169.371	173.773
Ti 334.941	0.2439	0.2336	-0.0417u
Tl 190.794	3.9118	-16.1757u	2.7861
V 292.401	2.0794	2.9810	2.6852
Zn 206.200	183.409	177.827	177.207

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0429	ppb	0.1412	329.3	-55.6695
Al 308.215	11.1890	ppb	2.4936	22.3	262.550
As 188.980	0.8903	ppb	2.2338	250.9	1.4364
B 249.678	6.8325	ppb	0.2909	4.3	25.3849
Ba 389.178	-1.6071	ppb	3.1928	198.7	-38.3997
Be 313.042	-0.0829	ppb	0.0060	7.2	-486.710
Ca 370.602	18456	ppb	33.35	0.2	26220
Cd 226.502	0.0389	ppb	0.4708	1209.8	2.9757
Co 228.615	0.3904	ppb	0.3196	81.9	-7.1324
Cr 267.716	0.7830	ppb	0.8771	112.0	21.7082
Cu 324.754	19.8753	ppb	1.1194	5.6	992.749
Fe 271.441	93.0959	ppb	5.6512	6.1	96.2286
K 766.491	118.513	ppb	0.5220	0.4	2249.33
Mg 279.078	1033.01	ppb	5.8488	0.6	1285.88
Mn 257.610	3.4602	ppb	0.0854	2.5	262.933
Mo 202.032	7.8018	ppb	1.0956	14.0	13.4902
Na 330.237	1641.33	ppb	159.062	9.7	70.7388
Ni 231.604	5.1467	ppb	2.6324	51.1	2.3212
Pb 220.353	-0.0690	ppb	1.7507	2535.9	1.6363
Sb 206.834	2.1356	ppb	7.1380	334.2	6.5175
Se 196.026	6.5116	ppb	9.1058	139.8	5.5667
Si 288.158	1157.14	ppb	2.5121	0.2	5490.28
Sn 189.925	-1.3210	ppb	8.7091	659.3	-1.3110
Sr 216.596	172.006	ppb	2.3264	1.4	423.731
Ti 334.941	0.1453	ppb	0.1620	111.5	-11.8615
Tl 190.794	-3.1593	ppb	11.2866	357.3	-3.2672
V 292.401	2.5819	ppb	0.4596	17.8	8.9225
Zn 206.200	179.481	ppb	3.4157	1.9	93.4843

660-93603-B-1-Dpds (Samp) 4/9/2019, 4:25:23 AM Rack 4, Tube 5
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.5391	52.3195	52.0837
Al 308.215	5174.15	5161.19	5191.47
As 188.980	122.529	116.879	126.803
B 249.678	237.226	239.775	240.780
Ba 389.178	96.7615	96.8726	98.1420
Be 313.042	54.7992	54.7140	54.7956
Ca 370.602	101995	102085	102048

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	52.0062	52.1499	51.9404
Co 228.615	51.4347	52.7933	51.2675
Cr 267.716	104.615	104.257	104.482
Cu 324.754	194.474	194.732	191.896
Fe 271.441	5530.68	5514.11	5538.55
K 766.491	9265.77	9255.22	9259.29
Mg 279.078	10608.8	10605.3	10620.8
Mn 257.610	524.886	527.649	525.373
Mo 202.032	139.274	138.860	138.867
Na 330.237	14327.4	14108.8	14736.5
Ni 231.604	118.697	116.085	118.208
Pb 220.353	515.422	505.481	494.734
Sb 206.834	51.2687	51.9919	58.9533
Se 196.026	109.726	122.141	123.653
Si 288.158	6022.78	6024.82	6030.29
Sn 189.925	108.193	114.205	91.1166
Sr 216.596	1001.95	1008.30	1004.91
Ti 334.941	393.285	393.725	394.193
Tl 190.794	32.8962	24.1527	33.4329
V 292.401	111.704	112.882	114.689
Zn 206.200	1052.89	1043.41	1034.40

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.3141	ppb	0.2277	0.4	1346.90
Al 308.215	5175.61	ppb	15.1944	0.3	8994.48
As 188.980	122.070	ppb	4.9781	4.1	30.9213
B 249.678	239.260	ppb	1.8318	0.8	1510.98
Ba 389.178	97.2587	ppb	0.7670	0.8	472.949
Be 313.042	54.7696	ppb	0.0481	0.1	41942.3
Ca 370.602	102043	ppb	45.31	0.0	144940
Cd 226.502	52.0322	ppb	0.1071	0.2	604.927
Co 228.615	51.8318	ppb	0.8368	1.6	165.954
Cr 267.716	104.451	ppb	0.1811	0.2	1527.12
Cu 324.754	193.701	ppb	1.5681	0.8	5526.88
Fe 271.441	5527.78	ppb	12.4741	0.2	3039.54
K 766.491	9260.09	ppb	5.3215	0.1	157648
Mg 279.078	10611.6	ppb	8.1589	0.1	12941.7
Mn 257.610	525.969	ppb	1.4753	0.3	36117.4
Mo 202.032	139.000	ppb	0.2372	0.2	195.646
Na 330.237	14390.9	ppb	318.644	2.2	370.219
Ni 231.604	117.663	ppb	1.3888	1.2	112.801
Pb 220.353	505.213	ppb	10.3466	2.0	188.253
Sb 206.834	54.0713	ppb	4.2433	7.8	23.1725
Se 196.026	118.506	ppb	7.6420	6.4	26.0553
Si 288.158	6025.96	ppb	3.8833	0.1	26206.3
Sn 189.925	104.505	ppb	11.9781	11.5	22.4677
Sr 216.596	1005.05	ppb	3.1783	0.3	2458.89
Ti 334.941	393.734	ppb	0.4541	0.1	29715.1
Tl 190.794	30.1606	ppb	5.2099	17.3	4.4961
V 292.401	113.091	ppb	1.5035	1.3	907.052
Zn 206.200	1043.57	ppb	9.2435	0.9	549.832

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

660-93603-B-1-E MS (Samp) 4/9/2019, 4:29:49 AM Rack 4, Tube 6**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	53.2563	53.3944	52.1117
Al 308.215	5209.68	5186.15	5206.09
As 188.980	113.213	120.928	119.055
B 249.678	247.754	245.356	246.194
Ba 389.178	102.429	101.314	99.3988
Be 313.042	55.1343	54.7826	55.0701
Ca 370.602	109498	109108	109364
Cd 226.502	53.2038	52.5748	52.9626
Co 228.615	53.0857	52.9691	50.8046
Cr 267.716	104.898	104.425	104.763
Cu 324.754	198.084	201.747	200.787
Fe 271.441	5626.03	5560.62	5576.35
K 766.491	9412.87	9393.60	9399.59
Mg 279.078	11069.3	11028.0	11039.5
Mn 257.610	530.763	528.732	530.653
Mo 202.032	141.828	141.356	144.599
Na 330.237	15187.8	15726.5	15391.8
Ni 231.604	121.423	118.205	119.821
Pb 220.353	511.696	494.141	515.317
Sb 206.834	52.9902	38.5185	57.3122
Se 196.026	107.965	128.087	105.528
Si 288.158	6475.61	6447.40	6472.03
Sn 189.925	120.647	98.3018	116.214
Sr 216.596	1068.25	1071.87	1066.39
Ti 334.941	396.525	394.834	396.142
Tl 190.794	38.9406	45.4015	50.0432
V 292.401	114.220	114.982	114.153
Zn 206.200	1116.96	1121.35	1111.56

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.9208	ppb	0.7041	1.3	1363.00
Al 308.215	5200.64	ppb	12.6740	0.2	9036.88
As 188.980	117.732	ppb	4.0239	3.4	29.8246
B 249.678	246.435	ppb	1.2171	0.5	1556.93
Ba 389.178	101.048	ppb	1.5328	1.5	492.574
Be 313.042	54.9957	ppb	0.1873	0.3	42117.8
Ca 370.602	109323	ppb	198.0	0.2	155280
Cd 226.502	52.9137	ppb	0.3174	0.6	615.107
Co 228.615	52.2865	ppb	1.2847	2.5	167.445
Cr 267.716	104.696	ppb	0.2435	0.2	1530.68
Cu 324.754	200.206	ppb	1.8993	0.9	5696.56
Fe 271.441	5587.67	ppb	34.1419	0.6	3071.97
K 766.491	9402.02	ppb	9.8606	0.1	160061
Mg 279.078	11045.6	ppb	21.3001	0.2	13470.0
Mn 257.610	530.049	ppb	1.1421	0.2	36398.5
Mo 202.032	142.595	ppb	1.7518	1.2	200.638
Na 330.237	15435.4	ppb	272.007	1.8	394.976
Ni 231.604	119.817	ppb	1.6090	1.3	114.916
Pb 220.353	507.052	ppb	11.3263	2.2	188.931
Sb 206.834	49.6070	ppb	9.8430	19.8	21.7667
Se 196.026	113.860	ppb	12.3814	10.9	25.2066
Si 288.158	6465.02	ppb	15.3595	0.2	28071.0

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	111.721	ppb	11.8307	10.6	24.0890
Sr 216.596	1068.83	ppb	2.7892	0.3	2614.74
Ti 334.941	395.834	ppb	0.8870	0.2	29874.5
Tl 190.794	44.7951	ppb	5.5761	12.4	7.8985
V 292.401	114.452	ppb	0.4604	0.4	917.898
Zn 206.200	1116.62	ppb	4.9010	0.4	588.419

660-93603-B-1-F MSD (Samp) 4/9/2019, 4:34:15 AM Rack 4, Tube 7

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	53.6801	53.1949	52.1670
Al 308.215	5186.78	5190.20	5186.67
As 188.980	126.401	113.084	112.140
B 249.678	247.244	245.001	246.436
Ba 389.178	98.6602	101.477	99.5715
Be 313.042	54.9158	55.0426	54.9686
Ca 370.602	103739	103930	103758
Cd 226.502	51.8890	52.0132	52.3719
Co 228.615	51.7693	52.3462	50.0457
Cr 267.716	104.936	104.430	104.954
Cu 324.754	194.645	196.156	197.887
Fe 271.441	6655.77	6651.74	6679.03
K 766.491	9320.26	9325.70	9289.69
Mg 279.078	10720.7	10734.7	10734.1
Mn 257.610	530.965	529.866	530.163
Mo 202.032	142.201	135.255	142.555
Na 330.237	14845.8	15219.7	15335.5
Ni 231.604	114.621	119.637	121.176
Pb 220.353	499.932	496.310	501.553
Sb 206.834	55.7623	62.4465	45.0421
Se 196.026	109.937	106.208	100.757
Si 288.158	6138.32	6136.74	6128.93
Sn 189.925	102.396	103.688	102.058
Sr 216.596	1018.98	1016.11	1012.73
Ti 334.941	393.464	393.673	393.853
Tl 190.794	37.1044	51.6485	39.9633
V 292.401	114.192	113.918	113.538
Zn 206.200	1060.07	1074.25	1069.61

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	53.0140	ppb	0.7726	1.5	1365.48
Al 308.215	5187.88	ppb	2.0061	0.0	9015.30
As 188.980	117.209	ppb	7.9750	6.8	29.6627
B 249.678	246.227	ppb	1.1360	0.5	1554.57
Ba 389.178	99.9028	ppb	1.4372	1.4	486.655
Be 313.042	54.9757	ppb	0.0637	0.1	42101.8
Ca 370.602	103809	ppb	105.0	0.1	147446
Cd 226.502	52.0914	ppb	0.2508	0.5	606.991
Co 228.615	51.3871	ppb	1.1969	2.3	164.446
Cr 267.716	104.773	ppb	0.2974	0.3	1531.88
Cu 324.754	196.230	ppb	1.6224	0.8	5592.99
Fe 271.441	6662.18	ppb	14.7308	0.2	3653.30
K 766.491	9311.88	ppb	19.4067	0.2	158528

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	10729.9	ppb	7.9179	0.1	13085.6
Mn 257.610	530.331	ppb	0.5681	0.1	36417.4
Mo 202.032	140.004	ppb	4.1162	2.9	197.029
Na 330.237	15133.7	ppb	255.960	1.7	388.095
Ni 231.604	118.478	ppb	3.4275	2.9	113.602
Pb 220.353	499.265	ppb	2.6841	0.5	186.060
Sb 206.834	54.4170	ppb	8.7798	16.1	23.2982
Se 196.026	105.634	ppb	4.6168	4.4	23.7008
Si 288.158	6134.67	ppb	5.0275	0.1	26667.2
Sn 189.925	102.714	ppb	0.8605	0.8	22.0653
Sr 216.596	1015.94	ppb	3.1305	0.3	2485.61
Ti 334.941	393.663	ppb	0.1949	0.0	29710.0
Tl 190.794	42.9054	ppb	7.7055	18.0	7.4376
V 292.401	113.883	ppb	0.3283	0.3	913.529
Zn 206.200	1067.98	ppb	7.2293	0.7	562.727

680-166830-A-10-B (Samp)

4/9/2019, 4:38:42 AM

Rack 4, Tube 8

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4904u	0.7261	0.8392
Al 308.215	1444.15	1449.35	1448.12
As 188.980	12.1953	13.3345	-0.5915u
B 249.678	57.3840	56.0814	55.9830
Ba 389.178	2.1534	1.1142	7.4549
Be 313.042	0.0811	0.0792	0.0737
Ca 370.602	58824	58920	58882
Cd 226.502	0.0463	0.1730	-0.6358
Co 228.615	1.8759	1.5986	1.3156
Cr 267.716	2.5060	2.6677	2.9155
Cu 324.754	2.7681	4.4679	2.8217
Fe 271.441	11009.5	11025.1	11025.7
K 766.491	6161.42	6127.94	6141.27
Mg 279.078	17618.0	17612.4	17616.4
Mn 257.610	141.159	140.625	141.019
Mo 202.032	0.9918	2.0760	0.5564
Na 330.237	38917.3	39070.8	38504.7
Ni 231.604	36.4053	37.9449	35.7194
Pb 220.353	-14.8521u	4.8043	3.3332
Sb 206.834	3.3921	5.1164	-5.5945u
Se 196.026	8.2216	-16.0577u	-6.4146u
Si 288.158	21569.9	21572.2	21594.5
Sn 189.925	-3.2244u	2.4060	-2.1220u
Sr 216.596	852.928	854.605	855.290
Ti 334.941	0.4284	0.3832	0.2040
Tl 190.794	-8.7554u	-13.7543u	2.3383
V 292.401	1.6510	2.0466	0.9202
Zn 206.200	61.9413	62.3563	60.8363

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3583	ppb	0.7371	205.7	-50.7339
Al 308.215	1447.21	ppb	2.7176	0.2	2689.66
As 188.980	8.3127	ppb	7.7323	93.0	3.2594
B 249.678	56.4828	ppb	0.7820	1.4	333.257

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	3.5742	ppb	3.4007	95.1	2.7056
Be 313.042	0.0780	ppb	0.0038	4.9	-358.005
Ca 370.602	58875	ppb	48.04	0.1	83612
Cd 226.502	-0.1388	ppb	0.4350	313.4	14.4108
Co 228.615	1.5967	ppb	0.2801	17.5	-3.2628
Cr 267.716	2.6964	ppb	0.2063	7.6	50.6323
Cu 324.754	3.3526	ppb	0.9663	28.8	563.578
Fe 271.441	11020.1	ppb	9.1748	0.1	6008.36
K 766.491	6143.54	ppb	16.8561	0.3	104669
Mg 279.078	17615.6	ppb	2.8599	0.0	21472.9
Mn 257.610	140.934	ppb	0.2767	0.2	9743.85
Mo 202.032	1.2080	ppb	0.7826	64.8	4.2256
Na 330.237	38830.9	ppb	292.732	0.8	981.727
Ni 231.604	36.6898	ppb	1.1397	3.1	33.3039
Pb 220.353	-2.2382	ppb	10.9487	489.2	0.8795
Sb 206.834	0.9713	ppb	5.7512	592.1	6.3217
Se 196.026	-4.7502	ppb	12.2249	257.4	3.4882
Si 288.158	21578.9	ppb	13.6039	0.1	92208.4
Sn 189.925	-0.9801	ppb	2.9838	304.4	-1.2312
Sr 216.596	854.275	ppb	1.2150	0.1	2092.52
Ti 334.941	0.3385	ppb	0.1187	35.1	39.8182
Tl 190.794	-6.7238	ppb	8.2364	122.5	-4.2945
V 292.401	1.5393	ppb	0.5714	37.1	1.2870
Zn 206.200	61.7113	ppb	0.7857	1.3	31.3031

680-166830-A-7-B (Samp)

4/9/2019, 4:43:08 AM

Rack 4, Tube 9

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.4769	0.3374	0.5957
Al 308.215	119.325	119.248	121.694
As 188.980	7.0942	10.3011	2.7358
B 249.678	68.7046	69.9335	68.8580
Ba 389.178	49.1063	47.1826	48.5976
Be 313.042	-0.0422u	-0.0242u	-0.0620u
Ca 370.602	112310	112419	112326
Cd 226.502	-0.0469	0.2450	0.3660
Co 228.615	-1.2360u	-0.3935u	1.3189
Cr 267.716	1.9145	1.6646	0.6377
Cu 324.754	2.3582	2.4016	2.0739
Fe 271.441	24858.8	24949.8	24873.6
K 766.491	4917.26	4902.34	4912.23
Mg 279.078	8968.52	8983.20	8986.76
Mn 257.610	903.459	904.297	904.142
Mo 202.032	-0.4980u	0.5802	0.0454u
Na 330.237	104965x	104514x	104968x
Ni 231.604	1.6488	2.6346	6.3811
Pb 220.353	-0.9760u	-6.4707u	4.2617
Sb 206.834	-5.9204u	2.8148	-1.2522u
Se 196.026	-1.1088u	-1.8731u	10.9799
Si 288.158	12010.6	12020.9	12024.8
Sn 189.925	13.7104	6.5216	2.8199
Sr 216.596	1529.79	1523.30	1527.91
Ti 334.941	1.2437	1.1574	1.1429

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-2.1435u	4.7561	-5.6725u
V 292.401	1.4482	1.9439	1.3166
Zn 206.200	5.2171	6.2758	3.0037

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4700	ppb	0.1293	27.5	-50.5954
Al 308.215	120.089	ppb	1.3906	1.2	447.168
As 188.980	6.7104	ppb	3.7972	56.6	2.7401
B 249.678	69.1654	ppb	0.6696	1.0	401.116
Ba 389.178	48.2955	ppb	0.9968	2.1	225.321
Be 313.042	-0.0428	ppb	0.0189	44.2	-446.598
Ca 370.602	112352	ppb	59.16	0.1	159551
Cd 226.502	0.1880	ppb	0.2123	112.9	35.0285
Co 228.615	-0.1035	ppb	1.3019	1257.5	-9.2077
Cr 267.716	1.4056	ppb	0.6767	48.1	34.2270
Cu 324.754	2.2779	ppb	0.1780	7.8	537.729
Fe 271.441	24894.1	ppb	48.8565	0.2	13514.8
K 766.491	4910.61	ppb	7.5918	0.2	83710.7
Mg 279.078	8979.49	ppb	9.6681	0.1	10952.0
Mn 257.610	903.966	ppb	0.4457	0.0	62027.8
Mo 202.032	0.0426	ppb	0.5391	1266.9	2.4714
Na 330.237	104816x	ppb	261.152	0.2	2596.70
Ni 231.604	3.5549	ppb	2.4967	70.2	0.7579
Pb 220.353	-1.0617	ppb	5.3667	505.5	1.4065
Sb 206.834	-1.4526	ppb	4.3711	300.9	5.7661
Se 196.026	2.6660	ppb	7.2102	270.4	4.8693
Si 288.158	12018.8	ppb	7.3131	0.1	51612.3
Sn 189.925	7.6840	ppb	5.5375	72.1	0.7213
Sr 216.596	1527.00	ppb	3.3394	0.2	3738.44
Ti 334.941	1.1813	ppb	0.0545	4.6	82.4647
Tl 190.794	-1.0200	ppb	5.3043	520.0	-3.1002
V 292.401	1.5696	ppb	0.3308	21.1	2.1042
Zn 206.200	4.8322	ppb	1.6697	34.6	1.2910

680-167040-C-3-B (Samp)

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Rack 4, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5453u	-0.0552	-0.7442u
Al 308.215	11.8001	7.0646	7.0238
As 188.980	-0.9367u	4.6172	0.7489
B 249.678	10.5219	10.7191	8.7955
Ba 389.178	40.6669	39.3916	42.5521
Be 313.042	-0.0768u	-0.0987u	-0.0933u
Ca 370.602	57134	57305	57217
Cd 226.502	-0.1755u	-0.0747u	0.1702
Co 228.615	26.6119	25.8764	28.0782
Cr 267.716	0.9430	0.3780	0.6045
Cu 324.754	2.5547	2.6859	3.2126
Fe 271.441	470.986	457.069	451.246
K 766.491	9610.55	9597.52	9599.88
Mg 279.078	9812.69	9804.26	9801.40
Mn 257.610	3340.46	3340.36	3340.46
Mo 202.032	1.1928	1.0496	-1.4527u

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	127950x	129265x	128233x
Ni 231.604	16.0278	17.3815	16.5352
Pb 220.353	-4.8332u	-5.3792u	-1.6099u
Sb 206.834	7.9613	-4.1855u	1.2093
Se 196.026	12.4279	9.5178	16.2984
Si 288.158	8812.75	8808.91	8812.75
Sn 189.925	3.5224	11.8581	7.5820
Sr 216.596	609.677	602.648	604.139
Ti 334.941	0.1052	0.0219	0.0100
Tl 190.794	16.0519	-12.5660u	-8.9847u
V 292.401	0.6701	-0.9153u	-0.2495u
Zn 206.200	3.8066	4.1447	1.7879

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.4482b	ppb	0.3546	79.1	-64.7332
Al 308.215	8.6295b	ppb	2.7459	31.8	258.042
As 188.980	1.4765b	ppb	2.8475	192.9	1.5692
B 249.678	10.0121b	ppb	1.0583	10.6	45.4327
Ba 389.178	40.8702b	ppb	1.5900	3.9	184.586
Be 313.042	-0.0896b	ppb	0.0114	12.7	-492.028
Ca 370.602	57219b	ppb	85.45	0.1	81315
Cd 226.502	-0.0267b	ppb	0.1778	666.6	2.5141
Co 228.615	26.8555b	ppb	1.1209	4.2	81.2427
Cr 267.716	0.6418b	ppb	0.2843	44.3	24.6656
Cu 324.754	2.8177b	ppb	0.3482	12.4	547.986
Fe 271.441	459.767b	ppb	10.1425	2.2	295.835
K 766.491	9602.65b	ppb	6.9429	0.1	163471
Mg 279.078	9806.12b	ppb	5.8729	0.1	11935.9
Mn 257.610	3340.43b	ppb	0.0576	0.0	229027
Mo 202.032	0.2633b	ppb	1.4877	565.1	3.0166
Na 330.237	128482xb	ppb	692.005	0.5	3176.87
Ni 231.604	16.6482b	ppb	0.6839	4.1	13.5975
Pb 220.353	-3.9408b	ppb	2.0370	51.7	0.3645
Sb 206.834	1.6617b	ppb	6.0860	366.2	6.3739
Se 196.026	12.7481b	ppb	3.4016	26.7	7.0094
Si 288.158	8811.47b	ppb	2.2181	0.0	37992.6
Sn 189.925	7.6541b	ppb	4.1683	54.5	0.7166
Sr 216.596	605.488b	ppb	3.7036	0.6	1483.42
Ti 334.941	0.0457b	ppb	0.0519	113.6	-1.8641
Tl 190.794	-1.8329b	ppb	15.5919	850.7	-2.2578
V 292.401	-0.1649b	ppb	0.7961	482.8	-13.3643
Zn 206.200	3.2464b	ppb	1.2744	39.3	0.4022

Cont Calib Verif (CCV) 4/9/2019, 4:52:01 AM Rack S, Tube 10
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.064	497.811	495.408
Al 308.215	10422.8	10415.3	10412.3
As 188.980	566.415	545.537	558.179
B 249.678	546.366	548.728	552.091
Ba 389.178	472.036	470.614	467.882
Be 313.042	548.552	547.614	548.537
Ca 370.602	10167	10122	10150

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	516.224	514.501	515.401
Co 228.615	513.708	516.920	520.285
Cr 267.716	497.874	497.223	497.823
Cu 324.754	517.313	518.019	511.449
Fe 271.441	10154.9	10123.5	10185.0
K 766.491	10105.0	10117.4	10110.2
Mg 279.078	10546.0	10526.8	10548.6
Mn 257.610	510.669	509.887	510.749
Mo 202.032	511.661	517.274	516.043
Na 330.237	11267.8	10691.0	11243.8
Ni 231.604	524.999	519.243	525.148
Pb 220.353	495.642	492.013	480.927
Sb 206.834	516.475	526.768	526.047
Se 196.026	547.861	566.775	547.525
Si 288.158	5151.83	5141.31	5138.06
Sn 189.925	503.139	505.749	503.551
Sr 216.596	492.513	494.089	491.933
Ti 334.941	496.111	494.700	495.940
Tl 190.794	494.164	496.851	485.077
V 292.401	508.134	508.396	509.880
Zn 206.200	1082.47	1073.37	1080.36

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	497.761	ppb	2.3283	0.5	13323.0	99.55219
Al 308.215	10416.8	ppb	5.4048	0.1	17864.4	104.16795
As 188.980	556.710	ppb	10.5161	1.9	135.149	111.34206Q
B 249.678	549.061	ppb	2.8769	0.5	3493.61	109.81227
Ba 389.178	470.177	ppb	2.1110	0.4	2370.54	94.03542
Be 313.042	548.235	ppb	0.5371	0.1	423565	109.64691
Ca 370.602	10146	ppb	22.96	0.2	14422	101.46233
Cd 226.502	515.375	ppb	0.8618	0.2	5914.75	103.07510
Co 228.615	516.971	ppb	3.2886	0.6	1716.05	103.39420
Cr 267.716	497.640	ppb	0.3621	0.1	7231.96	99.52803
Cu 324.754	515.593	ppb	3.6065	0.7	13923.4	103.11868
Fe 271.441	10154.5	ppb	30.7359	0.3	5565.88	101.49387
K 766.491	10110.9	ppb	6.2110	0.1	172110	101.10854
Mg 279.078	10540.5	ppb	11.9230	0.1	12854.3	105.40485
Mn 257.610	510.435	ppb	0.4763	0.1	35056.0	102.08700
Mo 202.032	514.993	ppb	2.9502	0.6	717.770	102.99858
Na 330.237	11067.5	ppb	326.324	2.9	287.485	110.67536Q
Ni 231.604	523.130	ppb	3.3669	0.6	510.709	104.62605
Pb 220.353	489.528	ppb	7.6662	1.6	182.279	97.90550
Sb 206.834	523.097	ppb	5.7462	1.1	171.861	104.61935
Se 196.026	554.053	ppb	11.0185	2.0	105.599	110.81069Q
Si 288.158	5143.73	ppb	7.1976	0.1	22541.3	102.87465
Sn 189.925	504.146	ppb	1.4030	0.3	112.261	100.82923
Sr 216.596	492.845	ppb	1.1160	0.2	1202.09	98.56902
Ti 334.941	495.584	ppb	0.7700	0.2	37401.9	99.11674
Tl 190.794	492.031	ppb	6.1700	1.3	112.003	98.40614
V 292.401	508.803	ppb	0.9412	0.2	4122.85	101.76068
Zn 206.200	1078.74	ppb	4.7619	0.4	568.208	107.87351

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Blank (CCB) 4/9/2019, 4:56:25 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3183	0.8477	0.0345
Al 308.215	6.7310	4.7894	1.3375
As 188.980	-6.6116u	8.2978	-5.3131u
B 249.678	16.7483	14.5474	12.6703
Ba 389.178	-3.8612u	-8.3805u	-0.3478u
Be 313.042	0.0087	0.0143	0.0302
Ca 370.602	7.290	7.899	5.158
Cd 226.502	0.5099	0.3628	0.8903
Co 228.615	0.6687	0.4975	-2.2704u
Cr 267.716	0.3135	0.1602	0.9493
Cu 324.754	1.8100	1.5523	3.1404
Fe 271.441	18.2342	7.5608	16.6832
K 766.491	3.0340	4.3361	0.6538
Mg 279.078	5.7926	1.8435	4.3869
Mn 257.610	0.3896	0.3060	0.1910
Mo 202.032	4.4098	1.7800	1.4733
Na 330.237	182.704	-64.4916u	-1.3486u
Ni 231.604	0.8696	1.1734	-0.5204u
Pb 220.353	-0.7717u	-9.8278u	-8.6305u
Sb 206.834	-8.7774u	-7.7228u	-1.4552u
Se 196.026	1.9560	1.0648	-5.8011u
Si 288.158	19.7985	19.4754	16.1711
Sn 189.925	4.2527	17.8658	3.3517
Sr 216.596	-0.3434u	0.0091	1.0338
Ti 334.941	0.0671	0.4190	0.3267
Tl 190.794	-13.0141u	1.7416	4.8477
V 292.401	0.8718	1.5176	-0.9017u
Zn 206.200	4.1598	3.5833	0.9082

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.4002	ppb	0.4128	103.1	-45.5749	0.40020
Al 308.215	4.2860	ppb	2.7318	63.7	250.769	4.28597
As 188.980	-1.2090	ppb	8.2587	683.1	0.9276	-1.20898
B 249.678	14.6553	ppb	2.0411	13.9	75.6398	14.65533
Ba 389.178	-4.1965	ppb	4.0268	96.0	-52.4015	-4.19647
Be 313.042	0.0177	ppb	0.0111	62.8	-411.160	0.01774
Ca 370.602	6.782	ppb	1.439	21.2	18.81	6.78231
Cd 226.502	0.5876	ppb	0.2722	46.3	9.1579	0.58764
Co 228.615	-0.3681	ppb	1.6497	448.2	-9.6145	-0.36809
Cr 267.716	0.4743	ppb	0.4184	88.2	17.2155	0.47434
Cu 324.754	2.1676	ppb	0.8523	39.3	530.984	2.16756
Fe 271.441	14.1594	ppb	5.7669	40.7	53.4920	14.15943
K 766.491	2.6746	ppb	1.8673	69.8	280.181	2.67462
Mg 279.078	4.0076	ppb	2.0017	49.9	33.1444	4.00765
Mn 257.610	0.2955	ppb	0.0997	33.7	42.6992	0.29551
Mo 202.032	2.5544	ppb	1.6142	63.2	6.2030	2.55437
Na 330.237	38.9544	ppb	128.431	329.7	33.4096	38.95443
Ni 231.604	0.5075	ppb	0.9031	177.9	-2.2354	0.50754
Pb 220.353	-6.4100	ppb	4.9195	76.7	-0.7052	-6.40999Z
Sb 206.834	-5.9851	ppb	3.9583	66.1	3.9589	-5.98513
Se 196.026	-0.9268	ppb	4.2447	458.0	4.2080	-0.92677
Si 288.158	18.4817	ppb	2.0075	10.9	654.574	18.48166

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	8.4900	ppb	8.1321	95.8	0.8933	8.49005
Sr 216.596	0.2332	ppb	0.7154	306.8	3.9130	0.23320
Ti 334.941	0.2709	ppb	0.1824	67.3	-4.6885	0.27093
Tl 190.794	-2.1416	ppb	9.5431	445.6	-3.0287	-2.14162
V 292.401	0.4959	ppb	1.2527	252.6	-7.8225	0.49590
Zn 206.200	2.8837	ppb	1.7350	60.2	0.2097	2.88374

680-167040-C-2-B (Samp) 4/9/2019, 5:00:50 AM Rack 4, Tube 11

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2137	1.1342	0.7294
Al 308.215	1.6682	1.7465	-0.6298u
As 188.980	2.2400	-0.4900u	-0.1561u
B 249.678	8.4458	7.2919	8.0328
Ba 389.178	0.3291	1.6617	-4.3250u
Be 313.042	-0.0680u	-0.0846u	-0.0740u
Ca 370.602	-2.594u	4.978	-5.732u
Cd 226.502	-0.4332u	-0.4711u	-0.8302u
Co 228.615	-0.5695u	-0.5153u	-1.2320u
Cr 267.716	0.7247	0.7834	0.2768
Cu 324.754	5.3900	3.9792	3.4806
Fe 271.441	-1.6042u	-1.7913u	17.6099
K 766.491	1.9606	2.7095	1.3216
Mg 279.078	-2.2214u	-8.3494u	-13.0137u
Mn 257.610	0.0744	0.1187	0.0810
Mo 202.032	3.5628	1.6458	0.6927
Na 330.237	1049.28	1160.67	793.669
Ni 231.604	2.7803	1.1256	-0.7068u
Pb 220.353	0.4944	-11.2584u	-3.5876u
Sb 206.834	-11.1791u	-5.7808u	-3.0155u
Se 196.026	-7.6118u	9.3669	-7.0015u
Si 288.158	35.2591	31.9081	37.3551
Sn 189.925	6.8627	-0.3485u	7.3151
Sr 216.596	-0.3407u	0.7821	2.2207
Ti 334.941	0.2174	-0.0292u	-0.0568u
Tl 190.794	-5.3069u	-7.7412u	5.2945
V 292.401	0.7296	0.6941	0.0127
Zn 206.200	5.3572	3.7210	2.6003

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6924	ppb	0.4613	66.6	-37.7208
Al 308.215	0.9283	ppb	1.3499	145.4	245.089
As 188.980	0.5313	ppb	1.4892	280.3	1.3276
B 249.678	7.9235	ppb	0.5847	7.4	32.4620
Ba 389.178	-0.7780	ppb	3.1432	404.0	-35.0283
Be 313.042	-0.0755	ppb	0.0084	11.1	-483.318
Ca 370.602	-1.116	ppb	5.506	493.5	7.589
Cd 226.502	-0.5782	ppb	0.2191	37.9	-4.1915
Co 228.615	-0.7723	ppb	0.3991	51.7	-10.9606
Cr 267.716	0.5950	ppb	0.2771	46.6	18.9696
Cu 324.754	4.2833	ppb	0.9904	23.1	586.138
Fe 271.441	4.7382	ppb	11.1477	235.3	48.3620
K 766.491	1.9972	ppb	0.6947	34.8	268.666

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	-7.8615	ppb	5.4127	68.9	18.6967
Mn 257.610	0.0914	ppb	0.0239	26.2	28.6644
Mo 202.032	1.9671	ppb	1.4618	74.3	5.3874
Na 330.237	1001.20	ppb	188.162	18.8	56.9494
Ni 231.604	1.0663	ppb	1.7443	163.6	-1.6859
Pb 220.353	-4.7839	ppb	5.9670	124.7	-0.1041
Sb 206.834	-6.6585	ppb	4.1520	62.4	3.7467
Se 196.026	-1.7488	ppb	9.6313	550.7	4.0578
Si 288.158	34.8408	ppb	2.7475	7.9	723.738
Sn 189.925	4.6098	ppb	4.2999	93.3	0.0215
Sr 216.596	0.8874	ppb	1.2839	144.7	5.5146
Ti 334.941	0.0438	ppb	0.1510	345.0	-21.8769
Tl 190.794	-2.5845	ppb	6.9312	268.2	-3.1319
V 292.401	0.4788	ppb	0.4040	84.4	-7.9410
Zn 206.200	3.8928	ppb	1.3864	35.6	0.7427

680-167040-C-1-B (Samp)

4/9/2019, 5:05:16 AM

Rack 4, Tube 12

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4515u	-0.0181	0.2871
Al 308.215	-0.2563	11.7971	-3.4181u
As 188.980	122.942	128.246	134.308
B 249.678	10.5285	13.1231	12.0106
Ba 389.178	116.749	112.951	115.688
Be 313.042	-0.0420u	-0.0550u	-0.0594u
Ca 370.602	47875	47788	47954
Cd 226.502	0.3486	0.0062	0.7221
Co 228.615	16.6435	20.4120	16.5294
Cr 267.716	-0.1795	0.0446	0.2449
Cu 324.754	1.8968	2.9007	2.6822
Fe 271.441	46511.7	46514.9	46572.0
K 766.491	16163.2	16172.8	16142.7
Mg 279.078	5356.82	5359.20	5360.83
Mn 257.610	9818.20	9804.76	9816.25
Mo 202.032	0.2836u	-0.0447u	-1.2187u
Na 330.237	239123x	239372x	240123x
Ni 231.604	0.0385	3.1559	0.0056u
Pb 220.353	0.8376	1.2674	-3.3103u
Sb 206.834	2.0293	-0.2785	2.1122
Se 196.026	-1.6440	6.4689	-0.7266
Si 288.158	8180.47	8186.37	8179.13
Sn 189.925	11.5966	15.9563	0.7661
Sr 216.596	1135.66	1130.55	1131.05
Ti 334.941	0.1630	0.2255	0.0927
Tl 190.794	-7.1080u	6.7631	7.4762
V 292.401	0.2945	0.4790	-0.3581u
Zn 206.200	7.3138	6.0892	3.1337

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0608b	ppb	0.3712	610.5	-52.5550
Al 308.215	2.7076b	ppb	8.0289	296.5	249.303
As 188.980	128.498b	ppb	5.6869	4.4	32.4144
B 249.678	11.8874b	ppb	1.3017	11.0	12.8115

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	115.129b	ppb	1.9596	1.7	565.441
Be 313.042	-0.0521b	ppb	0.0090	17.3	-470.462
Ca 370.602	47872b	ppb	83.09	0.2	68057
Cd 226.502	0.3590b	ppb	0.3581	99.8	63.2117
Co 228.615	17.8616b	ppb	2.2094	12.4	50.3099
Cr 267.716	0.0367b	ppb	0.2123	579.3	28.2175
Cu 324.754	2.4932b	ppb	0.5279	21.2	546.723
Fe 271.441	46532.9b	ppb	33.9481	0.1	25223.3
K 766.491	16159.6b	ppb	15.3926	0.1	274933
Mg 279.078	5358.95b	ppb	2.0158	0.0	6461.80
Mn 257.610	9813.07b	ppb	7.2596	0.1	672714
Mo 202.032	-0.3266b	ppb	0.7899	241.9	1.7490
Na 330.237	239539xb	ppb	520.450	0.2	5893.02
Ni 231.604	1.0667b	ppb	1.8094	169.6	-1.7004
Pb 220.353	-0.4018b	ppb	2.5280	629.2	2.1550
Sb 206.834	1.2877b	ppb	1.3570	105.4	6.9533
Se 196.026	1.3661b	ppb	4.4429	325.2	5.3780
Si 288.158	8181.99b	ppb	3.8492	0.0	35320.1
Sn 189.925	9.4397b	ppb	7.8214	82.9	1.1275
Sr 216.596	1132.42b	ppb	2.8193	0.2	2776.04
Ti 334.941	0.1604b	ppb	0.0665	41.4	-5.5509
Tl 190.794	2.3771b	ppb	8.2221	345.9	-0.8923
V 292.401	0.1385b	ppb	0.4398	317.6	-8.8205
Zn 206.200	5.5122b	ppb	2.1489	39.0	1.6965

680-167040-C-4-B (Samp)

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Rack 4, Tube 13

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2176	0.0480	1.0362
Al 308.215	-0.1978u	12.1478	2.6008
As 188.980	2.6016	2.9556	-0.2468u
B 249.678	6.4549	5.6658	6.4367
Ba 389.178	28.5298	25.1064	25.8857
Be 313.042	-0.0694u	-0.0859u	-0.0959u
Ca 370.602	58098	58224	58099
Cd 226.502	0.0228	0.0234	-0.4974u
Co 228.615	-2.1822u	0.4463	0.1652
Cr 267.716	-0.5000u	-0.0904u	0.7924
Cu 324.754	3.8538	3.0346	2.8845
Fe 271.441	6.0858	8.0061	5.8371
K 766.491	5053.31	5095.86	5008.92
Mg 279.078	12553.0	12593.7	12590.1
Mn 257.610	4.3261	4.2314	4.2458
Mo 202.032	0.6910	0.0745	3.0057
Na 330.237	60199.9	60156.0	59181.2
Ni 231.604	4.3046	1.5621	4.7602
Pb 220.353	-3.9805u	-2.2773u	-2.2627u
Sb 206.834	-2.6329u	6.5662	-4.5737u
Se 196.026	-10.7554u	-7.4655u	9.1560
Si 288.158	11439.6	11470.2	11445.6
Sn 189.925	10.0517	7.8926	17.1786
Sr 216.596	400.148	401.033	402.702
Ti 334.941	-0.0398	-0.1661	-0.0236

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	5.6745	3.3068	-2.0815u
V 292.401	-0.7754u	0.5723	0.3331
Zn 206.200	11.7876	7.6562	6.9831

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.4340	ppb	0.5284	121.8	-45.8595
Al 308.215	4.8503	ppb	6.4729	133.5	251.706
As 188.980	1.7701	ppb	1.7557	99.2	1.6339
B 249.678	6.1858	ppb	0.4505	7.3	21.3304
Ba 389.178	26.5073	ppb	1.7943	6.8	113.702
Be 313.042	-0.0838	ppb	0.0134	16.0	-484.043
Ca 370.602	58140	ppb	72.13	0.1	82582
Cd 226.502	-0.1504	ppb	0.3005	199.8	0.6512
Co 228.615	-0.5236	ppb	1.4433	275.7	-10.1284
Cr 267.716	0.0673	ppb	0.6605	980.7	11.6069
Cu 324.754	3.2576	ppb	0.5217	16.0	559.396
Fe 271.441	6.6430	ppb	1.1870	17.9	49.4103
K 766.491	5052.69	ppb	43.4737	0.9	86126.0
Mg 279.078	12579.0	ppb	22.5124	0.2	15342.6
Mn 257.610	4.2678	ppb	0.0510	1.2	354.149
Mo 202.032	1.2571	ppb	1.5454	122.9	4.4013
Na 330.237	59845.7	ppb	575.878	1.0	1497.04
Ni 231.604	3.5423	ppb	1.7300	48.8	0.7457
Pb 220.353	-2.8402	ppb	0.9876	34.8	0.6141
Sb 206.834	-0.2135	ppb	5.9510	2787.4	5.7756
Se 196.026	-3.0217	ppb	10.6737	353.2	3.8257
Si 288.158	11451.8	ppb	16.1875	0.1	49205.0
Sn 189.925	11.7077	ppb	4.8595	41.5	1.6214
Sr 216.596	401.294	ppb	1.2966	0.3	984.270
Ti 334.941	-0.0765	ppb	0.0780	102.0	-3.3968
Tl 190.794	2.2999	ppb	3.9748	172.8	-1.9946
V 292.401	0.0434	ppb	0.7191	1658.6	-11.5693
Zn 206.200	8.8090	ppb	2.6014	29.5	3.3396

MB 680-565362/1-A (Samp) 4/9/2019, 5:14:08 AM Rack 4, Tube 14

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.0441	-0.0689u	-0.6891u
Al 308.215	18.7768	7.7906	6.4110
As 188.980	-1.6294u	-1.0602u	-2.7540u
B 249.678	1.5036	0.7248	1.8939
Ba 389.178	-3.1127u	-4.3384u	-2.9132u
Be 313.042	-0.0581u	-0.0693u	-0.0704u
Ca 370.602	30.74	14.00	12.38
Cd 226.502	-0.0144u	-0.0141u	-0.2244u
Co 228.615	0.3454	-1.0026u	1.1882
Cr 267.716	0.5684	0.4864	-0.0311u
Cu 324.754	3.1508	2.3283	3.9230
Fe 271.441	4.9574	6.5916	28.3906
K 766.491	4.4394	4.8700	2.6598
Mg 279.078	4.1872	3.5391	2.8594
Mn 257.610	0.5592	0.5735	0.4703
Mo 202.032	-0.0643u	2.2023	1.2842

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	54.7056	-19.9319u	298.733
Ni 231.604	0.0521	-0.2433u	1.6382
Pb 220.353	7.6413	-2.8904u	-7.5376u
Sb 206.834	5.6662	-2.9782u	2.7906
Se 196.026	-4.6499u	-1.9353u	-6.9946u
Si 288.158	15.2331	12.8332	8.6592
Sn 189.925	9.7763	2.0814	5.8957
Sr 216.596	-0.2862u	-1.5125u	1.0152
Ti 334.941	0.2924	0.4435	0.2166
Tl 190.794	-15.0119u	-0.9116u	-19.5284u
V 292.401	0.5951	0.8920	0.8152
Zn 206.200	5.5033	3.0664	1.5550

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0954	ppb	0.8782	920.8	-53.7734
Al 308.215	10.9928	ppb	6.7764	61.6	262.099
As 188.980	-1.8145	ppb	0.8619	47.5	0.8230
B 249.678	1.3741	ppb	0.5952	43.3	-9.5517
Ba 389.178	-3.4548	ppb	0.7717	22.3	-48.6325
Be 313.042	-0.0659	ppb	0.0068	10.4	-475.818
Ca 370.602	19.04	ppb	10.17	53.4	36.22
Cd 226.502	-0.0843	ppb	0.1213	143.9	1.4684
Co 228.615	0.1770	ppb	1.1051	624.4	-7.7896
Cr 267.716	0.3412	ppb	0.3251	95.3	15.2840
Cu 324.754	3.1340	ppb	0.7974	25.4	556.170
Fe 271.441	13.3132	ppb	13.0829	98.3	53.0470
K 766.491	3.9897	ppb	1.1717	29.4	302.537
Mg 279.078	3.5286	ppb	0.6640	18.8	32.5576
Mn 257.610	0.5343	ppb	0.0559	10.5	59.0632
Mo 202.032	1.1407	ppb	1.1401	99.9	4.2396
Na 330.237	111.169	ppb	166.667	149.9	35.1758
Ni 231.604	0.4823	ppb	1.0119	209.8	-2.2604
Pb 220.353	-0.9289	ppb	7.7772	837.3	1.3200
Sb 206.834	1.8262	ppb	4.4022	241.1	6.4185
Se 196.026	-4.5266	ppb	2.5319	55.9	3.5504
Si 288.158	12.2419	ppb	3.3266	27.2	628.014
Sn 189.925	5.9178	ppb	3.8475	65.0	0.3153
Sr 216.596	-0.2611	ppb	1.2641	484.1	2.7133
Ti 334.941	0.3175	ppb	0.1155	36.4	-1.1792
Tl 190.794	-11.8173	ppb	9.7108	82.2	-5.2788
V 292.401	0.7674	ppb	0.1541	20.1	-5.5515
Zn 206.200	3.3749	ppb	1.9921	59.0	0.4693

LCS 680-565362/2-A (Samp) 4/9/2019, 5:18:34 AM Rack 4, Tube 15
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.8752	51.8600	51.9934
Al 308.215	5171.87	5170.69	5179.30
As 188.980	113.992	105.682	109.172
B 249.678	217.900	218.039	220.939
Ba 389.178	95.9215	91.6041	92.1870
Be 313.042	54.2430	54.3059	54.3940
Ca 370.602	5002	4995	5009

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	52.3557	52.8146	52.0521
Co 228.615	50.8573	51.4029	52.2935
Cr 267.716	99.8729	99.3212	100.454
Cu 324.754	104.918	104.446	104.993
Fe 271.441	5034.40	5048.34	5056.83
K 766.491	9200.32	9216.83	9244.99
Mg 279.078	5214.33	5214.44	5221.33
Mn 257.610	508.267	508.981	509.901
Mo 202.032	103.978	100.405	103.821
Na 330.237	5658.77	5245.44	5122.96
Ni 231.604	105.294	102.877	106.014
Pb 220.353	487.654	488.954	496.346
Sb 206.834	48.7608	49.1456	53.3458
Se 196.026	103.690	120.088	114.891
Si 288.158	2.5497	6.5705	6.4555
Sn 189.925	112.434	93.0726	110.401
Sr 216.596	99.1063	99.0382	99.3276
Ti 334.941	394.289	393.897	395.351
Tl 190.794	41.9280	47.6819	41.4525
V 292.401	100.703	101.136	101.946
Zn 206.200	111.597	113.109	110.936

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.2429	ppb	0.5517	1.1	1347.56
Al 308.215	5173.96	ppb	4.6652	0.1	8991.02
As 188.980	109.615	ppb	4.1730	3.8	27.8444
B 249.678	218.959	ppb	1.7161	0.8	1381.23
Ba 389.178	93.2375	ppb	2.3426	2.5	448.103
Be 313.042	54.3143	ppb	0.0758	0.1	41578.5
Ca 370.602	5002	ppb	7.184	0.1	7120
Cd 226.502	52.4075	ppb	0.3839	0.7	608.625
Co 228.615	51.5179	ppb	0.7250	1.4	165.201
Cr 267.716	99.8828	ppb	0.5666	0.6	1460.75
Cu 324.754	104.786	ppb	0.2963	0.3	3208.16
Fe 271.441	5046.52	ppb	11.3266	0.2	2779.10
K 766.491	9220.71	ppb	22.5884	0.2	156979
Mg 279.078	5216.70	ppb	4.0145	0.1	6373.76
Mn 257.610	509.050	ppb	0.8189	0.2	34940.3
Mo 202.032	102.734	ppb	2.0189	2.0	145.282
Na 330.237	5342.39	ppb	280.751	5.3	158.684
Ni 231.604	104.728	ppb	1.6431	1.6	100.096
Pb 220.353	490.985	ppb	4.6886	1.0	183.003
Sb 206.834	50.4174	ppb	2.5434	5.0	22.0084
Se 196.026	112.889	ppb	8.3798	7.4	25.0292
Si 288.158	5.1919	ppb	2.2889	44.1	634.872
Sn 189.925	105.303	ppb	10.6404	10.1	22.6461
Sr 216.596	99.1574	ppb	0.1513	0.2	244.841
Ti 334.941	394.512	ppb	0.7527	0.2	29761.7
Tl 190.794	43.6875	ppb	3.4675	7.9	7.6539
V 292.401	101.262	ppb	0.6307	0.6	812.158
Zn 206.200	111.881	ppb	1.1142	1.0	57.7372

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-167024-C-2-D (Samp) **4/9/2019, 5:23:01 AM** **Rack 4, Tube 16****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	0.9482	1.3188	0.5013
Al 308.215	225.605	220.259	222.726
As 188.980	-2.5363u	0.8528	2.8465
B 249.678	24.0352	23.7483	21.8836
Ba 389.178	17.5851	17.2872	15.1767
Be 313.042	-0.0382u	-0.0300u	-0.0427u
Ca 370.602	11477	11457	11467
Cd 226.502	-0.3817u	0.0957	-0.7507u
Co 228.615	-0.5525u	-0.3821u	-0.0666u
Cr 267.716	-0.3662u	1.4448	0.5146
Cu 324.754	3.0037	3.9471	4.5082
Fe 271.441	871.949	882.083	886.399
K 766.491	3084.67	3096.80	3083.99
Mg 279.078	3077.28	3068.16	3070.15
Mn 257.610	19.8288	19.3574	19.4313
Mo 202.032	-1.5537u	2.8380	1.1514
Na 330.237	5274.89	5141.27	4804.10
Ni 231.604	3.4062	0.4618	1.4522
Pb 220.353	-6.5894u	3.0848	-4.0944u
Sb 206.834	0.7591	-4.4677u	-2.3835u
Se 196.026	-1.8260u	-8.8316u	-14.5370u
Si 288.158	2194.86	2190.68	2184.35
Sn 189.925	-1.1214u	0.9463	3.4150
Sr 216.596	29.7474	31.2338	30.6934
Ti 334.941	2.0321	2.3111	2.2087
Tl 190.794	1.6892	-4.1317u	-1.8053u
V 292.401	1.6849	2.8488	1.0550
Zn 206.200	6.3649	7.9570	5.0264

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.9227	ppb	0.4093	44.4	-31.7470
Al 308.215	222.863	ppb	2.6758	1.2	620.216
As 188.980	0.3876	ppb	2.7214	702.0	1.2917
B 249.678	23.2224	ppb	1.1682	5.0	129.755
Ba 389.178	16.6830	ppb	1.3130	7.9	56.3315
Be 313.042	-0.0370	ppb	0.0064	17.4	-452.088
Ca 370.602	11467	ppb	9.879	0.1	16294
Cd 226.502	-0.3456	ppb	0.4244	122.8	-0.4508
Co 228.615	-0.3337	ppb	0.2465	73.9	-9.5000
Cr 267.716	0.5311	ppb	0.9056	170.5	18.1508
Cu 324.754	3.8196	ppb	0.7603	19.9	574.181
Fe 271.441	880.144	ppb	7.4178	0.8	522.049
K 766.491	3088.48	ppb	7.2080	0.2	52736.2
Mg 279.078	3071.86	ppb	4.7968	0.2	3767.91
Mn 257.610	19.5391	ppb	0.2535	1.3	1371.83
Mo 202.032	0.8119	ppb	2.2155	272.9	3.7743
Na 330.237	5073.42	ppb	242.619	4.8	156.523
Ni 231.604	1.7734	ppb	1.4983	84.5	-0.9922
Pb 220.353	-2.5330	ppb	5.0225	198.3	0.7305
Sb 206.834	-2.0307	ppb	2.6312	129.6	5.2179
Se 196.026	-8.3982	ppb	6.3666	75.8	2.8423
Si 288.158	2189.96	ppb	5.2914	0.2	9875.25

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	1.0799	ppb	2.2712	210.3	-0.7712
Sr 216.596	30.5582	ppb	0.7523	2.5	78.1242
Ti 334.941	2.1840	ppb	0.1411	6.5	146.584
Tl 190.794	-1.4159	ppb	2.9299	206.9	-2.8735
V 292.401	1.8629	ppb	0.9101	48.9	3.4448
Zn 206.200	6.4494	ppb	1.4671	22.7	2.0947

680-167024-C-2-Dsd^5 (Samp) 4/9/2019, 5:27:27 AM Rack 4, Tube 17

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.0713u	-0.3914u	1.4725
Al 308.215	45.2182	53.4251	41.5118
As 188.980	-2.0033u	-2.2783u	1.0568
B 249.678	5.8557	6.8485	6.5853
Ba 389.178	3.0384	2.6620	4.0583
Be 313.042	-0.0908u	-0.0788u	-0.0859u
Ca 370.602	2237	2243	2240
Cd 226.502	0.2826	-0.3419u	0.4040
Co 228.615	-0.1993u	0.0335	-0.5140u
Cr 267.716	0.2459	1.1847	0.4725
Cu 324.754	2.0598	3.6372	3.6718
Fe 271.441	165.949	182.303	171.897
K 766.491	511.753	511.430	512.297
Mg 279.078	592.956	586.812	600.593
Mn 257.610	3.6369	3.6740	3.5723
Mo 202.032	-0.6389u	2.0825	3.7989
Na 330.237	1000.58	1372.01	1387.00
Ni 231.604	1.1280	0.9967	2.8119
Pb 220.353	6.8410	-2.3216u	-6.2978u
Sb 206.834	1.2396	-0.0261u	-5.8041u
Se 196.026	12.6244	2.3473	-6.4964u
Si 288.158	440.792	436.980	436.501
Sn 189.925	0.2677	-11.5981u	3.6550
Sr 216.596	6.5805	6.2389	7.6712
Ti 334.941	0.3860	0.5579	0.3632
Tl 190.794	-4.0542u	-11.6159u	-3.1213u
V 292.401	1.2156	0.6240	-0.5317u
Zn 206.200	0.8092	4.6630	0.4913

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3366	ppb	0.9967	296.1	-47.3344
Al 308.215	46.7184	ppb	6.0967	13.0	322.476
As 188.980	-1.0749	ppb	1.8512	172.2	0.9527
B 249.678	6.4299	ppb	0.5143	8.0	22.7225
Ba 389.178	3.2529	ppb	0.7225	22.2	-14.0316
Be 313.042	-0.0852	ppb	0.0060	7.1	-490.454
Ca 370.602	2240	ppb	2.812	0.1	3190
Cd 226.502	0.1149	ppb	0.4002	348.3	3.9472
Co 228.615	-0.2266	ppb	0.2748	121.3	-9.1380
Cr 267.716	0.6343	ppb	0.4899	77.2	19.5591
Cu 324.754	3.1229	ppb	0.9209	29.5	555.907
Fe 271.441	173.383	ppb	8.2778	4.8	139.603
K 766.491	511.827	ppb	0.4381	0.1	8935.31

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	593.454	ppb	6.9040	1.2	750.731
Mn 257.610	3.6277	ppb	0.0515	1.4	273.031
Mo 202.032	1.7475	ppb	2.2378	128.1	5.0807
Na 330.237	1253.20	ppb	218.903	17.5	63.1231
Ni 231.604	1.6455	ppb	1.0123	61.5	-1.1170
Pb 220.353	-0.5928	ppb	6.7378	1136.6	1.4449
Sb 206.834	-1.5302	ppb	3.7550	245.4	5.3633
Se 196.026	2.8251	ppb	9.5693	338.7	4.8931
Si 288.158	438.091	ppb	2.3513	0.5	2436.09
Sn 189.925	-2.5585	ppb	8.0097	313.1	-1.5891
Sr 216.596	6.8302	ppb	0.7481	11.0	20.0576
Ti 334.941	0.4357	ppb	0.1065	24.4	9.0636
Tl 190.794	-6.2638	ppb	4.6585	74.4	-3.9903
V 292.401	0.4360	ppb	0.8887	203.8	-8.2555
Zn 206.200	1.9878	ppb	2.3222	116.8	-0.2629

680-167024-C-2-Dpds (Samp) 4/9/2019, 5:31:53 AM

Rack 4, Tube 18

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	52.7707	53.0770	52.1011
Al 308.215	5351.18	5367.26	5370.50
As 188.980	105.441	111.210	115.504
B 249.678	235.162	238.071	236.324
Ba 389.178	114.863	115.313	116.800
Be 313.042	54.2047	54.2310	54.3081
Ca 370.602	16156	16215	16200
Cd 226.502	52.3935	52.1524	52.1441
Co 228.615	50.6012	52.2798	53.4097
Cr 267.716	100.484	100.738	100.215
Cu 324.754	106.502	106.144	104.702
Fe 271.441	5883.46	5909.03	5891.12
K 766.491	12459.9	12457.1	12460.6
Mg 279.078	8189.49	8171.92	8181.12
Mn 257.610	526.153	526.617	527.451
Mo 202.032	101.274	100.722	100.326
Na 330.237	10537.7	10383.4	10359.5
Ni 231.604	102.628	108.548	101.132
Pb 220.353	490.558	503.413	497.953
Sb 206.834	57.7772	51.6122	42.7866
Se 196.026	113.870	123.056	113.919
Si 288.158	2152.80	2158.47	2151.66
Sn 189.925	98.6883	100.346	96.2726
Sr 216.596	128.854	127.848	130.325
Ti 334.941	393.215	394.359	395.062
Tl 190.794	29.2203	20.5757	32.2084
V 292.401	102.910	103.651	102.283
Zn 206.200	118.610	116.393	113.234

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.6496	ppb	0.4991	0.9	1358.28
Al 308.215	5362.98	ppb	10.3497	0.2	9310.51
As 188.980	110.718	ppb	5.0496	4.6	28.1705
B 249.678	236.519	ppb	1.4638	0.6	1493.04

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	115.659	ppb	1.0137	0.9	564.594
Be 313.042	54.2479	ppb	0.0537	0.1	41528.7
Ca 370.602	16190	ppb	30.50	0.2	23009
Cd 226.502	52.2300	ppb	0.1417	0.3	607.652
Co 228.615	52.0969	ppb	1.4132	2.7	167.133
Cr 267.716	100.479	ppb	0.2616	0.3	1469.51
Cu 324.754	105.783	ppb	0.9530	0.9	3234.24
Fe 271.441	5894.54	ppb	13.1258	0.2	3237.93
K 766.491	12459.2	ppb	1.8367	0.0	212030
Mg 279.078	8180.84	ppb	8.7886	0.1	9982.27
Mn 257.610	526.740	ppb	0.6580	0.1	36162.6
Mo 202.032	100.774	ppb	0.4763	0.5	142.550
Na 330.237	10426.9	ppb	96.7231	0.9	283.033
Ni 231.604	104.103	ppb	3.9214	3.8	99.4809
Pb 220.353	497.308	ppb	6.4516	1.3	185.343
Sb 206.834	50.7254	ppb	7.5346	14.9	22.1197
Se 196.026	116.948	ppb	5.2893	4.5	25.7696
Si 288.158	2154.31	ppb	3.6480	0.2	9760.71
Sn 189.925	98.4356	ppb	2.0484	2.1	21.1036
Sr 216.596	129.009	ppb	1.2458	1.0	317.925
Ti 334.941	394.212	ppb	0.9320	0.2	29745.7
Tl 190.794	27.3348	ppb	6.0412	22.1	3.8374
V 292.401	102.948	ppb	0.6848	0.7	826.148
Zn 206.200	116.079	ppb	2.7019	2.3	59.9562

680-167024-C-2-E MS (Samp) 4/9/2019, 5:36:19 AM Rack 4, Tube 19

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	50.8266	50.6791	49.8959
Al 308.215	5282.95	5278.87	5271.94
As 188.980	105.636	113.490	106.181
B 249.678	233.290	234.340	234.108
Ba 389.178	114.330	109.731	110.611
Be 313.042	52.9479	52.8421	52.8195
Ca 370.602	15463	15511	15497
Cd 226.502	50.5017	50.2673	50.8083
Co 228.615	49.5427	48.9739	50.4787
Cr 267.716	97.3049	97.8560	97.3128
Cu 324.754	102.056	103.946	102.106
Fe 271.441	5710.62	5741.78	5745.24
K 766.491	11993.4	11970.8	11971.8
Mg 279.078	7877.20	7890.50	7899.33
Mn 257.610	513.392	513.346	512.364
Mo 202.032	99.3221	99.8105	98.6972
Na 330.237	9908.60	10238.8	10330.2
Ni 231.604	103.471	103.607	103.178
Pb 220.353	473.038	483.591	471.627
Sb 206.834	51.4827	38.6204	41.9124
Se 196.026	118.135	98.0448	111.876
Si 288.158	2099.06	2094.56	2086.07
Sn 189.925	84.7393	102.203	89.0613
Sr 216.596	125.479	125.229	127.118
Ti 334.941	384.117	384.064	384.501

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	30.7716	35.0859	33.0451
V 292.401	99.3387	99.8277	99.4260
Zn 206.200	112.402	105.091	113.470

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.4672	ppb	0.5002	1.0	1299.63
Al 308.215	5277.92	ppb	5.5659	0.1	9166.68
As 188.980	108.436	ppb	4.3857	4.0	27.5943
B 249.678	233.913	ppb	0.5517	0.2	1476.48
Ba 389.178	111.557	ppb	2.4412	2.2	543.476
Be 313.042	52.8698	ppb	0.0685	0.1	40462.7
Ca 370.602	15490	ppb	24.69	0.2	22014
Cd 226.502	50.5258	ppb	0.2713	0.5	587.947
Co 228.615	49.6651	ppb	0.7598	1.5	158.966
Cr 267.716	97.4913	ppb	0.3159	0.3	1426.13
Cu 324.754	102.702	ppb	1.0773	1.0	3153.92
Fe 271.441	5732.55	ppb	19.0701	0.3	3150.17
K 766.491	11978.7	ppb	12.7746	0.1	203861
Mg 279.078	7889.01	ppb	11.1399	0.1	9627.12
Mn 257.610	513.034	ppb	0.5805	0.1	35221.9
Mo 202.032	99.2766	ppb	0.5580	0.6	140.473
Na 330.237	10159.2	ppb	221.790	2.2	276.628
Ni 231.604	103.418	ppb	0.2196	0.2	98.8106
Pb 220.353	476.085	ppb	6.5387	1.4	177.503
Sb 206.834	44.0051	ppb	6.6816	15.2	19.9948
Se 196.026	109.352	ppb	10.2803	9.4	24.3812
Si 288.158	2093.23	ppb	6.5982	0.3	9500.29
Sn 189.925	92.0014	ppb	9.0957	9.9	19.6579
Sr 216.596	125.942	ppb	1.0260	0.8	310.419
Ti 334.941	384.227	ppb	0.2382	0.1	28991.4
Tl 190.794	32.9676	ppb	2.1582	6.5	5.1464
V 292.401	99.5308	ppb	0.2608	0.3	798.191
Zn 206.200	110.321	ppb	4.5605	4.1	56.9159

680-167024-C-2-F MSD (Samp) 4/9/2019, 5:40:45 AM

Rack 4, Tube 20

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	49.2761	49.7434	49.9305
Al 308.215	5344.28	5342.59	5337.30
As 188.980	107.182	109.030	114.877
B 249.678	236.587	238.077	240.631
Ba 389.178	113.973	113.626	111.640
Be 313.042	53.6786	53.6913	53.7030
Ca 370.602	15648	15615	15627
Cd 226.502	51.7891	50.7791	51.3422
Co 228.615	51.6179	51.3393	51.2873
Cr 267.716	98.9258	99.9668	99.0488
Cu 324.754	102.700	105.419	103.393
Fe 271.441	5786.38	5811.39	5811.86
K 766.491	11964.8	11963.5	11988.3
Mg 279.078	7976.40	7988.86	8004.55
Mn 257.610	519.247	519.503	519.720
Mo 202.032	104.266	99.9202	100.224

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	10251.6	10206.5	10440.1
Ni 231.604	106.245	100.046	103.225
Pb 220.353	480.647	499.682	494.682
Sb 206.834	52.0373	52.9002	56.6981
Se 196.026	87.4683	120.628	97.3115
Si 288.158	2119.80	2112.09	2112.80
Sn 189.925	106.578	106.306	96.8476
Sr 216.596	126.110	126.687	128.286
Ti 334.941	389.246	389.853	390.207
Tl 190.794	37.4611	30.4018	48.1439
V 292.401	101.846	101.274	100.758
Zn 206.200	108.741	108.458	111.866

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.6500	ppb	0.3370	0.7	1277.66
Al 308.215	5341.39	ppb	3.6446	0.1	9274.01
As 188.980	110.363	ppb	4.0168	3.6	28.0363
B 249.678	238.432	ppb	2.0452	0.9	1505.40
Ba 389.178	113.080	ppb	1.2588	1.1	551.315
Be 313.042	53.6910	ppb	0.0122	0.0	41097.7
Ca 370.602	15630	ppb	16.57	0.1	22213
Cd 226.502	51.3035	ppb	0.5061	1.0	596.932
Co 228.615	51.4148	ppb	0.1778	0.3	164.818
Cr 267.716	99.3138	ppb	0.5688	0.6	1452.59
Cu 324.754	103.837	ppb	1.4128	1.4	3183.54
Fe 271.441	5803.21	ppb	14.5805	0.3	3188.48
K 766.491	11972.2	ppb	13.9354	0.1	203751
Mg 279.078	7989.94	ppb	14.1059	0.2	9749.93
Mn 257.610	519.490	ppb	0.2370	0.0	35664.9
Mo 202.032	101.470	ppb	2.4262	2.4	143.519
Na 330.237	10299.4	ppb	123.898	1.2	280.011
Ni 231.604	103.172	ppb	3.1001	3.0	98.5672
Pb 220.353	491.671	ppb	9.8685	2.0	183.260
Sb 206.834	53.8785	ppb	2.4796	4.6	23.1075
Se 196.026	101.803	ppb	17.0298	16.7	23.0026
Si 288.158	2114.90	ppb	4.2621	0.2	9593.27
Sn 189.925	103.244	ppb	5.5409	5.4	22.1839
Sr 216.596	127.028	ppb	1.1270	0.9	313.065
Ti 334.941	389.769	ppb	0.4859	0.1	29409.9
Tl 190.794	38.6689	ppb	8.9325	23.1	6.4729
V 292.401	101.293	ppb	0.5439	0.5	812.501
Zn 206.200	109.689	ppb	1.8912	1.7	56.5815

Cont Calib Verif (CCV) 4/9/2019, 5:45:12 AM Rack S, Tube 10
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	500.332	501.835	499.791
Al 308.215	10442.1	10470.5	10449.2
As 188.980	567.764	564.997	563.841
B 249.678	553.623	560.299	561.184
Ba 389.178	467.189	468.762	470.181
Be 313.042	550.283	550.496	550.506
Ca 370.602	10184	10174	10168

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	515.910	517.162	515.515
Co 228.615	518.648	517.497	514.018
Cr 267.716	499.411	501.152	497.589
Cu 324.754	518.103	515.576	517.167
Fe 271.441	10199.2	10216.1	10226.7
K 766.491	10139.1	10123.9	10150.0
Mg 279.078	10564.7	10568.7	10577.6
Mn 257.610	511.429	512.682	512.055
Mo 202.032	512.774	517.286	514.894
Na 330.237	11016.3	11206.8	11651.1
Ni 231.604	521.349	518.886	518.403
Pb 220.353	496.363	486.335	515.268
Sb 206.834	509.353	513.100	514.607
Se 196.026	556.971	563.978	565.578
Si 288.158	5123.90	5124.54	5112.37
Sn 189.925	499.603	510.727	496.982
Sr 216.596	492.292	495.716	492.747
Ti 334.941	496.340	497.427	496.454
Tl 190.794	487.584	482.520	496.970
V 292.401	509.357	511.460	511.099
Zn 206.200	1084.13	1095.08	1078.70

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	500.653	ppb	1.0589	0.2	13400.8	100.13057
Al 308.215	10453.9	ppb	14.7919	0.1	17927.2	104.53935
As 188.980	565.534	ppb	2.0157	0.4	137.336	113.10686Q
B 249.678	558.369	ppb	4.1335	0.7	3553.25	111.67374Q
Ba 389.178	468.711	ppb	1.4966	0.3	2363.12	93.74211
Be 313.042	550.428	ppb	0.1264	0.0	425262	110.08568Q
Ca 370.602	10175	ppb	7.821	0.1	14463	101.75242
Cd 226.502	516.196	ppb	0.8595	0.2	5924.20	103.23914
Co 228.615	516.721	ppb	2.4105	0.5	1715.22	103.34426
Cr 267.716	499.384	ppb	1.7813	0.4	7257.26	99.87675
Cu 324.754	516.949	ppb	1.2775	0.2	13958.7	103.38973
Fe 271.441	10214.0	ppb	13.8950	0.1	5598.09	102.08890
K 766.491	10137.7	ppb	13.1264	0.1	172566	101.37682
Mg 279.078	10570.3	ppb	6.5938	0.1	12890.6	105.70330
Mn 257.610	512.055	ppb	0.6266	0.1	35167.2	102.41100
Mo 202.032	514.985	ppb	2.2571	0.4	717.758	102.99695
Na 330.237	11291.4	ppb	325.751	2.9	292.878	112.91396Q
Ni 231.604	519.546	ppb	1.5800	0.3	507.188	103.90922
Pb 220.353	499.322	ppb	14.6919	2.9	185.898	99.86440
Sb 206.834	512.353	ppb	2.7052	0.5	168.479	102.47069
Se 196.026	562.176	ppb	4.5780	0.8	107.083	112.43512Q
Si 288.158	5120.27	ppb	6.8494	0.1	22441.8	102.40543
Sn 189.925	502.437	ppb	7.2980	1.5	111.877	100.48747
Sr 216.596	493.585	ppb	1.8593	0.4	1203.91	98.71700
Ti 334.941	496.740	ppb	0.5973	0.1	37489.3	99.34805
Tl 190.794	489.024	ppb	7.3318	1.5	111.303	97.80489
V 292.401	510.638	ppb	1.1246	0.2	4137.85	102.12770
Zn 206.200	1085.97	ppb	8.3418	0.8	572.030	108.59709

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Blank (CCB) 4/9/2019, 5:49:37 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5375u	-0.1426u	-0.1117u
Al 308.215	10.9372	10.7773	9.5792
As 188.980	-1.4824u	3.4135	-1.4316u
B 249.678	17.7138	15.3044	13.8983
Ba 389.178	-0.5178u	1.6748	-2.1615u
Be 313.042	0.0402	0.0043	0.0049
Ca 370.602	14.57	1.994	10.21
Cd 226.502	-0.2119u	0.3997	0.0962
Co 228.615	0.3972	-0.8114u	-0.5360u
Cr 267.716	-0.0501u	0.1557	0.5294
Cu 324.754	3.6005	3.3927	3.9947
Fe 271.441	10.2308	-7.8160u	-9.4791u
K 766.491	4.5518	4.1355	2.9845
Mg 279.078	-0.6281u	3.6439	7.1097
Mn 257.610	0.1401	0.2412	0.1386
Mo 202.032	1.9705	0.7716	2.8520
Na 330.237	266.125	-228.300u	80.5381
Ni 231.604	1.1504	-1.2364u	-3.9546u
Pb 220.353	0.6431	2.4955	-1.9769u
Sb 206.834	8.5017	-9.6736u	-0.0169u
Se 196.026	14.1170	12.9045	11.1082
Si 288.158	19.8108	16.6977	15.4091
Sn 189.925	-6.1833u	0.2463	9.6079
Sr 216.596	0.0179	-0.5014u	1.0202
Ti 334.941	0.4097	0.3213	0.0668
Tl 190.794	-2.3687u	-6.9241u	9.5569
V 292.401	-0.2838u	0.1042	0.7041
Zn 206.200	2.8173	2.4340	-1.0436u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.2639	ppb	0.2374	90.0	-63.4291	-0.26390
Al 308.215	10.4312	ppb	0.7422	7.1	261.133	10.43123
As 188.980	0.1665	ppb	2.8121	1689.1	1.2278	0.16648
B 249.678	15.6388	ppb	1.9296	12.3	81.9622	15.63884
Ba 389.178	-0.3348	ppb	1.9246	574.8	-32.7693	-0.33481
Be 313.042	0.0164	ppb	0.0206	125.1	-412.125	0.01645
Ca 370.602	8.926	ppb	6.385	71.5	21.87	8.92568
Cd 226.502	0.0947	ppb	0.3058	323.1	3.4974	0.09466
Co 228.615	-0.3167	ppb	0.6335	200.0	-9.4365	-0.31674
Cr 267.716	0.2117	ppb	0.2938	138.8	13.4037	0.21167
Cu 324.754	3.6626	ppb	0.3057	8.3	569.953	3.66263
Fe 271.441	-2.3548	ppb	10.9311	464.2	44.5445	-2.35477
K 766.491	3.8906	ppb	0.8119	20.9	300.852	3.89061
Mg 279.078	3.3752	ppb	3.8759	114.8	32.3743	3.37517
Mn 257.610	0.1733	ppb	0.0588	33.9	34.3078	0.17329
Mo 202.032	1.8647	ppb	1.0443	56.0	5.2453	1.86470
Na 330.237	39.4545	ppb	249.760	633.0	33.4343	39.45451
Ni 231.604	-1.3469	ppb	2.5543	189.6	-4.0567	-1.34688
Pb 220.353	0.3872	ppb	2.2472	580.3	1.8062	0.38724
Sb 206.834	-0.3962	ppb	9.0936	2295.0	5.7179	-0.39624
Se 196.026	12.7099	ppb	1.5138	11.9	6.6990	12.70992Z
Si 288.158	17.3059	ppb	2.2630	13.1	649.381	17.30587

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	1.2236	ppb	7.9408	649.0	-0.7394	1.22364
Sr 216.596	0.1789	ppb	0.7735	432.3	3.7908	0.17891
Ti 334.941	0.2659	ppb	0.1781	67.0	-5.0713	0.26591
Tl 190.794	0.0880	ppb	8.5107	9670.0	-2.5099	0.08801
V 292.401	0.1748	ppb	0.4977	284.7	-10.4020	0.17483
Zn 206.200	1.4025	ppb	2.1271	151.7	-0.5724	1.40255

680-166982-A-9-B (Samp) 4/9/2019, 5:54:01 AM Rack 4, Tube 21

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1019u	-0.8049u	-0.4048u
Al 308.215	246.369	252.220	254.452
As 188.980	15.7839	2.0680	6.8696
B 249.678	3702.43	3745.42	3753.03
Ba 389.178	30.2804	28.5148	28.1617
Be 313.042	0.7139	0.7064	0.6904u
Ca 370.602	330123	330760	330320
Cd 226.502	0.6211u	0.6662u	1.6178
Co 228.615	-1.2795u	-0.4675u	-1.5185u
Cr 267.716	-3.0774	-3.3328	-3.2299
Cu 324.754	1.3222	1.6112	1.7286
Fe 271.441	334.934	347.352	316.117
K 766.491	495128x	498587x	501152x
Mg 279.078	978583x	980473x	982387x
Mn 257.610	-19.1347	-19.0762	-19.0242
Mo 202.032	6.5135	8.7868	8.2091
Na 330.237	12888766x	12913011x	12985801x
Ni 231.604	3.4148	-1.1893u	-0.0942u
Pb 220.353	1.9798	-0.1233u	3.8788
Sb 206.834	-17.9784u	-6.7240u	-17.2442u
Se 196.026	13.4706	9.9526	0.5909
Si 288.158	1054.38	1066.59	1055.10
Sn 189.925	-14.5923u	-6.1909u	-2.6579
Sr 216.596	6018.43x	6021.95x	6003.94x
Ti 334.941	-21.2741	-21.4824	-21.5344
Tl 190.794	-24.3011u	-11.8467u	-11.3758u
V 292.401	7.3458	7.8621	7.5882
Zn 206.200	2.4820	6.2441	6.7352

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7705b	ppb	0.3498	45.4	-99.4803
Al 308.215	251.014b	ppb	4.1742	1.7	667.927
As 188.980	8.2405b	ppb	6.9599	84.5	3.2864
B 249.678	3733.62b	ppb	27.2862	0.7	23930.5
Ba 389.178	28.9857b	ppb	1.1351	3.9	894.260
Be 313.042	0.7036b	ppb	0.0120	1.7	-415.108
Ca 370.602	330401b	ppb	326.2	0.1	469255
Cd 226.502	0.9684b	ppb	0.5629	58.1	-2.3878
Co 228.615	-1.0885b	ppb	0.5509	50.6	-11.9458
Cr 267.716	-3.2134b	ppb	0.1285	4.0	26.8137
Cu 324.754	1.5540b	ppb	0.2091	13.5	515.108
Fe 271.441	332.801b	ppb	15.7266	4.7	225.860
K 766.491	498289xb	ppb	3022.94	0.6	8470705

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	980481xb	ppb	1901.82	0.2	1193721
Mn 257.610	-19.0784b	ppb	0.0553	0.3	1741.46
Mo 202.032	7.8365b	ppb	1.1816	15.1	13.5356
Na 330.237	12929193xb	ppb	50500.8	0.4	316457
Ni 231.604	0.7104b	ppb	2.4052	338.6	-2.0352
Pb 220.353	1.9118b	ppb	2.0020	104.7	2.3690
Sb 206.834	-13.9822b	ppb	6.2965	45.0	1.4451
Se 196.026	8.0047b	ppb	6.6571	83.2	5.8407
Si 288.158	1058.69b	ppb	6.8526	0.6	5072.77
Sn 189.925	-7.8137b	ppb	6.1305	78.5	-1.6451
Sr 216.596	6014.77xb	ppb	9.5451	0.2	14706.0
Ti 334.941	-21.4303b	ppb	0.1377	0.6	345.921
Tl 190.794	-15.8412b	ppb	7.3302	46.3	-6.2174
V 292.401	7.5987b	ppb	0.2583	3.4	25.8839
Zn 206.200	5.1538b	ppb	2.3268	45.1	1.4095

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4/9/2019, 5:58:27 AM

Rack 4, Tube 22

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.4231u	-0.4558u	-0.2673u
Al 308.215	3642.37	3654.07	3581.66
As 188.980	18.4417	8.0232	10.4455
B 249.678	3988.12	3975.74	3946.11
Ba 389.178	34.6498	36.0345	33.5603
Be 313.042	0.7968	0.8054	0.8370
Ca 370.602	345565	344916	345898
Cd 226.502	0.7856u	1.8083	1.8602
Co 228.615	-2.2510u	-2.5284u	-0.4607u
Cr 267.716	0.0961	1.1224	0.3667
Cu 324.754	2.4275	1.8132	0.7510
Fe 271.441	2368.25	2370.06	2378.11
K 766.491	518643x	512284x	507222x
Mg 279.078	1026627x	1022131x	1025898x
Mn 257.610	12.2589	12.4004	12.4935
Mo 202.032	8.7818	11.9892	7.6324
Na 330.237	13514928x	13288898x	13230917x
Ni 231.604	5.5489	5.3743	8.3122
Pb 220.353	12.2498	-10.3271u	20.0484
Sb 206.834	12.8694	11.3679	9.1636
Se 196.026	-3.7142u	20.9908	20.4327
Si 288.158	6923.02	6911.29	6870.40
Sn 189.925	-17.0442u	-6.4709u	-9.8074u
Sr 216.596	6313.99x	6324.89x	6397.53x
Ti 334.941	29.6443	31.4468	30.0152
Tl 190.794	-18.8742u	-23.8479u	-16.5902u
V 292.401	14.7585	14.2112	14.3922
Zn 206.200	10.4909	6.1870	9.2933

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3821b	ppb	0.1007	26.4	-90.4717
Al 308.215	3626.04b	ppb	38.8747	1.1	6372.01
As 188.980	12.3035b	ppb	5.4521	44.3	4.3178
B 249.678	3969.99b	ppb	21.5887	0.5	25444.6

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	34.7482b	ppb	1.2400	3.6	959.094
Be 313.042	0.8131b	ppb	0.0212	2.6	-346.848
Ca 370.602	345460b	ppb	499.1	0.1	490641
Cd 226.502	1.4847b	ppb	0.6060	40.8	5.6701
Co 228.615	-1.7467b	ppb	1.1223	64.3	-13.8443
Cr 267.716	0.5284b	ppb	0.5319	100.7	83.3505
Cu 324.754	1.6639b	ppb	0.8482	51.0	518.265
Fe 271.441	2372.14b	ppb	5.2493	0.2	1329.28
K 766.491	512716xb	ppb	5722.86	1.1	8715952
Mg 279.078	1024885xb	ppb	2412.94	0.2	1247780
Mn 257.610	12.3843b	ppb	0.1182	1.0	4037.26
Mo 202.032	9.4678b	ppb	2.2580	23.8	15.7805
Na 330.237	13344914xb	ppb	150063	1.1	326631
Ni 231.604	6.4118b	ppb	1.6481	25.7	3.5654
Pb 220.353	7.3237b	ppb	15.7755	215.4	4.3607
Sb 206.834	11.1336b	ppb	1.8639	16.7	9.3929
Se 196.026	12.5698b	ppb	14.1050	112.2	6.6712
Si 288.158	6901.57b	ppb	27.6241	0.4	29885.7
Sn 189.925	-11.1075b	ppb	5.4052	48.7	-2.3492
Sr 216.596	6345.47xb	ppb	45.4171	0.7	15514.6
Ti 334.941	30.3688b	ppb	0.9518	3.1	4348.69
Tl 190.794	-19.7708b	ppb	3.7110	18.8	-7.1656
V 292.401	14.4540b	ppb	0.2788	1.9	81.5124
Zn 206.200	8.6571b	ppb	2.2214	25.7	3.2621

680-166982-A-3-B (Samp)

4/9/2019, 6:02:53 AM

Rack 4, Tube 23

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2613u	0.2198u	-0.5729u
Al 308.215	712.551	716.926	705.515
As 188.980	0.3335	11.0182	5.9828
B 249.678	3835.18	3841.64	3818.27
Ba 389.178	32.2084	33.1882	28.8979
Be 313.042	0.7288	0.7291	0.7370
Ca 370.602	339813	339493	339550
Cd 226.502	1.4044	1.3454u	1.0359u
Co 228.615	-3.6544u	-1.5647u	0.6668
Cr 267.716	-2.4560	-3.5109	-2.1703
Cu 324.754	1.1009	0.9014	0.2970
Fe 271.441	671.316	674.773	661.393
K 766.491	503165x	500120x	494934x
Mg 279.078	1015075x	1013377x	1010446x
Mn 257.610	-16.3917	-16.4337	-16.4654
Mo 202.032	9.6008	9.4484	9.5942
Na 330.237	13173085x	12993038x	12769697x
Ni 231.604	2.5449	4.4863	4.8293
Pb 220.353	3.6270	-1.7478u	0.8593
Sb 206.834	6.3586	7.6997	-6.7848u
Se 196.026	14.7603	4.7918	-10.0685u
Si 288.158	1768.13	1763.52	1742.65
Sn 189.925	-17.5574u	-10.8323u	-23.2921u
Sr 216.596	6274.20x	6258.18x	6291.35x
Ti 334.941	-14.6155	-15.0091	-14.8972

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-14.9246u	-21.2181u	-6.7050u
V 292.401	8.7616	8.8403	8.7429
Zn 206.200	3.4578	8.5008	10.9287

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2048b	ppb	0.3993	195.0	-85.3246
Al 308.215	711.664b	ppb	5.7569	0.8	1446.48
As 188.980	5.7782b	ppb	5.3453	92.5	2.6791
B 249.678	3831.70b	ppb	12.0649	0.3	24559.2
Ba 389.178	31.4315b	ppb	2.2482	7.2	932.320
Be 313.042	0.7316b	ppb	0.0046	0.6	-394.695
Ca 370.602	339619b	ppb	170.8	0.1	482347
Cd 226.502	1.2619b	ppb	0.1979	15.7	1.4509
Co 228.615	-1.5174b	ppb	2.1610	142.4	-13.3389
Cr 267.716	-2.7124b	ppb	0.7061	26.0	34.3571
Cu 324.754	0.7665b	ppb	0.4186	54.6	494.632
Fe 271.441	669.161b	ppb	6.9459	1.0	407.844
K 766.491	499407xb	ppb	4161.66	0.8	8489701
Mg 279.078	1012966xb	ppb	2341.63	0.2	1233270
Mn 257.610	-16.4303b	ppb	0.0370	0.2	2023.30
Mo 202.032	9.5478b	ppb	0.0862	0.9	15.9090
Na 330.237	12978605xb	ppb	202081	1.6	317666
Ni 231.604	3.9535b	ppb	1.2319	31.2	1.1505
Pb 220.353	0.9128b	ppb	2.6878	294.4	1.9989
Sb 206.834	2.4245b	ppb	8.0036	330.1	6.6166
Se 196.026	3.1612b	ppb	12.4945	395.2	4.9552
Si 288.158	1758.10b	ppb	13.5793	0.8	8042.50
Sn 189.925	-17.2273b	ppb	6.2364	36.2	-3.7560
Sr 216.596	6274.58xb	ppb	16.5869	0.3	15341.1
Ti 334.941	-14.8406b	ppb	0.2028	1.4	915.788
Tl 190.794	-14.2826b	ppb	7.2779	51.0	-5.8611
V 292.401	8.7816b	ppb	0.0517	0.6	35.5909
Zn 206.200	7.6291b	ppb	3.8110	50.0	2.7176

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4/9/2019, 6:07:19 AM

Rack 4, Tube 24

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1576u	-0.2388u	-0.5860u
Al 308.215	761.209	765.490	760.214
As 188.980	0.8296	6.0481	4.9180
B 249.678	3549.72	3546.94	3543.79
Ba 389.178	23.9403	31.1943	24.9319
Be 313.042	0.7151	0.7204	0.7370
Ca 370.602	331805	331499	332336
Cd 226.502	1.7709	1.2095u	0.8333u
Co 228.615	-0.9285u	-1.6849u	-2.0343u
Cr 267.716	-2.6554	-2.4775	-2.4283
Cu 324.754	-0.8784u	-1.2307u	-1.4440u
Fe 271.441	620.471	640.949	634.372
K 766.491	476093x	472103x	468486x
Mg 279.078	995306x	993876x	995087x
Mn 257.610	-18.0548	-18.4513	-18.1813
Mo 202.032	6.3454	10.0372	7.6147

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	12193109x	12135902x	12034664x
Ni 231.604	2.8096	6.6090	2.7967
Pb 220.353	8.4898	9.6642	9.0459
Sb 206.834	10.0320	-5.0301u	3.2592
Se 196.026	6.5350	11.6321	-11.8366u
Si 288.158	2013.17	2013.46	2001.48
Sn 189.925	6.9718	-5.1350u	-4.7541u
Sr 216.596	6241.95x	6231.61x	6265.55x
Ti 334.941	-12.7951	-12.7261	-12.0022
Tl 190.794	0.3600	-27.7545u	-7.5584u
V 292.401	7.8154	8.5473	7.5679
Zn 206.200	8.5911	6.6514	1.7788

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2224b	ppb	0.3721	167.3	-85.5963
Al 308.215	762.305b	ppb	2.8033	0.4	1532.03
As 188.980	3.9319b	ppb	2.7454	69.8	2.2133
B 249.678	3546.82b	ppb	2.9678	0.1	22731.9
Ba 389.178	26.6888b	ppb	3.9333	14.7	893.998
Be 313.042	0.7242b	ppb	0.0115	1.6	-363.760
Ca 370.602	331880b	ppb	423.3	0.1	471355
Cd 226.502	1.2712b	ppb	0.4718	37.1	2.7674
Co 228.615	-1.5492b	ppb	0.5653	36.5	-13.4330
Cr 267.716	-2.5204b	ppb	0.1195	4.7	32.9407
Cu 324.754	-1.1844b	ppb	0.2856	24.1	443.756
Fe 271.441	631.930b	ppb	10.4550	1.7	387.673
K 766.491	472227xb	ppb	3804.98	0.8	8027672
Mg 279.078	994756xb	ppb	770.630	0.1	1211100
Mn 257.610	-18.2291b	ppb	0.2025	1.1	1845.67
Mo 202.032	7.9991b	ppb	1.8757	23.4	13.7586
Na 330.237	12121224xb	ppb	80235.7	0.7	296683
Ni 231.604	4.0718b	ppb	2.1973	54.0	1.2671
Pb 220.353	9.0666b	ppb	0.5875	6.5	5.0110
Sb 206.834	2.7537b	ppb	7.5437	274.0	6.7212
Se 196.026	2.1101b	ppb	12.3442	585.0	4.7632
Si 288.158	2009.37b	ppb	6.8377	0.3	9110.43
Sn 189.925	-0.9724b	ppb	6.8825	707.8	-0.1786
Sr 216.596	6246.37xb	ppb	17.3947	0.3	15272.1
Ti 334.941	-12.5078b	ppb	0.4392	3.5	1067.45
Tl 190.794	-11.6509b	ppb	14.4972	124.4	-5.2487
V 292.401	7.9769b	ppb	0.5093	6.4	30.8210
Zn 206.200	5.6738b	ppb	3.5098	61.9	1.6845

680-166982-A-2-B (Samp)

4/9/2019, 6:11:45 AM

Rack 4, Tube 25

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9845u	-0.4693u	-0.5762u
Al 308.215	457.669	456.192	447.222
As 188.980	7.3779	9.0115	4.3020
B 249.678	3443.59	3449.57	3427.20
Ba 389.178	29.7541	27.6564	24.7877
Be 313.042	0.7522	0.7393	0.7472
Ca 370.602	336634	337076	337329

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	1.5721	1.2957	1.1422u
Co 228.615	-0.1126u	-1.7736u	-2.9783u
Cr 267.716	-2.5619	-2.1413	-2.1339
Cu 324.754	-3.7254u	-4.8476u	-4.8957u
Fe 271.441	582.550	585.782	565.080
K 766.491	464751x	459425x	457351x
Mg 279.078	1018026x	1016168x	1018047x
Mn 257.610	-15.4980	-15.7891	-15.5390
Mo 202.032	10.7172	7.4075	8.4225
Na 330.237	11873243x	11683465x	11758359x
Ni 231.604	2.5470	1.8470	4.2097
Pb 220.353	1.9187	-5.7470u	-1.6171u
Sb 206.834	5.2930	-10.1931u	-7.2229u
Se 196.026	4.9348	11.2076	9.3209
Si 288.158	1380.02	1384.92	1382.97
Sn 189.925	-15.6614u	-3.6449	-2.6953
Sr 216.596	6436.01x	6445.96x	6484.03x
Ti 334.941	-17.7666	-17.3774	-17.8725
Tl 190.794	-18.7969u	-11.0955u	-10.3109u
V 292.401	7.5180	9.2302	8.3240
Zn 206.200	8.9385	8.3087	7.8167

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6766b	ppb	0.2719	40.2	-98.6347
Al 308.215	453.694b	ppb	5.6534	1.2	1010.48
As 188.980	6.8971b	ppb	2.3913	34.7	2.9505
B 249.678	3440.12b	ppb	11.5795	0.3	22047.6
Ba 389.178	27.3994b	ppb	2.4932	9.1	915.890
Be 313.042	0.7462b	ppb	0.0065	0.9	-331.230
Ca 370.602	337013b	ppb	351.7	0.1	478646
Cd 226.502	1.3366b	ppb	0.2178	16.3	4.0816
Co 228.615	-1.6215b	ppb	1.4389	88.7	-13.7053
Cr 267.716	-2.2790b	ppb	0.2450	10.7	34.7411
Cu 324.754	-4.4896b	ppb	0.6622	14.8	357.580
Fe 271.441	577.804b	ppb	11.1374	1.9	358.417
K 766.491	460509xb	ppb	3817.38	0.8	7828479
Mg 279.078	1017414xb	ppb	1078.98	0.1	1238684
Mn 257.610	-15.6087b	ppb	0.1576	1.0	2097.29
Mo 202.032	8.8491b	ppb	1.6956	19.2	14.9396
Na 330.237	11771690xb	ppb	95588.6	0.8	288129
Ni 231.604	2.8679b	ppb	1.2136	42.3	0.0841
Pb 220.353	-1.8151b	ppb	3.8367	211.4	0.9920
Sb 206.834	-4.0410b	ppb	8.2188	203.4	4.5813
Se 196.026	8.4878b	ppb	3.2183	37.9	5.9286
Si 288.158	1382.64b	ppb	2.4699	0.2	6448.55
Sn 189.925	-7.3339b	ppb	7.2275	98.5	-1.6383
Sr 216.596	6455.33xb	ppb	25.3438	0.4	15782.9
Ti 334.941	-17.6722b	ppb	0.2607	1.5	736.834
Tl 190.794	-13.4011b	ppb	4.6894	35.0	-5.6539
V 292.401	8.3574b	ppb	0.8566	10.2	34.7247
Zn 206.200	8.3546b	ppb	0.5623	6.7	3.1002

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166982-A-1-B (Samp) **4/9/2019, 6:16:12 AM** **Rack 4, Tube 26****Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	-0.4609u	-0.5088u	-0.7092u
Al 308.215	358.618	351.309	350.839
As 188.980	9.8356	-1.3122u	-1.5939u
B 249.678	3687.57	3668.35	3666.27
Ba 389.178	28.0881	35.8645	27.3641
Be 313.042	0.8023	0.7854	0.8371
Ca 370.602	367934	368814	368980
Cd 226.502	0.9923u	1.8177	0.6749u
Co 228.615	-2.8525u	-0.7804u	-3.0740u
Cr 267.716	-2.5509	-2.5405	-2.0239
Cu 324.754	-4.1890u	-4.8948u	-4.9372u
Fe 271.441	480.141	486.738	476.364
K 766.491	489144x	485053x	489854x
Mg 279.078	1115146x	1117730x	1123420x
Mn 257.610	-22.0071	-22.0968	-22.0721
Mo 202.032	9.4294	10.4515	6.8496
Na 330.237	12565142x	12455769x	12504339x
Ni 231.604	-0.4574u	5.1278	1.5978
Pb 220.353	10.9901	14.3584	-1.1030u
Sb 206.834	0.4065	-3.9143u	-7.9396u
Se 196.026	7.1560	8.1492	-0.1394u
Si 288.158	1273.84	1267.88	1265.79
Sn 189.925	8.0916	-2.7968	10.6653
Sr 216.596	7077.05x	7122.75x	7141.39x
Ti 334.941	-20.7653	-21.8951	-22.1327
Tl 190.794	-6.4556u	-15.2031u	-9.8670u
V 292.401	8.7373	7.9896	8.6712
Zn 206.200	10.6137	5.0913	11.1905

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.5596b	ppb	0.1318	23.5	-98.2039
Al 308.215	353.589b	ppb	4.3615	1.2	841.328
As 188.980	2.3098b	ppb	6.5190	282.2	1.8004
B 249.678	3674.06b	ppb	11.7423	0.3	23548.2
Ba 389.178	30.4389b	ppb	4.7126	15.5	1011.55
Be 313.042	0.8083b	ppb	0.0264	3.3	-312.403
Ca 370.602	368576b	ppb	562.1	0.2	523473
Cd 226.502	1.1616b	ppb	0.5899	50.8	1.2090
Co 228.615	-2.2356b	ppb	1.2652	56.6	-15.7686
Cr 267.716	-2.3717b	ppb	0.3013	12.7	36.9522
Cu 324.754	-4.6737b	ppb	0.4203	9.0	352.789
Fe 271.441	481.081b	ppb	5.2502	1.1	306.071
K 766.491	488017xb	ppb	2591.38	0.5	8296095
Mg 279.078	1118765xb	ppb	4233.19	0.4	1362076
Mn 257.610	-22.0587b	ppb	0.0463	0.2	1968.08
Mo 202.032	8.9102b	ppb	1.8562	20.8	15.0253
Na 330.237	12508416xb	ppb	54800.4	0.4	306159
Ni 231.604	2.0894b	ppb	2.8249	135.2	-0.6803
Pb 220.353	8.0818b	ppb	8.1306	100.6	4.6480
Sb 206.834	-3.8158b	ppb	4.1739	109.4	4.6501
Se 196.026	5.0553b	ppb	4.5261	89.5	5.3017
Si 288.158	1269.17b	ppb	4.1777	0.3	5066.96

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	5.3200b	ppb	7.1462	134.3	1.2685
Sr 216.596	7113.73xb	ppb	33.1070	0.5	17392.3
Ti 334.941	-21.5977b	ppb	0.7306	3.4	657.075
Tl 190.794	-10.5086b	ppb	4.4089	42.0	-4.9799
V 292.401	8.4660b	ppb	0.4139	4.9	34.3066
Zn 206.200	8.9651b	ppb	3.3672	37.6	3.4226

680-166982-A-5-B (Samp) 4/9/2019, 6:20:38 AM Rack 4, Tube 27

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1740u	-0.8978u	-0.8937u
Al 308.215	616.777	621.922	606.725
As 188.980	7.2684	-0.6346u	4.1980
B 249.678	3684.88	3690.64	3674.32
Ba 389.178	33.3336	34.6376	33.7181
Be 313.042	0.8250	0.8103	0.8100
Ca 370.602	368949	369249	369273
Cd 226.502	1.3010	1.4532	1.2657u
Co 228.615	-3.1805u	-2.7653u	-3.6644u
Cr 267.716	-1.4213	-1.4329	-2.3762
Cu 324.754	-4.3970u	-4.4085u	-4.8858u
Fe 271.441	635.826	626.958	639.954
K 766.491	495253x	498077x	492742x
Mg 279.078	1132755x	1132286x	1137743x
Mn 257.610	-28.3642	-28.7741	-28.3724
Mo 202.032	11.7277	9.9165	9.9838
Na 330.237	12729915x	12863942x	12652939x
Ni 231.604	2.5061	1.8566	4.4153
Pb 220.353	9.2880	3.2815	4.2651
Sb 206.834	-1.6099u	4.7938	-6.3327u
Se 196.026	-0.8468u	20.9530	-5.5360u
Si 288.158	1557.58	1558.00	1568.57
Sn 189.925	-16.4037u	-2.8919	1.9738
Sr 216.596	7132.23x	7120.69x	7145.29x
Ti 334.941	-17.1144	-17.4444	-18.0473
Tl 190.794	-16.5068u	-17.1927u	-7.9443u
V 292.401	10.1498	9.8011	7.6926
Zn 206.200	12.8514	10.1467	12.7761

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.6552b	ppb	0.4167	63.6	-101.190
Al 308.215	615.141b	ppb	7.7295	1.3	1283.38
As 188.980	3.6106b	ppb	3.9841	110.3	2.1430
B 249.678	3683.28b	ppb	8.2783	0.2	23607.2
Ba 389.178	33.8964b	ppb	0.6700	2.0	1041.46
Be 313.042	0.8151b	ppb	0.0086	1.1	-317.741
Ca 370.602	369157b	ppb	180.3	0.0	524298
Cd 226.502	1.3400b	ppb	0.0996	7.4	3.1357
Co 228.615	-3.2034b	ppb	0.4500	14.0	-18.9731
Cr 267.716	-1.7435b	ppb	0.5480	31.4	47.2437
Cu 324.754	-4.5638b	ppb	0.2789	6.1	355.680
Fe 271.441	634.246b	ppb	6.6407	1.0	388.889
K 766.491	495357xb	ppb	2669.00	0.5	8420863

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1134261xb	ppb	3024.07	0.3	1380942
Mn 257.610	-28.5036b	ppb	0.2343	0.8	1574.24
Mo 202.032	10.5427b	ppb	1.0268	9.7	17.2911
Na 330.237	12748931xb	ppb	106779	0.8	312045
Ni 231.604	2.9260b	ppb	1.3301	45.5	0.1424
Pb 220.353	5.6115b	ppb	3.2217	57.4	3.7344
Sb 206.834	-1.0496b	ppb	5.5844	532.1	5.5255
Se 196.026	4.8568b	ppb	14.1356	291.0	5.2645
Si 288.158	1561.38b	ppb	6.2270	0.4	7208.15
Sn 189.925	-5.7739b	ppb	9.5217	164.9	-1.2033
Sr 216.596	7132.74xb	ppb	12.3079	0.2	17438.8
Ti 334.941	-17.5354b	ppb	0.4730	2.7	994.440
Tl 190.794	-13.8813b	ppb	5.1530	37.1	-5.7692
V 292.401	9.2145b	ppb	1.3295	14.4	39.9696
Zn 206.200	11.9247b	ppb	1.5403	12.9	4.9857

680-166982-A-10-B (Samp)

4/9/2019, 6:25:04 AM

Rack 4, Tube 28

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.9074u	0.1434u	-0.0984u
Al 308.215	1408.83	1431.04	1419.98
As 188.980	7.6098	19.2049	8.0709
B 249.678	3392.68	3433.26	3429.80
Ba 389.178	34.0197	38.1150	32.9410
Be 313.042	0.8047	0.7935	0.8119
Ca 370.602	343704	345842	344424
Cd 226.502	0.7207u	1.4866	0.7004u
Co 228.615	-2.9907u	-3.7370u	-1.9360u
Cr 267.716	-0.3499	-1.1494	-0.4265
Cu 324.754	-2.9207u	-2.2491u	-2.9822u
Fe 271.441	1325.82	1310.74	1330.91
K 766.491	450798x	455353x	455359x
Mg 279.078	1042432x	1050627x	1045629x
Mn 257.610	6.1222	6.6007	6.4582
Mo 202.032	7.9658	10.5844	9.0894
Na 330.237	11669889x	11850908x	11715453x
Ni 231.604	0.6478	2.5897	2.3404
Pb 220.353	-0.5407u	6.6087	-8.2668u
Sb 206.834	2.6148	-5.4808u	-3.5220u
Se 196.026	-5.1117u	23.7314	0.3882
Si 288.158	3266.60	3313.12	3299.98
Sn 189.925	7.1817	-2.9675	6.6454
Sr 216.596	6582.63x	6609.73x	6574.85x
Ti 334.941	0.4100	2.4300	1.3459
Tl 190.794	-23.2063u	-2.0929u	-10.0729u
V 292.401	10.6888	11.5408	10.0872
Zn 206.200	11.2376	10.4671	13.4343

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2875b	ppb	0.5503	191.4	-89.5162
Al 308.215	1419.95b	ppb	11.1067	0.8	2643.57
As 188.980	11.6286b	ppb	6.5654	56.5	4.1242
B 249.678	3418.58b	ppb	22.4974	0.7	21908.6

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	35.0252b	ppb	2.7296	7.8	977.496
Be 313.042	0.8034b	ppb	0.0093	1.2	-284.652
Ca 370.602	344657b	ppb	1088	0.3	489501
Cd 226.502	0.9692b	ppb	0.4482	46.2	1.0130
Co 228.615	-2.8879b	ppb	0.9049	31.3	-17.8228
Cr 267.716	-0.6419b	ppb	0.4411	68.7	58.4177
Cu 324.754	-2.7173b	ppb	0.4067	15.0	403.898
Fe 271.441	1322.49b	ppb	10.4843	0.8	761.292
K 766.491	453837xb	ppb	2631.69	0.6	7715055
Mg 279.078	1046229xb	ppb	4130.56	0.4	1273766
Mn 257.610	6.3937b	ppb	0.2457	3.8	3695.13
Mo 202.032	9.2132b	ppb	1.3137	14.3	15.4374
Na 330.237	11745417xb	ppb	94155.9	0.8	287486
Ni 231.604	1.8593b	ppb	1.0566	56.8	-0.9057
Pb 220.353	-0.7329b	ppb	7.4396	1015.0	1.3903
Sb 206.834	-2.1293b	ppb	4.2236	198.4	5.1980
Se 196.026	6.3360b	ppb	15.3138	241.7	5.5353
Si 288.158	3293.24b	ppb	23.9802	0.7	14562.8
Sn 189.925	3.6199b	ppb	5.7111	157.8	0.8198
Sr 216.596	6589.07xb	ppb	18.3114	0.3	16109.9
Ti 334.941	1.3953b	ppb	1.0109	72.4	2241.85
Tl 190.794	-11.7907b	ppb	10.6610	90.4	-5.2902
V 292.401	10.7723b	ppb	0.7303	6.8	54.7396
Zn 206.200	11.7130b	ppb	1.5397	13.1	4.8749

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Rack 4, Tube 29

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1196u	0.6247u	-1.6252u
Al 308.215	590.482	583.900	583.792
As 188.980	5.4858	-2.7385u	-0.1086
B 249.678	3246.59	3237.18	3219.01
Ba 389.178	28.9209	31.9036	35.0359
Be 313.042	0.7554	0.7420	0.7666
Ca 370.602	334235	334329	334402
Cd 226.502	1.2533	0.3982u	1.1407u
Co 228.615	-4.9313u	-2.1396u	-2.7333u
Cr 267.716	-1.2687	-1.9901	-1.5381
Cu 324.754	-4.5033u	-4.4453u	-4.4533u
Fe 271.441	573.085	531.635	563.282
K 766.491	449446x	449172x	447408x
Mg 279.078	1027763x	1029121x	1030087x
Mn 257.610	-19.3078	-19.4785	-19.4766
Mo 202.032	7.9290	5.8822	7.9469
Na 330.237	11422438x	11523847x	11383499x
Ni 231.604	4.3866	8.7467	4.0285
Pb 220.353	12.0433	18.1991	7.1630
Sb 206.834	-2.6399u	-10.4732u	-4.5451u
Se 196.026	10.8347	16.4885	13.1051
Si 288.158	1734.90	1717.78	1712.30
Sn 189.925	2.1806	0.1764	-6.1645u
Sr 216.596	6409.43x	6425.39x	6452.99x
Ti 334.941	-15.4396	-15.7410	-16.0032

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-19.9077u	-33.7406u	-10.7192u
V 292.401	6.8757	7.6814	7.5146
Zn 206.200	6.9227	12.6672	9.2863

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3734b	ppb	1.1462	307.0	-91.2738
Al 308.215	586.058b	ppb	3.8315	0.7	1234.17
As 188.980	0.8795b	ppb	4.2002	477.5	1.5080
B 249.678	3234.26b	ppb	14.0168	0.4	20727.1
Ba 389.178	31.9534b	ppb	3.0578	9.6	948.028
Be 313.042	0.7547b	ppb	0.0123	1.6	-310.369
Ca 370.602	334322b	ppb	83.92	0.0	474824
Cd 226.502	0.9307b	ppb	0.4646	49.9	-0.0092
Co 228.615	-3.2680b	ppb	1.4707	45.0	-19.1813
Cr 267.716	-1.5990b	ppb	0.3645	22.8	42.9495
Cu 324.754	-4.4673b	ppb	0.0314	0.7	358.149
Fe 271.441	556.001b	ppb	21.6629	3.9	346.539
K 766.491	448675xb	ppb	1106.18	0.2	7627314
Mg 279.078	1028990xb	ppb	1167.76	0.1	1252779
Mn 257.610	-19.4210b	ppb	0.0980	0.5	1871.64
Mo 202.032	7.2527b	ppb	1.1869	16.4	12.7225
Na 330.237	11443261xb	ppb	72454.1	0.6	280091
Ni 231.604	5.7206b	ppb	2.6268	45.9	2.8875
Pb 220.353	12.4685b	ppb	5.5303	44.4	6.2687
Sb 206.834	-5.8861b	ppb	4.0852	69.4	4.0012
Se 196.026	13.4761b	ppb	2.8451	21.1	6.8396
Si 288.158	1721.66b	ppb	11.7892	0.7	7888.75
Sn 189.925	-1.2692b	ppb	4.3563	343.2	-0.3051
Sr 216.596	6429.27xb	ppb	22.0358	0.3	15719.2
Ti 334.941	-15.7279b	ppb	0.2820	1.8	915.842
Tl 190.794	-21.4558b	ppb	11.5885	54.0	-7.5282
V 292.401	7.3573b	ppb	0.4253	5.8	27.3421
Zn 206.200	9.6254b	ppb	2.8873	30.0	3.7712

680-166982-A-6-B (Samp)

4/9/2019, 6:33:58 AM

Rack 4, Tube 30

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.7522u	-1.5104u	0.8191u
Al 308.215	620.989	626.577	626.289
As 188.980	1.5039	-4.2129u	14.2122
B 249.678	3199.37	3244.43	3262.12
Ba 389.178	35.1850	27.7634	34.7172
Be 313.042	0.7552	0.7671	0.7579
Ca 370.602	338097	337754	337436
Cd 226.502	1.0645u	1.4260	1.6674
Co 228.615	-2.4713u	-1.8305u	-4.1858u
Cr 267.716	-2.0112	-2.1019	-1.1338
Cu 324.754	-5.5385u	-5.7837u	-4.6997u
Fe 271.441	649.636	641.260	646.134
K 766.491	460341x	459052x	459513x
Mg 279.078	1052907x	1046105x	1042588x
Mn 257.610	-17.6301	-17.6495	-17.4148
Mo 202.032	6.7375	11.0951	4.2174

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	11666373x	11726089x	11718759x
Ni 231.604	9.8352	3.9630	-0.4046u
Pb 220.353	1.6300	10.8977	8.8970
Sb 206.834	-6.5876u	1.1602	-11.9299u
Se 196.026	27.6522	9.7206	6.6803
Si 288.158	1762.97	1777.65	1779.39
Sn 189.925	-8.3751u	-4.2303	-6.8941u
Sr 216.596	6510.79x	6467.62x	6446.01x
Ti 334.941	-16.5753	-16.8423	-16.9328
Tl 190.794	-5.3924u	-29.2911u	-16.6899u
V 292.401	6.2928	7.9892	8.0246
Zn 206.200	10.6352	14.6236	7.1961

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.8145b	ppb	1.4199	174.3	-103.602
Al 308.215	624.618b	ppb	3.1461	0.5	1299.34
As 188.980	3.8344b	ppb	9.4310	246.0	2.2191
B 249.678	3235.31b	ppb	32.3568	1.0	20733.7
Ba 389.178	32.5552b	ppb	4.1564	12.8	963.404
Be 313.042	0.7601b	ppb	0.0063	0.8	-317.359
Ca 370.602	337762b	ppb	330.8	0.1	479710
Cd 226.502	1.3859b	ppb	0.3034	21.9	4.9637
Co 228.615	-2.8292b	ppb	1.2178	43.0	-17.7269
Cr 267.716	-1.7490b	ppb	0.5347	30.6	42.0400
Cu 324.754	-5.3406b	ppb	0.5684	10.6	335.408
Fe 271.441	645.677b	ppb	4.2068	0.7	395.079
K 766.491	459635xb	ppb	653.000	0.1	7813624
Mg 279.078	1047200xb	ppb	5245.79	0.5	1274948
Mn 257.610	-17.5648b	ppb	0.1302	0.7	2046.69
Mo 202.032	7.3500b	ppb	3.4795	47.3	12.8570
Na 330.237	11703741xb	ppb	32567.9	0.3	286466
Ni 231.604	4.4645b	ppb	5.1383	115.1	1.6534
Pb 220.353	7.1416b	ppb	4.8768	68.3	4.3007
Sb 206.834	-5.7858b	ppb	6.5818	113.8	4.0335
Se 196.026	14.6844b	ppb	11.3329	77.2	7.0602
Si 288.158	1773.34b	ppb	9.0183	0.5	8107.64
Sn 189.925	-6.4999b	ppb	2.1004	32.3	-1.4580
Sr 216.596	6474.81xb	ppb	32.9835	0.5	15830.6
Ti 334.941	-16.7835b	ppb	0.1859	1.1	866.612
Tl 190.794	-17.1245b	ppb	11.9552	69.8	-6.5221
V 292.401	7.4355b	ppb	0.9898	13.3	27.4308
Zn 206.200	10.8183b	ppb	3.7171	34.4	4.4015

Cont Calib Verif (CCV) 4/9/2019, 6:38:24 AM Rack S, Tube 10
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	447.171	443.627	451.753
Al 308.215	9557.37	9598.20	9624.35
As 188.980	566.811	562.252	574.359
B 249.678	566.011	566.397	562.424
Ba 389.178	462.771	459.840	457.989
Be 313.042	526.231	527.351	528.943
Ca 370.602	10442	10448	10399

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	528.296	526.509	525.813
Co 228.615	529.122	521.376	523.481
Cr 267.716	490.806	489.124	489.707
Cu 324.754	471.361	469.025	479.234
Fe 271.441	10109.4	10106.9	10093.1
K 766.491	9757.78	9754.25	9775.38
Mg 279.078	11078.7	11071.1	11057.0
Mn 257.610	507.368	507.491	509.316
Mo 202.032	507.275	503.685	509.875
Na 330.237	12331.2	11178.5	11649.6
Ni 231.604	537.568	541.183	542.741
Pb 220.353	573.108	557.373	553.292
Sb 206.834	476.981	485.224	480.255
Se 196.026	547.783	557.282	556.120
Si 288.158	4720.01	4714.82	4734.39
Sn 189.925	525.418	522.733	517.838
Sr 216.596	521.428	518.242	518.692
Ti 334.941	457.908	459.012	459.736
Tl 190.794	507.619	481.402	476.111
V 292.401	484.660	485.514	486.192
Zn 206.200	1209.55	1222.26	1214.33

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	447.517	ppb	4.0740	0.9	11972.1	89.50335Q
Al 308.215	9593.31	ppb	33.7583	0.4	16472.4	95.93307
As 188.980	567.808	ppb	6.1148	1.1	137.748	113.56151Q
B 249.678	564.944	ppb	2.1911	0.4	3595.31	112.98875Q
Ba 389.178	460.200	ppb	2.4112	0.5	2320.22	92.03998
Be 313.042	527.508	ppb	1.3624	0.3	407534	105.50166
Ca 370.602	10429	ppb	26.45	0.3	14823	104.29470
Cd 226.502	526.873	ppb	1.2810	0.2	6046.55	105.37457
Co 228.615	524.659	ppb	4.0054	0.8	1741.47	104.93187
Cr 267.716	489.879	ppb	0.8541	0.2	7119.36	97.97573
Cu 324.754	473.206	ppb	5.3489	1.1	12818.5	94.64128
Fe 271.441	10103.1	ppb	8.7774	0.1	5538.44	100.98051
K 766.491	9762.47	ppb	11.3224	0.1	166188	97.62469
Mg 279.078	11068.9	ppb	11.0164	0.1	13497.8	110.68932Q
Mn 257.610	508.058	ppb	1.0907	0.2	34894.3	101.61165
Mo 202.032	506.945	ppb	3.1081	0.6	706.593	101.38905
Na 330.237	11719.8	ppb	579.555	4.9	302.136	117.19764Q
Ni 231.604	540.497	ppb	2.6541	0.5	527.761	108.09947
Pb 220.353	561.257	ppb	10.4634	1.9	208.782	112.25148Q
Sb 206.834	480.820	ppb	4.1505	0.9	158.563	96.16400
Se 196.026	553.729	ppb	5.1814	0.9	105.539	110.74571Q
Si 288.158	4723.07	ppb	10.1401	0.2	20757.7	94.46149
Sn 189.925	521.997	ppb	3.8433	0.7	116.272	104.39931
Sr 216.596	519.454	ppb	1.7246	0.3	1266.98	103.89081
Ti 334.941	458.885	ppb	0.9204	0.2	34633.3	91.77709
Tl 190.794	488.377	ppb	16.8722	3.5	111.144	97.67547
V 292.401	485.456	ppb	0.7678	0.2	3930.68	97.09114
Zn 206.200	1215.38	ppb	6.4208	0.5	640.378	121.53816Q

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Blank (CCB) 4/9/2019, 6:42:49 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8716	0.0937	0.9661
Al 308.215	-22.4661u	-24.0524u	-19.2444u
As 188.980	-0.6467u	9.3521	-3.3971u
B 249.678	43.4177	40.0229	36.3106
Ba 389.178	-1.5659u	-1.7164u	-2.5510u
Be 313.042	0.0721	0.0824	0.0921
Ca 370.602	9.294	6.603	13.55
Cd 226.502	-0.5452u	-0.0845u	-0.0462u
Co 228.615	-1.7984u	-0.9565u	-1.8515u
Cr 267.716	0.3349	1.1785	0.3146
Cu 324.754	0.9166	-0.1012u	-0.6062u
Fe 271.441	-3.1865u	-4.4616u	3.5559
K 766.491	17.6190	16.0494	14.6519
Mg 279.078	25.9451	14.8556	19.1922
Mn 257.610	0.2018	0.1463	0.2277
Mo 202.032	1.6712	2.3016	1.2674
Na 330.237	-128.523u	280.594	469.781
Ni 231.604	0.6731	5.4646	2.2539
Pb 220.353	-0.5598u	6.1439	-1.9317u
Sb 206.834	3.4522	-3.1261u	-8.3481u
Se 196.026	-10.9142u	-13.6323u	-9.0749u
Si 288.158	1.6034	0.8907	-1.1266u
Sn 189.925	3.3945	3.0320	1.8144
Sr 216.596	2.6417	-0.0327u	0.3251
Ti 334.941	0.1587	0.4934	0.3505
Tl 190.794	-1.6419u	4.4957	-4.1243u
V 292.401	0.3659	0.4045	1.0375
Zn 206.200	3.9659	5.3284	3.0127

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.6438	ppb	0.4788	74.4	-39.0311	0.64380
Al 308.215	-21.9210	ppb	2.4499	11.2	206.475	-21.92097
As 188.980	1.7694	ppb	6.7092	379.2	1.6154	1.76942
B 249.678	39.9171	ppb	3.5547	8.9	237.683	39.91706
Ba 389.178	-1.9444	ppb	0.5306	27.3	-40.9403	-1.94445
Be 313.042	0.0822	ppb	0.0100	12.2	-361.274	0.08222
Ca 370.602	9.815	ppb	3.501	35.7	23.13	9.81503
Cd 226.502	-0.2253	ppb	0.2777	123.3	-0.1584	-0.22531
Co 228.615	-1.5355	ppb	0.5021	32.7	-13.5072	-1.53546
Cr 267.716	0.6094	ppb	0.4930	80.9	19.1747	0.60935
Cu 324.754	0.0697	ppb	0.7757	1112.6	476.282	0.06971
Fe 271.441	-1.3641	ppb	4.3082	315.8	45.0227	-1.36407
K 766.491	16.1068	ppb	1.4844	9.2	508.516	16.10677
Mg 279.078	19.9976	ppb	5.5885	27.9	52.6199	19.99764
Mn 257.610	0.1919	ppb	0.0416	21.7	35.6387	0.19194
Mo 202.032	1.7467	ppb	0.5212	29.8	5.0813	1.74671
Na 330.237	207.284	ppb	305.815	147.5	37.5188	207.28421
Ni 231.604	2.7972	ppb	2.4415	87.3	0.0148	2.79721
Pb 220.353	1.2175	ppb	4.3212	354.9	2.1133	1.21746
Sb 206.834	-2.6740	ppb	5.9131	221.1	5.0023	-2.67397
Se 196.026	-11.2071	ppb	2.2928	20.5	2.3301	-11.20711Z
Si 288.158	0.4559uv	ppb	1.4160	310.6	578.255	0.45586

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	2.7470	ppb	0.8277	30.1	-0.3971	2.74697
Sr 216.596	0.9780	ppb	1.4519	148.4	5.7274	0.97803
Ti 334.941	0.3342	ppb	0.1679	50.2	0.1153	0.33422
Tl 190.794	-0.4235	ppb	4.4373	1047.8	-2.6294	-0.42347
V 292.401	0.6026	ppb	0.3771	62.6	-6.9250	0.60262
Zn 206.200	4.1023	ppb	1.1639	28.4	0.8533	4.10232

MB 680-565351/1-B (Samp) 4/9/2019, 6:47:13 AM Rack 4, Tube 31

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9099	0.8242	0.4368
Al 308.215	-30.0781u	-28.4605u	-22.3744u
As 188.980	3.3950	1.5389	8.2459
B 249.678	19.0306	17.6065	16.3758
Ba 389.178	-4.1366u	1.5535	-1.5861u
Be 313.042	-0.0427u	-0.0458u	-0.0284u
Ca 370.602	19.70	11.18	13.17
Cd 226.502	-0.2153u	-0.2293u	-0.6099u
Co 228.615	-1.6100u	-1.5043u	-0.9815u
Cr 267.716	0.7784	0.8903	0.4259
Cu 324.754	2.0359	-0.7995u	-0.6935u
Fe 271.441	-4.4706u	-6.6278u	8.3919
K 766.491	11.1243	13.4185	11.2616
Mg 279.078	-0.0562u	1.5314	3.7318
Mn 257.610	0.0831	-0.0370u	0.0414
Mo 202.032	2.3694	-0.5139u	-0.0495u
Na 330.237	-31.9538u	136.308	244.609
Ni 231.604	1.7171	8.7984	-0.3441u
Pb 220.353	-3.5165u	-4.7121u	3.8887
Sb 206.834	-4.4334u	4.2840	-3.8174u
Se 196.026	-1.6051u	-12.1353u	2.3791
Si 288.158	-3.1813u	1.4328	-0.1827u
Sn 189.925	-5.2397u	4.7554	1.4289
Sr 216.596	1.0898	0.2695	1.5302
Ti 334.941	0.0043	-0.0221u	0.0294
Tl 190.794	-10.1406u	-8.6720u	-11.1693u
V 292.401	-0.1058u	0.4738	0.6447
Zn 206.200	5.3894	-0.2012u	1.8570

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7236	ppb	0.2521	34.8	-36.8852
Al 308.215	-26.9710	ppb	4.0621	15.1	197.921
As 188.980	4.3933	ppb	3.4632	78.8	2.3379
B 249.678	17.6710	ppb	1.3286	7.5	94.9920
Ba 389.178	-1.3898	ppb	2.8501	205.1	-38.1398
Be 313.042	-0.0390	ppb	0.0093	23.9	-454.961
Ca 370.602	14.68	ppb	4.454	30.3	30.03
Cd 226.502	-0.3515	ppb	0.2239	63.7	-1.6056
Co 228.615	-1.3653	ppb	0.3365	24.6	-12.9335
Cr 267.716	0.6982	ppb	0.2423	34.7	20.4639
Cu 324.754	0.1810	ppb	1.6073	888.2	479.172
Fe 271.441	-0.9022	ppb	8.1208	900.1	45.2977
K 766.491	11.9348	ppb	1.2868	10.8	437.596

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	1.7357	ppb	1.9022	109.6	30.3885
Mn 257.610	0.0292	ppb	0.0609	209.0	24.4025
Mo 202.032	0.6020	ppb	1.5481	257.2	3.4915
Na 330.237	116.321	ppb	139.361	119.8	35.3061
Ni 231.604	3.3905	ppb	4.7954	141.4	0.5971
Pb 220.353	-1.4467	ppb	4.6591	322.1	1.1292
Sb 206.834	-1.3223	ppb	4.8649	367.9	5.4273
Se 196.026	-3.7871	ppb	7.4992	198.0	3.6855
Si 288.158	-0.6438 ^{uv}	ppb	2.3413	363.7	573.190
Sn 189.925	0.3149	ppb	5.0898	1616.4	-0.9435
Sr 216.596	0.9632	ppb	0.6398	66.4	5.7030
Ti 334.941	0.0038	ppb	0.0258	672.9	-24.8740
Tl 190.794	-9.9939	ppb	1.2551	12.6	-4.8551
V 292.401	0.3375	ppb	0.3934	116.5	-9.0450
Zn 206.200	2.3484	ppb	2.8275	120.4	-0.0730

LCS 680-565351/2-B (Samp) 4/9/2019, 6:51:39 AM Rack 4, Tube 32

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	49.1710	47.7927	48.3902
Al 308.215	4863.43	4881.37	4876.43
As 188.980	108.406	110.438	114.311
B 249.678	215.306	216.783	216.288
Ba 389.178	98.3651	95.2466	95.9776
Be 313.042	54.1014	54.0458	54.0465
Ca 370.602	5096	5094	5109
Cd 226.502	52.3067	52.2012	52.7264
Co 228.615	52.9582	54.4646	51.5925
Cr 267.716	98.8814	98.3971	99.4063
Cu 324.754	98.6991	100.100	97.9196
Fe 271.441	5015.82	4999.58	4983.42
K 766.491	8106.68	8100.34	8095.42
Mg 279.078	5374.83	5384.12	5360.19
Mn 257.610	508.797	508.916	508.656
Mo 202.032	101.230	101.558	100.973
Na 330.237	5785.35	5700.38	5448.84
Ni 231.604	103.475	110.966	110.111
Pb 220.353	524.644	519.245	517.783
Sb 206.834	47.9205	41.0020	54.0011
Se 196.026	114.264	117.889	122.824
Si 288.158	-0.7795	-4.4874	-2.4745
Sn 189.925	102.627	100.189	102.848
Sr 216.596	101.180	98.6928	101.048
Ti 334.941	375.249	375.034	375.442
Tl 190.794	37.1220	33.0910	28.9384
V 292.401	97.8257	97.6278	97.1444
Zn 206.200	121.836	120.159	117.090

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.4513	ppb	0.6912	1.4	1245.60
Al 308.215	4873.74	ppb	9.2698	0.2	8483.62
As 188.980	111.052	ppb	2.9999	2.7	28.2048
B 249.678	216.126	ppb	0.7517	0.3	1363.01

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	96.5298	ppb	1.6309	1.7	464.973
Be 313.042	54.0646	ppb	0.0319	0.1	41385.2
Ca 370.602	5100	ppb	8.174	0.2	7258
Cd 226.502	52.4114	ppb	0.2778	0.5	608.726
Co 228.615	53.0051	ppb	1.4366	2.7	170.084
Cr 267.716	98.8950	ppb	0.5047	0.5	1446.42
Cu 324.754	98.9061	ppb	1.1046	1.1	3054.92
Fe 271.441	4999.61	ppb	16.1975	0.3	2753.77
K 766.491	8100.81	ppb	5.6489	0.1	137941
Mg 279.078	5373.05	ppb	12.0643	0.2	6564.16
Mn 257.610	508.790	ppb	0.1298	0.0	34922.8
Mo 202.032	101.253	ppb	0.2933	0.3	143.225
Na 330.237	5644.86	ppb	174.991	3.1	166.061
Ni 231.604	108.184	ppb	4.1008	3.8	103.489
Pb 220.353	520.558	ppb	3.6140	0.7	193.930
Sb 206.834	47.6412	ppb	6.5041	13.7	21.1375
Se 196.026	118.326	ppb	4.2965	3.6	26.0220
Si 288.158	-2.5804	ppb	1.8562	71.9	601.757
Sn 189.925	101.888	ppb	1.4758	1.4	21.8789
Sr 216.596	100.307	ppb	1.3995	1.4	247.627
Ti 334.941	375.242	ppb	0.2042	0.1	28307.6
Tl 190.794	33.0505	ppb	4.0919	12.4	5.1780
V 292.401	97.5327	ppb	0.3505	0.4	781.456
Zn 206.200	119.695	ppb	2.4064	2.0	61.8640

LCSD 680-565351/3-B (Samp) 4/9/2019, 6:56:06 AM Rack 4, Tube 33

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	48.1646	48.6032	48.6851
Al 308.215	4812.79	4819.16	4808.65
As 188.980	106.772	109.222	119.463
B 249.678	213.716	215.630	216.355
Ba 389.178	89.0471	89.3532	90.3563
Be 313.042	53.1814	53.1687	53.0850
Ca 370.602	4972	4968	4968
Cd 226.502	51.1078	50.5546	51.5253
Co 228.615	51.4347	48.0171	49.3127
Cr 267.716	96.7800	95.8870	97.4145
Cu 324.754	99.4697	98.4156	97.8964
Fe 271.441	4885.24	4928.73	4877.91
K 766.491	7920.14	7897.92	7906.02
Mg 279.078	5245.75	5235.75	5232.21
Mn 257.610	498.671	498.070	497.987
Mo 202.032	104.696	98.8786	99.8873
Na 330.237	5309.00	5452.68	5854.52
Ni 231.604	105.492	106.121	103.152
Pb 220.353	514.807	518.027	500.604
Sb 206.834	44.5674	51.6816	49.9815
Se 196.026	98.5080	108.560	97.2839
Si 288.158	1.4233	1.5879	3.1253
Sn 189.925	95.8879	95.8547	98.8361
Sr 216.596	98.8996	101.205	97.8801
Ti 334.941	368.572	368.244	368.877

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	38.7832	41.7869	29.7507
V 292.401	94.5693	96.3230	95.6563
Zn 206.200	114.629	116.224	116.253

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	48.4843	ppb	0.2799	0.6	1246.50
Al 308.215	4813.54	ppb	5.2947	0.1	8381.82
As 188.980	111.819	ppb	6.7325	6.0	28.3843
B 249.678	215.234	ppb	1.3631	0.6	1357.41
Ba 389.178	89.5855	ppb	0.6848	0.8	429.535
Be 313.042	53.1451	ppb	0.0524	0.1	40673.9
Ca 370.602	4969	ppb	2.263	0.0	7072
Cd 226.502	51.0625	ppb	0.4869	1.0	593.122
Co 228.615	49.5882	ppb	1.7253	3.5	158.636
Cr 267.716	96.6938	ppb	0.7674	0.8	1414.46
Cu 324.754	98.5939	ppb	0.8017	0.8	3046.77
Fe 271.441	4897.29	ppb	27.4711	0.6	2698.25
K 766.491	7908.02	ppb	11.2474	0.1	134664
Mg 279.078	5237.91	ppb	7.0213	0.1	6399.74
Mn 257.610	498.242	ppb	0.3731	0.1	34199.2
Mo 202.032	101.154	ppb	3.1088	3.1	143.089
Na 330.237	5538.73	ppb	282.754	5.1	163.578
Ni 231.604	104.922	ppb	1.5644	1.5	100.287
Pb 220.353	511.146	ppb	9.2704	1.8	190.454
Sb 206.834	48.7435	ppb	3.7151	7.6	21.4778
Se 196.026	101.450	ppb	6.1870	6.1	22.9389
Si 288.158	2.0455	ppb	0.9387	45.9	620.701
Sn 189.925	96.8596	ppb	1.7118	1.8	20.7491
Sr 216.596	99.3283	ppb	1.7034	1.7	245.229
Ti 334.941	368.564	ppb	0.3167	0.1	27803.3
Tl 190.794	36.7736	ppb	6.2647	17.0	6.0428
V 292.401	95.5162	ppb	0.8852	0.9	764.929
Zn 206.200	115.702	ppb	0.9292	0.8	59.7559

680-166819-E-2-B (Samp)

4/9/2019, 7:00:33 AM

Rack 4, Tube 34

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.6706u	-0.7962u	1.1694
Al 308.215	126.945	120.309	121.482
As 188.980	-0.6280u	4.3953	4.6839
B 249.678	26.5440	24.6682	22.7853
Ba 389.178	11.7215	10.1641	9.0712
Be 313.042	-0.0772u	-0.0784u	-0.0954u
Ca 370.602	24468	24280	24416
Cd 226.502	0.2282	-0.2716u	-0.4218u
Co 228.615	1.4635	-1.7913u	-1.4973u
Cr 267.716	2.0711	2.8995	2.6095
Cu 324.754	61.3141	60.0336	61.2830
Fe 271.441	143.807	161.455	140.408
K 766.491	2256.04	2261.05	2255.41
Mg 279.078	1144.39	1143.23	1131.64
Mn 257.610	25.3485	25.1827	25.1570
Mo 202.032	1.9744	-0.8145u	3.0431

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	1884.46	1576.44	2255.38
Ni 231.604	1.7952	0.0351	-2.3337u
Pb 220.353	-4.7852u	-6.0790u	-1.0356u
Sb 206.834	-1.1648u	-10.4938u	1.6575
Se 196.026	1.6195	10.0054	-3.4375u
Si 288.158	2517.80	2522.77	2524.80
Sn 189.925	-2.4293u	-7.2019u	0.3327
Sr 216.596	70.8564	72.6564	69.0964
Ti 334.941	3.1185	3.0099	2.7886
Tl 190.794	-7.6628u	-0.4039u	-7.1143u
V 292.401	0.3600	0.4253	1.1360
Zn 206.200	101.971	103.985	109.202

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0991	ppb	1.1004	1109.9	-59.2155
Al 308.215	122.912	ppb	3.5414	2.9	451.254
As 188.980	2.8171	ppb	2.9870	106.0	1.9235
B 249.678	24.6658	ppb	1.8793	7.6	139.718
Ba 389.178	10.3189	ppb	1.3319	12.9	22.3279
Be 313.042	-0.0837	ppb	0.0102	12.2	-486.146
Ca 370.602	24388	ppb	97.00	0.4	34646
Cd 226.502	-0.1551	ppb	0.3403	219.4	0.8317
Co 228.615	-0.6084	ppb	1.8003	295.9	-10.3928
Cr 267.716	2.5267	ppb	0.4204	16.6	47.0461
Cu 324.754	60.8769	ppb	0.7305	1.2	2061.66
Fe 271.441	148.557	ppb	11.2987	7.6	126.178
K 766.491	2257.50	ppb	3.0905	0.1	38610.2
Mg 279.078	1139.75	ppb	7.0460	0.6	1415.61
Mn 257.610	25.2294	ppb	0.1039	0.4	1755.54
Mo 202.032	1.4010	ppb	1.9917	142.2	4.5997
Na 330.237	1905.43	ppb	339.955	17.8	77.9453
Ni 231.604	-0.1678	ppb	2.0719	1235.0	-2.8981
Pb 220.353	-3.9666	ppb	2.6195	66.0	0.1990
Sb 206.834	-3.3337	ppb	6.3594	190.8	4.7995
Se 196.026	2.7291	ppb	6.7898	248.8	4.8776
Si 288.158	2521.79	ppb	3.5993	0.1	11283.7
Sn 189.925	-3.0995	ppb	3.8118	123.0	-1.7106
Sr 216.596	70.8697	ppb	1.7801	2.5	176.602
Ti 334.941	2.9723	ppb	0.1681	5.7	201.737
Tl 190.794	-5.0603	ppb	4.0419	79.9	-3.7053
V 292.401	0.6404	ppb	0.4304	67.2	-6.6160
Zn 206.200	105.052	ppb	3.7318	3.6	54.1722

680-166819-E-2-Bsd^5 (Samp) 4/9/2019, 7:04:59 AM

Rack 4, Tube 35

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.5857	0.3211	-0.5668u
Al 308.215	12.3170	6.0486	8.5589
As 188.980	-3.5955u	8.9689	-2.1705u
B 249.678	10.8176	10.7072	9.4573
Ba 389.178	-0.0060	-0.2328u	1.0851
Be 313.042	-0.0780u	-0.0736u	-0.0756u
Ca 370.602	4558	4578	4559

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.0194	0.2684	0.4571
Co 228.615	-0.3734u	-1.0668u	-0.7758u
Cr 267.716	0.0753	0.5305	1.0608
Cu 324.754	12.3945	13.4911	12.2738
Fe 271.441	22.3781	6.2120	12.7142
K 766.491	410.820	411.983	410.777
Mg 279.078	211.267	210.018	216.445
Mn 257.610	4.6520	4.6897	4.7250
Mo 202.032	1.4358	3.5610	0.2370
Na 330.237	980.748	769.166	220.433
Ni 231.604	1.4086	-2.2473u	5.6620
Pb 220.353	4.2588	-6.3119u	-6.2753u
Sb 206.834	12.3284	-13.9769u	4.5919
Se 196.026	6.1021	-0.1135u	15.0563
Si 288.158	485.885	486.227	488.342
Sn 189.925	-3.7549u	13.0069	0.3149
Sr 216.596	13.8662	13.1630	13.8135
Ti 334.941	0.5751	0.5964	0.4955
Tl 190.794	11.3853	8.7319	-22.7225u
V 292.401	0.1946	0.0230	1.2786
Zn 206.200	20.7305	19.8055	20.6209

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1133	ppb	0.6037	532.7	-53.3291
Al 308.215	8.9748	ppb	3.1548	35.2	258.688
As 188.980	1.0676	ppb	6.8797	644.4	1.4516
B 249.678	10.3274	ppb	0.7555	7.3	47.8692
Ba 389.178	0.2821	ppb	0.7046	249.8	-29.4606
Be 313.042	-0.0758	ppb	0.0022	2.9	-482.843
Ca 370.602	4565	ppb	11.28	0.2	6492
Cd 226.502	0.2483	ppb	0.2195	88.4	5.2865
Co 228.615	-0.7386	ppb	0.3482	47.1	-10.8469
Cr 267.716	0.5555	ppb	0.4932	88.8	18.4025
Cu 324.754	12.7198	ppb	0.6707	5.3	806.101
Fe 271.441	13.7681	ppb	8.1344	59.1	53.2511
K 766.491	411.193	ppb	0.6839	0.2	7224.63
Mg 279.078	212.576	ppb	3.4081	1.6	287.027
Mn 257.610	4.6889	ppb	0.0365	0.8	344.526
Mo 202.032	1.7446	ppb	1.6834	96.5	5.0782
Na 330.237	656.783	ppb	392.418	59.7	48.3317
Ni 231.604	1.6078	ppb	3.9584	246.2	-1.1542
Pb 220.353	-2.7761	ppb	6.0925	219.5	0.6378
Sb 206.834	0.9811	ppb	13.5192	1377.9	6.1535
Se 196.026	7.0150	ppb	7.6260	108.7	5.6590
Si 288.158	486.818	ppb	1.3306	0.3	2643.20
Sn 189.925	3.1889	ppb	8.7427	274.2	-0.2978
Sr 216.596	13.6142	ppb	0.3917	2.9	36.6172
Ti 334.941	0.5557	ppb	0.0532	9.6	17.2675
Tl 190.794	-0.8684	ppb	18.9727	2184.7	-2.7321
V 292.401	0.4987	ppb	0.6808	136.5	-7.7912
Zn 206.200	20.3857	ppb	0.5054	2.5	9.4537

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

680-166819-E-2-Bpds (Samp) 4/9/2019, 7:09:26 AM Rack 4, Tube 36**Weight: 1****Volume: 1****Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	51.0301	49.6269	51.0817
Al 308.215	5054.67	5066.19	5068.59
As 188.980	110.384	103.733	112.622
B 249.678	225.949	226.043	227.564
Ba 389.178	102.453	98.5519	100.568
Be 313.042	54.2716	54.3543	54.3467
Ca 370.602	29051	29052	29049
Cd 226.502	51.4958	51.2230	51.3002
Co 228.615	50.4254	50.7868	51.5576
Cr 267.716	101.011	100.622	100.597
Cu 324.754	160.250	158.110	156.703
Fe 271.441	5066.59	5095.40	5111.74
K 766.491	10347.3	10368.0	10338.9
Mg 279.078	6389.85	6371.43	6368.02
Mn 257.610	527.923	527.197	525.892
Mo 202.032	98.7169	102.305	102.392
Na 330.237	7367.50	7393.40	7081.61
Ni 231.604	106.010	104.819	107.429
Pb 220.353	503.915	489.877	508.551
Sb 206.834	41.2360	49.3661	54.2598
Se 196.026	107.911	111.236	109.203
Si 288.158	2531.86	2538.53	2527.99
Sn 189.925	113.268	103.431	104.067
Sr 216.596	168.951	168.578	165.782
Ti 334.941	377.480	377.491	377.379
Tl 190.794	29.7940	41.1231	46.0559
V 292.401	98.5041	98.8727	96.7810
Zn 206.200	217.582	211.166	213.876

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.5795	ppb	0.8254	1.6	1302.64
Al 308.215	5063.15	ppb	7.4441	0.1	8803.72
As 188.980	108.913	ppb	4.6237	4.2	27.6545
B 249.678	226.519	ppb	0.9062	0.4	1429.63
Ba 389.178	100.524	ppb	1.9511	1.9	486.090
Be 313.042	54.3242	ppb	0.0457	0.1	41589.4
Ca 370.602	29051	ppb	1.440	0.0	41274
Cd 226.502	51.3397	ppb	0.1406	0.3	596.518
Co 228.615	50.9232	ppb	0.5783	1.1	163.134
Cr 267.716	100.743	ppb	0.2325	0.2	1473.27
Cu 324.754	158.354	ppb	1.7862	1.1	4604.84
Fe 271.441	5091.24	ppb	22.8599	0.4	2803.26
K 766.491	10351.4	ppb	14.9560	0.1	176199
Mg 279.078	6376.43	ppb	11.7411	0.2	7785.53
Mn 257.610	527.004	ppb	1.0294	0.2	36174.6
Mo 202.032	101.138	ppb	2.0972	2.1	143.064
Na 330.237	7280.84	ppb	173.022	2.4	205.108
Ni 231.604	106.086	ppb	1.3065	1.2	101.430
Pb 220.353	500.781	ppb	9.7238	1.9	186.625
Sb 206.834	48.2873	ppb	6.5786	13.6	21.3432
Se 196.026	109.450	ppb	1.6764	1.5	24.4023
Si 288.158	2532.79	ppb	5.3313	0.2	11367.8

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	106.922	ppb	5.5052	5.1	23.0101
Sr 216.596	167.770	ppb	1.7321	1.0	412.555
Ti 334.941	377.450	ppb	0.0621	0.0	28476.5
Tl 190.794	38.9910	ppb	8.3380	21.4	6.5621
V 292.401	98.0526	ppb	1.1166	1.1	785.718
Zn 206.200	214.208	ppb	3.2207	1.5	111.783

680-166735-C-2-B (Samp) 4/9/2019, 7:13:52 AM Rack 4, Tube 37

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3966u	1.0048	0.1741
Al 308.215	2.6002	-6.2830u	-13.5432u
As 188.980	-3.3649u	-1.3344u	-0.3535u
B 249.678	28.3531	26.3883	25.7482
Ba 389.178	6.0751	3.4876	6.6988
Be 313.042	-0.1063u	-0.0921u	-0.0904u
Ca 370.602	22319	22274	22333
Cd 226.502	-0.1244	-0.0105	-0.1277
Co 228.615	-0.0502u	1.3227	1.3530
Cr 267.716	0.4487	0.6083	0.8220
Cu 324.754	1.5637	3.1183	3.0158
Fe 271.441	2088.56	2068.05	2061.34
K 766.491	1565.06	1562.48	1566.31
Mg 279.078	10611.5	10642.6	10653.8
Mn 257.610	2053.75	2054.33	2055.97
Mo 202.032	0.2970	2.1290	3.7785
Na 330.237	12150.9	12252.0	12334.0
Ni 231.604	2.1404	3.4204	1.5847
Pb 220.353	-4.0205u	0.9844	-4.2669u
Sb 206.834	-3.9878u	-3.7907u	-12.9410u
Se 196.026	6.0887	-7.2731u	0.3826
Si 288.158	13480.1	13480.0	13527.3
Sn 189.925	8.8425	-3.8168u	13.0570
Sr 216.596	114.611	114.669	112.360
Ti 334.941	0.0400	-0.1145	0.1073
Tl 190.794	-3.8058u	-13.6286u	-12.0869u
V 292.401	0.1041	0.6363	0.8803
Zn 206.200	3.2039	2.2522	2.5053

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.2608	ppb	0.7047	270.2	-46.6937
Al 308.215	-5.7420	ppb	8.0853	140.8	233.874
As 188.980	-1.6843	ppb	1.5359	91.2	0.8239
B 249.678	26.8298	ppb	1.3574	5.1	151.714
Ba 389.178	5.4205	ppb	1.7027	31.4	5.2281
Be 313.042	-0.0963	ppb	0.0088	9.1	-497.087
Ca 370.602	22309	ppb	30.48	0.1	31716
Cd 226.502	-0.0875	ppb	0.0667	76.2	4.0037
Co 228.615	0.8752	ppb	0.8016	91.6	-5.5067
Cr 267.716	0.6263	ppb	0.1873	29.9	22.3135
Cu 324.754	2.5659	ppb	0.8695	33.9	541.698
Fe 271.441	2072.65	ppb	14.1794	0.7	1167.29
K 766.491	1564.61	ppb	1.9538	0.1	26831.8

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	10636.0	ppb	21.8765	0.2	12958.1
Mn 257.610	2054.68	ppb	1.1488	0.1	140897
Mo 202.032	2.0682	ppb	1.7415	84.2	5.5075
Na 330.237	12245.6	ppb	91.7447	0.7	332.069
Ni 231.604	2.3818	ppb	0.9414	39.5	-0.3952
Pb 220.353	-2.4343	ppb	2.9633	121.7	0.8698
Sb 206.834	-6.9065	ppb	5.2270	75.7	3.7000
Se 196.026	-0.2672	ppb	6.7046	2508.8	4.5095
Si 288.158	13495.8	ppb	27.2432	0.2	57884.1
Sn 189.925	6.0276	ppb	8.7821	145.7	0.3410
Sr 216.596	113.880	ppb	1.3170	1.2	281.910
Ti 334.941	0.0109	ppb	0.1137	1039.4	-0.3598
Tl 190.794	-9.8404	ppb	5.2827	53.7	-4.4328
V 292.401	0.5402	ppb	0.3969	73.5	-7.3474
Zn 206.200	2.6538	ppb	0.4929	18.6	0.0927

680-166735-C-1-B (Samp)

4/9/2019, 7:18:19 AM

Rack 4, Tube 38

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1408	0.4538	-0.0444
Al 308.215	-3.6648u	-1.9215u	-5.0618u
As 188.980	10.3853	1.5328	1.1819
B 249.678	10.7570	11.9325	9.1215
Ba 389.178	12.9958	9.7171	9.3537
Be 313.042	-0.0894u	-0.1060u	-0.0840u
Ca 370.602	29513	29505	29471
Cd 226.502	-0.1135u	0.0139	-0.0183
Co 228.615	4.4003	3.0087	2.3357
Cr 267.716	0.7191	0.2695	0.1759
Cu 324.754	1.3793	2.9191	3.0864
Fe 271.441	360.809	350.074	349.627
K 766.491	1820.91	1829.84	1826.57
Mg 279.078	17784.2	17818.7	17792.5
Mn 257.610	3226.45	3229.62	3227.73
Mo 202.032	1.2042	1.0360	0.8909
Na 330.237	20888.9	20085.3	20471.6
Ni 231.604	4.0849	4.8873	3.5181
Pb 220.353	0.5880	-2.4263u	7.9499
Sb 206.834	-5.2638u	-7.8629u	4.1666
Se 196.026	-16.5912u	3.9212	-13.5093u
Si 288.158	13763.4	13788.1	13779.0
Sn 189.925	-2.1836u	1.9473	4.0526
Sr 216.596	142.731	143.418	143.601
Ti 334.941	-0.3881	-0.1979	-0.5365u
Tl 190.794	-7.0396u	-1.5559	-9.1184u
V 292.401	-0.1128u	0.4185	0.0176
Zn 206.200	0.4851	2.2216	4.8216

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0895	ppb	0.3191	356.4	-49.2131
Al 308.215	-3.5494	ppb	1.5733	44.3	237.502
As 188.980	4.3667	ppb	5.2152	119.4	2.2726
B 249.678	10.6037	ppb	1.4117	13.3	49.3065

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	10.6889	ppb	2.0061	18.8	37.4379
Be 313.042	-0.0931	ppb	0.0115	12.3	-494.092
Ca 370.602	29496	ppb	22.78	0.1	41941
Cd 226.502	-0.0393	ppb	0.0662	168.5	2.4559
Co 228.615	3.2482	ppb	1.0529	32.4	2.4587
Cr 267.716	0.3882	ppb	0.2904	74.8	20.3050
Cu 324.754	2.4616	ppb	0.9410	38.2	538.686
Fe 271.441	353.503	ppb	6.3310	1.8	237.251
K 766.491	1825.78	ppb	4.5177	0.2	31271.3
Mg 279.078	17798.5	ppb	17.9747	0.1	21667.3
Mn 257.610	3227.94	ppb	1.5914	0.0	221341
Mo 202.032	1.0437	ppb	0.1568	15.0	4.1014
Na 330.237	20481.9	ppb	401.920	2.0	533.718
Ni 231.604	4.1635	ppb	0.6880	16.5	1.3530
Pb 220.353	2.0372	ppb	5.3378	262.0	2.5718
Sb 206.834	-2.9867	ppb	6.3298	211.9	4.9086
Se 196.026	-8.7264	ppb	11.0610	126.8	3.0768
Si 288.158	13776.8	ppb	12.4856	0.1	59077.6
Sn 189.925	1.2721	ppb	3.1724	249.4	-0.7267
Sr 216.596	143.250	ppb	0.4585	0.3	353.545
Ti 334.941	-0.3741	ppb	0.1697	45.4	-13.2743
Tl 190.794	-5.9046	ppb	3.9069	66.2	-3.2345
V 292.401	0.1078	ppb	0.2769	256.9	-10.8729
Zn 206.200	2.5094	ppb	2.1825	87.0	0.0128

680-166735-C-4-B (Samp)

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Rack 4, Tube 39

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.1135u	-0.8428u	0.9994
Al 308.215	-5.7102u	-6.3430u	-4.5230u
As 188.980	5.7002	-1.7396u	-3.0339u
B 249.678	24.2804	22.5347	22.2133
Ba 389.178	12.9972	11.0961	10.7101
Be 313.042	-0.0874u	-0.0724u	-0.0846u
Ca 370.602	19470	19450	19429
Cd 226.502	-0.2590	-0.1329	-0.2293
Co 228.615	3.0541	2.7790	3.9396
Cr 267.716	-0.4866u	-0.2408u	0.4314
Cu 324.754	2.1599	2.5147	2.5759
Fe 271.441	3613.70	3596.63	3577.91
K 766.491	1915.24	1906.37	1909.79
Mg 279.078	10992.7	10989.3	10987.0
Mn 257.610	1633.68	1628.50	1628.10
Mo 202.032	-4.0192u	3.0980	-1.3402u
Na 330.237	12272.5	12443.4	11888.9
Ni 231.604	2.6208	0.2759	3.3719
Pb 220.353	-5.4464u	11.2981	1.8189
Sb 206.834	3.1414	-4.7657u	-5.7953u
Se 196.026	2.7277	7.8061	0.2352
Si 288.158	13268.3	13235.9	13235.7
Sn 189.925	1.7442	-8.8378u	1.1709
Sr 216.596	110.825	109.597	109.519
Ti 334.941	0.3388	-0.1175	-0.1862

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-9.8464u	-9.1527u	-18.3960u
V 292.401	0.3065	0.7235	0.5428
Zn 206.200	1.5370	5.2552	5.5302

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3189	ppb	1.1497	360.5	-63.2020
Al 308.215	-5.5254	ppb	0.9240	16.7	234.258
As 188.980	0.3089	ppb	4.7137	1526.0	1.3158
B 249.678	23.0095	ppb	1.1123	4.8	125.724
Ba 389.178	11.6011	ppb	1.2244	10.6	37.1680
Be 313.042	-0.0815	ppb	0.0079	9.7	-485.899
Ca 370.602	19450	ppb	20.10	0.1	27647
Cd 226.502	-0.2071	ppb	0.0659	31.8	4.5145
Co 228.615	3.2576	ppb	0.6064	18.6	2.4294
Cr 267.716	-0.0986	ppb	0.4752	481.7	11.3513
Cu 324.754	2.4168	ppb	0.2246	9.3	538.021
Fe 271.441	3596.08	ppb	17.9035	0.5	1991.64
K 766.491	1910.47	ppb	4.4719	0.2	32711.0
Mg 279.078	10989.7	ppb	2.8805	0.0	13392.7
Mn 257.610	1630.09	ppb	3.1130	0.2	111795
Mo 202.032	-0.7538	ppb	3.5947	476.9	1.5731
Na 330.237	12201.6	ppb	283.968	2.3	330.927
Ni 231.604	2.0895	ppb	1.6149	77.3	-0.6840
Pb 220.353	2.5569	ppb	8.3966	328.4	2.6992
Sb 206.834	-2.4732	ppb	4.8896	197.7	5.1186
Se 196.026	3.5896	ppb	3.8583	107.5	5.1705
Si 288.158	13246.6	ppb	18.7709	0.1	56825.5
Sn 189.925	-1.9742	ppb	5.9509	301.4	-1.4568
Sr 216.596	109.980	ppb	0.7323	0.7	272.548
Ti 334.941	0.0117	ppb	0.2854	2436.7	0.5212
Tl 190.794	-12.4650	ppb	5.1481	41.3	-5.1629
V 292.401	0.5243	ppb	0.2091	39.9	-7.2847
Zn 206.200	4.1075	ppb	2.2303	54.3	0.8639

680-166735-C-3-B (Samp)

4/9/2019, 7:27:13 AM

Rack 4, Tube 40

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	1.2275	0.4617	0.1557
Al 308.215	-6.3037u	-4.8448u	-6.2794u
As 188.980	9.8714	0.6281	-2.3351u
B 249.678	11.2044	10.9987	10.4959
Ba 389.178	19.9763	21.9368	23.5882
Be 313.042	-0.0933u	-0.0831u	-0.0887u
Ca 370.602	22390	22384	22387
Cd 226.502	0.2477	0.4984	0.0095
Co 228.615	0.3810	2.2561	0.1525
Cr 267.716	-0.4144u	0.7513	0.2018
Cu 324.754	0.9444	2.6220	2.2000
Fe 271.441	457.462	433.900	471.620
K 766.491	1695.47	1700.35	1701.50
Mg 279.078	11411.7	11391.0	11412.0
Mn 257.610	2156.33	2154.33	2155.77
Mo 202.032	0.5230	2.2346	-1.3160u

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	13300.3	13602.7	13560.1
Ni 231.604	-0.8770u	1.8956	2.9659
Pb 220.353	-9.4691u	4.0811	-2.6762u
Sb 206.834	-6.1382u	-4.4678u	1.5809
Se 196.026	12.8276	-6.3367u	-9.9806u
Si 288.158	13468.1	13494.8	13471.9
Sn 189.925	0.2338	11.8055	-4.2480u
Sr 216.596	150.557	151.900	151.200
Ti 334.941	-0.2784	-0.3463u	-0.1335
Tl 190.794	5.7760	-6.2985u	-8.0680u
V 292.401	0.4163	-0.2155u	-0.4129u
Zn 206.200	5.3876	2.0553	6.1273

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.6150	ppb	0.5521	89.8	-36.8449
Al 308.215	-5.8093	ppb	0.8354	14.4	233.680
As 188.980	2.7214	ppb	6.3668	234.0	1.8694
B 249.678	10.8997	ppb	0.3645	3.3	51.1170
Ba 389.178	21.8338	ppb	1.8082	8.3	89.0602
Be 313.042	-0.0884	ppb	0.0051	5.8	-490.888
Ca 370.602	22387	ppb	3.294	0.0	31831
Cd 226.502	0.2519	ppb	0.2445	97.1	5.8863
Co 228.615	0.9299	ppb	1.1542	124.1	-5.2733
Cr 267.716	0.1796	ppb	0.5831	324.7	15.8511
Cu 324.754	1.9221	ppb	0.8727	45.4	524.624
Fe 271.441	454.327	ppb	19.0542	4.2	291.695
K 766.491	1699.11	ppb	3.2010	0.2	29118.0
Mg 279.078	11404.9	ppb	12.0467	0.1	13893.3
Mn 257.610	2155.48	ppb	1.0336	0.0	147808
Mo 202.032	0.4805	ppb	1.7757	369.5	3.3184
Na 330.237	13487.7	ppb	163.667	1.2	362.516
Ni 231.604	1.3282	ppb	1.9833	149.3	-1.4302
Pb 220.353	-2.6881	ppb	6.7751	252.0	0.7755
Sb 206.834	-3.0084	ppb	4.0612	135.0	4.9025
Se 196.026	-1.1632	ppb	12.2526	1053.3	4.3601
Si 288.158	13478.3	ppb	14.4471	0.1	57809.1
Sn 189.925	2.5971	ppb	8.2836	319.0	-0.4296
Sr 216.596	151.219	ppb	0.6719	0.4	373.049
Ti 334.941	-0.2527	ppb	0.1087	43.0	-18.5284
Tl 190.794	-2.8635	ppb	7.5342	263.1	-2.7542
V 292.401	-0.0707	ppb	0.4331	612.6	-12.2967
Zn 206.200	4.5234	ppb	2.1692	48.0	1.0768

Cont Calib Verif (CCV) 4/9/2019, 7:31:40 AM Rack S, Tube 10
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	487.457	488.037	489.237
Al 308.215	10296.6	10312.9	10296.3
As 188.980	565.959	572.119	587.227
B 249.678	543.431	547.375	548.946
Ba 389.178	465.411	459.827	464.034
Be 313.042	552.495	554.177	554.564
Ca 370.602	10207	10223	10232

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	514.790	518.286	516.051
Co 228.615	516.139	517.546	517.747
Cr 267.716	495.509	496.951	496.706
Cu 324.754	503.766	510.879	510.225
Fe 271.441	10139.3	10177.2	10206.7
K 766.491	10123.0	10137.0	10115.4
Mg 279.078	10730.9	10747.7	10728.4
Mn 257.610	512.581	513.406	513.498
Mo 202.032	514.191	509.027	514.050
Na 330.237	11160.1	11022.2	11504.8
Ni 231.604	529.478	524.864	525.142
Pb 220.353	505.331	474.558	504.099
Sb 206.834	518.438	507.900	519.193
Se 196.026	566.048	581.069	567.880
Si 288.158	5107.01	5110.69	5088.96
Sn 189.925	487.037	518.596	520.299
Sr 216.596	497.041	494.462	497.540
Ti 334.941	485.132	486.295	487.247
Tl 190.794	488.157	499.625	482.788
V 292.401	504.834	504.651	506.796
Zn 206.200	1121.04	1118.12	1113.02

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	488.244	ppb	0.9080	0.2	13067.1	97.64873
Al 308.215	10301.9	ppb	9.5056	0.1	17670.3	103.01928
As 188.980	575.102	ppb	10.9431	1.9	139.624	115.02039Q
B 249.678	546.584	ppb	2.8411	0.5	3477.65	109.31680
Ba 389.178	463.091	ppb	2.9093	0.6	2334.68	92.61812
Be 313.042	553.745	ppb	1.1001	0.2	427827	110.74908Q
Ca 370.602	10221	ppb	12.51	0.1	14527	102.20731
Cd 226.502	516.376	ppb	1.7702	0.3	5926.28	103.27513
Co 228.615	517.144	ppb	0.8761	0.2	1716.58	103.42883
Cr 267.716	496.389	ppb	0.7714	0.2	7213.81	99.27770
Cu 324.754	508.290	ppb	3.9313	0.8	13733.0	101.65800
Fe 271.441	10174.4	ppb	33.7854	0.3	5576.68	101.69293
K 766.491	10125.1	ppb	10.9300	0.1	172353	101.25147
Mg 279.078	10735.6	ppb	10.4869	0.1	13091.9	107.35630
Mn 257.610	513.162	ppb	0.5052	0.1	35243.5	102.63234
Mo 202.032	512.423	ppb	2.9415	0.6	714.200	102.48454
Na 330.237	11229.0	ppb	248.579	2.2	291.005	112.29026Q
Ni 231.604	526.495	ppb	2.5875	0.5	514.013	105.29893
Pb 220.353	494.663	ppb	17.4223	3.5	184.177	98.93258
Sb 206.834	515.177	ppb	6.3134	1.2	169.378	103.03542
Se 196.026	571.666	ppb	8.1951	1.4	108.816	114.33313Q
Si 288.158	5102.22	ppb	11.6292	0.2	22365.6	102.04441
Sn 189.925	508.644	ppb	18.7314	3.7	113.271	101.72875
Sr 216.596	496.348	ppb	1.6516	0.3	1210.61	99.26954
Ti 334.941	486.225	ppb	1.0595	0.2	36696.0	97.24492
Tl 190.794	490.190	ppb	8.6010	1.8	111.572	98.03799
V 292.401	505.427	ppb	1.1894	0.2	4094.92	101.08542
Zn 206.200	1117.39	ppb	4.0631	0.4	588.625	111.73942Q

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Blank (CCB) 4/9/2019, 7:36:05 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8051	-0.5791u	-0.3635u
Al 308.215	4.0311	10.1474	2.1608
As 188.980	3.2010	3.8302	12.8153
B 249.678	18.5928	17.6459	14.0336
Ba 389.178	-0.9008u	-3.1014u	-4.7723u
Be 313.042	0.0071	-0.0022u	0.0316
Ca 370.602	7.678	12.80	10.59
Cd 226.502	-0.5271u	0.7562	-0.0698u
Co 228.615	-0.0612u	-0.9624u	-0.8961u
Cr 267.716	-0.2795u	0.2439	0.7182
Cu 324.754	3.8506	4.1929	2.8100
Fe 271.441	16.8123	17.4446	-4.1904u
K 766.491	8.8781	10.1270	10.9502
Mg 279.078	5.1855	7.7160	10.4730
Mn 257.610	0.3253	0.1336	0.0501
Mo 202.032	1.4965	1.6385	0.2521
Na 330.237	-41.5239u	-317.872u	256.020
Ni 231.604	2.7078	2.2926	3.5222
Pb 220.353	5.1778	-9.8532u	5.4931
Sb 206.834	-2.0112u	-5.0799u	2.1578
Se 196.026	-1.7890u	11.6275	5.9782
Si 288.158	21.7437	19.8553	16.1358
Sn 189.925	6.2593	1.2282	-9.9073u
Sr 216.596	-1.4205u	1.2859	-0.1365u
Ti 334.941	0.2237	0.3345	0.4877
Tl 190.794	-4.4297u	-5.1092u	-10.6852u
V 292.401	-0.5803u	-0.1627u	0.1744
Zn 206.200	5.2412	5.3043	2.5841

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.0458	ppb	0.7448	1624.9	-57.5693	-0.04584
Al 308.215	5.4464	ppb	4.1772	76.7	252.704	5.44642
As 188.980	6.6155	ppb	5.3784	81.3	2.8700	6.61551
B 249.678	16.7574	ppb	2.4059	14.4	89.1177	16.75742
Ba 389.178	-2.9248	ppb	1.9418	66.4	-45.9320	-2.92482
Be 313.042	0.0121	ppb	0.0174	143.7	-415.472	0.01214
Ca 370.602	10.36	ppb	2.569	24.8	23.87	10.35517
Cd 226.502	0.0531	ppb	0.6504	1225.4	3.0457	0.05308
Co 228.615	-0.6399	ppb	0.5023	78.5	-10.5177	-0.63989
Cr 267.716	0.2275	ppb	0.4991	219.4	13.6355	0.22750
Cu 324.754	3.6178	ppb	0.7202	19.9	568.791	3.61781
Fe 271.441	10.0222	ppb	12.3125	122.9	51.2268	10.02217
K 766.491	9.9851	ppb	1.0433	10.4	404.453	9.98509
Mg 279.078	7.7915	ppb	2.6446	33.9	37.7521	7.79149
Mn 257.610	0.1697	ppb	0.1411	83.2	34.0896	0.16966
Mo 202.032	1.1290	ppb	0.7628	67.6	4.2234	1.12904
Na 330.237	-34.4585	ppb	287.011	832.9	31.6072	-34.45848
Ni 231.604	2.8409	ppb	0.6255	22.0	0.0570	2.84089
Pb 220.353	0.2726	ppb	8.7706	3217.6	1.7640	0.27258
Sb 206.834	-1.6444	ppb	3.6327	220.9	5.3258	-1.64444
Se 196.026	5.2722	ppb	6.7360	127.8	5.3403	5.27224
Si 288.158	19.2449	ppb	2.8534	14.8	658.156	19.24494

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	-0.8066	ppb	8.2731	1025.7	-1.1955	-0.80661
Sr 216.596	-0.0904	ppb	1.3538	1498.1	3.1227	-0.09037
Ti 334.941	0.3486	ppb	0.1326	38.0	1.1856	0.34865
Tl 190.794	-6.7413	ppb	3.4323	50.9	-4.0990	-6.74134
V 292.401	-0.1895	ppb	0.3781	199.5	-13.3974	-0.18951
Zn 206.200	4.3765	ppb	1.5526	35.5	0.9984	4.37654

680-166814-C-1-B (Samp) 4/9/2019, 7:40:29 AM Rack 4, Tube 41

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.3309u	0.4777	0.0355
Al 308.215	-9.2615u	-3.1207u	-0.8647u
As 188.980	-0.7174u	1.8412	1.0672
B 249.678	12.0899	12.2736	12.0257
Ba 389.178	7.4899	11.5533	3.4091
Be 313.042	-0.0912u	-0.0846u	-0.1054u
Ca 370.602	17684	17719	17727
Cd 226.502	-0.6324u	0.2239	-0.0864
Co 228.615	19.8366	18.8642	18.0304
Cr 267.716	0.3744	0.1657	0.2947
Cu 324.754	2.5035	1.9266	2.9542
Fe 271.441	3228.06	3241.57	3221.98
K 766.491	1372.58	1369.98	1371.29
Mg 279.078	8260.49	8226.63	8263.61
Mn 257.610	1274.83	1273.96	1273.99
Mo 202.032	4.1445	-0.1257u	1.4742
Na 330.237	9724.98	9316.55	9522.22
Ni 231.604	3.6743	5.6672	7.1569
Pb 220.353	-5.2697u	-1.2880u	9.1204
Sb 206.834	4.0849	-9.5373u	2.6967
Se 196.026	-1.9229u	-10.5012u	-1.8357u
Si 288.158	11837.0	11791.4	11825.9
Sn 189.925	-4.8155u	0.8519	-1.3262u
Sr 216.596	87.9345	81.8605	83.3084
Ti 334.941	0.0183	-0.0600	-0.0761
Tl 190.794	-3.1423u	-15.7508u	-11.6715u
V 292.401	-0.2508u	0.2598	0.9254
Zn 206.200	3.8468	5.1008	0.0916

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0608	ppb	0.4049	666.1	-53.4297
Al 308.215	-4.4156	ppb	4.3456	98.4	236.110
As 188.980	0.7303	ppb	1.3121	179.7	1.4044
B 249.678	12.1297	ppb	0.1286	1.1	56.3058
Ba 389.178	7.4841	ppb	4.0721	54.4	14.0057
Be 313.042	-0.0937	ppb	0.0106	11.3	-495.554
Ca 370.602	17710	ppb	22.90	0.1	25173
Cd 226.502	-0.1650	ppb	0.4335	262.7	4.5241
Co 228.615	18.9104	ppb	0.9040	4.8	54.6592
Cr 267.716	0.2782	ppb	0.1053	37.9	16.3155
Cu 324.754	2.4614	ppb	0.5151	20.9	539.152
Fe 271.441	3230.54	ppb	10.0263	0.3	1794.58
K 766.491	1371.28	ppb	1.2994	0.1	23545.3

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	8250.25	ppb	20.5094	0.2	10060.8
Mn 257.610	1274.26	ppb	0.4926	0.0	87395.6
Mo 202.032	1.8310	ppb	2.1573	117.8	5.1669
Na 330.237	9521.25	ppb	204.217	2.1	265.356
Ni 231.604	5.4994	ppb	1.7473	31.8	2.6531
Pb 220.353	0.8542	ppb	7.4304	869.8	2.0483
Sb 206.834	-0.9186	ppb	7.4963	816.1	5.6029
Se 196.026	-4.7532	ppb	4.9780	104.7	3.6153
Si 288.158	11818.1	ppb	23.7969	0.2	50759.4
Sn 189.925	-1.7633	ppb	2.8589	162.1	-1.4097
Sr 216.596	84.3678	ppb	3.1726	3.8	209.877
Ti 334.941	-0.0393	ppb	0.0505	128.5	-9.5177
Tl 190.794	-10.1882	ppb	6.4338	63.1	-4.6949
V 292.401	0.3115	ppb	0.5898	189.4	-9.1586
Zn 206.200	3.0130	ppb	2.6066	86.5	0.2849

680-166814-C-4-B (Samp)

4/9/2019, 7:44:56 AM

Rack 4, Tube 42

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3618	-0.4064u	0.3377
Al 308.215	3.0592	6.8781	5.1343
As 188.980	8.5632	4.9471	-4.6287u
B 249.678	26.5099	26.3420	26.1210
Ba 389.178	52.1563	58.4533	62.4582
Be 313.042	-0.0964u	-0.1322u	-0.1169u
Ca 370.602	24981	25055	25015
Cd 226.502	-0.0474	0.3603	0.2576
Co 228.615	3.2071	2.5129	2.0193
Cr 267.716	0.4179	0.2771	0.0620
Cu 324.754	3.1766	4.0657	2.8078
Fe 271.441	6509.40	6494.72	6502.35
K 766.491	3268.20	3273.66	3276.51
Mg 279.078	12242.4	12278.7	12277.6
Mn 257.610	2302.65	2309.01	2311.71
Mo 202.032	-0.0986u	0.2524	0.7453
Na 330.237	13125.4	13083.2	13254.0
Ni 231.604	-0.8626u	4.7468	5.8689
Pb 220.353	-14.1799u	2.0513	-6.5242u
Sb 206.834	2.9504	-6.1446u	-11.6753u
Se 196.026	-2.1414u	-2.1937u	-0.7440
Si 288.158	13672.7	13694.8	13720.0
Sn 189.925	22.6872	-0.6826u	11.3206
Sr 216.596	158.844	159.050	161.914
Ti 334.941	0.0408	0.0412	-0.4468u
Tl 190.794	11.9620	2.4461	-14.3808u
V 292.401	-0.8250u	-0.2843u	0.5494
Zn 206.200	6.4064	11.8045	4.8473

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0977	ppb	0.4367	446.9	-51.5059
Al 308.215	5.0239	ppb	1.9118	38.1	252.151
As 188.980	2.9605	ppb	6.8166	230.2	1.8819
B 249.678	26.3243	ppb	0.1951	0.7	144.167

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	57.6893	ppb	5.1933	9.0	272.969
Be 313.042	-0.1152	ppb	0.0180	15.6	-511.372
Ca 370.602	25017	ppb	37.08	0.1	35559
Cd 226.502	0.1902	ppb	0.2121	111.5	12.6328
Co 228.615	2.5798	ppb	0.5967	23.1	0.1077
Cr 267.716	0.2523	ppb	0.1792	71.0	17.5450
Cu 324.754	3.3500	ppb	0.6466	19.3	562.810
Fe 271.441	6502.15	ppb	7.3444	0.1	3563.96
K 766.491	3272.79	ppb	4.2204	0.1	55869.2
Mg 279.078	12266.2	ppb	20.6271	0.2	14940.5
Mn 257.610	2307.79	ppb	4.6515	0.2	158255
Mo 202.032	0.2997	ppb	0.4240	141.5	3.0081
Na 330.237	13154.2	ppb	88.9910	0.7	354.091
Ni 231.604	3.2510	ppb	3.6065	110.9	0.4571
Pb 220.353	-6.2176	ppb	8.1199	130.6	-0.4992
Sb 206.834	-4.9565	ppb	7.3849	149.0	4.3816
Se 196.026	-1.6930	ppb	0.8223	48.6	4.2584
Si 288.158	13695.8	ppb	23.6778	0.2	58733.5
Sn 189.925	11.1084	ppb	11.6864	105.2	1.4827
Sr 216.596	159.936	ppb	1.7163	1.1	394.949
Ti 334.941	-0.1216	ppb	0.2816	231.6	-6.6645
Tl 190.794	0.0091	ppb	13.3394	146928.4	-2.1810
V 292.401	-0.1866	ppb	0.6924	371.0	-12.9684
Zn 206.200	7.6861	ppb	3.6509	47.5	2.7600

680-166814-C-3-B (Samp)

4/9/2019, 7:49:23 AM

Rack 4, Tube 43

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5241u	-0.5389u	0.6597
Al 308.215	5.4859	4.6049	-0.7276u
As 188.980	8.2354	-1.2510u	0.6702
B 249.678	9.4315	6.9024	7.4621
Ba 389.178	30.3210	28.3617	29.4784
Be 313.042	-0.1108u	-0.1188u	-0.0941u
Ca 370.602	22906	22942	22867
Cd 226.502	0.1832	-0.1318	0.3035
Co 228.615	4.6040	4.0184	4.2579
Cr 267.716	0.3279	-0.3584u	-0.7439u
Cu 324.754	3.0895	3.9686	4.0773
Fe 271.441	3529.33	3558.70	3548.75
K 766.491	1831.37	1832.46	1826.92
Mg 279.078	20013.8	20037.3	19992.7
Mn 257.610	2044.55	2045.13	2038.19
Mo 202.032	3.8021	0.8804	-1.4395u
Na 330.237	15887.7	15777.3	15949.3
Ni 231.604	2.6648	4.3120	1.3742
Pb 220.353	-8.1215u	4.0171	4.4665
Sb 206.834	-9.8827u	-3.2935u	0.6934
Se 196.026	-8.1225u	-2.9400u	12.8782
Si 288.158	13600.3	13599.6	13558.3
Sn 189.925	2.8678	5.2997	-1.1112u
Sr 216.596	135.806	136.794	138.077
Ti 334.941	-0.5574	-0.4453	-0.2707

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-10.3516u	1.0690	-14.0043u
V 292.401	-0.6210u	0.1802	-0.3239u
Zn 206.200	1.7036	0.8953	2.4762

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1344	ppb	0.6877	511.6	-57.6857
Al 308.215	3.1210	ppb	3.3620	107.7	248.861
As 188.980	2.5515	ppb	5.0152	196.6	1.8568
B 249.678	7.9320	ppb	1.3284	16.7	29.0723
Ba 389.178	29.3870	ppb	0.9829	3.3	134.757
Be 313.042	-0.1079	ppb	0.0126	11.7	-506.238
Ca 370.602	22905	ppb	37.26	0.2	32560
Cd 226.502	0.1183	ppb	0.2248	190.0	8.1935
Co 228.615	4.2934	ppb	0.2944	6.9	5.8776
Cr 267.716	-0.2581	ppb	0.5429	210.3	9.5897
Cu 324.754	3.7118	ppb	0.5417	14.6	571.795
Fe 271.441	3545.59	ppb	14.9400	0.4	1964.39
K 766.491	1830.25	ppb	2.9346	0.2	31347.4
Mg 279.078	20014.6	ppb	22.3157	0.1	24376.3
Mn 257.610	2042.62	ppb	3.8513	0.2	140101
Mo 202.032	1.0810	ppb	2.6265	243.0	4.1222
Na 330.237	15871.5	ppb	87.1523	0.5	420.764
Ni 231.604	2.7837	ppb	1.4725	52.9	-0.0033
Pb 220.353	0.1207	ppb	7.1415	5916.3	1.8182
Sb 206.834	-4.1609	ppb	5.3411	128.4	4.5858
Se 196.026	0.6053	ppb	10.9400	1807.4	4.6633
Si 288.158	13586.1	ppb	24.0555	0.2	58267.2
Sn 189.925	2.3521	ppb	3.2364	137.6	-0.4845
Sr 216.596	136.892	ppb	1.1389	0.8	338.312
Ti 334.941	-0.4245	ppb	0.1445	34.0	-11.9180
Tl 190.794	-7.7623	ppb	7.8632	101.3	-3.9814
V 292.401	-0.2549	ppb	0.4050	158.9	-13.7078
Zn 206.200	1.6917	ppb	0.7905	46.7	-0.4121

680-166814-C-2-B (Samp)

4/9/2019, 7:53:50 AM

Rack 4, Tube 44

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8253	0.4999	0.3928
Al 308.215	-0.7383u	1.4537	9.8246
As 188.980	-0.3063u	10.2209	3.5283
B 249.678	7.6826	6.3090	6.3470
Ba 389.178	18.7063	22.9545	24.3339
Be 313.042	-0.1173u	-0.1196u	-0.1167u
Ca 370.602	27134	27122	27134
Cd 226.502	0.1615	-0.2068u	-0.5513u
Co 228.615	0.5463	-0.1162u	1.0548
Cr 267.716	0.0935	0.0436	0.2613
Cu 324.754	4.1578	2.8767	4.6881
Fe 271.441	1243.40	1219.23	1237.86
K 766.491	1410.43	1411.30	1415.14
Mg 279.078	15032.4	15067.4	15058.7
Mn 257.610	2770.74	2775.84	2772.38
Mo 202.032	0.8171	0.3356	4.1656

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Na 330.237	18523.8	18463.7	18352.7
Ni 231.604	-0.3943u	1.4691	2.0117
Pb 220.353	-8.5082u	7.4974	3.2089
Sb 206.834	-2.9447u	-2.3477u	-6.4560u
Se 196.026	-5.3244u	-4.4597u	-12.2274u
Si 288.158	12946.0	12952.3	12968.9
Sn 189.925	-6.5011u	6.8880	8.8798
Sr 216.596	138.555	137.461	140.531
Ti 334.941	-0.1614	-0.5092u	-0.3781
Tl 190.794	6.4615	-15.5244u	-4.5019u
V 292.401	-0.8073u	-0.1572u	0.0315
Zn 206.200	5.2284	4.3863	-0.8031u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.5727	ppb	0.2253	39.3	-37.0834
Al 308.215	3.5133	ppb	5.5745	158.7	249.464
As 188.980	4.4810	ppb	5.3279	118.9	2.3186
B 249.678	6.7795	ppb	0.7824	11.5	23.9257
Ba 389.178	21.9982	ppb	2.9332	13.3	92.8978
Be 313.042	-0.1179	ppb	0.0015	1.3	-513.411
Ca 370.602	27130	ppb	6.988	0.0	38573
Cd 226.502	-0.1989	ppb	0.3564	179.2	1.6994
Co 228.615	0.4950	ppb	0.5872	118.6	-6.7495
Cr 267.716	0.1328	ppb	0.1141	85.9	16.0590
Cu 324.754	3.9075	ppb	0.9313	23.8	576.528
Fe 271.441	1233.50	ppb	12.6597	1.0	713.226
K 766.491	1412.29	ppb	2.5077	0.2	24242.4
Mg 279.078	15052.8	ppb	18.2252	0.1	18328.8
Mn 257.610	2772.99	ppb	2.6016	0.1	190148
Mo 202.032	1.7728	ppb	2.0862	117.7	5.1055
Na 330.237	18446.7	ppb	86.7861	0.5	483.873
Ni 231.604	1.0288	ppb	1.2620	122.7	-1.7236
Pb 220.353	0.7327	ppb	8.2851	1130.8	2.0717
Sb 206.834	-3.9161	ppb	2.2197	56.7	4.6283
Se 196.026	-7.3372	ppb	4.2571	58.0	3.2863
Si 288.158	12955.7	ppb	11.8020	0.1	55590.5
Sn 189.925	3.0889	ppb	8.3647	270.8	-0.3187
Sr 216.596	138.849	ppb	1.5562	1.1	342.876
Ti 334.941	-0.3496	ppb	0.1756	50.2	-17.6385
Tl 190.794	-4.5216	ppb	10.9930	243.1	-3.0277
V 292.401	-0.3110	ppb	0.4400	141.5	-14.2807
Zn 206.200	2.9372	ppb	3.2665	111.2	0.2408

MB 680-565350/1-A (Samp) 4/9/2019, 7:58:17 AM Rack 4, Tube 45

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.2667u	0.0819	1.2710
Al 308.215	1.5279	7.2607	6.3892
As 188.980	8.9818	11.5354	-2.5986u
B 249.678	2.4119	3.1732	3.9347
Ba 389.178	-5.9815u	-4.0002u	-2.8485u
Be 313.042	-0.1028u	-0.0952u	-0.0951u
Ca 370.602	0.5366	2.781	1.540

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Cd 226.502	0.4540	-0.5671u	0.2254
Co 228.615	-0.6100u	-1.0467u	-2.6927u
Cr 267.716	-0.2494u	0.0015	0.2955
Cu 324.754	3.3890	3.8787	2.2988
Fe 271.441	-13.4632u	-1.0476u	3.4262
K 766.491	9.9940	9.5399	8.8916
Mg 279.078	-6.2633u	-2.5879u	-1.1210u
Mn 257.610	0.1614	0.0775	0.0597
Mo 202.032	2.5532	1.4477	0.7164
Na 330.237	137.823	58.4622	-1.6200u
Ni 231.604	1.2770	-1.2578u	-0.4410u
Pb 220.353	2.1635	-5.7688u	3.5378
Sb 206.834	-11.2217u	-5.5094u	4.6567
Se 196.026	19.5039	18.3877	13.8023
Si 288.158	22.3076	22.1677	20.6099
Sn 189.925	3.6260	-2.5873u	9.8401
Sr 216.596	0.4733	-2.3174u	-0.4496u
Ti 334.941	0.0112	-0.0511u	-0.0202u
Tl 190.794	-12.7342u	-7.1674u	-4.9267u
V 292.401	-0.4856u	-0.5234u	-0.4937u
Zn 206.200	0.6315	4.4305	6.4898

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3621	ppb	0.8062	222.7	-46.6001
Al 308.215	5.0593	ppb	3.0892	61.1	252.047
As 188.980	5.9729	ppb	7.5321	126.1	2.7150
B 249.678	3.1733	ppb	0.7614	24.0	2.0066
Ba 389.178	-4.2767	ppb	1.5847	37.1	-52.8202
Be 313.042	-0.0977	ppb	0.0044	4.5	-500.451
Ca 370.602	1.619	ppb	1.124	69.4	11.49
Cd 226.502	0.0375	ppb	0.5359	1431.0	2.8397
Co 228.615	-1.4498	ppb	1.0983	75.8	-13.2220
Cr 267.716	0.0158	ppb	0.2728	1722.2	10.5625
Cu 324.754	3.1888	ppb	0.8087	25.4	557.611
Fe 271.441	-3.6949	ppb	8.7504	236.8	43.7606
K 766.491	9.4752	ppb	0.5540	5.8	395.784
Mg 279.078	-3.3241	ppb	2.6490	79.7	24.2197
Mn 257.610	0.0995	ppb	0.0544	54.6	29.2253
Mo 202.032	1.5724	ppb	0.9247	58.8	4.8395
Na 330.237	64.8883	ppb	69.9430	107.8	34.0433
Ni 231.604	-0.1406	ppb	1.2938	920.2	-2.8709
Pb 220.353	-0.0225	ppb	5.0237	22321.8	1.6550
Sb 206.834	-4.0248	ppb	8.0426	199.8	4.5754
Se 196.026	17.2313	ppb	3.0216	17.5	7.5249
Si 288.158	21.6950	ppb	0.9424	4.3	667.636
Sn 189.925	3.6263	ppb	6.2137	171.4	-0.1996
Sr 216.596	-0.7646	ppb	1.4218	186.0	1.4771
Ti 334.941	-0.0200	ppb	0.0311	155.5	-26.6672
Tl 190.794	-8.2761	ppb	4.0201	48.6	-4.4560
V 292.401	-0.5009	ppb	0.0199	4.0	-15.9762
Zn 206.200	3.8506	ppb	2.9719	77.2	0.7204

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

LCS 680-565350/2-A (Samp) 4/9/2019, 8:02:44 AM Rack 4, Tube 46

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	50.5066	51.3964	50.2160
Al 308.215	5112.10	5108.43	5100.66
As 188.980	110.755	115.109	111.250
B 249.678	218.952	219.603	221.845
Ba 389.178	88.9157	92.1039	94.3966
Be 313.042	55.5439	55.4323	55.4194
Ca 370.602	4979	4982	4951
Cd 226.502	52.6551	52.0752	50.9273
Co 228.615	52.1607	51.6153	50.4232
Cr 267.716	99.2317	98.9177	99.2150
Cu 324.754	104.782	104.603	104.890
Fe 271.441	4970.87	4980.12	4987.78
K 766.491	8254.72	8254.28	8195.90
Mg 279.078	5257.03	5264.70	5251.24
Mn 257.610	506.457	506.102	504.439
Mo 202.032	106.245	103.157	104.560
Na 330.237	5586.42	5702.78	5621.89
Ni 231.604	101.593	101.577	105.697
Pb 220.353	483.736	487.533	504.942
Sb 206.834	45.9532	36.7410	40.0187
Se 196.026	126.829	109.704	112.340
Si 288.158	14.9693	14.9390	14.8660
Sn 189.925	110.384	111.643	104.608
Sr 216.596	96.3412	96.2353	98.2764
Ti 334.941	386.397	386.381	385.660
Tl 190.794	31.0843	31.4093	34.3815
V 292.401	99.4454	99.7522	97.7364
Zn 206.200	113.382	113.832	115.569

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	50.7063	ppb	0.6150	1.2	1306.27
Al 308.215	5107.06	ppb	5.8459	0.1	8877.95
As 188.980	112.372	ppb	2.3838	2.1	28.5307
B 249.678	220.133	ppb	1.5179	0.7	1388.81
Ba 389.178	91.8054	ppb	2.7526	3.0	440.844
Be 313.042	55.4652	ppb	0.0685	0.1	42468.4
Ca 370.602	4971	ppb	16.99	0.3	7075
Cd 226.502	51.8859	ppb	0.8793	1.7	602.589
Co 228.615	51.3997	ppb	0.8886	1.7	164.748
Cr 267.716	99.1215	ppb	0.1767	0.2	1449.70
Cu 324.754	104.758	ppb	0.1451	0.1	3207.48
Fe 271.441	4979.59	ppb	8.4684	0.2	2742.85
K 766.491	8234.97	ppb	33.8363	0.4	140222
Mg 279.078	5257.66	ppb	6.7519	0.1	6423.67
Mn 257.610	505.666	ppb	1.0773	0.2	34708.3
Mo 202.032	104.654	ppb	1.5461	1.5	147.949
Na 330.237	5637.03	ppb	59.6385	1.1	165.905
Ni 231.604	102.955	ppb	2.3739	2.3	98.3547
Pb 220.353	492.070	ppb	11.3078	2.3	183.404
Sb 206.834	40.9043	ppb	4.6695	11.4	19.0105
Se 196.026	116.291	ppb	9.2211	7.9	25.6504
Si 288.158	14.9247	ppb	0.0531	0.4	676.220

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	108.879	ppb	3.7514	3.4	23.4496
Sr 216.596	96.9510	ppb	1.1491	1.2	239.434
Ti 334.941	386.146	ppb	0.4207	0.1	29130.3
Tl 190.794	32.2917	ppb	1.8171	5.6	5.0025
V 292.401	98.9780	ppb	1.0862	1.1	793.331
Zn 206.200	114.261	ppb	1.1546	1.0	58.9947

LCSD 680-565350/3-A (Samp) 4/9/2019, 8:07:11 AM Rack 4, Tube 47

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	51.7826	51.7605	52.6236
Al 308.215	5174.04	5190.95	5176.57
As 188.980	109.837	106.508	103.172
B 249.678	230.373	229.240	229.103
Ba 389.178	96.1943	91.3790	86.5536
Be 313.042	56.4829	56.4805	56.2742
Ca 370.602	5042	5026	5045
Cd 226.502	52.0223	53.1291	52.2546
Co 228.615	51.0549	54.6138	50.2102
Cr 267.716	100.818	100.491	99.6340
Cu 324.754	109.110	109.863	109.158
Fe 271.441	5058.57	5050.68	5071.75
K 766.491	8311.55	8299.28	8282.25
Mg 279.078	5346.96	5333.74	5320.40
Mn 257.610	514.377	513.093	512.979
Mo 202.032	104.013	100.437	101.313
Na 330.237	5565.98	5780.12	5185.91
Ni 231.604	103.572	105.183	106.032
Pb 220.353	486.885	492.843	491.283
Sb 206.834	44.5540	48.5015	57.5366
Se 196.026	99.0404	124.045	111.448
Si 288.158	15.6318	16.1896	15.2098
Sn 189.925	100.787	105.129	106.473
Sr 216.596	99.3326	100.077	98.5443
Ti 334.941	393.157	392.233	391.749
Tl 190.794	28.0637	23.3408	20.1594
V 292.401	101.506	101.252	101.635
Zn 206.200	112.104	118.049	113.332

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.0556	ppb	0.4921	0.9	1342.53
Al 308.215	5180.52	ppb	9.1193	0.2	9002.13
As 188.980	106.506	ppb	3.3321	3.1	27.1632
B 249.678	229.572	ppb	0.6971	0.3	1449.27
Ba 389.178	91.3756	ppb	4.8204	5.3	438.731
Be 313.042	56.4125	ppb	0.1198	0.2	43201.3
Ca 370.602	5038	ppb	10.23	0.2	7170
Cd 226.502	52.4687	ppb	0.5836	1.1	609.361
Co 228.615	51.9596	ppb	2.3371	4.5	166.667
Cr 267.716	100.314	ppb	0.6114	0.6	1467.02
Cu 324.754	109.377	ppb	0.4220	0.4	3327.88
Fe 271.441	5060.33	ppb	10.6470	0.2	2786.59
K 766.491	8297.69	ppb	14.7148	0.2	141288

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	5333.70	ppb	13.2820	0.2	6516.16
Mn 257.610	513.483	ppb	0.7764	0.2	35244.5
Mo 202.032	101.921	ppb	1.8636	1.8	144.152
Na 330.237	5510.67	ppb	300.942	5.5	162.760
Ni 231.604	104.929	ppb	1.2494	1.2	100.292
Pb 220.353	490.337	ppb	3.0896	0.6	182.764
Sb 206.834	50.1974	ppb	6.6554	13.3	21.9425
Se 196.026	111.511	ppb	12.5023	11.2	24.7777
Si 288.158	15.6771	ppb	0.4915	3.1	679.529
Sn 189.925	104.130	ppb	2.9718	2.9	22.3826
Sr 216.596	99.3180	ppb	0.7665	0.8	245.231
Ti 334.941	392.380	ppb	0.7154	0.2	29601.0
Tl 190.794	23.8546	ppb	3.9771	16.7	3.0414
V 292.401	101.464	ppb	0.1948	0.2	813.765
Zn 206.200	114.495	ppb	3.1385	2.7	59.1175

680-166819-E-3-C (Samp)

4/9/2019, 8:11:38 AM

Rack 4, Tube 48

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1167u	-0.0856u	-0.9162u
Al 308.215	210.803	220.332	220.877
As 188.980	-1.3355u	3.5198	-3.1043u
B 249.678	22.6649	21.8025	22.5363
Ba 389.178	8.6101	11.8995	15.0529
Be 313.042	-0.1008u	-0.0881u	-0.0871u
Ca 370.602	9050	9066	9065
Cd 226.502	-0.7584u	0.3755	-0.5835u
Co 228.615	0.6367	-0.9746u	-1.5003u
Cr 267.716	0.2241	0.2388	1.2166
Cu 324.754	6.5728	5.8921	6.8230
Fe 271.441	50.3397	63.7592	57.0076
K 766.491	398.253	398.565	401.845
Mg 279.078	2867.00	2865.57	2870.45
Mn 257.610	8.0201	7.8749	7.9896
Mo 202.032	1.9952	1.3860	0.4910
Na 330.237	4643.77	5434.84	4852.00
Ni 231.604	0.0343	4.0099	1.8759
Pb 220.353	1.3970	-11.1828u	-2.2468u
Sb 206.834	5.8210	3.8144	-11.6318u
Se 196.026	-5.0846u	-4.5426u	3.4398
Si 288.158	2827.19	2837.24	2843.09
Sn 189.925	4.0766	1.9710	6.3841
Sr 216.596	40.7312	42.9669	39.6798
Ti 334.941	3.4653	3.3867	3.2955
Tl 190.794	-7.1425u	4.0575	-0.5632u
V 292.401	0.9943	0.4885	1.2240
Zn 206.200	8.9253	10.8897	7.1791

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.3728	ppb	0.4708	126.3	-66.4974
Al 308.215	217.337	ppb	5.6658	2.6	610.821
As 188.980	-0.3067	ppb	3.4298	1118.4	1.1515
B 249.678	22.3346	ppb	0.4652	2.1	124.851

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	11.8542	ppb	3.2216	27.2	31.4924
Be 313.042	-0.0920	ppb	0.0077	8.3	-494.904
Ca 370.602	9060	ppb	8.712	0.1	12877
Cd 226.502	-0.3221	ppb	0.6105	189.5	-1.1882
Co 228.615	-0.6127	ppb	1.1135	181.7	-10.4019
Cr 267.716	0.5598	ppb	0.5688	101.6	18.4957
Cu 324.754	6.4293	ppb	0.4817	7.5	642.085
Fe 271.441	57.0355	ppb	6.7098	11.8	76.6430
K 766.491	399.554	ppb	1.9896	0.5	7026.78
Mg 279.078	2867.67	ppb	2.5115	0.1	3519.42
Mn 257.610	7.9615	ppb	0.0766	1.0	577.150
Mo 202.032	1.2907	ppb	0.7566	58.6	4.4474
Na 330.237	4976.87	ppb	410.055	8.2	154.175
Ni 231.604	1.9734	ppb	1.9896	100.8	-0.7947
Pb 220.353	-4.0108	ppb	6.4728	161.4	0.1812
Sb 206.834	-0.6655	ppb	9.5499	1435.1	5.6353
Se 196.026	-2.0625	ppb	4.7728	231.4	4.0011
Si 288.158	2835.84	ppb	8.0403	0.3	12618.0
Sn 189.925	4.1439	ppb	2.2073	53.3	-0.0828
Sr 216.596	41.1260	ppb	1.6787	4.1	103.884
Ti 334.941	3.3825	ppb	0.0850	2.5	236.577
Tl 190.794	-1.2161	ppb	5.6285	462.8	-2.8129
V 292.401	0.9023	ppb	0.3763	41.7	-4.4138
Zn 206.200	8.9980	ppb	1.8564	20.6	3.4392

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Rack 4, Tube 49

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.7059u	0.5705	0.2421
Al 308.215	46.5500	40.7774	48.6815
As 188.980	7.4917	4.9876	-1.2319u
B 249.678	23.2464	23.7480	23.7334
Ba 389.178	28.8148	35.7159	27.3307
Be 313.042	-0.1168u	-0.1111u	-0.0925u
Ca 370.602	70712	70789	70675
Cd 226.502	0.5477	-0.9295u	0.3422
Co 228.615	-1.5695u	-0.9844u	-1.3877u
Cr 267.716	0.4147	0.7473	1.2728
Cu 324.754	39.0982	38.6530	39.0636
Fe 271.441	715.021	703.466	712.814
K 766.491	2549.65	2549.95	2555.16
Mg 279.078	3355.27	3359.18	3349.20
Mn 257.610	31.7817	32.0705	31.9275
Mo 202.032	3.5555	0.6109	3.4750
Na 330.237	4291.50	4513.26	4463.58
Ni 231.604	1.5609	1.1950	1.1828
Pb 220.353	-2.5266u	8.1435	-2.4308u
Sb 206.834	5.7672	-1.2247u	1.4769
Se 196.026	5.0268	3.9019	-18.9770u
Si 288.158	3034.01	3032.55	3046.69
Sn 189.925	6.4186	5.3155	-8.9348u
Sr 216.596	117.564	117.762	115.911
Ti 334.941	1.4760	1.5107	1.7257

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Replicates Concentration		
Tl 190.794	-4.2580u	3.3290	-18.5258u
V 292.401	0.5820	0.9424	0.4576
Zn 206.200	78.1125	79.6886	77.5576

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0356	ppb	0.6628	1863.0	-55.8311
Al 308.215	45.3363	ppb	4.0894	9.0	320.176
As 188.980	3.7491	ppb	4.4917	119.8	2.1539
B 249.678	23.5760	ppb	0.2855	1.2	132.183
Ba 389.178	30.6204	ppb	4.4747	14.6	127.406
Be 313.042	-0.1068	ppb	0.0127	11.9	-497.496
Ca 370.602	70725	ppb	58.30	0.1	100455
Cd 226.502	-0.0132	ppb	0.8002	6068.5	3.1460
Co 228.615	-1.3139	ppb	0.2995	22.8	-12.7769
Cr 267.716	0.8116	ppb	0.4326	53.3	22.2228
Cu 324.754	38.9383	ppb	0.2476	0.6	1489.78
Fe 271.441	710.433	ppb	6.1345	0.9	430.160
K 766.491	2551.59	ppb	3.0953	0.1	43609.4
Mg 279.078	3354.55	ppb	5.0309	0.1	4111.98
Mn 257.610	31.9266	ppb	0.1444	0.5	2221.96
Mo 202.032	2.5472	ppb	1.6773	65.9	6.1861
Na 330.237	4422.78	ppb	116.373	2.6	139.854
Ni 231.604	1.3129	ppb	0.2148	16.4	-1.4434
Pb 220.353	1.0620	ppb	6.1329	577.5	2.0594
Sb 206.834	2.0065	ppb	3.5259	175.7	6.4865
Se 196.026	-3.3495	ppb	13.5456	404.4	3.7661
Si 288.158	3037.75	ppb	7.7786	0.3	13475.5
Sn 189.925	0.9331	ppb	8.5636	917.8	-0.8043
Sr 216.596	117.079	ppb	1.0166	0.9	289.599
Ti 334.941	1.5708	ppb	0.1353	8.6	100.955
Tl 190.794	-6.4850	ppb	11.0963	171.1	-4.0473
V 292.401	0.6607	ppb	0.2518	38.1	-6.4480
Zn 206.200	78.4529	ppb	1.1055	1.4	40.1250

x (Samp) 4/9/2019, 8:20:32 AM Rack 4, Tube 50
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	8.7149	9.4550	10.5145
Al 308.215	210.290	216.391	209.680
As 188.980	21.3388	16.9689	36.9178
B 249.678	111.525	112.222	113.540
Ba 389.178	8.0932	9.2900	8.3264
Be 313.042	4.2783	4.2628	4.2527
Ca 370.602	505.0	504.2	515.4
Cd 226.502	5.0754	5.2587	4.5155
Co 228.615	9.6851	9.3579	8.3530
Cr 267.716	10.9604	10.2143	10.2206
Cu 324.754	23.8963	24.4725	24.1653
Fe 271.441	44.4712	67.9263	50.1234
K 766.491	990.237	988.230	992.622
Mg 279.078	524.551	526.929	537.803
Mn 257.610	11.3618	11.1909	11.4731
Mo 202.032	10.3836	12.7815	12.8067

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Label	Replicates Concentration		
Na 330.237	1579.02	1277.60	1403.58
Ni 231.604	43.7915	44.7121	44.3504
Pb 220.353	13.7228	15.8173	16.7975
Sb 206.834	26.6040	10.2753	9.8097
Se 196.026	23.9131	22.7919	11.7925
Si 288.158	32.3839	34.6564	29.8294
Sn 189.925	47.8496	48.3815	49.5641
Sr 216.596	9.7383	9.2433	12.1858
Ti 334.941	9.8225	9.7232	9.5866
Tl 190.794	16.0648	7.7686	13.7032
V 292.401	9.7892	10.6123	10.5024
Zn 206.200	24.6060	24.2808	22.1263

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	9.5615	ppb	0.9045	9.5	200.696
Al 308.215	212.120	ppb	3.7108	1.7	602.321
As 188.980	25.0752	ppb	10.4862	41.8	7.2824
B 249.678	112.429	ppb	1.0233	0.9	702.754
Ba 389.178	8.5698	ppb	0.6345	7.4	12.9552
Be 313.042	4.2646	ppb	0.0129	0.3	2872.97
Ca 370.602	508.2	ppb	6.268	1.2	731.3
Cd 226.502	4.9499	ppb	0.3872	7.8	59.1418
Co 228.615	9.1320	ppb	0.6942	7.6	22.0689
Cr 267.716	10.4651	ppb	0.4290	4.1	162.194
Cu 324.754	24.1780	ppb	0.2883	1.2	1104.94
Fe 271.441	54.1736	ppb	12.2408	22.6	75.6094
K 766.491	990.363	ppb	2.1989	0.2	17070.0
Mg 279.078	529.761	ppb	7.0654	1.3	673.086
Mn 257.610	11.3419	ppb	0.1421	1.3	801.671
Mo 202.032	11.9906	ppb	1.3918	11.6	19.3075
Na 330.237	1420.07	ppb	151.386	10.7	66.9167
Ni 231.604	44.2846	ppb	0.4638	1.0	40.7577
Pb 220.353	15.4459	ppb	1.5707	10.2	7.3644
Sb 206.834	15.5630	ppb	9.5646	61.5	10.7673
Se 196.026	19.4992	ppb	6.6977	34.3	7.9400
Si 288.158	32.2899	ppb	2.4149	7.5	717.839
Sn 189.925	48.5984	ppb	0.8776	1.8	9.9052
Sr 216.596	10.3892	ppb	1.5755	15.2	28.4816
Ti 334.941	9.7108	ppb	0.1185	1.2	708.935
Tl 190.794	12.5122	ppb	4.2744	34.2	0.3846
V 292.401	10.3013	ppb	0.4469	4.3	71.8343
Zn 206.200	23.6710	ppb	1.3476	5.7	11.1840

Cont Calib Verif (CCV)

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	499.202	500.082	501.617
Al 308.215	10525.0	10547.3	10531.6
As 188.980	583.036	580.610	564.261
B 249.678	563.246	567.286	572.259
Ba 389.178	460.113	465.024	460.289
Be 313.042	564.364	565.920	565.375
Ca 370.602	10195	10231	10219

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Label	Replicates Concentration		
Cd 226.502	518.333	520.201	519.104
Co 228.615	522.204	520.434	519.484
Cr 267.716	498.996	500.866	500.460
Cu 324.754	525.006	517.802	524.257
Fe 271.441	10247.8	10261.9	10247.2
K 766.491	10285.3	10308.5	10296.0
Mg 279.078	10796.7	10818.4	10788.4
Mn 257.610	515.635	516.642	515.700
Mo 202.032	509.365	517.298	513.075
Na 330.237	11942.0	11767.5	11765.7
Ni 231.604	521.868	524.931	529.575
Pb 220.353	492.996	503.676	488.373
Sb 206.834	510.317	521.305	513.192
Se 196.026	569.388	593.989	578.172
Si 288.158	5189.44	5203.40	5174.83
Sn 189.925	514.380	519.646	502.033
Sr 216.596	499.816	495.936	495.380
Ti 334.941	495.177	496.766	497.325
Tl 190.794	493.356	494.091	511.051
V 292.401	509.360	509.864	508.531
Zn 206.200	1107.73	1115.46	1119.94

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	500.301	ppb	1.2221	0.2	13391.3	100.06013
Al 308.215	10534.6	ppb	11.4439	0.1	18063.6	105.34643
As 188.980	575.969	ppb	10.2118	1.8	139.822	115.19382Q
B 249.678	567.597	ppb	4.5144	0.8	3612.40	113.51941Q
Ba 389.178	461.809	ppb	2.7859	0.6	2328.21	92.36174
Be 313.042	565.220	ppb	0.7895	0.1	436701	113.04393Q
Ca 370.602	10215	ppb	18.44	0.2	14519	102.14932
Cd 226.502	519.212	ppb	0.9389	0.2	5958.80	103.84249
Co 228.615	520.707	ppb	1.3806	0.3	1728.52	104.14143
Cr 267.716	500.107	ppb	0.9838	0.2	7267.77	100.02147
Cu 324.754	522.355	ppb	3.9610	0.8	14099.7	104.47103
Fe 271.441	10252.3	ppb	8.3102	0.1	5618.99	102.47153
K 766.491	10296.6	ppb	11.6089	0.1	175268	102.96631
Mg 279.078	10801.2	ppb	15.5187	0.1	13171.6	108.01176
Mn 257.610	515.992	ppb	0.5635	0.1	35437.8	103.19840
Mo 202.032	513.246	ppb	3.9693	0.8	715.343	102.64919
Na 330.237	11825.1	ppb	101.280	0.9	305.607	118.25076Q
Ni 231.604	525.458	ppb	3.8808	0.7	512.992	105.09164
Pb 220.353	495.015	ppb	7.8487	1.6	184.306	99.00307
Sb 206.834	514.938	ppb	5.6983	1.1	169.307	102.98757
Se 196.026	580.516	ppb	12.4669	2.1	110.433	116.10329Q
Si 288.158	5189.23	ppb	14.2896	0.3	22735.9	103.78450
Sn 189.925	512.020	ppb	9.0405	1.8	114.030	102.40393
Sr 216.596	497.044	ppb	2.4166	0.5	1212.34	99.40878
Ti 334.941	496.423	ppb	1.1148	0.2	37465.8	99.28456
Tl 190.794	499.499	ppb	10.0109	2.0	113.740	99.89986
V 292.401	509.252	ppb	0.6732	0.1	4126.37	101.85036
Zn 206.200	1114.38	ppb	6.1785	0.6	587.031	111.43771Q

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Blank (CCB) 4/9/2019, 8:29:24 AM Rack S, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.9635	0.3495	-1.8291u
Al 308.215	15.2399	19.2677	15.6915
As 188.980	4.4020	0.3248	-3.7094u
B 249.678	21.1859	17.1689	16.5074
Ba 389.178	-1.5566u	-5.5458u	1.1656
Be 313.042	-0.0099u	-0.0141u	-0.0078u
Ca 370.602	14.31	16.15	8.548
Cd 226.502	-0.0229u	-0.0701u	-0.5009u
Co 228.615	-0.3957u	0.4952	0.2849
Cr 267.716	-0.0415u	-0.6344u	0.6141
Cu 324.754	5.4516	3.7810	4.1775
Fe 271.441	-7.9919u	4.5568	10.5830
K 766.491	6.8417	7.2307	5.3265
Mg 279.078	11.4012	2.1236	7.3086
Mn 257.610	0.3014	0.3093	0.2097
Mo 202.032	2.3041	2.1079	0.1621
Na 330.237	-356.220u	420.302	364.011
Ni 231.604	2.0462	1.2381	0.9955
Pb 220.353	-1.7161u	3.3756	-4.5660u
Sb 206.834	-4.6344u	-6.7315u	-0.1382u
Se 196.026	-5.5744u	2.4092	7.5151
Si 288.158	26.5374	27.3232	27.4417
Sn 189.925	-1.0829u	10.7589	0.7002
Sr 216.596	-0.0145u	-0.6638u	1.2833
Ti 334.941	0.2236	0.3288	0.4425
Tl 190.794	-8.4144u	-6.2062u	-9.0027u
V 292.401	-0.4364u	0.8259	-0.0759u
Zn 206.200	0.6711	-0.6936u	3.0369

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	-0.1720	ppb	1.4675	853.1	-60.9607	-0.17202
Al 308.215	16.7330	ppb	2.2067	13.2	271.784	16.73302
As 188.980	0.3391	ppb	4.0557	1195.9	1.3265	0.33914
B 249.678	18.2874	ppb	2.5319	13.8	98.9437	18.28739
Ba 389.178	-1.9789	ppb	3.3756	170.6	-41.1252	-1.97891
Be 313.042	-0.0106	ppb	0.0032	30.3	-433.019	-0.01059
Ca 370.602	13.00	ppb	3.966	30.5	27.65	13.00135
Cd 226.502	-0.1980	ppb	0.2634	133.1	0.1570	-0.19796
Co 228.615	0.1281	ppb	0.4657	363.4	-7.9496	0.12814
Cr 267.716	-0.0206	ppb	0.6245	3033.8	10.0347	-0.02059
Cu 324.754	4.4701	ppb	0.8729	19.5	591.001	4.47005
Fe 271.441	2.3826	ppb	9.4764	397.7	47.1368	2.38264
K 766.491	6.4663	ppb	1.0061	15.6	344.636	6.46632
Mg 279.078	6.9445	ppb	4.6495	67.0	36.7171	6.94446
Mn 257.610	0.2735	ppb	0.0554	20.3	41.1923	0.27345
Mo 202.032	1.5247	ppb	1.1841	77.7	4.7730	1.52470
Na 330.237	142.698	ppb	432.992	303.4	35.9707	142.69774
Ni 231.604	1.4266	ppb	0.5501	38.6	-1.3330	1.42659
Pb 220.353	-0.9688	ppb	4.0232	415.3	1.3052	-0.96885
Sb 206.834	-3.8347	ppb	3.3686	87.8	4.6356	-3.83470
Se 196.026	1.4500	ppb	6.5973	455.0	4.6421	1.44997
Si 288.158	27.1008	ppb	0.4914	1.8	690.879	27.10077

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	3.4587	ppb	6.3847	184.6	-0.2372	3.45875
Sr 216.596	0.2016	ppb	0.9914	491.7	3.8445	0.20164
Ti 334.941	0.3316	ppb	0.1094	33.0	-0.1023	0.33164
Tl 190.794	-7.8744	ppb	1.4744	18.7	-4.3617	-7.87443
V 292.401	0.1045	ppb	0.6503	622.1	-10.9695	0.10453
Zn 206.200	1.0048	ppb	1.8875	187.8	-0.7826	1.00482

(Samp) 4/9/2019, 8:33:45 AM Rack 1, Tube 1
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	0.0841	0.6335	-0.5647u
Al 308.215	15.0581	12.8459	11.5000
As 188.980	-3.3793u	9.0469	3.2464
B 249.678	8.3385	7.2252	5.9304
Ba 389.178	-4.8683u	-5.4546u	-5.1449u
Be 313.042	-0.1253u	-0.1445u	-0.1218u
Ca 370.602	1.606	2.657	8.645
Cd 226.502	0.1007	0.0818	-0.1883u
Co 228.615	-1.1305u	0.3784	-1.1392u
Cr 267.716	0.6452	0.2946	-0.3457u
Cu 324.754	3.7565	5.4965	3.1507
Fe 271.441	-4.4341u	-1.1815u	3.2734
K 766.491	9.1418	9.1374	8.8718
Mg 279.078	-7.2237u	-4.5685u	-9.6031u
Mn 257.610	-0.0380u	0.1518	-0.1396u
Mo 202.032	-0.8910u	0.3660	2.0131
Na 330.237	498.617	532.185	380.170
Ni 231.604	-0.9094u	0.6468	-2.8551u
Pb 220.353	-0.1737u	-3.6375u	-4.6803u
Sb 206.834	-0.5215u	1.4953	20.2605
Se 196.026	-3.4088u	-16.1171u	15.0550
Si 288.158	26.8267	29.2116	28.3365
Sn 189.925	5.0698	1.4905	2.3004
Sr 216.596	-1.0389u	0.9556	-0.9454u
Ti 334.941	0.1527	0.0463	0.1632
Tl 190.794	-15.3595u	-4.8009u	-2.1323u
V 292.401	0.3652	-0.0113u	0.2476
Zn 206.200	8.1082	6.6749	4.6724

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.0509	ppb	0.5998	1177.3	-54.9657
Al 308.215	13.1347	ppb	1.7965	13.7	265.693
As 188.980	2.9713	ppb	6.2176	209.3	1.9759
B 249.678	7.1647	ppb	1.2051	16.8	27.5940
Ba 389.178	-5.1560	ppb	0.2933	5.7	-57.2944
Be 313.042	-0.1305	ppb	0.0122	9.4	-525.736
Ca 370.602	4.302	ppb	3.797	88.2	15.28
Cd 226.502	-0.0019	ppb	0.1617	8492.7	2.4077
Co 228.615	-0.6305	ppb	0.8737	138.6	-10.4769
Cr 267.716	0.1980	ppb	0.5025	253.7	13.2079
Cu 324.754	4.1346	ppb	1.2178	29.5	582.247
Fe 271.441	-0.7807	ppb	3.8693	495.6	45.3763
K 766.491	9.0504	ppb	0.1546	1.7	388.563

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	-7.1318	ppb	2.5185	35.3	19.5831
Mn 257.610	-0.0086	ppb	0.1479	1716.5	21.8043
Mo 202.032	0.4960	ppb	1.4564	293.6	3.3442
Na 330.237	470.324	ppb	79.8590	17.0	43.9262
Ni 231.604	-1.0392	ppb	1.7545	168.8	-3.7542
Pb 220.353	-2.8305	ppb	2.3592	83.3	0.6178
Sb 206.834	7.0781	ppb	11.4607	161.9	8.0722
Se 196.026	-1.4903	ppb	15.6743	1051.8	4.1050
Si 288.158	28.1249	ppb	1.2064	4.3	694.826
Sn 189.925	2.9536	ppb	1.8769	63.5	-0.3507
Sr 216.596	-0.3429	ppb	1.1255	328.2	2.5255
Ti 334.941	0.1207	ppb	0.0647	53.6	-16.0608
Tl 190.794	-7.4309	ppb	6.9948	94.1	-4.2590
V 292.401	0.2005	ppb	0.1926	96.1	-10.1486
Zn 206.200	6.4852	ppb	1.7258	26.6	2.1119

(Samp) 4/9/2019, 8:38:07 AM Rack 1, Tube 2
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	49.1997	49.8783	49.7542
Al 308.215	4960.10	4978.97	4963.79
As 188.980	104.750	112.899	114.030
B 249.678	216.242	216.614	218.317
Ba 389.178	85.1307	85.5152	83.8445
Be 313.042	54.1299	54.0181	54.0035
Ca 370.602	4762	4764	4756
Cd 226.502	50.0426	49.6779	49.5597
Co 228.615	49.0249	48.6788	50.3693
Cr 267.716	96.6888	96.3931	95.5396
Cu 324.754	104.515	104.759	102.694
Fe 271.441	4844.88	4806.36	4826.53
K 766.491	7846.14	7834.37	7839.95
Mg 279.078	5052.31	5050.95	5047.72
Mn 257.610	487.398	486.412	486.395
Mo 202.032	100.025	98.5298	96.7415
Na 330.237	5648.36	5649.57	5697.10
Ni 231.604	99.8882	95.6474	96.6852
Pb 220.353	461.292	469.087	455.650
Sb 206.834	44.9505	41.1909	61.9960
Se 196.026	119.131	123.539	98.4923
Si 288.158	26.4043	25.1890	23.2082
Sn 189.925	100.367	104.447	102.566
Sr 216.596	92.8664	92.5417	93.0669
Ti 334.941	375.592	375.074	375.446
Tl 190.794	44.1673	40.3912	21.2049
V 292.401	95.1916	94.9281	94.2535
Zn 206.200	109.198	107.529	105.807

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	49.6107	ppb	0.3614	0.7	1276.83
Al 308.215	4967.62	ppb	9.9984	0.2	8642.11
As 188.980	110.559	ppb	5.0627	4.6	28.0838
B 249.678	217.058	ppb	1.1064	0.5	1369.25

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	84.8301	ppb	0.8750	1.0	405.174
Be 313.042	54.0505	ppb	0.0691	0.1	41374.6
Ca 370.602	4761	ppb	4.177	0.1	6777
Cd 226.502	49.7601	ppb	0.2517	0.5	578.044
Co 228.615	49.3577	ppb	0.8930	1.8	157.912
Cr 267.716	96.2072	ppb	0.5967	0.6	1407.37
Cu 324.754	103.989	ppb	1.1285	1.1	3187.31
Fe 271.441	4825.93	ppb	19.2689	0.4	2659.61
K 766.491	7840.15	ppb	5.8898	0.1	133510
Mg 279.078	5050.33	ppb	2.3578	0.0	6171.45
Mn 257.610	486.735	ppb	0.5743	0.1	33409.8
Mo 202.032	98.4323	ppb	1.6441	1.7	139.310
Na 330.237	5665.01	ppb	27.7976	0.5	166.779
Ni 231.604	97.4069	ppb	2.2106	2.3	92.9059
Pb 220.353	462.010	ppb	6.7472	1.5	172.301
Sb 206.834	49.3792	ppb	11.0871	22.5	21.6696
Se 196.026	113.721	ppb	13.3711	11.8	25.1797
Si 288.158	24.9338	ppb	1.6133	6.5	717.203
Sn 189.925	102.460	ppb	2.0420	2.0	22.0074
Sr 216.596	92.8250	ppb	0.2650	0.3	229.420
Ti 334.941	375.371	ppb	0.2673	0.1	28316.6
Tl 190.794	35.2545	ppb	12.3129	34.9	5.6911
V 292.401	94.7911	ppb	0.4838	0.5	759.444
Zn 206.200	107.512	ppb	1.6955	1.6	55.4314

(Samp) 4/9/2019, 8:42:29 AM Rack 1, Tube 3
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8361u	-0.1950u	0.4102
Al 308.215	1233.42	1238.94	1247.22
As 188.980	16.7504	3.0118	9.2106
B 249.678	141.507	139.739	141.594
Ba 389.178	100.764	101.893	103.078
Be 313.042	0.0548	0.0722	0.0694
Ca 370.602	23596	23574	23622
Cd 226.502	-0.1755u	-0.5599u	-0.1935u
Co 228.615	3.1305	1.4502	0.2767
Cr 267.716	1.9001	1.7993	1.8034
Cu 324.754	5.1242	5.8439	4.8915
Fe 271.441	458.635	453.913	454.576
K 766.491	17221.1	17217.5	17282.5
Mg 279.078	25661.5	25622.5	25702.8
Mn 257.610	15.2435	15.2603	15.2991
Mo 202.032	1.2899	0.8121	0.4771
Na 330.237	251563x	251897x	249889x
Ni 231.604	4.3810	1.4957	-0.5391u
Pb 220.353	12.3449	1.2527	-8.5680u
Sb 206.834	7.3518	1.2805	-1.7865u
Se 196.026	18.8252	7.3825	8.2172
Si 288.158	4898.84	4896.58	4907.62
Sn 189.925	9.8009	-0.0803	11.8285
Sr 216.596	167.471	166.678	169.565
Ti 334.941	0.1320	0.0150	0.2262

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Label	Replicates Concentration		
Tl 190.794	-10.7401u	0.1330	-2.3879u
V 292.401	2.3248	2.9366	2.1263
Zn 206.200	55.1439	54.7510	62.1227

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2069b	ppb	0.6233	301.2	-62.5534
Al 308.215	1239.86b	ppb	6.9467	0.6	2338.96
As 188.980	9.6576b	ppb	6.8802	71.2	3.5950
B 249.678	140.947b	ppb	1.0469	0.7	885.300
Ba 389.178	101.912b	ppb	1.1569	1.1	507.593
Be 313.042	0.0655b	ppb	0.0093	14.2	-382.254
Ca 370.602	23598b	ppb	23.99	0.1	33523
Cd 226.502	-0.3096b	ppb	0.2169	70.0	-0.8178
Co 228.615	1.6191b	ppb	1.4344	88.6	-2.9792
Cr 267.716	1.8343b	ppb	0.0570	3.1	38.2266
Cu 324.754	5.2865b	ppb	0.4965	9.4	612.350
Fe 271.441	455.708b	ppb	2.5567	0.6	292.467
K 766.491	17240.4b	ppb	36.5524	0.2	293306
Mg 279.078	25662.3b	ppb	40.1700	0.2	31270.6
Mn 257.610	15.2676b	ppb	0.0285	0.2	1148.60
Mo 202.032	0.8597b	ppb	0.4085	47.5	3.8447
Na 330.237	251117xb	ppb	1075.93	0.4	6177.62
Ni 231.604	1.7792b	ppb	2.4723	139.0	-0.9872
Pb 220.353	1.6765b	ppb	10.4629	624.1	2.2810
Sb 206.834	2.2819b	ppb	4.6507	203.8	6.5715
Se 196.026	11.4750b	ppb	6.3791	55.6	6.4734
Si 288.158	4901.01b	ppb	5.8308	0.1	21388.1
Sn 189.925	7.1830b	ppb	6.3714	88.7	0.6214
Sr 216.596	167.905b	ppb	1.4915	0.9	413.821
Ti 334.941	0.1244b	ppb	0.1058	85.1	37.9498
Tl 190.794	-4.3317b	ppb	5.6912	131.4	-3.5428
V 292.401	2.4625b	ppb	0.4224	17.2	7.8968
Zn 206.200	57.3392b	ppb	4.1473	7.2	28.9723

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1576	-0.1364u	-0.2997u
Al 308.215	243.812	242.309	249.072
As 188.980	13.0650	4.8779	4.9713
B 249.678	33.0155	32.5901	31.9261
Ba 389.178	17.7607	17.7870	19.4196
Be 313.042	-0.0844u	-0.0729u	-0.0945u
Ca 370.602	4624	4616	4653
Cd 226.502	-0.4381u	-0.3659u	0.1566
Co 228.615	-0.0881u	-0.6122u	0.3604
Cr 267.716	0.7075	0.2041	0.5979
Cu 324.754	4.2593	3.4716	4.5907
Fe 271.441	83.0194	95.9237	80.1062
K 766.491	2774.85	2772.52	2778.41
Mg 279.078	5079.71	5085.44	5091.89
Mn 257.610	2.9035	2.9121	3.0097
Mo 202.032	0.7451	2.4858	2.0881

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Label	Replicates Concentration		
Na 330.237	44284.3	45120.0	44469.8
Ni 231.604	1.5555	5.3310	1.7405
Pb 220.353	-3.7881u	-0.9731u	6.0908
Sb 206.834	6.4986	2.3173	14.5641
Se 196.026	-3.6235u	-9.4873u	-6.1309u
Si 288.158	990.656	992.203	991.442
Sn 189.925	-0.3133u	9.4087	-0.8315u
Sr 216.596	33.2887	36.2295	33.3290
Ti 334.941	-0.0399	-0.0292	-0.0960
Tl 190.794	-5.0239u	-13.1377u	-9.8250u
V 292.401	1.3062	1.1815	1.3774
Zn 206.200	13.7489	9.8688	12.5800

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.0928	ppb	0.2317	249.6	-58.9586
Al 308.215	245.064	ppb	3.5508	1.4	657.702
As 188.980	7.6381	ppb	4.7001	61.5	3.1080
B 249.678	32.5106	ppb	0.5490	1.7	190.097
Ba 389.178	18.3224	ppb	0.9503	5.2	66.1496
Be 313.042	-0.0839	ppb	0.0108	12.9	-491.116
Ca 370.602	4631	ppb	19.51	0.4	6586
Cd 226.502	-0.2158	ppb	0.3245	150.4	0.0144
Co 228.615	-0.1133	ppb	0.4868	429.7	-8.7609
Cr 267.716	0.5032	ppb	0.2647	52.6	17.8606
Cu 324.754	4.1072	ppb	0.5748	14.0	581.553
Fe 271.441	86.3498	ppb	8.4182	9.7	92.5566
K 766.491	2775.26	ppb	2.9669	0.1	47411.7
Mg 279.078	5085.68	ppb	6.0922	0.1	6219.79
Mn 257.610	2.9418	ppb	0.0590	2.0	239.846
Mo 202.032	1.7730	ppb	0.9121	51.4	5.1169
Na 330.237	44624.7	ppb	438.865	1.0	1124.47
Ni 231.604	2.8757	ppb	2.1284	74.0	0.0907
Pb 220.353	0.4432	ppb	5.0895	1148.3	1.8266
Sb 206.834	7.7933	ppb	6.2252	79.9	8.2991
Se 196.026	-6.4139	ppb	2.9421	45.9	3.2057
Si 288.158	991.434	ppb	0.7732	0.1	4785.85
Sn 189.925	2.7546	ppb	5.7684	209.4	-0.3915
Sr 216.596	34.2824	ppb	1.6864	4.9	87.1491
Ti 334.941	-0.0550	ppb	0.0359	65.2	-18.5680
Tl 190.794	-9.3289	ppb	4.0796	43.7	-4.7010
V 292.401	1.2884	ppb	0.0991	7.7	-1.3679
Zn 206.200	12.0659	ppb	1.9905	16.5	5.0597

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	59.0560	59.4708	59.5513
Al 308.215	6606.11	6605.70	6601.96
As 188.980	122.782	121.279	123.217
B 249.678	355.064	357.755	360.336
Ba 389.178	194.477	196.278	195.494
Be 313.042	56.6295	56.7013	56.6731
Ca 370.602	28079	28057	28086

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Label	Replicates Concentration		
Cd 226.502	52.7118	52.2318	51.8071
Co 228.615	52.2922	53.9020	52.7245
Cr 267.716	102.025	102.546	101.581
Cu 324.754	111.321	111.817	111.638
Fe 271.441	5510.44	5557.55	5513.92
K 766.491	27540.3	27627.5	27616.7
Mg 279.078	30461.4	30497.9	30492.5
Mn 257.610	527.034	527.624	525.355
Mo 202.032	105.927	104.141	102.940
Na 330.237	254897x	253243x	256075x
Ni 231.604	111.960	104.451	106.881
Pb 220.353	478.745	480.437	472.232
Sb 206.834	57.5444	52.8931	55.4120
Se 196.026	126.651	132.039	99.6852
Si 288.158	4822.58	4828.85	4837.76
Sn 189.925	104.040	97.6098	99.1032
Sr 216.596	260.573	264.037	263.428
Ti 334.941	395.907	395.918	396.114
Tl 190.794	35.8146	28.1172	31.6118
V 292.401	104.400	103.668	104.201
Zn 206.200	166.441	167.123	160.778

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	59.3593b	ppb	0.2658	0.4	1538.23
Al 308.215	6604.59b	ppb	2.2869	0.0	11408.9
As 188.980	122.426b	ppb	1.0169	0.8	31.0291
B 249.678	357.718b	ppb	2.6363	0.7	2270.82
Ba 389.178	195.416b	ppb	0.9031	0.5	987.809
Be 313.042	56.6680b	ppb	0.0362	0.1	43390.8
Ca 370.602	28074b	ppb	14.96	0.1	39887
Cd 226.502	52.2502b	ppb	0.4526	0.9	607.178
Co 228.615	52.9729b	ppb	0.8331	1.6	170.066
Cr 267.716	102.051b	ppb	0.4829	0.5	1493.49
Cu 324.754	111.592b	ppb	0.2514	0.2	3385.68
Fe 271.441	5527.30b	ppb	26.2507	0.5	3039.30
K 766.491	27594.9b	ppb	47.5292	0.2	469323
Mg 279.078	30483.9b	ppb	19.7329	0.1	37135.1
Mn 257.610	526.671b	ppb	1.1772	0.2	36226.6
Mo 202.032	104.336b	ppb	1.5031	1.4	147.502
Na 330.237	254738xb	ppb	1422.57	0.6	6261.71
Ni 231.604	107.764b	ppb	3.8315	3.6	103.076
Pb 220.353	477.138b	ppb	4.3323	0.9	177.885
Sb 206.834	55.2832b	ppb	2.3283	4.2	23.5536
Se 196.026	119.458b	ppb	17.3347	14.5	26.2293
Si 288.158	4829.73b	ppb	7.6279	0.2	21121.8
Sn 189.925	100.251b	ppb	3.3653	3.4	21.5328
Sr 216.596	262.679b	ppb	1.8491	0.7	644.594
Ti 334.941	395.980b	ppb	0.1163	0.0	29925.2
Tl 190.794	31.8479b	ppb	3.8541	12.1	4.8952
V 292.401	104.089b	ppb	0.3783	0.4	834.862
Zn 206.200	164.781b	ppb	3.4833	2.1	85.6775

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

(Samp) **4/9/2019, 8:55:38 AM** **Rack 1, Tube 6**
Weight: 1 **Volume: 1** **Dilution: 1**

Label	Replicates Concentration		
Ag 328.068	52.5778	51.9530	52.2275
Al 308.215	6466.42	6473.97	6483.62
As 188.980	118.731	118.774	114.751
B 249.678	359.109	361.286	362.699
Ba 389.178	193.773	201.985	199.666
Be 313.042	54.9215	55.0142	54.9387
Ca 370.602	28649	28634	28594
Cd 226.502	50.8128	51.1022	50.3878
Co 228.615	50.7915	52.3313	52.8952
Cr 267.716	98.5430	98.8920	99.7048
Cu 324.754	107.691	108.159	108.921
Fe 271.441	5464.25	5469.73	5421.74
K 766.491	27808.4	27735.9	27792.4
Mg 279.078	31126.7	31125.2	31114.1
Mn 257.610	513.314	513.160	512.381
Mo 202.032	102.829	101.987	102.678
Na 330.237	264056x	261546x	261412x
Ni 231.604	99.3904	105.952	101.413
Pb 220.353	466.782	477.806	471.786
Sb 206.834	53.2557	44.7329	53.9601
Se 196.026	122.058	108.367	124.433
Si 288.158	4974.79	4971.80	4971.38
Sn 189.925	104.846	99.2594	107.375
Sr 216.596	268.454	265.501	264.742
Ti 334.941	384.936	385.595	385.519
Tl 190.794	29.5935	30.7670	34.4268
V 292.401	99.2653	100.907	99.3975
Zn 206.200	162.743	163.623	161.989

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	52.2528b	ppb	0.3132	0.6	1347.17
Al 308.215	6474.67b	ppb	8.6169	0.1	11189.2
As 188.980	117.419b	ppb	2.3101	2.0	29.8032
B 249.678	361.031b	ppb	1.8086	0.5	2292.14
Ba 389.178	198.475b	ppb	4.2334	2.1	1003.85
Be 313.042	54.9581b	ppb	0.0493	0.1	42068.1
Ca 370.602	28626b	ppb	28.54	0.1	40670
Cd 226.502	50.7676b	ppb	0.3593	0.7	590.113
Co 228.615	52.0060b	ppb	1.0889	2.1	166.775
Cr 267.716	99.0466b	ppb	0.5961	0.6	1449.91
Cu 324.754	108.257b	ppb	0.6208	0.6	3298.73
Fe 271.441	5451.91b	ppb	26.2692	0.5	2998.45
K 766.491	27778.9b	ppb	38.0765	0.1	472451
Mg 279.078	31122.0b	ppb	6.9029	0.0	37912.1
Mn 257.610	512.952b	ppb	0.5004	0.1	35287.9
Mo 202.032	102.498b	ppb	0.4488	0.4	144.950
Na 330.237	262338xb	ppb	1489.25	0.6	6447.81
Ni 231.604	102.252b	ppb	3.3601	3.3	97.6630
Pb 220.353	472.125b	ppb	5.5198	1.2	176.034
Sb 206.834	50.6496b	ppb	5.1361	10.1	22.0870
Se 196.026	118.286b	ppb	8.6714	7.3	26.0141
Si 288.158	4972.65b	ppb	1.8585	0.0	21728.4

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Sn 189.925	103.827b	ppb	4.1526	4.0	22.3368
Sr 216.596	266.232b	ppb	1.9610	0.7	653.299
Ti 334.941	385.350b	ppb	0.3606	0.1	29124.3
Tl 190.794	31.5958b	ppb	2.5210	8.0	4.8337
V 292.401	99.8566b	ppb	0.9122	0.9	800.216
Zn 206.200	162.785b	ppb	0.8178	0.5	84.6251

(Samp) 4/9/2019, 9:00:01 AM Rack 1, Tube 7
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	51.0708	51.1485	52.1511
Al 308.215	6467.29	6480.77	6491.15
As 188.980	122.706	118.789	118.045
B 249.678	360.590	362.557	364.893
Ba 389.178	197.183	199.002	200.000
Be 313.042	55.1932	55.1136	55.2526
Ca 370.602	28285	28342	28350
Cd 226.502	51.1731	51.0099	50.8913
Co 228.615	52.7606	52.8591	52.8584
Cr 267.716	98.8186	98.9085	99.9612
Cu 324.754	108.245	108.620	108.254
Fe 271.441	5377.15	5394.98	5385.30
K 766.491	27546.4	27549.3	27620.1
Mg 279.078	30815.7	30775.4	30878.6
Mn 257.610	512.899	513.513	513.853
Mo 202.032	101.464	96.4979	101.281
Na 330.237	259187x	259650x	258992x
Ni 231.604	104.055	102.787	105.071
Pb 220.353	484.351	471.343	473.575
Sb 206.834	53.4737	51.3382	57.2690
Se 196.026	118.538	119.014	124.800
Si 288.158	4926.96	4934.80	4940.25
Sn 189.925	104.197	108.540	101.232
Sr 216.596	261.039	263.279	262.248
Ti 334.941	386.030	387.288	386.483
Tl 190.794	28.9064	26.1985	18.9346
V 292.401	99.9317	99.3746	100.359
Zn 206.200	162.870	166.568	160.819

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	51.4568b	ppb	0.6025	1.2	1325.78
Al 308.215	6479.74b	ppb	11.9603	0.2	11197.8
As 188.980	119.847b	ppb	2.5042	2.1	30.4279
B 249.678	362.680b	ppb	2.1543	0.6	2302.78
Ba 389.178	198.728b	ppb	1.4280	0.7	1004.89
Be 313.042	55.1865b	ppb	0.0697	0.1	42244.9
Ca 370.602	28326b	ppb	35.77	0.1	40244
Cd 226.502	51.0248b	ppb	0.1415	0.3	592.973
Co 228.615	52.8260b	ppb	0.0567	0.1	169.540
Cr 267.716	99.2294b	ppb	0.6353	0.6	1452.54
Cu 324.754	108.373b	ppb	0.2141	0.2	3301.71
Fe 271.441	5385.81b	ppb	8.9265	0.2	2962.72
K 766.491	27571.9b	ppb	41.7223	0.2	468933

E04082019.wvq. All Data Report 4/9/2019, 10:10:39 AM

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	30823.2b	ppb	51.9973	0.2	37548.3
Mn 257.610	513.422b	ppb	0.4835	0.1	35319.2
Mo 202.032	99.7473b	ppb	2.8156	2.8	141.130
Na 330.237	259277xb	ppb	338.112	0.1	6372.87
Ni 231.604	103.971b	ppb	1.1444	1.1	99.3512
Pb 220.353	476.423b	ppb	6.9559	1.5	177.622
Sb 206.834	54.0270b	ppb	3.0039	5.6	23.1493
Se 196.026	120.784b	ppb	3.4859	2.9	26.4707
Si 288.158	4934.00b	ppb	6.6846	0.1	21564.0
Sn 189.925	104.656b	ppb	3.6752	3.5	22.5230
Sr 216.596	262.189b	ppb	1.1212	0.4	643.429
Ti 334.941	386.600b	ppb	0.6370	0.2	29218.0
Tl 190.794	24.6798b	ppb	5.1565	20.9	3.2276
V 292.401	99.8883b	ppb	0.4934	0.5	800.614
Zn 206.200	163.419b	ppb	2.9135	1.8	84.9596

(Samp) 4/9/2019, 9:04:25 AM Rack 1, Tube 8
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.2723	0.0876	0.6142
Al 308.215	642.405	645.451	642.088
As 188.980	-3.8409u	3.1383	9.8344
B 249.678	47.7392	47.7676	46.5759
Ba 389.178	12.6487	6.0597	10.1857
Be 313.042	-0.0330u	-0.0293u	-0.0233u
Ca 370.602	3094	3088	3089
Cd 226.502	0.2108	-0.0768u	0.4542
Co 228.615	-0.0419u	-1.4435u	-0.1880u
Cr 267.716	2.3822	1.7694	1.2216
Cu 324.754	4.5554	4.6685	4.6053
Fe 271.441	531.163	551.886	523.869
K 766.491	11841.9	11852.8	11854.1
Mg 279.078	1630.07	1633.03	1621.99
Mn 257.610	1.9501	1.8022	1.7619
Mo 202.032	-1.4344u	2.2729	1.8500
Na 330.237	9146.63	8409.98	8826.27
Ni 231.604	3.2025	5.1736	0.5359
Pb 220.353	8.3635	11.0111	-0.0922u
Sb 206.834	3.7415	6.5369	-8.8129u
Se 196.026	-8.4382u	-6.6213u	4.2334
Si 288.158	3609.67	3609.90	3608.21
Sn 189.925	6.7009	-6.2848u	-1.7592u
Sr 216.596	21.6538	19.9287	23.0281
Ti 334.941	1.9796	2.0184	2.1976
Tl 190.794	-10.0166u	-8.7651u	-10.8261u
V 292.401	1.1106	2.2407	2.1861
Zn 206.200	5.2434	5.4657	2.7658

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.3247	ppb	0.2672	82.3	-47.7543
Al 308.215	643.315	ppb	1.8570	0.3	1330.78
As 188.980	3.0439	ppb	6.8381	224.6	1.9764
B 249.678	47.3609	ppb	0.6800	1.4	284.927

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	9.6314	ppb	3.3293	34.6	19.2792
Be 313.042	-0.0285	ppb	0.0049	17.1	-447.035
Ca 370.602	3090	ppb	3.244	0.1	4398
Cd 226.502	0.1961	ppb	0.2658	135.6	5.3341
Co 228.615	-0.5578	ppb	0.7706	138.1	-10.2349
Cr 267.716	1.7911	ppb	0.5806	32.4	36.4042
Cu 324.754	4.6097	ppb	0.0567	1.2	594.716
Fe 271.441	535.639	ppb	14.5350	2.7	335.634
K 766.491	11849.6	ppb	6.7021	0.1	201667
Mg 279.078	1628.36	ppb	5.7135	0.4	2010.59
Mn 257.610	1.8381	ppb	0.0991	5.4	153.784
Mo 202.032	0.8961	ppb	2.0294	226.5	3.8946
Na 330.237	8794.29	ppb	369.364	4.2	247.626
Ni 231.604	2.9707	ppb	2.3276	78.4	0.1843
Pb 220.353	6.4275	ppb	5.7994	90.2	4.0379
Sb 206.834	0.4885	ppb	8.1756	1673.6	6.0070
Se 196.026	-3.6087	ppb	6.8520	189.9	3.7166
Si 288.158	3609.26	ppb	0.9171	0.0	15902.1
Sn 189.925	-0.4477	ppb	6.5914	1472.3	-1.1142
Sr 216.596	21.5369	ppb	1.5530	7.2	56.0458
Ti 334.941	2.0652	ppb	0.1163	5.6	134.273
Tl 190.794	-9.8693	ppb	1.0384	10.5	-4.8362
V 292.401	1.8458	ppb	0.6373	34.5	3.3011
Zn 206.200	4.4916	ppb	1.4988	33.4	1.0596

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.8309u	0.4026	-0.0574u
Al 308.215	190.448	193.581	202.320
As 188.980	-0.7566u	2.8152	9.1534
B 249.678	70.5860	70.5478	70.2574
Ba 389.178	57.5938	51.9754	54.1683
Be 313.042	-0.0395u	-0.0331u	-0.0373u
Ca 370.602	39596	39500	39586
Cd 226.502	0.1997	0.2413	0.3418
Co 228.615	-0.2597u	0.4091	-1.1885u
Cr 267.716	3.1843	2.5519	3.1658
Cu 324.754	6.2222	7.8611	6.6307
Fe 271.441	492.057	500.019	513.195
K 766.491	8976.85	8977.85	8929.66
Mg 279.078	10726.8	10710.7	10734.2
Mn 257.610	18.8817	18.6433	18.8107
Mo 202.032	-1.0712u	0.5265	1.3135
Na 330.237	26106.0	25880.6	25617.6
Ni 231.604	4.5198	-2.3044u	4.7613
Pb 220.353	4.8176	1.9322	0.7547
Sb 206.834	1.4291	-8.6616u	11.7964
Se 196.026	12.9786	8.7296	1.4465
Si 288.158	9757.52	9701.33	9698.67
Sn 189.925	-5.6259u	0.6164	1.3706
Sr 216.596	262.847	260.832	259.735
Ti 334.941	1.3327	1.3914	1.2749

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Label	Replicates Concentration		
Tl 190.794	1.7596	-6.3603u	-14.8281u
V 292.401	4.0090	1.9406	3.0740
Zn 206.200	6.6407	8.8353	5.8735

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.1619	ppb	0.6233	385.1	-61.5290
Al 308.215	195.450	ppb	6.1526	3.1	573.892
As 188.980	3.7373	ppb	5.0189	134.3	2.1596
B 249.678	70.4637	ppb	0.1797	0.3	433.146
Ba 389.178	54.5791	ppb	2.8316	5.2	255.051
Be 313.042	-0.0366	ppb	0.0033	8.9	-448.735
Ca 370.602	39561	ppb	52.63	0.1	56194
Cd 226.502	0.2610	ppb	0.0731	28.0	6.0273
Co 228.615	-0.3464	ppb	0.8023	231.6	-9.5238
Cr 267.716	2.9673	ppb	0.3599	12.1	53.5710
Cu 324.754	6.9047	ppb	0.8531	12.4	654.525
Fe 271.441	501.757	ppb	10.6755	2.1	317.309
K 766.491	8961.45	ppb	27.5406	0.3	152571
Mg 279.078	10723.9	ppb	11.9912	0.1	13083.9
Mn 257.610	18.7786	ppb	0.1224	0.7	1343.31
Mo 202.032	0.2563	ppb	1.2151	474.1	3.0061
Na 330.237	25868.1	ppb	244.450	0.9	665.470
Ni 231.604	2.3255	ppb	4.0115	172.5	-0.4495
Pb 220.353	2.5015	ppb	2.0904	83.6	2.5898
Sb 206.834	1.5213	ppb	10.2293	672.4	6.3345
Se 196.026	7.7182	ppb	5.8322	75.6	5.7873
Si 288.158	9719.17	ppb	33.2382	0.3	41846.7
Sn 189.925	-1.2130	ppb	3.8403	316.6	-1.2846
Sr 216.596	261.138	ppb	1.5788	0.6	641.737
Ti 334.941	1.3330	ppb	0.0582	4.4	99.3929
Tl 190.794	-6.4762	ppb	8.2944	128.1	-4.0421
V 292.401	3.0078	ppb	1.0358	34.4	12.8412
Zn 206.200	7.1165	ppb	1.5372	21.6	2.4451

(Samp) 4/9/2019, 9:13:13 AM Rack 1, Tube 10
 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.5647u	0.3294	-0.4091u
Al 308.215	69.5617	63.1226	67.0140
As 188.980	13.0475	14.5819	5.9075
B 249.678	216.370	217.173	216.338
Ba 389.178	37.2036	37.4450	40.8735
Be 313.042	-0.0713u	-0.0660u	-0.0793u
Ca 370.602	111248	111320	111230
Cd 226.502	0.6502	0.4022	0.3252
Co 228.615	1.4586	-1.9241u	-3.4451u
Cr 267.716	1.3642	1.5919	1.1083
Cu 324.754	7.2760	5.7270	6.7802
Fe 271.441	88.7970	90.8745	80.8438
K 766.491	41398.8x	41373.0x	41365.9x
Mg 279.078	69785.8	69854.2	69776.3
Mn 257.610	1.3300	1.2239	1.2955
Mo 202.032	0.4568	0.3485	-0.1551u

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Label	Replicates Concentration		
Na 330.237	1242218x	1249560x	1242676x
Ni 231.604	-1.5856u	5.7916	1.3953
Pb 220.353	-1.6777u	-18.1920u	1.7234
Sb 206.834	-4.0479u	22.3302	0.4514
Se 196.026	2.0827	9.5679	7.3498
Si 288.158	1600.59	1595.68	1596.55
Sn 189.925	5.9444	2.4373	-12.2452u
Sr 216.596	481.144	483.605	483.878
Ti 334.941	-1.0505	-1.2024	-1.2233
Tl 190.794	-8.9702u	-1.3682u	-13.3844u
V 292.401	1.3494	1.2683	0.4908
Zn 206.200	5.6385	6.8528	7.1711

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.2148b	ppb	0.4777	222.4	-63.8988
Al 308.215	66.5661b	ppb	3.2428	4.9	356.017
As 188.980	11.1790b	ppb	4.6292	41.4	4.0086
B 249.678	216.627b	ppb	0.4733	0.2	1371.12
Ba 389.178	38.5074b	ppb	2.0527	5.3	220.102
Be 313.042	-0.0722b	ppb	0.0067	9.2	-519.908
Ca 370.602	111266b	ppb	47.44	0.0	158033
Cd 226.502	0.4592b	ppb	0.1698	37.0	6.1199
Co 228.615	-1.3035b	ppb	2.5101	192.6	-12.7113
Cr 267.716	1.3548b	ppb	0.2419	17.9	36.0738
Cu 324.754	6.5944b	ppb	0.7910	12.0	646.384
Fe 271.441	86.8384b	ppb	5.2944	6.1	92.7715
K 766.491	41379.3xb	ppb	17.3133	0.0	703645
Mg 279.078	69805.4b	ppb	42.5281	0.1	85013.3
Mn 257.610	1.2831b	ppb	0.0541	4.2	325.623
Mo 202.032	0.2167b	ppb	0.3266	150.7	2.9554
Na 330.237	1244818xb	ppb	4113.41	0.3	30497.7
Ni 231.604	1.8671b	ppb	3.7111	198.8	-0.8992
Pb 220.353	-6.0488b	ppb	10.6530	176.1	-0.5708
Sb 206.834	6.2446b	ppb	14.1110	226.0	7.8127
Se 196.026	6.3335b	ppb	3.8447	60.7	5.5343
Si 288.158	1597.61b	ppb	2.6156	0.2	7359.25
Sn 189.925	-1.2878b	ppb	9.6500	749.3	-1.1953
Sr 216.596	482.876b	ppb	1.5057	0.3	1183.72
Ti 334.941	-1.1587b	ppb	0.0943	8.1	22.6804
Tl 190.794	-7.9076b	ppb	6.0781	76.9	-4.3704
V 292.401	1.0361b	ppb	0.4740	45.8	-5.7199
Zn 206.200	6.5541b	ppb	0.8088	12.3	2.1480

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Rack S, Tube 10

Weight: 1

Volume: 1

Dilution: 1

Label	Replicates Concentration		
Ag 328.068	502.555	505.436	502.103
Al 308.215	10623.3	10623.7	10624.5
As 188.980	581.491	579.975	579.628
B 249.678	575.098	577.936	581.577
Ba 389.178	461.492	459.493	459.515
Be 313.042	569.673	569.312	571.027
Ca 370.602	10196	10182	10152

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Label	Replicates Concentration		
Cd 226.502	518.682	518.382	520.212
Co 228.615	519.228	519.301	520.048
Cr 267.716	500.079	502.391	501.316
Cu 324.754	524.175	527.572	526.423
Fe 271.441	10241.1	10302.5	10287.1
K 766.491	10357.5	10351.5	10408.5
Mg 279.078	10823.4	10802.8	10833.2
Mn 257.610	515.496	514.889	515.704
Mo 202.032	512.202	510.964	514.748
Na 330.237	12059.5	11273.1	11550.2
Ni 231.604	525.484	520.370	518.801
Pb 220.353	497.380	480.915	496.821
Sb 206.834	525.657	531.840	511.734
Se 196.026	577.941	597.543	570.231
Si 288.158	5241.70	5223.61	5231.15
Sn 189.925	515.544	516.063	499.339
Sr 216.596	492.472	495.339	489.491
Ti 334.941	497.800	498.046	498.596
Tl 190.794	480.018	494.963	500.729
V 292.401	510.198	510.644	512.100
Zn 206.200	1108.43	1120.46	1103.82

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	503.365	ppb	1.8082	0.4	13473.7	100.67291
Al 308.215	10623.8	ppb	0.6113	0.0	18214.3	106.23813
As 188.980	580.365	ppb	0.9905	0.2	140.933	116.07290Q
B 249.678	578.204	ppb	3.2481	0.6	3680.42	115.64073Q
Ba 389.178	460.167	ppb	1.1480	0.2	2319.87	92.03337
Be 313.042	570.004	ppb	0.9041	0.2	440402	114.00072Q
Ca 370.602	10177	ppb	22.67	0.2	14465	101.76919
Cd 226.502	519.092	ppb	0.9814	0.2	5957.44	103.81844
Co 228.615	519.526	ppb	0.4539	0.1	1724.61	103.90520
Cr 267.716	501.262	ppb	1.1571	0.2	7284.53	100.25243
Cu 324.754	526.057	ppb	1.7280	0.3	14196.1	105.21135
Fe 271.441	10276.9	ppb	31.9766	0.3	5632.25	102.71777
K 766.491	10372.5	ppb	31.3376	0.3	176558	103.72516
Mg 279.078	10819.8	ppb	15.5278	0.1	13194.3	108.19798
Mn 257.610	515.363	ppb	0.4237	0.1	35394.7	103.07259
Mo 202.032	512.638	ppb	1.9293	0.4	714.498	102.52760
Na 330.237	11627.6	ppb	398.879	3.4	300.839	116.27603Q
Ni 231.604	521.552	ppb	3.4948	0.7	509.157	104.31033
Pb 220.353	491.705	ppb	9.3487	1.9	183.084	98.34106
Sb 206.834	523.077	ppb	10.2985	2.0	171.870	104.61536
Se 196.026	581.905	ppb	14.0807	2.4	110.687	116.38096Q
Si 288.158	5232.16	ppb	9.0860	0.2	22917.5	104.64313
Sn 189.925	510.315	ppb	9.5090	1.9	113.647	102.06302
Sr 216.596	492.434	ppb	2.9243	0.6	1201.12	98.48683
Ti 334.941	498.147	ppb	0.4078	0.1	37596.0	99.62947
Tl 190.794	491.904	ppb	10.6893	2.2	111.974	98.38072
V 292.401	510.981	ppb	0.9946	0.2	4140.74	102.19613
Zn 206.200	1110.90	ppb	8.5912	0.8	585.198	111.09045Q

E04082019.vvq. All Data Report 4/9/2019, 10:10:39 AM

Cont Calib Blank (CCB) 4/9/2019, 9:22:03 AM Rack S, Tube 1

Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.8582	-0.1996u	1.1864
Al 308.215	27.7337	15.6682	19.0912
As 188.980	-0.6324u	-4.4109u	4.6926
B 249.678	19.9949	17.3590	16.4366
Ba 389.178	-4.1787u	-1.0463u	-0.8682u
Be 313.042	0.0042	-0.0140u	-0.0141u
Ca 370.602	4.727	14.18	5.202
Cd 226.502	0.1208	0.2504	0.0262
Co 228.615	-0.9218u	-0.0141u	-0.9562u
Cr 267.716	1.0742	1.2434	0.7589
Cu 324.754	3.7235	4.7640	5.3191
Fe 271.441	2.8585	17.4855	18.5828
K 766.491	8.9372	8.0815	8.9773
Mg 279.078	4.2589	8.8647	5.9587
Mn 257.610	0.2820	0.3478	0.4135
Mo 202.032	-0.6176u	0.8786	0.1218
Na 330.237	319.862	273.243	454.135
Ni 231.604	1.4299	0.7972	2.7593
Pb 220.353	-3.6016u	-1.9431u	-5.8785u
Sb 206.834	-7.0058u	8.8121	15.0315
Se 196.026	-6.3531u	-8.7686u	-4.0150u
Si 288.158	30.5283	26.6572	26.4712
Sn 189.925	-2.7142u	9.7225	6.3041
Sr 216.596	1.1930	0.6147	-0.5563u
Ti 334.941	0.4588	0.4894	0.8157
Tl 190.794	-8.2596u	-1.9781u	8.0917
V 292.401	-0.3489u	1.8360	0.5874
Zn 206.200	3.4398	-0.7089u	-1.6445u

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Ag 328.068	0.6150	ppb	0.7243	117.8	-39.8031	0.61497
Al 308.215	20.8310	ppb	6.2181	29.8	278.709	20.83103
As 188.980	-0.1169	ppb	4.5736	3913.1	1.1650	-0.11688
B 249.678	17.9301	ppb	1.8466	10.3	96.6454	17.93013
Ba 389.178	-2.0311	ppb	1.8621	91.7	-41.3899	-2.03105
Be 313.042	-0.0080	ppb	0.0105	132.1	-430.924	-0.00796
Ca 370.602	8.037	ppb	5.328	66.3	20.60	8.03705
Cd 226.502	0.1325	ppb	0.1126	85.0	3.9479	0.13249
Co 228.615	-0.6307	ppb	0.5343	84.7	-10.4753	-0.63069
Cr 267.716	1.0255	ppb	0.2459	24.0	25.2144	1.02551
Cu 324.754	4.6022	ppb	0.8100	17.6	594.432	4.60221
Fe 271.441	12.9756	ppb	8.7788	67.7	52.8265	12.97560
K 766.491	8.6653	ppb	0.5060	5.8	382.018	8.66533
Mg 279.078	6.3608	ppb	2.3291	36.6	36.0046	6.36075
Mn 257.610	0.3478	ppb	0.0657	18.9	46.2932	0.34777
Mo 202.032	0.1276	ppb	0.7481	586.2	2.8325	0.12762
Na 330.237	349.080	ppb	93.9191	26.9	41.0217	349.07986
Ni 231.604	1.6621	ppb	1.0015	60.3	-1.1008	1.66215
Pb 220.353	-3.8077	ppb	1.9758	51.9	0.2568	-3.80771
Sb 206.834	5.6126	ppb	11.3617	202.4	7.6122	5.61260
Se 196.026	-6.3789	ppb	2.3769	37.3	3.2120	-6.37892
Si 288.158	27.8856	ppb	2.2906	8.2	604.719	27.88558

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)	QC Value
Sn 189.925	4.4375	ppb	6.4251	144.8	-0.0173	4.43747
Sr 216.596	0.4171	ppb	0.8912	213.6	4.3799	0.41715
Ti 334.941	0.5880	ppb	0.1978	33.6	19.2413	0.58797
Tl 190.794	-0.7154	ppb	8.2485	1153.0	-2.6967	-0.71537
V 292.401	0.6915	ppb	1.0962	158.5	-6.1151	0.69149
Zn 206.200	0.3622	ppb	2.7061	747.2	-1.1223	0.36215

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates	Concentration	
Ag 328.068	0.9202	-0.0470u	-0.4204u
Al 308.215	1721.37	1719.74	1720.50
As 188.980	25.7188	25.6890	24.9834
B 249.678	51.3194	50.5614	50.4316
Ba 389.178	6.0936	9.4548	6.7329
Be 313.042	-0.0923u	-0.1360u	-0.0977u
Ca 370.602	14722	14759	14721
Cd 226.502	0.3884	0.3827	0.4537
Co 228.615	-0.0035	1.5275	2.8562
Cr 267.716	2.0399	2.5320	2.3773
Cu 324.754	5.9395	5.9173	6.3348
Fe 271.441	245.924	236.126	238.476
K 766.491	5556.66	5531.09	5443.76
Mg 279.078	4160.82	4180.09	4176.20
Mn 257.610	5.2419	5.1362	5.1209
Mo 202.032	1.9881	4.4003	3.6721
Na 330.237	12758.7	12614.0	12827.4
Ni 231.604	3.5741	0.2887	-3.5674u
Pb 220.353	5.6403	2.4197	-1.5194u
Sb 206.834	4.8457	14.5221	7.2757
Se 196.026	-1.4998u	-8.8681u	-12.0117u
Si 288.158	2927.16	2933.17	2916.37
Sn 189.925	-2.6817u	6.6920	-10.6137u
Sr 216.596	92.0207	95.1041	92.9227
Ti 334.941	7.8740	7.5508	7.6032
Tl 190.794	7.6786	0.4237	-3.5220u
V 292.401	6.2455	5.1949	5.1472
Zn 206.200	11.6838	10.3759	10.8348

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1509	ppb	0.6919	458.5	-52.5937
Al 308.215	1720.54	ppb	0.8117	0.0	3151.41
As 188.980	25.4637	ppb	0.4162	1.6	7.4520
B 249.678	50.7708	ppb	0.4795	0.9	307.075
Ba 389.178	7.4271	ppb	1.7849	24.0	10.0458
Be 313.042	-0.1086	ppb	0.0238	21.9	-507.377
Ca 370.602	14734	ppb	21.47	0.1	20934
Cd 226.502	0.4083	ppb	0.0395	9.7	7.4460
Co 228.615	1.4601	ppb	1.4311	98.0	-3.4757
Cr 267.716	2.3164	ppb	0.2517	10.9	44.0305
Cu 324.754	6.0639	ppb	0.2349	3.9	632.596
Fe 271.441	240.175	ppb	5.1153	2.1	175.852
K 766.491	5510.50	ppb	59.1996	1.1	93908.3

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Mg 279.078	4172.37	ppb	10.1896	0.2	5107.60
Mn 257.610	5.1663	ppb	0.0659	1.3	389.766
Mo 202.032	3.3535	ppb	1.2373	36.9	7.3100
Na 330.237	12733.3	ppb	108.925	0.9	343.931
Ni 231.604	0.0985	ppb	3.5746	3630.1	-2.6379
Pb 220.353	2.1802	ppb	3.5859	164.5	2.4631
Sb 206.834	8.8812	ppb	5.0340	56.7	8.6483
Se 196.026	-7.4599	ppb	5.3956	72.3	3.0143
Si 288.158	2925.57	ppb	8.5159	0.3	12999.1
Sn 189.925	-2.2011	ppb	8.6629	393.6	-1.5078
Sr 216.596	93.3492	ppb	1.5853	1.7	231.541
Ti 334.941	7.6760	ppb	0.1735	2.3	563.464
Tl 190.794	1.5268	ppb	5.6812	372.1	-2.1778
V 292.401	5.5292	ppb	0.6208	11.2	33.3383
Zn 206.200	10.9649	ppb	0.6636	6.1	4.4772

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-0.1599u	-0.2953u	0.7577
Al 308.215	660.216	665.641	672.737
As 188.980	22.6138	0.8664	7.3664
B 249.678	158.330	158.378	160.729
Ba 389.178	113.052	111.077	108.805
Be 313.042	0.0241	0.0388	-0.0025u
Ca 370.602	26081	26071	26067
Cd 226.502	-0.1066	0.0396	-0.0832
Co 228.615	-1.2424u	-0.4781u	-0.8988u
Cr 267.716	2.8465	3.5680	4.1293
Cu 324.754	6.6611	7.1881	6.0576
Fe 271.441	3139.22	3126.77	3142.36
K 766.491	5647.53	5525.72	5527.45
Mg 279.078	6108.14	6127.44	6112.71
Mn 257.610	22.3832	22.3550	22.1811
Mo 202.032	2.3446	1.7217	2.1306
Na 330.237	38131.2	37431.2	37414.0
Ni 231.604	3.7567	2.1080	2.5591
Pb 220.353	1.7138	7.4230	5.5338
Sb 206.834	13.5350	-3.3641u	-12.3224u
Se 196.026	-22.8619u	6.5711	-4.3415u
Si 288.158	8595.12	8602.24	8598.10
Sn 189.925	-2.1894u	1.5676	4.5808
Sr 216.596	120.758	119.464	119.762
Ti 334.941	0.8406	0.8196	0.8544
Tl 190.794	-4.5478u	-6.7572u	-16.7972u
V 292.401	1.1580	1.4402	2.7649
Zn 206.200	6.5296	10.5442	8.6607

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.1008	ppb	0.5729	568.2	-54.4636
Al 308.215	666.198	ppb	6.2791	0.9	1369.53
As 188.980	10.2822	ppb	11.1630	108.6	3.7625
B 249.678	159.145	ppb	1.3715	0.9	999.422

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Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ba 389.178	110.978	ppb	2.1252	1.9	538.586
Be 313.042	0.0201	ppb	0.0209	104.0	-407.290
Ca 370.602	26073	ppb	6.917	0.0	37035
Cd 226.502	-0.0500	ppb	0.0785	156.9	5.6739
Co 228.615	-0.8731	ppb	0.3828	43.8	-11.3501
Cr 267.716	3.5146	ppb	0.6431	18.3	61.7682
Cu 324.754	6.6356	ppb	0.5657	8.5	647.948
Fe 271.441	3136.11	ppb	8.2459	0.3	1742.61
K 766.491	5566.90	ppb	69.8338	1.3	94867.1
Mg 279.078	6116.10	ppb	10.0876	0.2	7474.02
Mn 257.610	22.3064	ppb	0.1095	0.5	1572.21
Mo 202.032	2.0656	ppb	0.3165	15.3	5.4936
Na 330.237	37658.8	ppb	409.208	1.1	953.922
Ni 231.604	2.8079	ppb	0.8521	30.3	0.0247
Pb 220.353	4.8902	ppb	2.9085	59.5	3.4806
Sb 206.834	-0.7172	ppb	13.1303	1830.8	5.6706
Se 196.026	-6.8774	ppb	14.8795	216.4	3.1133
Si 288.158	8598.49	ppb	3.5760	0.0	37088.4
Sn 189.925	1.3197	ppb	3.3919	257.0	-0.7145
Sr 216.596	119.994	ppb	0.6777	0.6	296.966
Ti 334.941	0.8382	ppb	0.0175	2.1	51.3401
Tl 190.794	-9.3674	ppb	6.5286	69.7	-4.7697
V 292.401	1.7877	ppb	0.8580	48.0	2.8461
Zn 206.200	8.5782	ppb	2.0086	23.4	3.2225

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.1714	0.5262	2.6212
Al 308.215	583.405	576.989	581.434
As 188.980	15.6093	14.4357	12.3620
B 249.678	95.1508	97.4864	97.9899
Ba 389.178	64.6708	69.5661	72.1189
Be 313.042	-0.0092u	-0.0081u	0.0008
Ca 370.602	22380	22424	22424
Cd 226.502	0.4887	0.6088	0.0745
Co 228.615	1.4151	0.4451	-0.3517u
Cr 267.716	2.4239	3.1394	2.1407
Cu 324.754	5.6483	7.0735	7.2242
Fe 271.441	752.395	761.939	747.804
K 766.491	14508.5	14560.0	14582.5
Mg 279.078	11986.5	12031.7	12006.0
Mn 257.610	28.3476	28.5002	28.6289
Mo 202.032	1.8430	2.1754	3.5407
Na 330.237	23633.3	24004.2	24051.7
Ni 231.604	1.8131	3.4660	3.3655
Pb 220.353	6.4717	15.5079	-6.5202u
Sb 206.834	-2.9343u	1.6422	4.5422
Se 196.026	18.4204	7.7269	5.0601
Si 288.158	5325.89	5347.39	5344.16
Sn 189.925	-4.0383u	0.0723	1.3456
Sr 216.596	89.1330	87.8027	87.1725
Ti 334.941	1.5351	1.4182	1.4656

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Label	Replicates Concentration		
Tl 190.794	-1.2422u	10.3619	5.3131
V 292.401	27.0052	28.0716	27.2292
Zn 206.200	26.8353	27.6335	34.0806

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	1.1062	ppb	1.3239	119.7	-26.9575
Al 308.215	580.610	ppb	3.2864	0.6	1225.38
As 188.980	14.1356	ppb	1.6443	11.6	4.6583
B 249.678	96.8757	ppb	1.5149	1.6	602.328
Ba 389.178	68.7853	ppb	3.7849	5.5	328.358
Be 313.042	-0.0055	ppb	0.0055	99.7	-426.782
Ca 370.602	22410	ppb	25.43	0.1	31836
Cd 226.502	0.3907	ppb	0.2803	71.8	7.8347
Co 228.615	0.5028	ppb	0.8848	176.0	-6.7102
Cr 267.716	2.5680	ppb	0.5147	20.0	47.7654
Cu 324.754	6.6487	ppb	0.8696	13.1	647.796
Fe 271.441	754.046	ppb	7.2107	1.0	453.937
K 766.491	14550.4	ppb	37.9249	0.3	247578
Mg 279.078	12008.1	ppb	22.6392	0.2	14647.2
Mn 257.610	28.4922	ppb	0.1409	0.5	2013.19
Mo 202.032	2.5197	ppb	0.8997	35.7	6.1440
Na 330.237	23896.4	ppb	229.099	1.0	616.967
Ni 231.604	2.8815	ppb	0.9266	32.2	0.0959
Pb 220.353	5.1531	ppb	11.0731	214.9	3.5689
Sb 206.834	1.0834	ppb	3.7695	347.9	6.2001
Se 196.026	10.4025	ppb	7.0706	68.0	6.2778
Si 288.158	5339.15	ppb	11.5952	0.2	23247.9
Sn 189.925	-0.8735	ppb	2.8138	322.1	-1.2085
Sr 216.596	88.0360	ppb	1.0009	1.1	218.601
Ti 334.941	1.4730	ppb	0.0588	4.0	112.913
Tl 190.794	4.8109	ppb	5.8183	120.9	-1.4134
V 292.401	27.4353	ppb	0.5623	2.0	212.905
Zn 206.200	29.5164	ppb	3.9728	13.5	14.2769

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	-1.3175u	-0.2964u	-0.6532u
Al 308.215	602.563	597.873	602.252
As 188.980	0.3707	7.7437	-2.4870u
B 249.678	115.093	116.332	118.441
Ba 389.178	-0.5044	-0.4362	2.1831
Be 313.042	-0.0253u	-0.0140u	0.0058
Ca 370.602	53155	53221	53178
Cd 226.502	0.0566	-0.2711u	0.1472
Co 228.615	0.5246	-2.6605u	0.5576
Cr 267.716	6.0097	5.8646	6.3861
Cu 324.754	4.8271	6.0566	6.2886
Fe 271.441	1624.17	1614.93	1613.56
K 766.491	15690.2	15690.1	15700.5
Mg 279.078	5451.58	5481.94	5468.67
Mn 257.610	56.2144	56.2077	56.2639
Mo 202.032	-1.6455u	1.4930	-0.8133u

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Label	Replicates Concentration		
Na 330.237	53551.2	53442.9	53336.3
Ni 231.604	1.4591	2.0386	1.1860
Pb 220.353	13.9914	0.6208	-9.1539u
Sb 206.834	4.3369	-14.5945u	8.5573
Se 196.026	19.5414	17.1020	-7.8764u
Si 288.158	11749.2	11762.9	11772.7
Sn 189.925	-2.2749u	1.3801	5.3002
Sr 216.596	392.196	392.276	395.249
Ti 334.941	2.8631	2.7459	2.8318
Tl 190.794	-9.4681u	-24.6185u	-9.8775u
V 292.401	8.5834	7.6115	6.3353
Zn 206.200	6.1618	4.8115	7.8737

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	-0.7557	ppb	0.5182	68.6	-77.9433
Al 308.215	600.896	ppb	2.6225	0.4	1259.23
As 188.980	1.8758	ppb	5.2788	281.4	1.7360
B 249.678	116.622	ppb	1.6928	1.5	728.143
Ba 389.178	0.4142	ppb	1.5323	370.0	-24.3869
Be 313.042	-0.0112	ppb	0.0157	140.8	-428.201
Ca 370.602	53184	ppb	33.66	0.1	75542
Cd 226.502	-0.0224	ppb	0.2201	982.3	4.1022
Co 228.615	-0.5261	ppb	1.8485	351.4	-10.1355
Cr 267.716	6.0868	ppb	0.2692	4.4	99.0935
Cu 324.754	5.7241	ppb	0.7854	13.7	623.900
Fe 271.441	1617.55	ppb	5.7717	0.4	921.026
K 766.491	15693.6	ppb	6.0089	0.0	267012
Mg 279.078	5467.39	ppb	15.2205	0.3	6683.95
Mn 257.610	56.2287	ppb	0.0307	0.1	3894.71
Mo 202.032	-0.3219	ppb	1.6259	505.0	2.1915
Na 330.237	53443.4	ppb	107.452	0.2	1340.29
Ni 231.604	1.5612	ppb	0.4354	27.9	-1.2002
Pb 220.353	1.8195	ppb	11.6191	638.6	2.3424
Sb 206.834	-0.5668	ppb	12.3303	2175.5	5.6999
Se 196.026	9.5890	ppb	15.1746	158.2	6.1290
Si 288.158	11761.6	ppb	11.7876	0.1	50519.8
Sn 189.925	1.4685	ppb	3.7883	258.0	-0.6797
Sr 216.596	393.240	ppb	1.7399	0.4	964.762
Ti 334.941	2.8136	ppb	0.0607	2.2	198.644
Tl 190.794	-14.6547	ppb	8.6313	58.9	-5.9587
V 292.401	7.5101	ppb	1.1275	15.0	49.6552
Zn 206.200	6.2823	ppb	1.5346	24.4	2.0053

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 Weight: 1 Volume: 1 Dilution: 1

Label	Replicates Concentration		
Ag 328.068	0.3539	0.8319	1.0397
Al 308.215	304.456	300.873	305.148
As 188.980	5.9134	1.5361	4.1233
B 249.678	19.4161	19.1081	18.9736
Ba 389.178	2.3909	4.6696	3.7661
Be 313.042	-0.1217u	-0.0781u	-0.0910u
Ca 370.602	4998	4996	4996

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Label	Replicates Concentration		
Cd 226.502	0.1744	0.5114	-0.5556u
Co 228.615	-3.1243u	1.0380	-0.1662u
Cr 267.716	1.4218	1.8766	1.4735
Cu 324.754	8.0325	5.9450	6.1643
Fe 271.441	314.701	313.109	299.067
K 766.491	2749.65	2739.55	2733.86
Mg 279.078	2836.40	2836.74	2820.80
Mn 257.610	5.5115	5.3890	5.5011
Mo 202.032	1.3371	0.7923	1.8683
Na 330.237	2627.97	2870.74	2845.73
Ni 231.604	-0.2252u	-0.0011u	0.4551
Pb 220.353	2.2586	3.0808	-5.5666u
Sb 206.834	-5.2707u	5.9374	-4.5315u
Se 196.026	10.4344	12.0444	-14.0815u
Si 288.158	3545.40	3525.45	3523.68
Sn 189.925	7.2595	3.9956	12.9374
Sr 216.596	25.4202	27.1942	28.8243
Ti 334.941	1.6383	1.4410	1.5165
Tl 190.794	-1.0548u	-4.5196u	-11.4853u
V 292.401	0.5517	-0.2472u	0.0968
Zn 206.200	12.0960	10.5878	9.1577

Label	Sol'n Conc.	Units	SD	%RSD	Int. (c/s)
Ag 328.068	0.7418	ppb	0.3516	47.4	-36.5271
Al 308.215	303.492	ppb	2.2950	0.8	756.431
As 188.980	3.8576	ppb	2.2007	57.0	2.1725
B 249.678	19.1659	ppb	0.2269	1.2	104.286
Ba 389.178	3.6089	ppb	1.1475	31.8	-10.4290
Be 313.042	-0.0969	ppb	0.0224	23.1	-499.304
Ca 370.602	4997	ppb	1.052	0.0	7106
Cd 226.502	0.0434	ppb	0.5454	1256.6	3.3104
Co 228.615	-0.7508	ppb	2.1419	285.3	-10.8812
Cr 267.716	1.5907	ppb	0.2490	15.7	33.4565
Cu 324.754	6.7139	ppb	1.1472	17.1	649.556
Fe 271.441	308.959	ppb	8.6035	2.8	212.963
K 766.491	2741.02	ppb	7.9978	0.3	46829.6
Mg 279.078	2831.31	ppb	9.1092	0.3	3475.16
Mn 257.610	5.4672	ppb	0.0679	1.2	406.156
Mo 202.032	1.3325	ppb	0.5380	40.4	4.5031
Na 330.237	2781.48	ppb	133.530	4.8	100.432
Ni 231.604	0.0762	ppb	0.3467	454.7	-2.6585
Pb 220.353	-0.0757	ppb	4.7730	6302.3	1.6357
Sb 206.834	-1.2883	ppb	6.2685	486.6	5.4444
Se 196.026	2.7991	ppb	14.6412	523.1	4.8881
Si 288.158	3531.51	ppb	12.0598	0.3	15571.6
Sn 189.925	8.0642	ppb	4.5249	56.1	0.7978
Sr 216.596	27.1462	ppb	1.7026	6.3	69.7407
Ti 334.941	1.5319	ppb	0.0995	6.5	96.8671
Tl 190.794	-5.6866	ppb	5.3123	93.4	-3.8585
V 292.401	0.1338	ppb	0.4008	299.5	-10.7486
Zn 206.200	10.6138	ppb	1.4693	13.8	4.2926

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Batch Number: 565367 Batch Start Date: 04/08/19 06:34 Batch Analyst: Dixon, Charles D

Batch Method: 3050B Batch End Date: 04/08/19 12:38

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MS_Ag_LCS_SPK 00080	MS_LCS1_WK 00081	MS_LCS2_wk 00247	
MB 680-565367/1		3050B, 6010C		1.04 g	100 mL				
LCS 680-565367/2		3050B, 6010C		1.01 g	100 mL	1 mL	1 mL	1 mL	
480-151367-A-1	Rail Road Timber	3050B, 6010C	T	1.17 g	100 mL				

Batch Notes	
Balance ID	27
Blank Soil Lot Number	5926224
Temperature - Corrected - End	95 Degrees C
Temperature - Corrected - Start	95 Degrees C
Digestion Unit ID	HB11
Digestion Tube/Cup ID	5998201
Hydrogen Peroxide ID	5975254
Hydrochloric Acid ID	6012500
Nitric Acid ID	6015522
Pipette/Syringe/Dispenser ID	ME16/ME22
Sufficient Volume for Batch QC	YES
Thermometer ID	MEPREP19
Temperature - Uncorrected - End	94 Degrees C
Temperature - Uncorrected - Start	94 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.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Savannah Job Number: 480-151367-1

SDG No.: _____

Project: Hancock Field

Client Sample ID
Rail Road Timber

Lab Sample ID
480-151367-1

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Savannah

Job Number: 480-151367-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

LOQ Date: 01/01/2005 13:43

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Savannah

Job Number: 480-151367-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

XRL Date: 04/09/2011 17:03

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.01	
Percent Solids		0.01	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/09/2019 10:49 End Date: 04/09/2019 10:49

Lab Sample ID	D / F	T y p e	Time	Analytes																
				% S o l	M o i s t															
ZZZZZZ			10:49																	
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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Savannah Job No.: 480-151367-1

SDG No.: _____

Batch Number: 565555 Batch Start Date: 04/09/19 10:49 Batch Analyst: Sharpe, Evan H

Batch Method: Moisture Batch End Date: 04/09/19 14:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
480-151367-A-1	Rail Road Timber	Moisture	T	1.31 g	10.52 g	6.03 g			

Batch Notes	
Balance ID	19
Date samples were placed in the oven	04/09/2019
Oven Temp In	106 Degrees C
Time samples were place in the oven	10:49
Date samples were removed from oven	04/09/2019
Oven Temp Out	101 Degrees C
Time Samples were removed from oven	14:50
Oven ID	CU01
Thermometer ID	EXTCLPWB1
Temperature - Start - Uncorrected	109 Degrees C
Temperature - End - Uncorrected	104 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.

Moisture

Subcontract Data

Shipping and Receiving Documents

68021630


TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

TAL-4124 (1007)

Client: **EA Engineering** Chain of Custody Number: **275176**
 Address: **269 W. Jefferson St** Date: **4/4/19**
 City: **Syracuse** State: **Ny** Zip Code: **13202** Lab Number: **1** of **1**

Project Manager: **Joe Van Wert** Analysis (Attach list if more space is needed)
 Telephone Number (Area Code)/Fax Number: **315-431-4410**
 Site Contact: **DOE Vb2** Barcode: 
 Carrier/Maybill Number: **Syracuse ny** 480-151367 Chain of Custody

Containers & Preservatives: **Unpres. X** **H2SO4** **HNO3** **HCl** **NaOH** **ZnAc** **NaOH**

Matrix: **Soil** **Sed** **Agonous** **Air**

Sample I.D. No. and Description: **Rail Road timbers** Date: **4/4/19** Time: **1500**

(Containers for each sample may be combined on one line)

Sample Disposal: Return To Client Disposal By Lab Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

QC Requirements (Specify): _____

1. Relinquished By: *[Signature]* Date: **4/4/19** Time: **1300**

2. Relinquished By: *[Signature]* Date: **4-4-19** Time: **19:00**

3. Relinquished By: *[Signature]* Date: **04/05/19** Time: **0100**

Comments: **Syracuse #225**

2.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy



Client Information (Sub Contract Lab) Client Contact: Lanier, Jerry A Shipping/Receiving Company: TestAmerica Laboratories, Inc. Address: 5102 LaRoche Avenue, City: Savannah State, Zip: GA, 31404 Phone: 912-354-7858(Tel) 912-352-0165(Fax) Email:			Lab PM: Lanier, Jerry A E-Mail: jerry.lanier@testamericainc.com Carrier Tracking No(s): 480-48738-1 State of Origin: New Jersey Page 1 of 1 Job #: 480-151367-1						
Due Date Requested: 4/9/2019 TAT Requested (days):			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 Other:						
Project Name: Hancock Field Project #: 68021630 Site:			Analysis Requested:						
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab) or (T=Issue A=Air)	Matrix (W=water, S=solid, O=waste/oil, BT=issue A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Moisture/Percent Moisture	Total Number of Containers	Special Instructions/Note:
Rail Road Timber (480-151367-1)	4/4/19	15:00 Eastern	Solid		X	X		1	

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/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 compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification

Unconfirmed
 Deliverable Requested I, II, III, IV, Other (specify) **4**
 Primary Deliverable Rank: **4**

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: *[Signature]* Date/Time: **4-5-19 1545** Company: **JAB**
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: _____
 Δ Yes Δ No

Custody Seal No.: _____

Received by: *[Signature]* Date/Time: **4-6-19 9:17** Company: **TestAmerica**
 Received by: _____ Date/Time: _____ Company: _____
 Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks: **19/21**

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:

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 480-151367-1

Login Number: 151367
List Number: 1
Creator: Velickovic, Zoran

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 480-151367-1

Login Number: 151367
List Number: 2
Creator: Nobles, Terry G

List Source: Eurofins TestAmerica, Savannah
List Creation: 04/06/19 11:12 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Appendix D

Concrete Recycle and Railroad Timber Disposal Tickets

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WGR ASSOCIATES (610) 432-3423

FORM #H015

70370

HANSON AGGREGATES

SUNDRY WEIGH TICKET

4-29-19 20

Name 131 concrete

Address 20.16

Material Weighed _____

Gross Lbs. _____

Tare Lbs. _____

Net Lbs. _____

Weighed By _____

Cash Rec'd _____

FORM #H015 (REV. 3/99)

WGR ASSOCIATES (610) 432-3423

FORM #H015

70371

HANSON AGGREGATES

SUNDRY WEIGH TICKET

4-29-19 20

Name 154 concrete

Address 21.21

Material Weighed _____

Gross Lbs. _____

Tare Lbs. _____

Net Lbs. _____

Weighed By _____

Cash Rec'd _____

FORM #H015 (REV. 3/99)

WGR ASSOCIATES (610) 432-3423

FORM #H015

70374

HANSON AGGREGATES

SUNDRY WEIGH TICKET

4-29-19₂₀

Name P630

Address 24.33

Material Weighed _____

Gross Lbs. _____

Tare Lbs. _____

Net Lbs. _____

Weighed By _____

Cash Rec'd _____

FORM #H015 (REV. 3/99)

WGR ASSOCIATES (610) 432-3423

FORM #H015

70372

HANSON AGGREGATES

SUNDRY WEIGH TICKET

4-29-19₂₀

Name 131 concrete

Address 23.25

Material Weighed _____

Gross Lbs. _____

Tare Lbs. _____

Net Lbs. _____

Weighed By _____

Cash Rec'd _____

FORM #H015 (REV. 3/99)

WGR ASSOCIATES (610) 432-3423

FORM #H015

70375

HANSON AGGREGATES

SUNDRY WEIGH TICKET

4-29-19 20

Name 154

Address 17.29

Material Weighed _____

Gross Lbs. _____

Tare Lbs. _____

Net Lbs. _____

Weighed By _____

Cash Rec'd _____

WGR ASSOCIATES (610) 432-3423

FORM #H015

70373

HANSON AGGREGATES

SUNDRY WEIGH TICKET

4-29-19 20

Name 154 concrete

Address 25.00

Material Weighed _____

Gross Lbs. _____

Tare Lbs. _____

Net Lbs. _____

Weighed By _____

Cash Rec'd _____

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID	WEIGHMASTER		
01	00283487	WE	KRISTY		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/29/19	04/29/19	12:05	12:31	PAR630	
REFERENCE			ORIGIN		
CD-0NO			ONONDAGA		

Scale 1 Gross Wt. 36180 LB
 Scale 3 Tare Wt. 29180 LB TRUCK EXPIRES / /
 Net Weight 7000 LB LIC# CONTAINER

WT	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
3.50	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: Job #
 19-0028

TRK 630
 Pete

[Handwritten Signature]

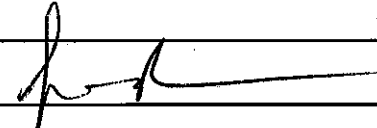
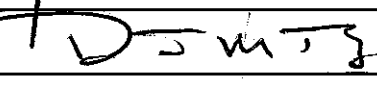
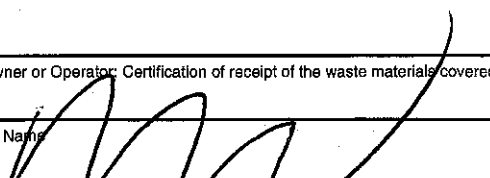
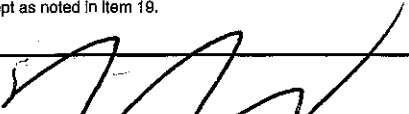
HAULER: 7426
 ROUTE: 0-NONE

WW6TI TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767 SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. N/A	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		SAME		
4. Generator's Phone ()	5. Transporter 1 Company Name Paragon Environmental Construction, Inc.		6. US EPA ID Number NYR 000119289	A. State Transporter's ID 7A-516
				B. Transporter 1 Phone (315) 699-0840
	7. Transporter 2 Company Name		8. US EPA ID Number	C. State Transporter's ID
				D. Transporter 2 Phone
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Salzman Road Waterloo NY 13165		10. US EPA ID Number		E. State Facility's ID
				F. Facility's Phone (315) 539-5624
11. WASTE DESCRIPTION		Containers		13. Total Quantity
		No.	Type	14. Unit Wt./Vol.
a. Non-DOT Regulated Material		1	DT	T
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above		
a) Rail Road Ties		a) L		
15. Special Handling Instructions and Additional Information				
Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name Jason Preston		Signature 		Date 4/29/19
17. Transporter 1 Acknowledgement of Receipt of Materials				
Printed/Typed Name Peter Rovero		Signature 		Date 4/29/19
18. Transporter 2 Acknowledgement of Receipt of Materials				
Printed/Typed Name		Signature		Date Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in Item 19.				
Printed/Typed Name 		Signature 		Date 4/29/19

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID	WEIGHMASTER		
01	00283513	WE	KRISTY		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/29/19	04/29/19	12:28	13:05	PAR154	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Scale 1 Gross Wt. 35680 LB
 Scale 3 Tare Wt. 28700 LB TRUCK EXPIRES / /
 Net Weight 6980 LB LIC# CONTAINER

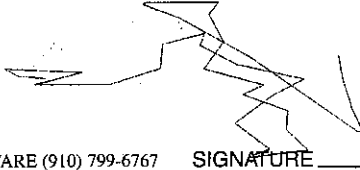
QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
3.49	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.
 This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: 19-0028

HAULER: 7426

ROUTE: 0-NONE



TO CAROLINA SOFTWARE (910) 799-6767 SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

154
2

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. N/A	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		SAME	
4. Generator's Phone ()			
5. Transporter 1 Company Name Paragon Environmental Construction, Inc.	6. US EPA ID Number NYR 000119289	A. State Transporter's ID 7A-516	
		B. Transporter 1 Phone (315) 699-0840	
7. Transporter 2 Company Name	8. US EPA ID Number	C. State Transporter's ID 01802MM	
		D. Transporter 2 Phone	
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Salzman Road Waterloo NY 13165	10. US EPA ID Number	E. State Facility's ID	
		F. Facility's Phone (315) 539-5624	
11. WASTE DESCRIPTION		Containers	13. Total Quantity
		No.	14. Unit Wt./Vol.
a. Non-DOT Regulated Material		1	DT
			68-DOT
b.			
c.			
d.			
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above	
a) Rail Road Ties		a) L	
15. Special Handling Instructions and Additional Information			
Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840			
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.			
Printed/Typed Name Jason Preston		Signature 	Date Month Day Year 4 29 19
17. Transporter 1 Acknowledgement of Receipt of Materials			
Printed/Typed Name Danny Edwards		Signature 	Date Month Day Year 4 29 19
18. Transporter 2 Acknowledgement of Receipt of Materials			
Printed/Typed Name		Signature	Date Month Day Year
19. Discrepancy Indication Space			
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.			
Printed/Typed Name 		Signature 	Date Month Day Year 4 29 19

NON-HAZARDOUS WASTE GENERATOR

TRANSPORTER FACILITY

HAULER: 7426
 ROUTE: 0-NONE
 WWW6TI TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE *[Handwritten Signature]*

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID		WEIGHMASTER	
01	00283850	WE		Morgan W	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/30/19	04/30/19	07:38	08:10	PAR630	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Manual Gross Wt. 39880 LB
 Scale 3 Tare Wt. 29140 LB TRUCK EXPIRES / /
 Net Weight 10740 LB LIC# CONTAINER

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
5.37	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: 19-0028

HAULER: 7426
 ROUTE: 0-NONE

TRK630
PETE

[Handwritten Signature]

WWW6TI TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767 SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

TRK
630 PABE

NON-HAZARDOUS WASTE MANIFEST

3

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NA	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		SAME		
4. Generator's Phone ()				
5. Transporter 1 Company Name Paragon Environmental Construction, Inc.		6. US EPA ID Number NYR 00019289	A. State Transporter's ID 7A-516	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter 1 Phone (315) 699-0840	
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Salzman Road Waterloo NY 13185		10. US EPA ID Number	C. State Transporter's ID	
			D. Transporter 2 Phone	
			E. State Facility's ID	
			F. Facility's Phone (315) 539-5624	

11. WASTE DESCRIPTION	Containers		13. Total Quantity	14. Unit Wt./Vol.
	No.	Type		
a. Non DOT Regulated Material	1	DT		T
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above a) Rail Road Ties	H. Handling Codes for Wastes Listed Above a) L
---	--

15. Special Handling Instructions and Additional Information

Emergency Contact: **Paragon Environmental Construction, Inc. @ 315-699-0840**

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name Josiah Prussell	Signature <i>[Signature]</i>	Date Month Day Year 4/30/19
17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name Pete Borewicz	Signature <i>[Signature]</i>	Date Month Day Year 4/30/19
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name <i>[Signature]</i>	Signature <i>[Signature]</i>	Date Month Day Year 4/30/19
--	---------------------------------	--

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID	WEIGHMASTER		
01	00283849	WE	Morgan W		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/30/19	04/30/19	07:38	08:29	PAR131	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Scale 1 Gross Wt. 36780 LB
 Scale 3 Tare Wt. 28380 LB TRUCK EXPIRES / /
 Net Weight 8400 LB LIC# CONTAINER

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
4.20	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm, Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: 19-0028

HAULER: 7426

ROUTE: A-NONE

WW6T1 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767 SIGNATURE _____

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

4

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. N/A	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address	Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		
4. Generator's Phone ()	SAME		
5. Transporter 1 Company Name	6. US EPA ID Number	A. State Transporter's ID	7A-516
Paragon Environmental Construction, Inc.	NYR 00019289	B. Transporter 1 Phone	(315) 699-0840
7. Transporter 2 Company Name	8. US EPA ID Number	C. State Transporter's ID	
		D. Transporter 2 Phone	
9. Designated Facility Name and Site Address	10. US EPA ID Number	E. State Facility's ID	
Seneca Meadows Inc. 1786 Saloman Road Waterloo NY 13185		F. Facility's Phone	(315) 539-5624

11. WASTE DESCRIPTION	Containers		13. Total Quantity	14. Unit Wt./Vol.
	No.	Type		
a. Non DOT Regulated Material	1	DT		T
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above	H. Handling Codes for Wastes Listed Above
a) Rail Road Ties	a) L

15. Special Handling Instructions and Additional Information

Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840

18. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date
<i>Jason P...</i>	<i>[Signature]</i>	Month Day Year 4 30 19
17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Date
<i>Yancey W...</i>	<i>[Signature]</i>	Month Day Year 4 30 19
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Date
		Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 18.

Printed/Typed Name	Signature	Date
	<i>[Signature]</i>	Month Day Year 4 30 19

NON-HAZARDOUS WASTE GENERATOR

TRANSPORTER

FACILITY

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID	WEIGHMASTER		
01	00283851	WE	Morgan W		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/30/19	04/30/19	07:39	08:31	PAR154	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Scale 1 Gross Wt. 37680 LB
 Scale 3 Tare Wt. 29060 LB TRUCK EXPIRES / /
 Net Weight 8620 LB LIC# CONTAINER

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
4.31	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.
 This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: 19-0028

HAULER: 7426

ROUTE: A-NONE

WW6T1 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767 SIGNATURE _____



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

5
154

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. N/A	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address	Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		
4. Generator's Phone ()	SAME		
5. Transporter 1 Company Name	6. US EPA ID Number	A. State Transporter's ID	7A-516
Paragon Environmental Construction, Inc.	NYR 00019289	B. Transporter 1 Phone	(315) 699-0840
7. Transporter 2 Company Name	8. US EPA ID Number	C. State Transporter's ID	01802 MA
9. Designated Facility Name and Site Address	10. US EPA ID Number	D. Transporter 2 Phone	
Seneca Meadows Inc. 1786 Salcman Road Waterloo NY 13185		E. State Facility's ID	
		F. Facility's Phone	(315) 539-5624

11. WASTE DESCRIPTION	Containers		13. Total Quantity	14. Unit Wt./Vol.
	No.	Type		
Non DOT Regulated Material	1	DT	EST 20	T
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above	H. Handling Codes for Wastes Listed Above
a) Rail Road Ties	a) L

15. Special Handling Instructions and Additional Information

Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date
Jason Preston		Month Day Year 4 30 19
17. Transporter 1 Acknowledgement of Receipt of Materials	Signature	Date
Printed/Typed Name	Signature	Date
Danny Edwards		Month Day Year 4 30 19
18. Transporter 2 Acknowledgement of Receipt of Materials	Signature	Date
Printed/Typed Name	Signature	Date

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date
		Month Day Year 4 30 19

NON-HAZARDOUS WASTE GENERATOR



Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID	WEIGHMASTER		
01	00284067	WE	KRISTY		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/30/19	04/30/19	10:29	11:17	PAR630	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Scale 1 Gross Wt. 43060 LB
 Scale 3 Tare Wt. 28980 LB TRUCK EXPIRES / /

Net Weight 14080 LB LIC# CONTAINER

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
7.04	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

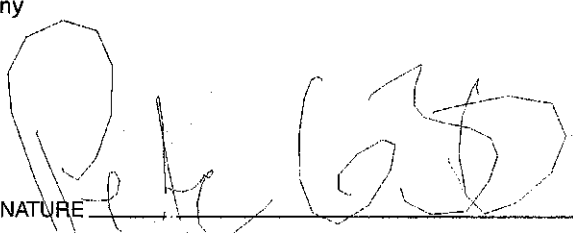
MANIFEST: 19-0028

HAULER: 7426

ROUTE: 0-NONE

WWW1 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

TRK 630 Per

6

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. N/A	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		SAME		
4. Generator's Phone ()	5. Transporter 1 Company Name Paragon Environmental Construction, Inc.		6. US EPA ID Number NYR 000119289	
7. Transporter 2 Company Name		8. US EPA ID Number		A. State Transporter's ID 7A-510
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Saleman Road Waterloo NY 13165		10. US EPA ID Number		B. Transporter 1 Phone (315) 699-0840
11. WASTE DESCRIPTION		C. State Transporter's ID		D. Transporter 2 Phone
11. WASTE DESCRIPTION		E. State Facility's ID		F. Facility's Phone (315) 539-5624
		13. Total Quantity		14. Unit Wt./Vol.
a. Non DOT Regulated Material		1. 1		DT
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above a) Rail Road Ties		H. Handling Codes for Wastes Listed Above a) L		
15. Special Handling Instructions and Additional Information Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name Jason Preston		Signature <i>[Signature]</i>		Date 4/30/19
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name Pete Boverzi		Date 4/30/19
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Date 4/30/19
Printed/Typed Name		Signature		Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in Item 19.				
Printed/Typed Name		Signature <i>[Signature]</i>		Date 4/30/19

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID	WEIGHMASTER		
01	00284109	WE	KRISTY		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/30/19	04/30/19	10:59	12:09	PAR131	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Scale 1 Gross Wt. 43820 LB
 Scale 3 Tare Wt. 27920 LB TRUCK EXPIRES / /
 Net Weight 15900 LB LIC# CONTAINER

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
7.95	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: 19-0028

HAULER: 7426

ROUTE: 0-NONE

WWW.TI TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767 SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

7

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. N/A	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		SAME		
4. Generator's Phone ()	7A-516			
5. Transporter 1 Company Name Paragon Environmental Construction, Inc.	6. NYR 000119289	A. State Transporter's ID (315) 699-0840		
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter 1 Phone		
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Salzman Road Waterloo NY 13185	10. US EPA ID Number	C. State Transporter's ID		
		D. Transporter 2 Phone		
		E. State Facility's ID		
		F. Facility's Phone (315) 539-5624		

11. WASTE DESCRIPTION	Containers		13. Total Quantity	14. Unit Wt./Vol.
	No.	Type		
Non DOT Regulated Material	1	DT		T
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above a) Rail Road Ties	H. Handling Codes for Wastes Listed Above a) L
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15. Special Handling Instructions and Additional Information

Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

GENERATOR	Printed/Typed Name Josiah Probert	Signature <i>[Signature]</i>	Date Month Day Year 4 30 19
	17. Transporter 1 Acknowledgement of Receipt of Materials		
TRANSPORTER	Printed/Typed Name Yonco Wathrich	Signature <i>[Signature]</i>	Date Month Day Year 4 30 19
	18. Transporter 2 Acknowledgement of Receipt of Materials		
FACILITY	Printed/Typed Name	Signature	Date Month Day Year
	19. Discrepancy Indication Space		
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.			
	Printed/Typed Name	Signature <i>[Signature]</i>	Date Month Day Year 4 30 19

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID	WEIGHMASTER			
01	00284111	WE	KRISTY			
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF	
04/30/19	04/30/19	11:00	12:10	PAR154		
REFERENCE			ORIGIN			
CD-ONO			ONONDAGA			

Scale 1 Gross Wt. 38960 LB
 Scale 3 Tare Wt. 28800 LB TRUCK EXPIRES / /

Net Weight 10160 LB LIC# CONTAINER

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
5.08	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: 19-0028

HAULER: 7426

ROUTE: 0-NONE

WWW611 TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767



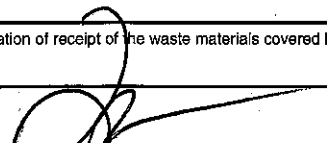
SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

154 8

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. N/A	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		SAME		
4. Generator's Phone ()				
5. Transporter 1 Company Name Paragon Environmental Construction, Inc.		6. US EPA ID Number NYR 000119289	A. State Transporter's ID 7A-516	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter 1 Phone (315) 699-0840	
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Salzman Road Waterloo NY 13165		10. US EPA ID Number	C. State Transporter's ID 61902MM	
			D. Transporter 2 Phone	
			E. State Facility's ID	
			F. Facility's Phone (315) 539-5624	
11. WASTE DESCRIPTION		Containers No.	13. Total Quantity	14. Unit Wt./Vol.
Non DOT Regulated Material		1	ES120	T
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above a) Rail Road Ties		H. Handling Codes for Wastes Listed Above a) L		
15. Special Handling Instructions and Additional Information Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840				
18. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name JASON PRISTON		Signature 	Date Month Day Year 4 30 19	
17. Transporter 1 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name Danny Edwards		Signature 	Date Month Day Year 4 30 19	
18. Transporter 2 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name		Signature	Date Month Day Year	
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				
Printed/Typed Name		Signature 	Date Month Day Year 4 30 19	

NON-HAZARDOUS WASTE GENERATOR

TRANSPORTER FACILITY

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID		WEIGHMASTER	
01	00284303	WE		Morgan W	
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/30/19	04/30/19	13:44	14:16	PAR630	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Scale 1 Gross Wt. 44160 LB
 Scale 3 Tare Wt. 28860 LB TRUCK EXPIRES / /
 Net Weight 15300 LB LIC# CONTAINER

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
7.65	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: 19-0028

HAULER: 7426

ROUTE: NONE

WW6TI TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE

Ref
TEL 630
[Handwritten Signature]

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

NON-HAZARDOUS WASTE MANIFEST

9

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <p style="text-align: center;">N/A</p>		Manifest Document No. <p style="text-align: center;">19-0028</p>		2. Page 1 of 1					
3. Generator's Name and Mailing Address <p style="text-align: center;">Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211</p>				SAME							
4. Generator's Phone ()											
5. Transporter 1 Company Name Paragon Environmental Construction, Inc.		6. US EPA ID Number NYR 000119289		A. State Transporter's ID 7A-516		B. Transporter 1 Phone (315) 699-0840					
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID		D. Transporter 2 Phone					
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Salzman Road Waterloo NY 13165				10. US EPA ID Number		E. State Facility's ID					
				F. Facility's Phone (315) 539-5624							
11. WASTE DESCRIPTION						Containers		13. Total Quantity		14. Unit Wt./Vol.	
						No. Type					
a. Non DOT Regulated Material						1 DT					
b.											
c.											
d.											
G. Additional Descriptions for Materials Listed Above						H. Handling Codes for Wastes Listed Above					
a) Rail Road Ties						a) L					
15. Special Handling Instructions and Additional Information											
Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840											
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.											
Printed/Typed Name DSON PRESTON				Signature <i>[Signature]</i>				Date Month Day Year 5 2009			
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Pete Boverney				Signature <i>[Signature]</i>				Date Month Day Year 5 2009			
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name				Signature				Date Month Day Year			
19. Discrepancy Indication Space											
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.											
Printed/Typed Name <i>[Signature]</i>				Signature <i>[Signature]</i>				Date Month Day Year 5 2009			

NON-HAZARDOUS WASTE GENERATOR

TRANSPORTER

FACILITY

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

01	00284344	WE	KRISTY		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
04/30/19	04/30/19	14:28	14:58	PAR131	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Scale 1 Gross Wt. 39360 LB
 Scale 3 Tare Wt. 27720 LB TRUCK EXPIRES / /
 Net Weight 11640 LB LIC# CONTAINER

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
5.82	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

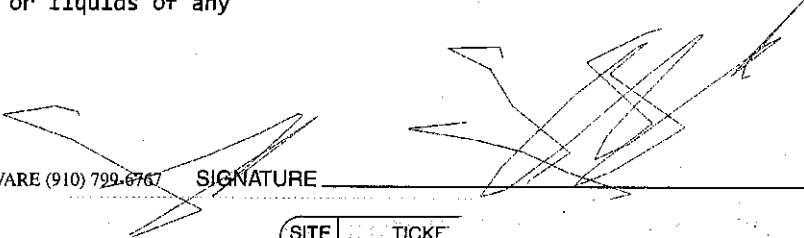
MANIFEST: 19-0028

HAULER: 7426

ROUTE: 0-NONE

WW6TI TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767

SIGNATURE



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

SITE	TICKET
------	--------

NON-HAZARDOUS WASTE MANIFEST

10

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <p style="text-align: center;">N/A</p>		Manifest Document No. <p style="text-align: center;">19-0028</p>	2. Page 1 of 1
3. Generator's Name and Mailing Address <p style="text-align: center;">Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211</p>		SAME			
4. Generator's Phone ()					
5. Transporter 1 Company Name Paragon Environmental Construction, Inc.		6. US EPA ID Number NYR 000119289		A. State Transporter's ID 7A-516	
7. Transporter 2 Company Name		8. US EPA ID Number		B. Transporter 1 Phone (315) 699-0840	
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Salaman Road Waterloo NY 13185		10. US EPA ID Number		C. State Transporter's ID	
				D. Transporter 2 Phone	
				E. State Facility's ID	
				F. Facility's Phone (315) 539-5624	
11. WASTE DESCRIPTION			Containers		13. Total Quantity
			No.	Type	14. Unit Wt./Vol.
a. Non DOT Regulated Material			1	DT	T
b.					
c.					
d.					
G. Additional Descriptions for Materials Listed Above a) Rail Road Ties			H. Handling Codes for Wastes Listed Above a) L		
15. Special Handling Instructions and Additional Information Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840					
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.					
Printed/Typed Name David Preston		Signature 		Date Month Day Year 4 30 19	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name Yonco Wathnich		Signature 	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.					
Printed/Typed Name		Signature 		Date Month Day Year 4 30 19	

NON-HAZARDOUS WASTE GENERATOR

TRANSPORTER FACILITY

Seneca Meadows Landfill
 1786 Salcman Road
 Waterloo, NY 13165

INBOUND CHARGE

000410 PARAGON ENVIRONMENTAL
 5664 MUD HILL RD
 BEWRERTON NY 13029

SITE	TICKET	GRID	WEIGHMASTER		
01	00284669	WE	Morgan W		
DATE IN	DATE OUT	TIME IN	TIME OUT	VEHICLE	ROLL OFF
05/01/19	05/01/19	08:52	09:25	PAR630	
REFERENCE			ORIGIN		
CD-ONO			ONONDAGA		

Scale 1 Gross Wt. 51820 LB
 Scale 3 Tare Wt. 29100 LB TRUCK EXPIRES / /
 Net Weight 22720 LB LIC# CONTAINER

QTY	UNIT	DESCRIPTION	RATE	EXTENSION	FEE	TOTAL
11.36	TON	CONSTRUCT DEBRI				
1.00		DEC-ENV FEE				

Operating Hours Mon-Fri 6:00am-4:00pm. Sat 6:00am-11:30am.

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

MANIFEST: 19-0028

HAULER: 7426

ROUTE: 2-NONE TO REORDER CONTACT CAROLINA SOFTWARE (910) 799-6767 SIGNATURE

TRK 630
 Pete
 [Handwritten Signature]

NET AMOUNT
TENDERED
CHANGE
CHECK NO.

TRK
630
Pace

NON-HAZARDOUS WASTE MANIFEST

11

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. N/A	Manifest Document No. 19-0028	2. Page 1 of 1
3. Generator's Name and Mailing Address Hancock Air National Guard Air Base 6001 East Molloy Rd Mattydale NY 13211		SAME		
4. Generator's Phone ()				
5. Transporter 1 Company Name Paragon Environmental Construction, Inc.		6. US EPA ID Number NYR 000119289	A. State Transporter's ID 7A-516	
7. Transporter 2 Company Name		8. US EPA ID Number	B. Transporter 1 Phone (315) 699-0840	
9. Designated Facility Name and Site Address Seneca Meadows Inc. 1786 Salzman Road Waterloo NY 13165		10. US EPA ID Number	C. State Transporter's ID	
			D. Transporter 2 Phone	
			E. State Facility's ID	
			F. Facility's Phone (315) 539-5624	
11. WASTE DESCRIPTION		Containers No.	Type	13. Total Quantity
a. Non-DOT Regulated Material		1	DT	T
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above a) Rail Road Ties		H. Handling Codes for Wastes Listed Above a) L		
15. Special Handling Instructions and Additional Information Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840				
16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.				
Printed/Typed Name Joseph Perrotta		Signature <i>[Signature]</i>		Date 5/1/19
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Pat Bovey		Signature <i>[Signature]</i>		Date 5/1/19
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date Month Day Year
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.				
Printed/Typed Name <i>[Signature]</i>		Signature <i>[Signature]</i>		Date 5/1/19

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY



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Appendix E

MDAS Disposal Information

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JFR SALVAGE, LLC.

Buyers of Scrap Iron, Steel, Cars, and Metals
6500 Sullivan Trail · Wind Gap, PA 18091
Phone: (610)863-6071 · Fax: (610)863-7323

June 3, 2019

EA Engineering, Science, and Technology, Inc.
1311 Continental Drive Suite K
Abingdon, MD 21009

Timothy A. Reese
Senior Project Manager
Remediation and OE Services

Dear Mr. Timothy A. Reese:

On June 3, 2019, the contents of sealed Ammo Can #EA0001, Custody Seal # TBS 102141, and Seal # TBS 102144 were received from EA Engineering, Science, and Technology, Inc. from Hancock Field Air National Guard Base in Syracuse, NY. Project Number 6273502 / Contract Number W9128F-13-D-0006.

JFR Salvage, LLC. has received and inspected the sealed containers and agree that the material received is MD and contains no explosive hazards.

The contents of the sealed container are to be processed in accordance with DoD 4160-21 M-1, and will not be sold, traded or otherwise given to another party until the contents are only identifiable by their basic content.

Enclosed is the signed Chain of Custody that was received along with the containers.

Anthony Graziani



Vice President
JFR Salvage, LLC.

6500 Sullivan Trail
Wind Gap, PA 18091
Phone: 610-863-6071
Fax: 610-863-7323

JFR SALVAGE, LLC.

Buyers of Scrap Iron, Steel, Cars, and Metals
6500 Sullivan Trail · Wind Gap, PA 18091
Phone: (610)863-6071 · Fax: (610)863-7323

June 3, 2019

EA Engineering, Science, and Technology, Inc.
1311 Continental Drive Suite K
Abingdon, MD 21009

Timothy A. Reese
Senior Project Manager
Remediation and OE Services

Dear Mr. Timothy A. Reese:

I certify that the contents of sealed container #EA0001, Seal Serial #TBS102141 and #TBS102144 received on 06/03/2019 from EA Engineering, Science, and Technology, Inc. from Hancock Field Air National Guard Base Syracuse, NY were demilitarized in accordance with guidelines in DoD 4160.21-1VI-1 and are only identifiable by their basic content.

Anthony Graziani



Vice President
JFR Salvage, LLC.

6500 Sullivan Trail
Wind Gap, PA 18091
Phone: 610-863-6071
Fax: 610-863-7323



FINAL INSPECTION CHECKLIST (G-8)

(PART I)

PROJECT Hancock ANGB Firing-In-Buttress (6273502) DATE: 04/26/2019

AREA OF INSPECTION :

Near FIB entrance (MGRS 18T VN 11250 72977)

A. DEFINABLE FEATURE OF WORK: STATUS OF

INSPECTION: _____

DFOW: MPPEH Inspection, Certification, and Final Disposition

Status: All recovered munition debris (MD) items were inspected and certified as MDAS by Mr. John Monk, EA SUXOS, and Mr. Miguel Ferrer, UXOQC.

All MDAS items were stored and sealed inside a 40-MM ammunition metal can.

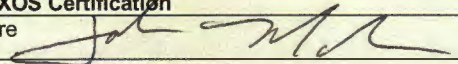

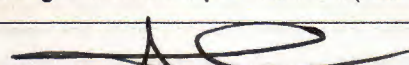
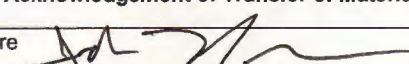
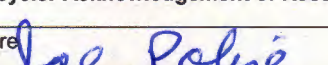
Seal # TBS-102141 and Seal # TBS-102144

I HEREBY CERTIFY, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE WORK INSPECTED IS COMPLETE AND ALL MATERIALS AND EQUIPMENT USED AND WORK PERFORMED WERE COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS.

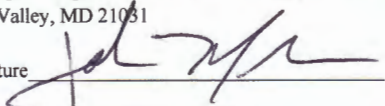
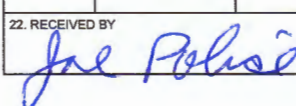
NAME OF PROJECT QC SPECIALIST: Miguel A. Ferrer

DATE: 04/26/2019

SIGNATURE OF PROJECT QC SPECIALIST: 

Material Documented as Safe Certification Chain of Custody					
General	1. Generator's Name and Mailing Address: EA Engineering, Science, and Technology, Inc., PBC 225 Schilling Cir Hunt Valley, MD 21031			1.a Generator's Ph # (410) 584-7000	
	2. Project Location – Hancock Air National Guard Base (ANGB), Syracuse, NY			2.a Project Ph # (410) 584-7000	
	3. MPPEH Contractor Name and Mailing Address – EA Engineering, Science, and Technology, Inc., PBC 225 Schilling Cir Hunt Valley, MD 21031			3.a MPPEH Contractor Ph# (410) 584-7000	
	4. Government Assigned Verification Name and Mailing Address (if used)			4.a Verifier Ph # ()	
	4. Transporter Name and Mailing Address JD MARLOWE SAME AS BLOCK #1			5.a Transporter Ph # 443 752 1775	
	5. Recycler Name and Mailing Address: JFR Salvage Inc. 6500 Sullivan Trail P.O. Box 17 Wind Gap, PA 18091			6.a Recycler Ph # (610) 863-6071	
	7. Container ID # EA0001		8. Security Seal # TBS 102141 & 102144	9. Manifest #	10. Date 04-26-2019
Explosives Safety Status	11. Description Ammo Can containing MDAS material		12. Material MDAS	13. QTY 1	14. Unit (i.e., drum) Ammo Can
	15. MATERIAL DOCUMENTED AS SAFE CERTIFICATION: This certifies and verifies that the material listed has been 100 percent inspected and to the best of our knowledge and belief, is inert and/or free of explosives or related materials.				
	16. SUXOS Certification				
	Signature 		Address Hancock ANGB		Date: 04-26-2019
	Printed/Typed Name: John Monk		Hancock ANGB		Phone: 717-887-5582
	17. UXOQCS/SO Verification				
	Signature 		Address: Hancock ANGB		Date: 04-26-2019
Printed/Typed Name: Miguel Ferrer				Phone: 254-247-6222	
Transporter	18. Transporter Acknowledgement of Receipt of Materials (Receiving Signature Verifies that Container was Received with Seal Intact)				
	Signature 		Address SAME AS BLOCK #1		Date: 03 JUN 2019
	Printed/Typed Name: JD MARLOWE EA SUXOS		BLOCK #1		Phone: 443 762 1776
	19. EA Acknowledgement of Transfer of Materials (Signature verifies that Container was Transferred to Transporter with Seal Intact)				
	Signature 		Address Hancock ANGB		Date: 5-31-2019
	Printed/Typed Name: John Monk		Hancock ANGB		Phone: 717 887 5582
	20. Discrepancy Indication Space				
Signature		Address		Date	
Printed/Typed Name				Phone	
Demil. and/or Recycle Facility	21. Recycler Acknowledgement of Receipt of Materials (Receiving Signature Verifies that Drums were Received with Seal Intact)				
	Signature 		Address JFR Salvage		Date: 6-3-19
	Printed/Typed Name: Joe Polise		Wind Gap		Phone: 610-863-6071
	22. DEMILITARIZATION/RECYCLING CONFIRMATION: This certifies and verifies that each item or items contained have been demilitarized to the minimum requirements of DOD Instruction 4160.21-M-1, Defense Demilitarization Manual. (To be signed by person performing the demilitarization – Recycler or UXO Technician)				
	23. Recycler				
	Signature		Address		Date
	Printed/Typed Name				Phone
24. Senior UXO Supervisor Verification					
Signature		Address		Date	
Printed/Typed Name: John Monk				Phone	
25. Final Disposition (If other than recycling)					

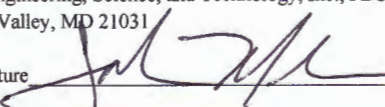
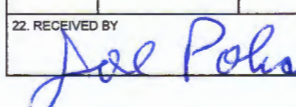
DD FORM 1348-1A, JUL 91 (EG) ISSUE RELEASE/RECEIPT DOCUMENT

1	2	3	4	5	6	7	23	24	25	26	27	28	29	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
UNIT PRICE	DOLLARS		CTS		2. SHIP FROM			3. SHIP TO			1. TOTAL PRICE		4. MARK FOR																																				
DOLLARS	DOLLARS		CTS		Hancock ANGB Syracuse, NY			JFR Salvage Inc. 6500 Sullivan Trail P.O.Box 17 Wind Gap, PA 18091																																									
24. DOCUMENT NUMBER & SUFFIX (30-44) MMRP Non-Time Critical Removal Action, Hancock Field Air National Guard Base Syracuse, NY EA Engineering, P.C. and Its Affiliate EA Science, and Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211 Contract Number: W9128F-13-D-0006, Delivery Order # 0002													5. DOC DATE 04/26/19		6. NMFC		7. FRT RATE		8. TYPE CARGO		9. PS																												
25. NATIONAL STOCK NO. & ADD (8-22) Mixed Medals - Material Documented as Safe (MDAS) Project Number 6273502, Ammo Can #EA0001 Custody Seal # TBS 102141 and Seal # TBS 102144													10. QTY. RECD 01		11. UP		12. UNIT WEIGHT		13. UNIT CUBE Ammo Can		14. UFC		15. SL																										
26. RIC (4-6) LI (23-24) QTY (25-29) CON CODE (7-1) DIST (55-56) UP (74-80) "This certifies and verifies that the material listed has been 100 percent properly inspected and to the best of our knowledge and belief are inert and/or free of explosives related material."													16. FREIGHT CLASSIFICATION NOMENCLATURE																																				
27. ADDITIONAL DATA Inspected by: John Monk SUXOS EA Engineering, Science, and Technology, Inc., PBC Hunt Valley, MD 21031 Signature 													17. ITEM NOMENCLATURE Ammo Can Drum Various metals																																				
			18. TY CONT		19. NO CONT		20. TOTAL WEIGHT 100-lb		21. TOTAL CUBE																																								
													22. RECEIVED BY 			23. DATE RECEIVED 6-3-19																																	

PREVIOUS EDITION MAY BE USED

FormFlow (DLA)

DD FORM 1348-1A, JUL 91 (EG) ISSUE RELEASE/RECEIPT DOCUMENT

1	2	3	4	5	6	7	23	24	25	26	27	28	29	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
UNIT PRICE	DOLLARS		CTS		2. SHIP FROM			3. SHIP TO			1. TOTAL PRICE		4. MARK FOR																																				
DOLLARS	DOLLARS		CTS		Hancock ANGB Syracuse, NY			JFR Salvage Inc. 6500 Sullivan Trail P.O. Box 17 Chesapeake, Va. 23324																																									
24. DOCUMENT NUMBER & SUFFIX (30-44) MMRP Non-Time Critical Removal Action, Hancock Field Air National Guard Base Syracuse, NY EA Engineering, P.C. and Its Affiliate EA Science, and Technology 6712 Brooklawn Parkway, Suite 104 Syracuse, NY 13211 Contract Number: W9128F-13-D-0006, Delivery Order # 0002													5. DOC DATE 04/26/19		6. NMFC		7. FRT RATE		8. TYPE CARGO		9. PS																												
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27. ADDITIONAL DATA Inspected by: John Monk SUXOS EA Engineering, Science, and Technology, Inc., PBC Hunt Valley, MD 21031 Signature 													17. ITEM NOMENCLATURE Ammo Can Drum Various metals																																				
			18. TY CONT		19. NO CONT		20. TOTAL WEIGHT 100-lb		21. TOTAL CUBE																																								
													22. RECEIVED BY 			23. DATE RECEIVED 6-3-19																																	

PREVIOUS EDITION MAY BE USED

FormFlow (DLA)



Store/Customer Copy 1 2



6500 Sullivan Trail Wind Gap PA 18091 610-863-4094

Ticket# **166615**

Printed On Monday

06/03/2019

08:21:38AM

WEIGHT IN : 8:18:32 am

WEIGHT OUT : 8:18:35 am

Started By Anthony

Gross	Tare	Net	Price	Amount
#1 STEEL 74	0	74	\$6.00cwt	\$4.44
Total ->				\$ 4.44

E A Engineering

Laura Pastor

Customer Name

ID/License

Veh/Plate

225 Schilling Circle Hunt Valley MD 21031
Address

Ownership: I hereby state that I am the lawful owner of the material described heron, that I have a right to sell same, that all of the above items are free of hazardous materials and pollutants and that for payment received in full, hereby acknowledged, I sell and convey title of same to J.F.R. SALVAGE INC.

X

signature

ScrapRight.
Recycling Software Done Right.